

Sub-study of the India country study of the
international collaborative research project:
Instruments for sustainable private sector forestry

INDIA
COUNTRY
SUB-STUDY

Policies affecting private sector participation in sustainable forest management

Daman Singh

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Acronyms

CITES	Convention on International Trade in Endangered Species
FDC	Forest Development Corporation
GoI	Government of India
ha	Hectare
JFM	Joint Forest Management
IASSI	Indian Association of Social Science Institutions
ICFRE	Indian Council of Forestry Research and Education
IIPA	Indian Institute of Public Administration
IFFDC	Indian Farm Forestry Development Cooperative
MoA	Ministry of Agriculture
MoC	Ministry of Commerce
MoEF	Ministry of Environment and Forests
Mol	Ministry of Industry
NABARD	National Bank for Agriculture and Rural Development
NTFP	Non-timber Forest Produce
NTGCF	National Tree Growers' Cooperative Federation
RBI	Reserve Bank of India
SIA	Secretariat for Industrial Assistance
TRIFED	Tribal Cooperative Marketing Development Federation of India
WTO	World Trade Organisation



Preface

The present study is part of a wider international project entitled ‘Instruments for Sustainable Private Sector Forestry’ which is co-ordinated by the International Institute for Environment and Development (IIED), London. The overall aim of the project is to identify effective market and regulatory instruments that ensure private sector produces social and environmental benefits from forest management, and to promote these instruments.*

In the first phase of the project, a **Global Review of Private Sector Participation in Sustainable Forest Management** was undertaken. This provided a snapshot of status and trends regarding private sector participation in sustainable forest management in 23 countries from all regions of the world.

In the second phase of the project, detailed country specific studies were carried out in five countries: **Brazil, China, India, Papua New Guinea** and **South Africa**. The present study forms a part of the India Country Study, which is being co-ordinated by Ecotech Services (India) Pvt. Ltd. (ETS), New Delhi. The India Country Study is funded by the Department for International Development (DFID), India.

* In this project, the term ‘private sector’ is interpreted broadly such that it includes all those who engage in commercial activity concerning forest goods and services—be they individuals, community groups, informal sector groups or the large-scale corporate sector.

The broad objectives of the India Country Study are to understand the current situation, trends and potentials with respect to private sector participation in sustainable forest management; to review the impact of sectoral and extra-sectoral policies on private sector participation; and to explore strategic options for the private sector to contribute to sustainable forest management in India. The country study consists of six sub-studies divided into three broad themes: emerging new private sector players; policy provisions for private sector participation in sustainable forest management; and market-based instruments to encourage the private sector's contribution to sustainable forest management (see pages ix–x for a list of the 6 sub-studies).

The present study was undertaken in 1999–2000 and is part of the theme 'Policy provisions for private sector participation', which analyses various sectoral and extra-sectoral policies that affect private sector participation in sustainable forest management and identifies measures to ensure future sustainable supplies. It is hoped that the insights gained from this study would help policy makers in initiating necessary policy changes to further strengthen sustainable forest management in the country.

The Directors of ETS would like to formally acknowledge the institutional support by IIED, financial support by DFIDI, individual efforts made by our consultant, Mr. Daman Singh in completing this report, Ms. Hema Arora for her efforts in editing it and Mr. Sushil Saigal in assisting CTD for co-ordinating this sub-study.

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Sub-studies under the India Country Study

The New Foresters: the role of private enterprise in the Indian forestry sector is the India country study prepared under the project **Instruments for sustainable private sector forestry**. This study derives from a series of sub-studies that were commissioned under the project. The sub-studies are:

1. *Policies affecting private sector participation in sustainable forest management*. Daman Singh. Ecotech Services (India) Pvt. Ltd. 2002.

The private sector's participation in forestry activities is determined by policies at the central and state levels, not only those directly related to forests but also policies and legislation introduced for other sectors e.g. land ceiling on agriculture lands, export-import policies, tax laws etc. This study provides an overview of the policy environment for the private sector participation in forestry activities.

2. *Potential for commercial production from forests under Joint Forest Management*. Hema Arora, Anjali M. Bhatia and Snigdha Chakraborty. Ecotech Services (India) Pvt. Ltd. 2002.

Around 15 per cent of India's forestland is already under joint forest management (JFM). Given the considerable area under JFM, these forests could well be important sources of raw material in future. This study examines the potential for commercial production from JFM forests by analysing the situation in Haryana and West Bengal—two states where the JFM programme first started and has reached a level of maturity.

3. *New hope for private forestry: Policy and practice of Lok Vaniki in Madhya Pradesh*. S. Raghavan and P. Srivastava. Ecotech Services (India) Pvt. Ltd. 2002.

The state of Madhya Pradesh has recently introduced significant policy changes to encourage private sector participation in forestry. This study analyses the process of policy change and attempts to highlight the factors that made positive policy change possible.

4. *The ayurvedic medicine industry: Current status and sustainability*. Niraj Subrat, Meera Iyer and Ram Prasad. Ecotech Services (India) Pvt. Ltd. 2002.

Ayurvedic industry is an important forest-based industry, which uses a large quantum of medicinal plants that are mainly procured from the wild. The domestic market for *ayurvedic* formulations is expanding rapidly and the government is planning to substantially increase exports. There is danger of overexploitation of the medicinal plant resources if corrective steps involving the industry are not taken. This study examines the potential of application of certain market-based instruments to promote sustainable utilisation of these resources.

5. *Review of company-farmer partnerships for the supply of raw material to wood-based industry.* Sushil Saigal and Divya Kashyap. Ecotech Services (India) Pvt. Ltd. 2002.

The national forest policy clearly indicates that forest-based industry should meet its raw material needs by establishing direct relationships with farmers. This study analyses the experience with partnership schemes started by four companies and provides suggestions for improvement.

6. *The second green revolution: Analysis of farm forestry experience in western Tarai region of Uttar Pradesh and coastal Andhra Pradesh.* Sushil Saigal and Divya Kashyap. Ecotech Services (India) Pvt. Ltd. 2002.

Farm forestry was actively promoted by the government during the 1970s and 1980s, and farmers in several states planted trees on a large scale. Due to a variety of reasons, tree planting by farmers declined by the end of the 1980s. In recent years, farm forestry has again become popular among farmers. This study documents the farm forestry experience in the '70s and '80s and, through detailed case studies of two districts, analyses the reasons behind the popularity of farm forestry among local farmers.

These studies are available from Ecotech Services (India) Pvt. Ltd. and the Forestry and Land Use Programme of IIED (contact details are given behind the title page).



Executive summary

Recent years have seen numerous policy changes that have redefined the objectives of forest management and defined new roles for the various stakeholders in the forestry sector. In the contemporary policy context, forest conservation and the use of forests to meet subsistence needs of the forest-dependent communities are emphasised as national priorities. The private sector, including individuals, local communities and industry, are seen as partners in sustainable forest management. However, despite national level forest policies supporting this change, many policies at the state as well as central level continue to be geared to the old order where forest-dependent communities were seen as being responsible for forest degradation and from whom the forests had to be protected. Not only this, many policies outside the forestry sector have a significant influence on the extent to which the private sector can contribute towards production of forest goods and services. In this study an attempt is made to examine the implications of various national and state level policies and laws for private sector participation in sustainable forest management. It also explores ways in which the participation can be enhanced.

Under the present policy regime, government forests cannot be owned or leased by the private sector. The role that the private sector can play in management of these forests is also restricted. Only local communities are currently treated as stakeholders in managing state forests and conserving protected areas. Although industry

and individuals use produce from the government forests, they do not have any role in its management.

Community participation in the management of state-owned forests is being effected through the joint forest management (JFM) programme, which offers to the communities certain usufruct rights, a share in the harvest income and a role in management as incentives. The national guidelines issued by the Ministry of Environment and Forests provide the framework for JFM. The precise terms on which communities work with the Forest Department, however, are determined by policy measures introduced by state governments. Though some states have created a policy environment that is conducive for eliciting effective participation, most states do not provide a legal backing to the JFM resolution, give little or no share of the harvested produce to the community and give little power to the local communities to participate in the decision-making process. All these significantly affect the quality of peoples' participation.

About 3 per cent of the forest lands of the country are designated as private forests. Of these, corporate bodies and communities own half, while the rest are owned by individuals. The use and management of these forest lands is governed, in most of the states where they exist, either by separate Private Forest Acts or by provisions in the State Forest Acts. Although different states have different provisions in their Acts, these are generally quite restrictive: in some states, transfer of land, whether by sale or lease, is restricted; in other states, the owners must obtain permission to fell trees; in some cases the state may even assume management if the owners are deemed not to be taking sufficient care of their forests. Evidently, these measures undermine the tenurial security of private forests and limit the effort and input provided by the owners to increase the productivity of these lands.

The National Forest Policy envisages a major role for the private sector in planting on non-forest lands. However, numerous state level forest laws and rules that restrict the land owners to remove, transport and sell forest produce, act against the interest of the producers and discourage tree farming. In addition, there are other factors that govern the decision to invest in plantations, which are influenced by a range of national and state level policies that are outside the purview of the forestry sector. These pertain mainly to land ceiling, patent protection and domestic and international trade.

Land ceiling laws apply to taking up plantations. Permissible agricultural holdings are very small which restrict the corporate sector from playing any meaningful role in private sector forestry development or for raising any 'captive' industrial plantations for meeting raw material requirements for the wood-based industries.

Legislation for *sui generis* protection for breeder's rights is still pending, and there is no mechanism for certification of seed of forestry species or registration of clones. Recent introduction of Protection of Plant Varieties and Farmers' Rights Act (2001) may address this issue to a certain extent but much will depend on how effectively this legislation is implemented.

Laws in several states establish the state's monopoly in trade of certain timber and non-timber products. The degree of regulation varies across states but trade in sandalwood and *tendu* leaves is nationalised in all states that grow them and most states hold a monopoly in trade of major timber species and virtually all important non-timber forest produce (NTFP). A private grower is thus obliged to supply NTFPs only to government approved agencies and is paid a collection charge rather than a competitive price for his/ her produce. This acts as a major disincentive for private production.

The import of wood, wood products and pulp is now virtually

unregulated. Wood-based raw material and intermediate products respectively attract the lowest and middle order of import duties. The export of wood and unfinished wood products is prohibited on grounds of national scarcity. Low import duties and the ban on exports together work to depress domestic prices. This adversely affects the profitability of domestic wood producers.

Import duties are pegged at the highest level possible for non-wood raw material and finished goods. Regulation of imports accompanied by high duty structure insulates the domestic market. Since state owned bodies hold a monopoly in procurement and trade in commercial NTFPs, they are the primary beneficiaries of protectionist trade policies.

The new trade and industrial policies have forced private sector industries to restructure themselves in order to maintain profitability. However, many units have failed to do so. The transition has been particularly difficult for the wood-based industry, which also had to adjust to withdrawal of a committed supply of raw material at subsidised prices. Although favoured by liberalised raw material imports and high duties on finished goods, many of these industries are short of capital and use obsolete technology. Doubts about assured supply of raw material also discourage new investment and expensive modernisation. These conditions threaten the sustainability of wood-based industry.

Overall, persistent state regulation of private plantation and trade in forest produce coupled with the lack of policy support to biomass-based industry to modernise continue to constrain private sector participation.

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Author



1. Introduction

1.1 About the study

This study is part of a wider international project **Instruments for Sustainable Private Sector Forestry** co-ordinated by the London-based International Institute for Environment and Development. It aims to understand the current situation, trends and potentials with respect to private sector participation in sustainable forest management; to review the impact of sectoral and extra-sectoral policies on private sector participation and to explore strategic options for the private sector to contribute to sustainable forest management in India.

One of five country case studies, the India country study, *The New Foresters: the role of private enterprise in the Indian forestry sector*, is organised into three themes: emerging private sector players; policy provisions for private sector participation in sustainable forest management; and market based instruments to encourage the private sector's contribution to sustainable forest management. The research for this sub-study was undertaken within the second theme of the study. This sub-study examines the implications of various national and state level policies and laws for private sector participation in sustainable forest management.

The study is based on a review of literature, analysis of secondary data, and perusal of official documents and legal texts. It also draws from discussions held with researchers, government

officials, and participants in the workshop organised as part of the research project in June 2000.¹

1.2 Structure of the report

For the purpose of the study, the private sector is defined to include the non-state, direct users of forest resources. These are grouped as individuals, local communities and biomass-based industry. The scope of participation of these entities varies according to their status as owners, managers or users of forest resources. Correspondingly, the report separately examines the private sector role in state forests (as managers and users), in private forests (as owners, managers and users) and in industrial processing (as users). National and state level policies and laws relating to these are discussed in sections 2, 3 and 4 respectively. Section 5 concludes the paper with a summary of key policy opportunities.

1.3 The agenda for forest management

Sustainable management of forests requires that a balance be achieved among the social, economic and environmental services that this resource provides. Policies that determine or influence the nature of this balance vary according to national and sub-national priorities at any given time. During colonial rule in India, economic exploitation of forests was of primary importance.² After Independence in 1947, forests retained their commercial importance

¹ This workshop was organised to review the progress of different sub-studies under the India country study and was mainly attended by those directly associated with the study and a few outside experts.

² In the early British period, the main objectives of the colonialists were to obtain timber for ship building, local construction, sandalwood export and to encourage conversion of forest lands into agricultural revenue-paying lands (Lal 1992; Hobley 1996 in Saigal 1998). However, in the later British period, stress was also laid on meeting people's needs. A forest policy was announced in 1894, which placed great emphasis on the management of forests for the overall public benefit. It also stressed the importance of meeting local needs.

although certain social and environmental priorities were also recognised. In the contemporary policy context, there is a marked shift away from production forestry, and the need to ensure conservation and meet subsistence needs are emphasised as national priorities.

The National Forest Policy of 1988 sets out the agenda for forest management in India. The objectives of this policy are to maintain environmental stability; conserve natural forest and biodiversity; check soil erosion and the extension of sand dunes; increase forest productivity to meet essential national needs; undertake massive afforestation, especially on degraded land; meet biomass needs of rural and tribal people; encourage efficient utilisation of forest produce and maximise wood substitution. The policy envisages a people's movement, with the involvement of women, to achieve these objectives (GoI 1988).

The National Conservation Strategy and Policy Statement on Environment and Development of 1992 reiterates the above and includes a commitment to increase biomass production to meet essential requirements of biomass-based industry. It also seeks to develop technologies that enhance the productivity and efficient use of all biomass resources, recycle wastes, recycle natural resources, conserve energy and conserve natural resources (GoI 1992). The Ninth Five Year Plan strategy for the environment seeks to involve the private sector but it does not outline any specific measures in relation to forestry (Planning Commission 1999).

Clearly, the national agenda identifies individuals, local communities, and industry as partners in sustainable forest management. However, the precise form and extent of their respective participation depends on a number of national and state level policies and laws, as well as on a plethora of official rules and

regulations.³ These relate to forests as well as to agriculture, social welfare, industry, environment and trade. These are discussed in the subsequent sections.

³ As a complete set of updated state forest laws is not readily available, the discussion that follows is only indicative as it considers a limited number of laws. These have been used to highlight issues that may be relevant to other states, but do not intend to generalise the situation in all states.

2. Policies affecting private sector participation in state forests



The process of colonisation converted almost half of India's geographical area into government property, roughly 40 per cent of which was controlled by the Forest Department (Singh 2000). Even today, the government owns an overwhelming majority of forests. According to official estimates, 93 per cent are controlled by the Forest Department and another 4 per cent by the Revenue Department. In contrast, corporate bodies and communities together own 1.5 per cent of forests, while private forests constitute another 1.5 per cent of all forests (ICFRE 1996).

Government ownership of forests has been well established in both forest laws and policies since the period of colonial rule. More recently, governmental control and more specifically central government control, has been further strengthened by two events.

- In 1980, forests were moved from the state list to the concurrent list of the Constitution of India, giving both the centre and state the authority to legislate on the subject. Therefore, by virtue of its constitutional powers relating to forests and the

Box 2.1: National level laws/policies applicable to government forests

- Indian Forest Act, 1927
- Wildlife (Protection) Act, 1972
- Forest (Conservation) Act, 1980
- National Forest Policy, 1988
- National Conservation Strategy and Policy Statement on Environment, 1992
- National Guidelines for Joint Forest Management, 1990 and 2000

predominance of government ownership over much of this resource, the central government is a major influence on forest management throughout the country.

- Also in 1980, the Forest (Conservation) Act was passed: this restricts any change in land use and transfer of ownership of forests. Two new clauses added to the Act in 1988 have severely restricted the role of the private sector on government forest lands. According to Sub-clause 2 (iii) of the Forest (Conservation) Act, any forest land or any portion thereof cannot be assigned by way of lease or similar arrangement, for any purpose whatsoever, including afforestation, to any private person or to any authority/agency/organisation not wholly owned, managed and controlled by the government, without the prior approval of the central government.⁴ Sub-clause 2 (iv) of the Forest (Conservation) Act prohibits clearing of naturally grown trees in forest land for the purpose of using it for reforestation.

The National Forest Policy also stresses that natural forest will not be made available to industries, whether for plantation or for other activities. These provisions virtually preclude transfer of ownership to or lease of government forest land by the private sector.

Leasing of forest land to industry has been a long standing debate and was the subject of a working group set up in 1997 by the Planning Commission. The report of the working group deals primarily with the demand of the paper industry to raise captive plantations on government forest land to meet its raw material requirements. The working group recommended against leas-

⁴ The lease of forest produce (and not just forest land) is also deemed to be in contravention of the Forest (Conservation) Act. However, the Governments of Orissa and Arunachal Pradesh have entered into agreements with industry for use of forest land on terms that are deemed to contravene the Forest (Conservation) Act 1980 (Planning Commission 1998).

ing of land, as it was against the Forest (Conservation) Act, the National Forest Policy, and on social, ecological and economic grounds (Planning Commission 1998). Instead, the Planning Commission recommended concerted attention be given to developing farm forestry and various company-grower arrangements to generate the raw material to meet India's pulp and wood needs. These recommendations have been cited in the Ninth Five Year Plan document.

Thus, the government holds ownership rights of government forests, and it is not possible for these rights to be transferred to individuals, local communities or to industry. However, while the private sector cannot expect to own government forests, local communities may qualify as managers and users. National policies affirm that forests should meet the biomass needs of tribal and other poor communities dependent on forests (subject to carrying capacity) and also envisage their involvement in management. On the other hand, while industry is treated as a legitimate user, it is not eligible for a role in management.⁵ Hence, within the private sector, local communities alone are currently treated as stakeholders in managing government forests (see table 2.1).

In line with the National Forest Policy, there has been a strategic move to enlist local support for forest protection and to inculcate controlled utilisation by communities living in and around government forests. As a result, joint forest management (JFM) has been introduced in most states and participatory 'ecodevelopment' projects are being implemented in selected protected areas.

⁵ The system of forest leases for harvest of timber and bamboo as per Working Plan prescriptions to industry or forest contractors has also been abolished. Logging operations are carried out either by the state Forest Departments or Forest Development Corporations (FDCs) and the private sector has no role to play even in the development of scientific logging operations.

Table 2.1: National Forest Policy: role for private sector in state forests

<i>Entity</i>	<i>Eligibility</i>
Individuals and local communities	<p>Customary rights and concessions (including grazing) to be first charge on forest produce, subject to carrying capacity; produce to be supplied through conveniently located depots at reasonable prices; such facility should be extended to scheduled castes and other poor people living near forests, subject to carrying capacity; rights holders to be involved in protection and development.</p> <p>Communities may be involved in protecting, afforesting and developing degraded forest land, especially near habitations; in return for usufructs and share in revenue as may be decided by the state government</p>
Industry	<p>Natural forest will not be made available to industry for plantation or for any other activity</p> <p>The practice of supplying forest produce to industry at concessional prices should cease.</p>

Source: Gol 1988, Gol 1990

2.1 Joint forest management

In the past, Forest Departments in states such as West Bengal, Arunachal Pradesh, Orissa and Gujarat explored different ways of working with local communities to manage government forests. Building on this experience, national guidelines for JFM were formulated in 1990 and revised in the year 2000. The concept of JFM envisages the involvement of village communities in the protection and/or regeneration of government forests. As an incentive, communities are entitled to certain usufruct rights, a share in the harvest income and a role in management. According to latest official statistics, JFM is being implemented by 27 state governments and over 62,000 JFM groups are engaged in protecting and managing around 14.2 million hectares of forest lands (see annex 1).

While JFM provides unprecedented incentives for community participation in protection and short-term management, there are different views on the long-term implications of this arrangement. Some claim that the performance of the new system has been far from uniform and that successful examples exist on a scale too small to validate general solutions. Others argue that the present form of joint management is heavily weighed against local communities and does not constitute meaningful participation.⁶

The national guidelines issued by MoEF in 1990 and again in 2000 provide the framework for JFM. However, the precise terms on which communities work with Forest Departments are determined by policy measures introduced by state governments. Four elements seem critical to the quality of community participation on a sustained basis. First, communities are more likely to make long term commitments to JFM if the programme and local groups (or JFM committees) have legal standing. Second, assured usufruct rights are likely to act as a powerful incentive. Third, an attractive share in income on harvest would encourage continued participation for protection. Fourth, local control over decision-making would increase the opportunities for effective participation.

The national guidelines on JFM support local participation only on the second count: assuring usufruct to the communities engaged in JFM. They are non-prescriptive on the other three elements, and leave it up to the state governments to decide (see table 2.2). At this stage it is important to take some steps at the national level to reinforce community participation in JFM:

- JFM should be given legal backing.
- National guidelines should prescribe the minimum share of net income due to JFM committees upon successful protection of

⁶ See Arora 1994 and Pathak and Kothari 1998.

Table 2.2: JFM: policy measures critical for community participation

<i>Requirement</i>	<i>National level policies</i>	<i>State level policies</i>
Legal standing	The Indian Forest Act 1927 does not envisage a role for local communities in management of state forests. The 1990 guidelines were silent on the subject of legal status of JFM committees. Those issued in February 2000 suggest that all committees be registered under the Societies Registration Act, 1860.	The legal status of the JFM programmes, and of JFM committees varies across states; compliance with latest national guidelines is yet to be reported.
Assured usufructs	According to the 1990 guidelines, communities should be given usufructs like grasses, lops and tops of branches and minor forest produce. The state government is to prescribe the extent and conditions of usufruct rights.	Usufruct rights are provided in all states, subject to those of traditional right holders; in some cases these do not conform to existing state laws.
Fair share in income	According to 1990 guidelines, communities may be given a share of the proceeds from the sale of mature trees, upon successful protection. February 2000 guidelines prescribe an upper limit of 20% of revenue in the case of good forest areas.	Share in income varies within states for different products and across states as well.
Reasonable degree of local control	According to 1990 guidelines, microplans are to be prepared in consultation with communities; the Forest Department should closely supervise operations. Guidelines in 2000 suggest that these be dovetailed with departmental working plans	Powers of participating communities vary in different states.

Source: Gol 1990, Gol 2000.

both degraded and good forest areas; they should also prescribe the items of departmental costs that may be recovered from gross income.

- National guidelines should prescribe the minimum degree of control that JFM committees should be provided.

The situation in the states *vis-à-vis* these points is as presented below.

2.1.1 Legal status

The national guidelines for JFM do not prescribe any legal framework under which the programme should operate. While some states have passed the programme under an existing law, most have launched the programme through administrative orders. JFM programmes are backed by the force of law in only four states: Jammu and Kashmir, Orissa, Rajasthan and Uttar Pradesh. In the remaining states it operates by administrative instructions of different types (see table 2.3). In the absence of legal backing, such orders are liable to be challenged.

In addition, the legal status of JFM committees affects the nature and sustainability of community participation. Various studies argue that the committees must be formal organisations rather than informal groups.⁷ In response, national guidelines issued in February 2000 direct state governments to register the committees under the Societies Registration Act, 1860. Table 2.3 shows the position across states prior to this directive. The committee is a registered body in six states: Arunachal Pradesh, Gujarat, Haryana, Karnataka, Rajasthan and Uttar Pradesh.

In order to institutionalise community participation in JFM:

- JFM should be notified under relevant sections of state forest laws.

⁷ See Arora, Saigal and Singh 1999

Table 2.3: Legal status of JFM

<i>State</i>	<i>Legal status of JFM programme</i>	<i>Legal status of JFM committees</i>
Andhra Pradesh	Government order	Committee
Arunachal Pradesh	Notification	Society or association registered under the Society's Registration Act 1860
Assam	Government order	Committee
Bihar	Government resolution	Committee
Gujarat	Government resolution	Village <i>panchayat</i> ; cooperative society registered under the Societies Registration Act 1860 and/or the Bombay Public Trust's Act 1950
Haryana	Government memorandum	Society registered under the Society's Registration Act 1860
Himachal Pradesh	Notification	Committee
Jammu and Kashmir	Issued under section 5 and 14A of the Jammu and Kashmir Forest Act 1987	Committee
Karnataka	Government order	Association registered under the Karnataka Societies Act
Kerala	Government order	Committee
Madhya Pradesh	Government resolution	Committee
Maharashtra	Government resolution	Committee; forest labour cooperative societies
Nagaland	Notification	Committee
Orissa	Notification; land to be notified as village forest	Committee

State	Legal status of JFM programme	Legal status of JFM committees
Punjab	Government resolution	Committee
Rajasthan	Issued under articles 28, 80 and 81 of the Rajasthan Forest Act 1953	Cooperative societies (tree growers, forest labour, etc)
Tamil Nadu	Government order	Committee
Tripura	Government resolution	Committee
Uttar Pradesh	Issued under section 28 and 76 of the Indian Forest Act 1927	Committee constituted under sub-section 6 of section 29 of the Uttar Pradesh Panchayat Raj Act 1947
West Bengal	Government resolution	Committee

Source: SPWD 1998

- Committees must be given formal status; it would, however, be wise to explore alternative forms of organisations at the state level rather than adopt a single option across all states.

2.1.2 Usufruct rights

People who live in and around forest areas are dependent on forest produce to meet domestic needs of fuel, fodder, small timber, and a variety of fruits, flowers and leaves for different purposes. In accordance with state forest laws, local communities generally have the right to obtain such produce free of charge or at concessional prices. In areas where there is a high degree of pressure on forests, resulting in their degradation, people face tremendous hardship in meeting basic needs. Hence, assured usufructs is a crucial incentive for community participation.

Most JFM programmes allow participating communities to remove some amount of fuelwood (dead and fallen wood), small timber

(lops, tops, and branches from thinning), grasses, leaves, fruits, flowers and seeds for their personal use (excluding nationalised produce in which the government has a monopoly). In some states this is supplemented by the concessional sale of produce to committee members. Such a provision exists in Gujarat and Maharashtra for timber, and in Karnataka for both timber and non-timber forest produce (NTFP).

The usufruct rights of committee members are, however, subject to traditional rights and concessions due to people who may not be members, for instance, in Madhya Pradesh. Since usufruct rights must be exercised within the carrying capacity of the forest, JFM communities may eventually get only limited usufructs. In some states, there are areas of conflict between user rights specified in JFM and those granted by prevailing laws. For instance, in Andhra Pradesh, tribal communities are given special usufruct and grazing rights under the rules governing protected forests. These are not specifically accommodated in the JFM order. Also, while the *Panchayat* Act vests the *gram sabha* (village assembly) with the right to collect NTFPs, the JFM order assigns collection rights of non-scheduled NTFPs to committee members.⁸ Similarly, in Rajasthan, the JFM orders do not clarify the rights and concessions due to traditional right holders in forest areas. In Gujarat, while grazing is allowed in protected forests according to protected forest rules, it has been prohibited in the JFM programme (Arora, Saigal and Singh 1999).

In order to provide communities participating in JFM with assured usufructs:

- State governments must resolve competitive rights of JFM committees *vis-à-vis* other right holders and create fair and transparent mechanisms to deal with conflicts.

⁸ *Panchayat* is the lowest unit of local self-government.

- The rights and responsibilities under JFM should be in line with existing laws governing the forests. In case of conflicting provisions, necessary amendments should be effected.

2.1.3 Share in income

The promise of a share in income from intermediate and final harvests is a powerful incentive for communities to protect forests over a long-term period. A greater share for communities is thus likely to result in better regeneration. JFM brings the local community and the Forest Department together in a collaborative arrangement. Their respective share in net income reflects how community effort in protection and management is valued *vis-à-vis* the surplus due to government as the custodian of the land. Table 2.4 presents the share of communities in NTFP, intermediate harvest and final harvest.

Andhra Pradesh and Tamil Nadu stand out among states for giving communities the entire net income earned on timber harvest. In contrast, in parts of Madhya Pradesh and West Bengal, JFM offers nothing to communities. For intermediate produce the balance shifts in favour of communities and is more generous when it comes to non-scheduled NTFP. Yet, the net balance weighs sharply against communities in states such as Bihar, Haryana, Himachal Pradesh, Jammu and Kashmir, Kerala, and parts of Madhya Pradesh and West Bengal.

It is important to note that JFM committees do not have a share in income derived from scheduled NTFP, i.e., produce in which the government enjoys monopoly rights of trade. These generally cover all NTFP of commercial value. It is now a well-established fact that in many forests, the economics of NTFP is comparable to that of timber produce. In such cases, JFM denies communities any share in the income that is derived by virtue of their

Table 2.4: Community share in net income

<i>Share in income</i>	<i>NTPF (non-scheduled)</i>	<i>Intermediate harvest</i>	<i>Final harvest</i>
Nil		Madhya Pradesh (well stocked forest)	Madhya Pradesh (well stocked forest), West Bengal (north Bengal/Darjeeling)
10%			Kerala
25%		Himachal Pradesh, West Bengal	Assam, Himachal Pradesh, Jammu and Kashmir, West Bengal (south West Bengal/Sunderbans)
30%	Bihar	Bihar	Bihar, Madhya Pradesh (degraded forests)
33%		Haryana	Haryana
50%	Karnataka, Uttar Pradesh	Arunachal Pradesh*, Assam, Gujarat, Karnataka, Orissa, Tripura, Uttar Pradesh	Arunachal Pradesh*, Gujarat, Karnataka, Maharashtra**, Orissa, Tripura, Uttar Pradesh
60%			Rajasthan
100%	Andhra Pradesh, Arunachal Pradesh, Himachal Pradesh, Kerala, Madhya Pradesh, Rajasthan, Tripura, West Bengal	Andhra Pradesh, Madhya Pradesh (degraded forest), Rajasthan	Andhra Pradesh, Tamil Nadu

* gross income; ** gross income less taxes

Source: SPWD 1998; Arora, Saigal and Singh 1999

investment in protection. Granting communities a share in net income from NTFP would serve a crucial purpose by providing short-term gains that would be useful in sustaining community interest.

In order that communities are treated as equal partners in JFM:

- Communities should be entitled to at least 50% of the total net income earned through sale of all NTFP (including scheduled items), intermediate harvest as well as final harvest.
- Departmental costs to be recovered from gross income should be rationalised and completely transparent

2.1.4 Degree of control

The partnership between communities and government in JFM may be assessed quantitatively in terms of income sharing, and qualitatively in terms of control in decision-making. A recent study of eight states found that the autonomy granted to JFM committees varies, and in some cases (such as Uttar Pradesh) is highly ambiguous. The degree of autonomy was assessed in terms of the powers to admit members; cancel membership; convene meetings; elect the executive committee; dissolve the executive committee; assume posts as office bearers; maintain accounts; apprehend offenders and influence action against them; charge fines; play a formal role in microplanning; and distribute benefits. JFM committees in Andhra Pradesh and Rajasthan (followed closely by Gujarat and Haryana) enjoy greater autonomy in contrast to those in West Bengal. Karnataka and Madhya Pradesh fall between the two extremes, largely on account of the fact that committee members may not hold the important executive posts, as is the case in West Bengal (Arora, Saigal and Singh 1999).

In order that communities are treated as equal partners in JFM and act responsibly in the interests of forest conservation:

- State governments must make substantial investment in local capacity building.
- Local communities must have a reasonable degree of control in critical decisions on local matters.

2.2 Ecodevelopment

Protected areas are the second arena in which local communities are sought to be involved. The protected area network consists of 84 national parks and 447 wildlife sanctuaries, spanning about 15 million hectares. In 1991–92 the Government of India launched an eco-development scheme around selected protected areas, mainly tiger reserves. In 1996, India Ecodevelopment Project was started around seven protected areas with the assistance of the World Bank. This US\$ 67 million project is being implemented in the following protected areas: Palamau in Bihar, Buxa in West Bengal, Nagarhole in Karnataka, Periyar in Kerala, Pench in Madhya Pradesh, Gir in Gujarat and Ranthambhore in Rajasthan.

Under eco-development, the aim is to provide improved subsistence strategies to the local people through improving productivity and utilisation of their lands and other resources and enhancing their income. The hope is that this would help in reducing the dependence of these communities on the protected areas. Unlike JFM, the objective of eco-development is not the involvement of the fringe communities in the management of protected areas but is limited to enlisting their cooperation for conservation of protected areas through provision of certain economic incentives.

The current law governing protected areas, the Wildlife (Protection) Act, 1972, does not offer much space for local communities' participation in the management of protected areas. Although efforts are underway to amend it and introduce new categories of

protected areas such as ‘community reserves’,⁹ the proposed amendments do not tackle the issue of involving the village communities in the protection and management of existing protected areas. The process of declaring an area as protected is still arbitrary and there is a need for greater transparency and participation in settling of rights (Pathak and Kothari 1998).

⁹ A draft amendment to this law seeks to introduce two new categories of protected areas: ‘conservation reserves’ to provide buffers or corridors to existing protected areas, and ‘community reserves’ declared on the recommendation of a community or individuals seeking legal sanction and recognition to areas that they wish to protect. In both cases, local communities are to be represented on advisory committees for management.

3. Policies affecting private forests and plantations on non-forest lands



3.1 Private forests

About 3 per cent of the forest lands of the country are designated as private forests.¹⁰ Of these, corporate bodies and communities own half, while the rest are owned by individuals. The use and management of these forest lands is governed, in most of the states where they exist, either by separate Private Forest Acts or by provisions in the State Forest Acts. Although different states have different provisions in their Acts, there are two areas of concern regarding the involvement of the private sector in the management of these forests. These relate to the restrictions placed on the owner regarding the transfer of private forest land (see table 3.1) and the use of private forests (see table 3.2). The states of Andhra Pradesh, Kerala, Tamil Nadu and Orissa restrict the transfer of these lands.

¹⁰ Private forests refer to lands that are privately owned and are legally designated as 'forest lands' in the land records of the government. These are distinct from private lands that are forested but appear as 'agricultural lands' or 'wastelands' in the land records. Many laws that apply to legally classified private forest land may not apply to the forests/ plantations on other private lands. However, in many cases, the lands to which the Private Forest Acts apply is ambiguous as the Acts do not define forests (see Srivastava 2001).

Private forests were virtually decimated after Independence. With the abolition of *zamindari* in the 1950s and enactment of land reform laws, large tracts of Private Forest land in excess of ceiling limits were acquired by the government. Some state governments enacted separate laws to deal with the acquisition of private forests and their subsequent management. This process was distinct from the provision in the Indian Forest Act, 1927, and numerous state forest laws that allows take over of private forests for special purposes, namely soil and water conservation and public health.

This means that the land owner has to obtain permission, often from the District Collector, in order to sell, mortgage, lease or otherwise alienate the whole or any portion of forest land (or forest produce). These restrictions are expected to serve two purposes: first, to check the alienation of valuable forest land (often owned by tribals), and second to prevent the forests from being cleared or degraded.

Table 3.1: Laws restricting transfer of private forest lands

<i>Law</i>	<i>Section</i>
Andhra Pradesh Forest Act, 1967	28B
Kerala Preservation of Private Forest Act, 1972	3
Tamil Nadu Preservation of Private Forest Act, 1949	3
Orissa Preservation of Private Forest Act, 1947	3

Laws dealing with private forests in other states do not mention the issue of land transfer. Instead, the owner must obtain permission in order to cut or girdle trees, or do any act likely to denude a forest or diminish its utility as a forest.¹¹ This provision clearly aims to prevent clearfelling and conversion to agriculture, but in order to do so it regulates the removal of forest produce, particularly timber.

Additionally, the regulations provide that if government perceives that the land owner is not taking adequate care of his/her forest, it has the power to assume management through a process of notification. Such forest is variously termed ‘private protected forest’ (in Bihar), ‘controlled forest’ (in Himachal Pradesh) and ‘vested forest’ (in Uttar Pradesh and West Bengal). Further, under Section 35 of the Indian Forest Act, 1927, the state government may regulate or prohibit cultivation, pasturing and clearing of vegetation

¹¹ Permission is not required for using forest produce for customary or domestic needs.

Table 3.2: Laws regulating the use of private forests

<i>Law</i>	<i>Section</i>
Andhra Pradesh Forest Act, 1967	28B
Bihar Private Forests Act, 1947	7
Goa, Daman and Diu Forest Rules, 1964	46
Himachal Pradesh Private Forest Act, 1954	7
Karnataka Forest Act, 1963	37
Kerala Preservation of Private Forests Act, 1972	3
Orissa Preservation of Private Forest Act, 1947	3
Tamil Nadu Preservation of Forests Act, 1949	3
Tamil Nadu Hill Areas (Preservation of Trees) Act, 1955	3,4
Uttar Pradesh Private Forests Act, 1948	7
West Bengal Private Forests Act, 1948	5-A

in private forests through notification issued after a process of dealing with any objections that the land owner may have.¹²

Evidently, these measures undermine the tenurial security of private forests and are largely responsible for the common perception that land put to trees is liable to be acquired by government; a belief that discourages farm forestry. Further, transferable property rights are an important prerequisite for the economic use of land. The existing restrictions limit the effort and input provided by the owners to increase the productivity of these lands. Control over transfer or sale of private forest land in tribal areas must be seen in the context

¹² These provisions however did not prove much effective in practice as the term 'forest' or 'wasteland' was not defined in the Act and as a result the areas to which these provisions were to be made applicable were not clearly identifiable.

of similar regulations that deal with the real problem of private land being usurped by non-tribals. However, such controls are not justified in non-tribal areas, where they do not apply to other categories of private land.

Similarly, regulating removal of forest produce by owners of private forest is certainly necessary on environmental and public health grounds. However, given the fact that private forests are at best small tracts of land, their conversion is likely to have adverse impacts only on the local environment. Such impacts could well be assessed by local government, i.e. village *panchayats*. This would help to remove some of the barriers faced by land owners in getting permission to fell their own trees from district level officers.

Two steps would be useful to ensure secure ownership rights of private forests:

- In non-tribal areas, owners should be free to sell, mortgage or lease private forests.
- In all areas, the village *panchayat* should be authorised to permit removal of forest produce from private holdings.

3.2 Plantations on non-forest lands

Other than in forest areas (state or private), plantations can also be taken up on non-forest lands.¹³ Plantation of trees, shrubs and grasses outside state forests contributes to sustainable forestry by increasing green cover, stabilising soil, and by supplying wood and non-wood products which helps to reduce the pressure on natural forests. In combination with social objectives, these considerations led to the introduction of social forestry programmes in the Sixth

¹³ Non-forest land essentially consists of private land, and public land owned either by *panchayats* or the Revenue Department.

Five Year Plan. These programmes were designed to promote farm forestry, agroforestry, and plantation on private land and on non-forest public land. Since the 1980s, a number of programmes for poverty alleviation and rural development and externally aided forestry projects have invested substantially in social forestry. As of 1997–98 their cumulative coverage is estimated at about 6–8 million hectares. Agroforestry accounts for about half the area planted since 1980. Industrial plantations consisted of about 30 per cent (5 million hectares) of all plantations in forest and non-forest land till 1990 (MoEF 1999). The private sector has also invested in forestry over the years. Farmers have planted trees at homesteads, in fields and on marginal lands at their own expense, and with the support of wood-based industries. Industries have leased public land to raise captive plantations. Local groups, notably forestry cooperatives, have pooled private land or leased public land for plantation. Yet the extent of private forests is quite limited.

The lack of suitable policy support and imperfect markets are cited as major constraints to private sector plantation. However, a number of recent changes in the way state forests are managed provide new opportunities for private forestry. Since 1988 the central government has taken steps to drastically curtail timber extraction from state forests in order to arrest degradation of forests across the country. At the same time the National Forest Policy advocates that industry no longer be provided forest produce at concessional prices. Each of these measures reduce the supply of wood from state forests to industry, indirectly creating a strong impetus for private plantations to meet the deficit.

The National Forest Policy envisages a major role for the private sector in planting on these lands (see table 3.3). However, numerous state level forest laws and rules that regulate user rights of the land and its produce, act as major disincentives for the involvement

Table 3.3: National Forest Policy: provisions for private plantation

<i>Entity</i>	<i>Role</i>
Individuals	<p>People should undertake tree farming and grow fodder plants, grasses and legumes on their own land; this should be facilitated by modification of land laws; degraded land may be made available on lease/tree <i>patta</i> basis¹⁴, subject to land grant rules and land ceiling laws; felling of trees on private land should be suitably regulated. (Paragraph 4.2.4)</p> <p>Farmers may be encouraged to grow wood species required for industries. These may also be grown along with fuel and fodder species on community lands not required for pasture purposes. (Paragraph 4.9)</p>
Communities	<p>Communities should be responsible for the maintenance of tree crops and fodder resources on village and community land with technical assistance and other inputs to be provided by government; certain tree ownership rights may be vested in individuals; communities are entitled to usufruct rights; revenue is to be shared with community (and <i>panchayat</i> if land is vested in it). (Paragraph 4.2.3)</p>
Industry	<p>Forest-based industries should raise their own raw material, preferably in association with individual farmers, by supporting them with inputs including credit, technical advice, and harvesting and transport services. (Paragraph 4.9)</p>

Source: Gol 1988

of the private sector. Further, since the requisite land, resources, and market support for plantation lie outside the purview of the forest sector, this policy is by itself largely ineffectual.

Individuals, local communities and biomass-based industries are motivated to plant trees either for consumption or for sale of raw material or value added products. The decision to invest in plan-

¹⁴ Tree *patta* refers to the granting of right over the produce from the trees.

tation is primarily influenced by ownership and user rights to the land and its produce. It is also governed by the availability of land, access to inputs, technical support and institutional finance. In the case of commercial plantations it is subject to market conditions. A wide range of national and state level policies and laws have a bearing on each of these aspects and are elaborated in the following sub-sections (see table 3.4).

3.1.1 User rights

Section 35 of the Indian Forest Act, 1927, relates to the protection of private forests and wasteland for special purposes. These include protection against soil erosion and land slips; maintenance of water supply in springs, rivers and tanks; protection of communication lines; and the preservation of public health. On these grounds the state government may regulate or prohibit cultivation, pasturing and clearing of vegetation through notification issued after a process of dealing with any objections that the land owner may have.

Since forests have a number of environmental functions (particularly in hilly or undulating terrain) this provision clearly provides a mechanism to protect private forests in public interest. The interpretation of public interest may however be rather subjective. Further, the Act does not define ‘private forests’ and ‘wastelands’. Consequently, these provisions could be arbitrary in practice. In order to facilitate private initiative in plantation, the following changes are called for:

- Transparent and fair procedures involving village *panchayats* should be in place to assess the environmental impact of private forest management.
- The scope of these Acts should be clearly defined.

Apart from laws dealing with the ownership and use of private forests and their produce, there is a separate set of regulations for

Table 3.4: Laws/policies affecting private plantation

<i>Requirements</i>	<i>National level policies</i>	<i>State level policies</i>
Secure, transferable ownership	–	Some state forest laws restrict land transfer.
Secure rights of use	The Indian Forest Act, 1927, empowers the state government to control the use of private forests on certain environmental and other grounds. It also vests the state government with the right to control all timber and other forest produce in transit.	Various state laws restrict the right of land owners to remove, transport and sell forest produce.
Availability of land	National guidelines prescribe maximum land ceilings and permitted exemptions. The Ninth Five Year Plan recommends giving the poor access to wastelands.	State laws determine land ceilings and exemptions. State schemes exist for allotment of public wasteland.
Access to institutional finance	The National Bank for Agriculture and Rural Development (NABARD) provides banks with refinance through a number of forestry schemes.	
Access to inputs and technical support	The National Forest Policy states that the government should provide inputs and technical support for community plantation.	State governments distribute subsidised saplings and technical assistance to growers.
Remunerative prices of forest produce	The central government influences prices of forest produce through regulating exports and imports, and levying customs duties. The National Forest Policy prohibits subsidised supply of forest produce to industry.	State governments control the market for nationalised items; as major sellers of forest produce they influence prices of other items as well.

individual tree species found on any private land (including private forests) (see table 3.5). Permission, often from the Divisional Forest Officer or a designated tree authority, is thus required to fell trees and to transport forest produce. The relevant species are listed in schedules that may be modified through notification. Normally, scheduled species are those of commercial timber value and permits are issued to prevent their illegal removal from state forests. In the case of tribal communities they are also designed to protect owners from unscrupulous deals.

The system of felling permits for certain species discourages tree farming and imposes high transaction costs on people who do plant trees. In non-tribal areas, the only rationale for such a system is to establish the legitimate source of produce. In order to ensure that this is not a disincentive for plantation, it is possible to prune the list of scheduled species to exclude those that are preferred by farmers. In most cases there is little overlap between these species and those found naturally in state forests. Such a step was in fact

Table 3.5: Laws that control felling of private trees

<i>Law</i>	<i>Section</i>	<i>Number of species</i>
Andhra Pradesh Preservation of Private Forest Rules, 1978 (applicable only in scheduled areas)	3	12 (10 species prohibited)
Karnataka Preservation of Trees Act, 1976	8	All but 2
Kerala Preservation of Trees Act, 1986	4	10
Maharashtra Felling of Trees (Regulation) Act, 1964	3	14 +12 mangrove species
Uttar Pradesh Protection of Trees in Rural and Hill Areas Act, 1976	4,5	42 timber species and 13 fruit species.

taken in Uttar Pradesh in 1982. A total of 16 species, including poplar, eucalyptus, casuarina and leucaena were notified to be exempt from the provisions of the tree protection law.¹⁵ Apart from this, village *panchayats* should have the authority to certify the origin of trees being felled and issue felling permits.

The above arguments also hold for transit passes. In a number of cases transit rules have been modified to facilitate private growers. For instance, in Andhra Pradesh, eucalyptus (*Eucalyptus spp.*), casuarina (*Casuarina equestifolia*) and subabul (*Leucaena leucocephala*), all popular with farmers, were exempted from transit passes in 1984. In Orissa, the Range Forest Officer (as opposed to the Divisional Forest Officer or Assistant Conservator of Forests) was authorised in 1991 to issue permits in respect of certain plantations (barring 11 species) under the state social forestry project. Eucalyptus and certain bamboo species were exempted from transit rules in the state in 1992. In Madhya Pradesh, the Transit (Forest Produce) Rules, 1961 were amended in 1995 to cut down its list of trees requiring transit passes to 15 species found growing in natural forests. Of these, the village *panchayat* was allowed to issue transit passes for 10 species (see annex 2). However, these rules have been further amended and new transit rules issued in 2000. Under the new Rules, 6 fast growing tree species need no transit pass, another 8 tree species commonly found growing on farmlands get transit pass from the *panchayat*, while the transit pass for all other species will be issued by the DFO or a person authorised by him.

In order to rationalise and simplify the system of felling and transit permits it would be useful to:

¹⁵ The complete list is as follows: *Sesbania grandiflora*, *Ailanthus excelsa*, *Alnus nitida*, *Casuarina equestifolia*, *Pithecellobium dulce*, *Populus spp.*, *Tamarix aphylla*, *Melia azedrach*, *Acacia nilotica*, *Prosopis juliflora*, *Eucalyptus spp.*, *Robinia pseudoacacia*, *Acacia mearusii*, *Salix spp.*, *Albizia spp.*, *Leucaena leucocephala* (vide notification no. 86/XIV-3-377-76, dated 20th January 1982).

- Exempt species predominantly grown in private holdings from felling and transit regulation.
- Authorise the village *panchayat* to issue felling permits and transit passes.

3.1.2 Land availability

Scarcity of land is often cited as a major constraint to private plantation. In this context there is a view that restrictions on the maximum size of land holdings should be removed to allow farmers to put their land to forestry.

Land ceilings are one of the elements of land reforms that seem to alleviate poverty and lead to growth with distributional equity. In 1972 the central government set out land ceiling guidelines for state governments. Accordingly, for a five member family, holdings of the best category of land in a state, with assured irrigation and capable of yielding at least two crops a year should be limited to 10–18 acres; holdings with assured irrigation for a single crop a year should be limited to 27 acres; and all other type of land should be limited to 54 acres. In the case of owners with holdings consisting of different types of land, the total holdings after converting better categories into the lowest categories should not exceed 54 acres (IASSI 1991). As can be seen in annex 3, all state governments have adopted these limits.

Land ceilings are designed for the purpose of agriculture and thus do not take into account the fact that larger economic units are better suited for forestry. Evidently these do not permit large tracts of private plantations; on the other hand they do not pose a barrier to agroforestry, nor to small scale plantation, particularly on dryland. It is obvious that in most areas forestry is a far more viable option for large farmers, rather than for small and marginal farmers. Although large farms constitute 17.3 per cent of the operated area, they account for just 1.6 per cent of all holdings (MoA 2000). There

are few takers for policy reform that would favour the relatively better off minority in rural society. It is also important to note that the average operational holding in all states is far below ceiling limits. Given the predominance of small and marginal farmers, the general scarcity of land (which defies policy prescriptions) is a far more serious constraint to private sector forestry, compared to the land ceiling limits *per se*.

Thus, the need to promote private plantation does not present a strong case for changing land ceilings. However, there are sufficient grounds to treat forestry on par with plantation crops. The national guidelines stipulate that plantations of tea, coffee, rubber, cardamom, cocoa, coconut, arecanut, banana and vineyards should be exempt from land ceiling limits. There is no logical reason to exclude forestry species from this list. The national guidelines also recommend that land held by industrial or commercial undertakings for non-agricultural purposes should be exempt from ceiling laws. Certain exemptions are also due to registered cooperative farming societies.

The following measures would improve the ability of farmers to set aside land for the purpose of forestry:

- Forestry species should be treated on par with plantation crops in land ceiling laws.
- Exemption should be extended to registered forestry cooperative societies as well as to other registered forestry societies.

3.1.3 System of land grants

Land grants of cultivable land assign a parcel of land, within ceiling limits, to an individual who is given the inheritable right to cultivate the land. Land grants of uncultivable land (marginal/wasteland) to individuals, communities, and industries for plantation are similar to those of cultivable land, but differ on two points: share in harvest

and land ceiling limits. In the former case, the assignee is free to grow what he wants and keeps the harvest. In the latter case, the government does not give the lessee full rights to the trees. It retains a portion of these for itself, though the portion varies according to different schemes and in different states. Second, while in the case of cultivable land, land grants can be made within the existing land ceiling limits, the schemes for land assignment of uncultivable land have to devise new terms and conditions regarding maximum possible size of land for different categories. This is because uncultivable land is not on par with irrigated/rainfed cultivable land and so does not fit into the land ceiling formula.

Tree *patta* schemes were promoted as a means to encourage the landless and small and marginal farmers to undertake plantation on wasteland assigned to them for this purpose. In Rajasthan for instance, the Rajasthan Land Revenue (Allotment of Unculturable Wasteland for Development of Private Forest) Rules were framed in 1986. These rules provide land on lease for 25 years, renewable 10 years at a time, giving the lessee full rights over produce.¹⁶ The maximum area for allotment is 1 hectare for the landless poor, and 5 hectares for other categories. The District Collector may assign an area up to 25 hectares to a cooperative, *panchayat samiti* (committee), religious trust, educational institution or registered society. For larger areas, applications are to be referred to the state government. Although details of progress across states are not available, the schemes came up against many constraints. These include the limited availability of land at suitable locations, encroachment, lack of access to quality inputs and technical support, problems in protection and marketing constraints. Many of these problems are common to other growers as well.

¹⁶ In Karnataka under a similar scheme in 1993, for planting on roadsides, canal sides and similar sites (including in urban areas), beneficiaries are entitled to 75% of the produce.



Photo: Sushil Saigal

A clonal eucalyptus plantation on a farmer's field in Andhra Pradesh: if the right policy environment is provided, farmers are capable of meeting most of country's commercial wood requirements.



Photo: Sushil Saigal

A local plywood manufacturing unit: the policy must promote efficient industrial processing.



Photo: V.K. Bahuguna

A protected area: limited participation of local communities residing around the protected areas is being sought through the ecodevelopment programme.



Photo: Gazala Shahabuddin

The National Forest Policy of 1988 places much higher priority to meeting local needs over commercial exploitation of forests



Photo: Sushil Saigal

NTFPs collected from JFM forests. It has been estimated that the potential earnings from NTFPs are likely to be several times higher than the income from the community's share in timber revenues.



Photo: Sushil Saigal

Pulpwood stored in a company depot after purchasing it from farmers.



Photo: V.K. Bahuguna

Regenerating forest in eastern India: the JFM experience has proved that it is possible for the government and communities to collaborate to protect and manage the country's forests.

Table 3.6: Forestry cooperatives: time lags in registration and land lease

<i>State</i>	<i>Days taken for registration</i>	<i>Days taken for land lease</i>
Orissa	127	146
Rajasthan	410	61
Karnataka	504	189
Andhra Pradesh	164	127
Gujarat	241	154

Source: Ballooni and Ballabh 1998

Forestry cooperative societies are considered a viable means to combine social and economic gain for rural communities. They have been promoted by the Indian Farm Forestry Development Corporation (IFFDC)¹⁷ and the National Tree Growers Cooperative Federation (NTGCF)¹⁸. Both agencies help to establish community forestry on private as well as leased-in government land. The terms and conditions of lease vary from state to state, and procedures are lengthy. In Madhya Pradesh, it took IFFDC three years for the lease documents to be processed, at which time a final ruling on sharing of produce was yet to be given. The experience of NTGCF is that it takes an average of 118 days to register a cooperative after setting it up, and 309 days for the lease process (see table 3.6) (Ballooni and Ballabh 1998). Procedural difficulties faced by such large, established national level organisations indicate the inordinate constraints that smaller agencies are likely to face.

¹⁷ By March 1999, the general body of IFFDC had 103 primary cooperative societies in 11 states (IFFDC 1999).

¹⁸ By March 1998 NTGCF had 518 cooperatives in Andhra Pradesh, Gujarat, Karnataka, Orissa, Rajasthan and Uttar Pradesh (Singh 1999).

Allotment of wasteland to industry is a sensitive subject; as such land is often used by village communities for collection of fuelwood and fodder, for grazing livestock, and other purposes. Following local opposition the court struck down the allotment of land to Ballarpur Industries in Karnataka in the 1980s. Such allotment is therefore only feasible in tracts of land removed from village settlements. State governments have sought to allot such land for industrial plantation. In 1979, the government of Uttar Pradesh offered long-term leases on blocks of saline land. In 1990–91, the government of Rajasthan offered long term leases for over 2000 acres of desert land. And in 1994, the government of Gujarat offered 20-year leases of 100–2000 acres of uncultivable wasteland (Planning Commission 1998). There have been only few takers for these offers.

Plantation on non-forest public land needs to be encouraged through:

- Simplified rules for allotment to cooperatives and other registered societies.
- More offers of allotment of relatively large blocks of land (removed from village settlements and free from use by local communities) to industry.

3.1.4 Institutional finance

The limited extent of private plantation is matched by the negligible amount of credit disbursed for this activity. Published statistics of scheduled commercial banks on sectoral loans have heads for agriculture, industry, transport operators, professional and other services, personal loans, trade and finance; forestry is conspicuously absent from this list (RBI 1999). Recognising the need to promote lending to the forestry sector, the National Bank for Agriculture and Rural Development (NABARD) offers refinance through a number of bankable schemes.

Over the past ten years or so NABARD liberalised its lending policies to channelise credit through joint sector undertakings, private companies, cooperatives and private entrepreneurs for nurseries, farm forestry and industrial plantation. Despite this, its cumulative disbursement to the forestry sector as of 31 March 1999 was a modest 0.6 per cent of total disbursement. As seen in annex 4, there has been no uptake of credit in many states. Comparatively large sums have been invested in Madhya Pradesh, Uttar Pradesh, Maharashtra, Haryana and Punjab, but their share to total disbursement in the state remains low.

Several institutional reasons are offered for the poor disbursement of credit to private sector forestry. To begin with, its profitability and bankability is yet to be established in many areas. Forestry continues to be perceived as a high risk venture. In order to be credit worthy, forestry projects are expected to have a minimum internal rate of return of 15 per cent at constant prices. This underestimates benefits and discriminates against long gestation harvests. Hypothecation of trees has not worked in practice, and insurance premiums are often unaffordable. Differential interest rates are required for different categories of land and farmers (Pethiya 1993).

The issue of institutional finance for private forestry rests on two conditions. First, its profitability is doubted due to unpredictable markets. Second, credit schemes need to take into account the specific attributes of different trees, and the land on which they may be grown. The issue of financing community forestry remains to be discussed. Theoretically, the option for bank finance does exist but, for various reasons, there are few examples of commercially viable ventures. In this connection the experience of NABARD's ambitious project with the government of Andhra Pradesh to finance JFM in nine districts during 2000–2002 may open up new opportunities of funding community forestry outside state forests.

In order to improve the access of farmers, communities and biomass-based industry to institutional finance, the following measures may be useful:

- Specialised methods of financial analysis should be applied to assess the bankability of different types of forestry schemes.
- Model schemes should be formulated at the state level, based on locally viable species, taking into account prevailing rules and regulations for forests and forest produce.

3.1.5 Trade policy

Domestic trade policy

By virtue of owning the vast majority of forest resources the government is also the single largest supplier of forest produce. Its control over forest produce is consolidated by laws in several states that establish its monopoly in trade of certain timber and non-timber products. The degree of regulation varies across states. The most extreme is in Himachal Pradesh, where the government is the sole authority to purchase all forest produce. Trade in sandalwood and tendu (*Diospyros melanoxylon*) leaves is nationalised in all states that grow them. A system of licences is in place for the extraction of *katha* (from the tree *Acacia catechu*) in a number of states. Uttar Pradesh has a separate law dealing with control over resin extraction and trade. As seen in annex 5, states often hold a monopoly in major timber species (normally excluding farm forestry ones) and virtually all important non-timber products.¹⁹

Consequently, private growers have limited market opportunities for a range of forest produce that they may obtain from their own land. Although this does not normally apply to timber species grown

¹⁹ In Bihar, eucalyptus grown on private holdings was exempted from state marketing as late as 1990 (vide notification S.O 628 dated 10th September 1990).

on short rotation, it does hold for other timber and non-timber produce. A private grower is thus obliged to supply non-timber forest produce only to approved agencies. These agencies could range from individual agents, to village *panchayats*, primary cooperatives, the Forest Department and state level corporations. In the choice of agents, Madhya Pradesh gives primacy to primary cooperatives and *panchayats*, while in scheduled areas of Maharashtra village *panchayats* have been assigned ownership rights of non-timber forest produce (see annex 5). These are extremely progressive measures that reduce the difficulty faced by collectors and growers in dealing with larger and more distant agents. Even so, the fact remains that a private grower is paid a collection charge rather than a competitive price for his produce. Also, notwithstanding state monopolies, parallel markets exist for many products. These thrive on unrecorded, illegal removal from state forests and are often characterised by unfair practices (Saxena 1996).

Evidently, a system of administered prices and procurement by state agencies or agents appointed by the government does not work to the advantage of private growers as it is not driven by economic principles alone. It is important to note that state monopoly was introduced to check illicit removal of timber from state forests, and to give a fair deal to collectors (predominantly tribals) of non-timber forest produce from state forests. The consequent constraints imposed on private growers are thus inadvertent rather than deliberate.

Trade prospects for private growers of forest produce are inextricably linked with the regulation of such produce found in state forests. There are many arguments for changing the existing system. Monopoly purchase by government needs sustained political support and a highly efficient bureaucracy, both of which are difficult to ensure over a long period of time. As a result, nationalisation

has often increased the exploitation of the poor (Saxena 1996). Despite state control, many plants in natural forests have been over-exploited and are gradually disappearing. Crude collection methods such as burning the forest floor, hacking of branches, uprooting herbs and shrubs and digging up roots of tubers have seriously depleted several NTFP producing plants in forest areas (Gupta 1994). Finally, the effectiveness and economic efficiency of a number of state agencies trading in forest produce is being increasingly questioned. State monopolies in trade in forest produce need to be reviewed in the current context of industrial liberalisation in the country.

The government also influences markets of a number of non-nationalised items by virtue of being their single largest supplier. In such cases growers of such produce must compete with the government in the market. Despite the national directive to end concessional pricing of forest produce to industries, the practice continues in many forms. This lowers the market price and reduces the profits that may be earned by private sector growers.

Sale of wood to industries at market prices or through public auction or tender is commonly practiced in Andhra Pradesh, Bihar, Haryana, Himachal Pradesh, Karnataka, Tamil Nadu, Tripura and Uttar Pradesh. However subsidised supply is reportedly made to the match industry and paper mills in Assam, and to various industries in Madhya Pradesh, Maharashtra, Orissa and West Bengal (Forestry Consultants 1994).

While most NTFPs are sold by the government through public auction or tender, some amounts are directly supplied to industries owned by the government. Under this sort of arrangement the Gujarat State Forest Development Corporation sells medicinal extracts from plants; the Himachal Pradesh Forest Corporation operates resin factories at Nahar and Bilaspur; the state owned

Corporation in Karnataka produces and sells *Katha*; and the Orissa Forest Development Corporation produces and sells honey, arrowroot, sal resin, and myrobalans (Forestry Consultants 1994). In the current industrial scenario, such protection to public sector enterprises is not justified.

Concessions on wood produce are also given to government departments in Bihar, Gujarat, Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu and West Bengal. On social grounds, tribal and other poor communities living in and around forests are provided with essential forest produce at controlled rates. In addition, items such as fuelwood are sold to the general public at reduced rates in Bihar, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra and Uttar Pradesh (Forestry Consultants 1994)

A number of changes in trade regulations and pricing policies are necessary to create incentives for private sector forestry:

- State governments should review the list of forest produce reserved for trading by government; items that have potential for private growers should be exempt from existing regulations.
- Village level bodies such as *panchayats* or primary cooperatives should be given preference in appointment as agents (such as in Madhya Pradesh).
- The performance of state monopoly systems must be reviewed on social, economic and environmental grounds. Opportunities for de-regulation must be identified.
- State governments must end subsidised supply to private industry, government enterprises and government departments.
- State governments should not subsidise forest produce to the general public. This may instead be targetted at poor households through the public distribution system.

International trade policy

Till the mid 1980s the domestic market for most goods was closely protected by import restrictions and administered prices. Liberalisation of trade intensified rapidly with the introduction of economic reforms in 1991 and India's ratification of the World Trade Organisation (WTO) agreement in 1994. Trade policy reforms have progressively simplified India's restrictive import licensing and reduced tariff protection (see box 3.1). So far the emphasis has been on capital goods and inputs for industry to encourage domestic and export oriented growth; by and large imports of consumer goods and agricultural commodities remained regulated at the time of conducting this study.

Box 3.1: Trade policy: import licensing and tariff protection

The trade policy reforms that have been ushered in after the liberalisation of the Indian economy in 1991 have greatly simplified the import and export procedures as also reduced tariff protection.

The negative list of imports has been progressively shortened. Currently only 58 items are prohibited from imports; either on religious or cultural grounds, or to fulfil international obligations such as the Convention on International Trade in Endangered Species (CITES). A total of 168 items are canalised, or reserved for monopoly trading by state agencies. This is intended to enable bulk transactions and realise economies of scale. About a fourth of canalised items may be traded by private agencies on obtaining a special import licence^a and a no objection certificate from the canalising agency. Under two overlapping categories 2714 and 600 items are respectively classified as restricted; either for balance of payment reasons, or on grounds of safety, security and environmental protection. Most consumer goods are restricted, as are seeds, plant and animal products and items relating to the small-scale sector. Restricted items may only be imported under a licence or in accordance with a public notice. Of these,

^a These are granted as an incentive to large established exporters who have acquired prescribed quality certification; are in proportion to their export or foreign exchange earnings; are tradable and transferable; are mainly for industrial products.

1051 are importable under special import licences. Finally, 6647 items may be freely imported. Regulation of exports includes prohibition on exporting items such as wildlife forms, exotic birds and wood. Licences are required for 90 items, mainly agricultural commodities, for socio-cultural or environmental reasons. Only 23 items (including gum karaya) are canalised (WTO 1998).

Parallel to reducing import controls, customs duties have also been cut. Between 1993–94 and 1997–98 the simple average of all import duty rates came down from 71% to 35% (with a weighted average of 20%) and the process of reform and reduction continues. Collection rates, which are a better indicator of protection than declared rates, came down from the level of 47% in 1990–91 to 29% in 1995–96 (WTO 1998).

As a result of the Uruguay Round, India set an upper limit to (or bound) 67% of its tariffs in manufacturing and 100% in agriculture (including forestry). Lines remaining unbound include those of certain industrial items and many consumer products. The bindings range from 0–300% for agricultural products and from 0–40% for non-agricultural products. Manufactured products were bound at 25% on intermediate goods and 40% on finished goods. The bound simple average tariff to be implemented by the year 2005 is 54%, compared with the present applied rate of 35%, itself said to decline further. Many applied tariffs are well within the bound rates. Thus India, like most other developing countries, has put a ceiling on its protective structure rather than binding import duties at effective levels, while continuing to pursue unilateral liberalisation (WTO 1998).

Drastic changes in the trade policy have a massive influence on domestic markets, including those of timber and non-timber forest produce (NTFP). Annex 6 and 7 list forest produce on the negative list of imports and exports respectively. As can be seen from these lists, the import of wood, wood products and pulp is now virtually unregulated. Wood-based raw material and intermediate products respectively attract the lowest and middle order of import duties (see annex 8). The export of wood and unfinished wood products is prohibited on grounds of national scarcity. Low import duties and the ban on exports together work to depress domestic prices. On one hand, this adversely affects the profitability of domestic

wood producers; on the other hand, wood-based industries have little incentive to improve wood conversion ratios and overall efficiency and competitiveness. Relatively high import duties on finished goods reinforce this situation. It may be more judicious to have moderate to high import duties on raw material, and to increase sales tax and excise duty on final products. Contrary to perceptions that the scope for increasing duties is severely limited by obligations to the WTO, table 3.7 shows that the bound rates of select products are far higher than those applied.

In contrast, a number of NTFPs are still under state trading regimes, and many others require import licences. The export of 29 species of wild plants is prohibited on grounds of national scarcity. Gum

Table 3.7: Tariff bindings on forest produce

<i>Item</i>	<i>% Share of imports (1995–96)</i>	<i>Applied rate of custom duty in 2000–2001 (%)</i>	<i>Bound rates (%)</i>	
			<i>Simple average</i>	<i>Range</i>
Wood and articles of wood, charcoal	0.7	5	36.5	25–40
Pulp of wood/other fibrous cellulosic material/waste etc.	0.8	5	28.2	25–40
Paper and paper board	1.4	15	39.8	25–40
Lac, gums, resins and other vegetable saps and extracts	0.1	35	100	100
Vegetable plaiting material	..	35	100	100
Tannins/dyeing extracts and derivatives, pigments, etc.	0.4	15–35	39	25–40
Silk	0.3	35	100	100

Source: WTO 1998

karaya may only be exported by TRIFED and licensing applies to forestry seeds. Import duties are pegged at the highest level possible for non-wood raw material and finished goods (see annex 8). Regulation of imports accompanied by high duty structure insulates the domestic market. Since state owned bodies hold a monopoly in procurement and trade in commercial NTFPs, they are the primary beneficiaries of protectionist trade policies. While this allows the government to fully control prices to its own advantage (which may or may not benefit collectors) it has the dual effect of discouraging production in the private sector and restraining growth of the NTFPs-based industry.

The following steps would stimulate remunerative pricing of forest produce and provide incentives for private sector forestry:

- There is a need to evaluate wood conversion ratios and economic efficiency of wood based industry.
- Import duties on wood and pulp should be reviewed with respect to their impact on producers.
- A combination of customs and excise duties and sales tax should be used to encourage competitive production in wood based industry.
- There is a need to evaluate economic efficiency and the extent to which state monopolies in NTFPs serve social objectives.
- Trade in NTFP should be liberalised.

3.1.6 Inputs and technical support

Under farm forestry and social forestry programmes sponsored by various ministries and departments, the Forest Department provides subsidised saplings and technical assistance in plantation and management. Subsidised saplings fulfill the social objective of reaching out to resource-poor farmers. However, in some instances the limited choice of species and variable quality of saplings reduce

the performance of plantations. In addition, low sapling prices reduce the market for private nurseries.

Private growers often pay a high cost for technical assistance from the Forest Department. For instance, under the Orissa (Management of Coastal Shelter Belt Plantation raised on Private Land) rules, 1980, the state government is entitled to sell the produce and recover the cost of management, the value of usufruct enjoyed by the owner and even the interest on such costs. The landowner is entitled to just half the net income after these deductions. In several community plantation programmes, the Forest Department takes over managerial control, may retain principal rights to the produce, and may also assume ownership of the land. In many parts of the country communities prefer not to enter into agreements with the Forest Department.

Departmental assistance to private growers needs to be reoriented:

- Subsidised saplings should be targeted.
- Departmental technical assistance should be compensated solely by the recovery of reasonable direct costs. The state government should not seek to retain the profits of aided plantation.

Although many companies have over the years undertaken research work and developed new clones and plantation techniques that have helped farmers in raising highly productive plantations, there is little incentive from the government to these companies. Legislation for *sui generis* protection for breeder's rights is still pending, and there is no mechanism for certification of seed of forestry species or registration of clones. Recent introduction of Protection of Plant Varieties and Farmers' Rights Act (2001) may address this issue to a certain extent but much will depend on how effectively this legislation is implemented.

4. Policies affecting private sector participation in industrial processing



Biomass-based industries add value to forest produce and provide economic incentives to both state and private forestry. In the interest of sustainability, industry must use raw material in a conservative and efficient manner. This provides the necessary link between meeting economic and ecological objectives of forest management.

The current status of forest-based industry is influenced by the larger context of industrial policy. Economic and policy reforms have drastically reduced industrial licensing requirements, removed restrictions on investment and expansion, and facilitated easy access to foreign technology and foreign direct investment. This section examines these measures in relation to biomass-based industries.

Box 4.1: National level laws/policies affecting forest-based industry in private sector

- Industrial policy
 - licensing requirements
 - investment and expansion restrictions
 - access to foreign technology
 - access to foreign direct investment
- Environment Protection Act, 1986
- Water (Prevention and Control of Pollution) Act, 1976
- Air (Prevention and Control of Pollution) Act, 1981

While numerous measures that once protected industry have been removed since 1991, some of these remain, notably in the case of small-scale industries. A total of 821 items are reserved for the small-scale sector. Reserved items include sawn timber, wooden crates,

tea chest plywood, seasoned wood, wooden furniture and fixtures, miscellaneous paper products, sandalwood oil, pine oil, resin, safety matches, pencils and brushes.²⁰ Small-scale industries are provided certain special treatment such as priority sector lending and concessional credit, preferential purchase by central and state government organisations (358 items), assistance for technology development and modernisation, incentives for ISO 9000 certification, and excise exemptions (except sandalwood oil and matches) (MoI 1999). While this policy of preferential state support protects the small-scale sector against competition, it does not actively promote efficient utilisation of resources such as wood, which is also a national priority. The existing arrangement also limits the possibilities of investment and technological upgradation in the industrial forestry sector.

Only seven types of industries now require licensing. This list no longer includes the paper and pulp industry, as was the case until recently. Industries are free to select project location as long as they are at least 25 km from standard urban limits. This restriction does not apply to small-scale industries. Siting of industries is, however, subject to environmental considerations, as specified in 56 protected districts and 27 districts reserved for non-polluting industries (excluding the paper and pulp industry). Many of these locations are in forest areas and could thus be out of bounds for any industry including the forest-based industry. In addition, environmental clearance from the MoEF is required for a list of 29 industries (including paper, pulp and newsprint) having an investment exceeding Rs. 500 million. All industries are subject to local zoning and land use regulations.

The paper, pulp and paper products industry is subject to other

²⁰ Large units may also manufacture these items if they obtain an industrial licence and undertake an obligation to export 50% of their produce.

environmental regulations as well. It is one of the 29 industries subject to regulations for using hazardous processes. Industry specific standards are prescribed for emissions, effluents, and discharge of wastewater by both small and large paper and pulp industries. Small-scale industries are allowed simplified consent procedures under the Air (Prevention and Control of Pollution) Act 1981, and the Water (Prevention and Control of Pollution) Act 1976 (Shrivastava 1999).

The central government has taken measures to facilitate foreign direct investment and investment from non-resident Indians including overseas corporate bodies. Sector specific guidelines for 22 sectors do not, however, list biomass-based industries separately. Foreign direct investment and that by non-resident Indians including overseas corporate bodies is not permitted in the plantation industry. Foreign equity up to 24 per cent is permitted in small-scale industries, subject to licensing and government approval. Manufacture of wood and wood products, furniture and fixtures is included in the 22 industries in the consumer goods sector in which dividend balancing is applicable; and hence investment and returns are not freely repatriable (SIA 2000).²¹

The new industrial policy has forced private sector industries, including those based on wood, to restructure themselves in order to maintain profitability; but many units have failed to do so. The transition has been particularly difficult for the wood based industry, which also had to adjust to withdrawal of committed supply of raw material at subsidised prices. Among these, the paper and pulp industry must also contend with strict environmental regulations.

²¹ Under the dividend balancing condition, for companies in specific sectors with foreign equity holding, repatriation of foreign exchange in the form of dividends was linked to export earnings. This condition, which was imposed in order to prevent foreign exchange outflow from the country, was removed in 2000.

Although favoured by liberalised raw material imports and high duties on finished goods, many of these industries are short of capital and use obsolete technology. These conditions threaten the sustainability of wood based industry, which in turn may trigger increased pressure on scarce forest resources or else greater dependence on imports.

So far wood processing industries and NTFP based industry in the small-scale sector have been given preferential state support. However, such support must encourage efficient production of competitive goods if the industries are to survive the phased removal of reservation that is planned.

Given its important role in meeting both social and environmental objectives, forest based industry deserves special policy support:

- Specific steps should be taken to encourage foreign investment in the industrial forestry sector.
- Concessional credit should be provided for technological upgradation.
- Incentives for efficient conversion of raw material should be built into the structure of taxes.



5. Policy opportunities

The preceding sections show that despite the enormous need for the private sector to participate in sustainable forest management, its ability and willingness to do so are limited. In large part, this is due to the unfavourable policy environment that exists both at the central and the state level. Some fresh initiatives, such as joint forest management, do try and correct this. But persistent state regulation of private plantation and trade in forest produce coupled with the lack of policy support to biomass-based industry to modernise continue to constrain private sector participation.

Joint forest management is making impressive strides in many states, in ways that have not been captured in this report. This programme is set to design different dimensions of collaboration between government and communities that should be instrumental in sustainable forest management. The degree to which these designs actually work has much to do with the quality of community participation. In several states, JFM committees lack a reasonable share in income from harvest, and a reasonable level of control in decision-making. Both these aspects are within the purview of state governments, as is evident in those states that have chosen otherwise. This dichotomy between states could well cripple the programme in some states and slow down the transition to collaborative management across the country. For this reason, this issue deserves to be taken up at the national level and be built into national guidelines.

Private forestry is often the hapless victim of laws that seek to protect state forests. This is so in the case of the Forest (Conservation) Act, 1980, which prohibits the use of all forest land for other purposes. Given the fact that state governments have the authority to check conversion of private forests on grounds of environmental conservation and public health, there is no reason for such forests to be subject to this highly centralised law. Similarly, state laws governing felling of trees and transport of produce needlessly restrict the freedom of private growers. In this case, the solution is relatively simple. As some state governments have shown, official notifications are all that are required to rationalise the lists of controlled species.

The 73rd Amendment to the Constitution in 1992, the *Panchayat* (Extension to the Scheduled Areas) Act, 1996, and the consequent amendment to state laws on *panchayats* provide a strong impetus for decentralisation of powers over local resources. In this context, there is a strong case for village *panchayats* to play a greater role in regulating forest produce. This should include exclusive collection rights of NTFPs as well as the authority to issue felling permits and transit passes for private produce. While the former would create a stake in sustainable extraction of NTFPs, the latter would reduce the transaction costs faced by private growers and encourage greater interest in private forestry.

Nationalisation of trade in forest produce, particularly NTFPs, needs a serious review. This measure denies economic incentives to private growers, and eliminates employment opportunities for processing and trade of scheduled produce. Apart from this, it is not at all clear whether state regulation has successfully served the economic interests of tribal collectors, nor whether it has safeguarded the quality of forest resources themselves.

Trade liberalisation and industrial deregulation have changed the rules by which biomass-based industry operated in the past. While

some industries have prospered under the new regime, others have stagnated. Scarcity of capital, obsolete technology and lack of confidence in the changing structure of regulations are cited as major constraints in adapting to the new economic environment. Given the social, economic and environmental gains that accrue from private forestry, it is important that industry serves as a stable market for forest produce. This calls for policy support to encourage foreign investment, access to credit, and technology. At the same time, direct and indirect taxes should be used as instruments to ensure efficient production.

The legacy of state hegemony in the forest sector was driven by four premises: first, that local communities were incapable of managing public forests; second, that private forests were the sole domain of large farmers and allow them to accumulate disproportionate wealth; third, that individuals could not be trusted to preserve private forests in public interest; and fourth, that biomass-based industry had to be closely regulated by the government in order to produce essential goods. Each of these premises has little justification in the present context. It is now a well-established fact that given the right kind of incentives and safeguards, local communities do manage resources sustainably. In many areas agroforestry, and even farm forestry, provide a stable source of income to small and marginal farmers. Several biomass-based industries successfully operate outreach programmes to produce quality goods at competitive prices. In a liberalised economy there are enormous opportunities for the private sector to contribute to the social, economic and environmental objectives of forest management. These can, however, only be realised with suitable policy support.

Annex 1: Progress of JFM

S. No.	State	No. of JFM Committees	Area under JFM (hectares)
1	Andhra Pradesh	7,606	16,79,084.00
2	Arunachal Pradesh	13	5,810.00
3	Assam	245	6,970.00
4	Bihar	296	5,04,602.50
5	Chattisgarh	6,412	33,91,305.31
6	Goa	26	13,000.00
7	Gujarat	1,237	1,38,015.19
8	Haryana	471	65,852.42
9	Himachal Pradesh	914	1,11,247.20
10	Jammu and Kashmir	1,895	79,546.00
11	Jharkhand	1,379	4,30,463.00
12	Karnataka	2,620	1,85,000.00
13	Kerala	32	4,994.70
14	Madhya Pradesh	9,203	41,25,837.00

<i>S. No.</i>	<i>State</i>	<i>No. of JFM Committees</i>	<i>Area under JFM (hectares)</i>
15	Maharashtra	2,153	6,86,688.00
16	Manipur	58	10,500.00
17	Mizoram	129	12,740.00
18	Nagaland	55	1,50,000.00
19	Orissa	12,317	7,83,467.00
20	Punjab	188	97,193.40
21	Rajasthan	3,042	3,09,336.00
22	Sikkim	158	600.00
23	Tamil Nadu	799	2,99,389.00
24	Tripura	160	23,476.79
25	Uttar Pradesh	502	45,025.44
26	Uttranchal	7,435	6,06,608.00
27	West Bengal	3,545	4,88,095.00
	Total	62,890	1,42,54,845.95

Source: Ministry of Environment and Forests 2002 (Unpublished data)

Annex 2: Amendment to the Madhya Pradesh Transit (Forest Product) Rules, 1961

Vide notification No.F-30-40-95-X-3-(1), dated 19th October 1995, the state government exempted from the transit rules, timber and fuelwood of all tree species grown outside the limits of government forests, other than the following:

1. *Tectona grandis*
2. *Shorea robusta*
3. *Pterocarpus marsupium*
4. *Dalbergia latifolia*
5. *Acacia catechu*
6. *Santalum album*
7. *Terminalia tomentosa*
8. *Adina cordifolia*
9. *Anogeissus latifolia*
10. *Ougenia oogenensis*
11. *Gmelina arborea*
12. *Mangifera indica*
13. *Eugenia eugenensis*
14. *Tamarindus indica*
15. *Madhuca indica*

Vide notification No.F-30-40-95-X-3-(2), dated 19th October 1995, the state government modified the clause dealing with persons authorised to issue transit passes for forest produce owned by any person (i.e., other than government).

The village *panchayat* has the power to issue passes in respect of the timber and fuelwood of the following species:

1. *Santalum album*
2. *Terminalia tomentosa*
3. *Adina cordifolia*
4. *Anogeissus latifolia*
5. *Ougenia oogenensis*
6. *Gmelina arborea*
7. *Mangifera indica*
8. *Eugenia eugenensis*
9. *Tamarindus indica*
10. *Madhuca indica*

The Divisional Forest Officer (Territorial) or any forest officer not below the rank of Forest Ranger, authorised by the former in writing, has the power to issue transit passes in respect of timber and fuelwood of the following species:

1. *Tectona grandis*
2. *Shorea robusta*
3. *Pterocarpus marsupium*
4. *Dalbergia latifolia*
5. *Acacia catechu*
6. *Dendrocalamus strictus*, *Bambusa arundinaceae* and all other species of bamboo
7. Any other forest produce for which the village *panchayat* is not authorised.

Annex 3: Land ceilings and average operational holdings

State	Ceiling limits on land holdings (ha)			Average operational holding (ha)
	Irrigated with two crops	Irrigated with one crop	Dry land	
Andhra Pradesh	4.05–7.28	6.07–10.93	14.16–21.85	1.56
Assam	6.74	6.74	6.74	1.27
Bihar	6.07–7.28	10.12	12.14–18.21	0.83
Gujarat	4.05–7.29	6.07–10.93	8.09–21.85	2.93
Haryana	7.25	10.90	21.80	2.43
Himachal Pradesh	4.05	6.07	12.14–28.33	1.21
Jammu and Kashmir	3.6–5.06	–	5.95–9.20	0.83*
Karnataka	4.05–8.10	10.12–12.14	21.85	2.13
Kerala	4.86–6.07	4.86–6.07	4.86–6.07	0.33
Madhya Pradesh	7.28	10.93	21.85	2.63
Maharashtra	7.28	10.93	21.85	2.21
Manipur	5.00	5.00	6.00	1.23
Orissa	4.05	6.07	12.14–18.21	1.34
Punjab	7.00	11.00	20.50	3.61

*: 7.7 ha in Ladakh

State	Ceiling limits on land holdings (ha)			Average operational holding (ha)
	Irrigated with two crops	Irrigated with one crop	Dry land	
Rajasthan	7.28	10.93	21.85–70.82	4.11
Sikkim	5.06	–	20.23	2.09
Tamil Nadu	4.86	12.14	24.28	0.93
Tripura	4.00	4.00	12.00	0.97
Uttar Pradesh	7.30	10.95	18.25	0.90
West Bengal	5.00	5.00	7.00	0.90
National average				1.55
National guidelines (1972)	4.05–7.28	10.93	21.85	

Note : The actual ceiling limits for irrigated land having two crops and single crops in Karnataka and Uttar Pradesh respectively are marginally lower due to variation in classification of land.

The actual ceiling limits for dry land in Himachal Pradesh and Rajasthan are higher due to hilly terrain and desert conditions respectively.

Data on operational holdings was collected during the agricultural census in 1990–91.

Source : Ministry of Agriculture, 2000.

Annex 4: NABARD lending through forestry schemes

State	Funds committed (lac ^a rupees)	Funds disbursed (lac rupees)		% of total funds disbursed
		Disbursement in 1998–99	Cumulative up to 31.3.99	
Andhra Pradesh	108	107	2329	0.6
Arunachal Pradesh	–	–	47	1.3
Assam	–	–	59	..
Bihar	–	–	33	..
Gujarat	–	–	1098	0.5
Haryana	714	524	2809	1.3
Himachal Pradesh	–	–	6	..
Karnataka	–	–	2524	0.8
Kerala	–	1	1	..
Madhya Pradesh	–	–	4414	1.9
Maharashtra	–	–	3470	0.9
Meghalaya	–	–	9	0.2
Mizoram	–	–	8	0.5

Note : '–' indicates nil; '..' indicates negligible

^a 1 lac=100,000

State	Funds committed (lac ^a rupees)	Funds disbursed (lac rupees)		% of total funds disbursed
		Disbursement in 1998-99	Cumulative up to 31.3.99	
Nagaland	–	–	180	11.3
Orissa	118	118	439	0.4
Pondichery	1	1	5	0.2
Punjab	227	103	1592	0.6
Rajasthan	2	2	15	..
Tamil Nadu	54	89	943	0.3
Tripura	–	–	40	0.3
Uttar Pradesh	1	–	3168	0.5
West Bengal	–	–	279	0.2
Total	1225	945	23468	0.6

Note : '–' indicates nil; '..' indicates negligible

^a 1 lac=100,000

Source : NABARD 1999.

Annex 5: Regulation of trade in forest produce

<i>Relevant law</i>	<i>Scheduled items</i>	<i>Eligible state agents</i>
Bihar Forest Produce (Regulation of Trade) Act, 1984	31 timber spp. 12 fruits/seeds 5 gums/resins 5 medicinal plants 2 bamboo spp. mahua flowers, sabai grass, tassar cocoons, sisal, Bauhinia/sal leaves, khair	Village <i>panchayat</i> , LAMPS, PACS, Vyapar Mandal, Bihar State Tribal Cooperative Development Corporation, Bihar State Forest Development Corporation
Madhya Pradesh Van Upaj (Vyapar Vinimayan) Adhiniyam, 1969	13 timber 6 gums/resins khair/katha, rosha grass/oil, lac, mahua flowers/seed, chiroji, sal seed, harra/kacharia, mahul leaves/bark, phool bahari grass, all bamboo.	A cooperative society, village <i>panchayat</i> or janpada <i>panchayat</i> . An individual may be appointed only if none of the above are forthcoming.
Maharashtra Transfer of Ownership of Minor Forest Produce in the Scheduled Areas and the Maharashtra Minor Forest Produce (Regulation of Trade) Amendment Act, 1997	33 items, including: mahua flower/fruit, gum, lac, gums, honey, cut grass/fodder, various fruit and seed	The ownership of listed produce (not timber) found in government land (excluding national) parks and sanctuaries) in scheduled areas shall vest in the <i>panchayat</i> within whose jurisdiction such area falls

<i>Relevant law</i>	<i>Scheduled items</i>	<i>Eligible state agents</i>
Orissa Forest Produce (Control of Trade) Act, 1981	15 timber spp. bamboo 26 items, including: 6 gums/resins, tassar cocoons, khair/katha, lac, mahua flowers/seed, honey	A village <i>panchayat</i> , cooperative society, Orissa State Tribal Development Cooperative Corporation

Annex 6: Forest produce on the negative list of imports

1. Prohibited items

None

2. Canalised items (for exclusive state trading)

None

3. Canalised items (with provision for special import licences)

- Cassia, cinnamon bark, cinnamon tree flowers, tejpata, cloves: to be imported through Spices Trading Corporation Limited, or NAFED; Special import licence available at 5 times the value of imported goods.
- Mahua oil (not edible grade), oil cake and oil cake meal expeller variety; residues of babool seed extraction; oil cake of neem seed extraction: to be imported through State Trading Corporation, or Hindustan Vegetable Oils Corporation.

4. Restricted items (subject to licences)

- Nutmeg, mace, tamarind seed and paste.
- Neem seed, leaves, powder and extracts.
- Bidi wrappers (tendu) and bidi, mahua flowers, soap nut and soap nut powder, katha.
- Eucalyptus oil in bulk form (under special import licence).
- Silk worm cocoons, raw silk and silk yarn.
- Matting, basketwork and wickerwork.

Wood based products

- Newsprint
- Composite paper and paper board

- Wall paper, oiled paper and numerous consumer items made of paper
- Sandalwood chips
- Toys of wood (under special import licence)
- Brooms and brushes
- Safety matches
- Woodwork (including carving) of rosewood, sandalwood, shisham, walnut wood; lacquer work and inlay work
- Wooden frames, marquetry, inlaid wood, statuettes (under SIL)

Source: Ministry of Commerce 1998. (Note: Subsequent to August 1998, certain items have been removed from the above list through relevant notifications).

Annex 7: Forest produce on the negative list of exports

1. Prohibited items

- Plants and parts of plants of wild varieties of 29 specified species, including 18 species notified under appendix I and II of CITES; except with a legal procurement licence issued by the Chief Conservator of Forests or Divisional Forest Officer of the relevant area, and with a prescribed CITES permit for export (in respect of the 18 listed species). In the case of cultivated varieties of the above species, it is necessary to obtain a certificate of cultivation from the same authorities. Exports are only permitted through select ports.
- Wood and wood products in the form of logs, timber, stumps, roots, bark, chips, powder, flakes, dust, pulp and charcoal (except sawn timber made exclusively from imported logs or timber, subject to specified conditions).
- Sandalwood in any form (except finished handicrafts, machine crafted products and oil).
- Red sanders wood in any form (excluding certain value added products)

2. Canalised items

- Gum karaya: may be exported only by TRIFED

3. Restricted items

- Seeds of Red Sanders, sandalwood, neem, and all forestry species.
- Silk worms, silk worm seeds and silk worm cocoons.
- Waste paper

Source: Ministry of Commerce 1998.

Annex 8: Import duties on forest produce

In the year 2000–2001 there were 4 basic rates of customs duty: 5%, 15%, 25% and 35%.

<i>Item</i>	<i>Basic duty 2000–01</i>	<i>Basic duty 1990–91</i>
Fuelwood, wood in chips or particles, sawdust, wood waste and scraps, wood charcoal	5%	60%
Wood in the rough	5%	60%
Mechanical and chemical wood pulp	5%	40%
Pulp of fibres from recovered paper and paper board	5%	100%
Recovered paper and paper board	15%	100%
Newsprint	15%	60% *
Tanning extracts of vegetable origin	15%	50–80%
Wood sawn or chipped lengthwise (>6 mm thick)	25%	60%
Wood wool and wood flour	25%	60%
Hoop wood, split poles, piles, pickets, stakes and sticks	25%	60%
Hand tools and toys	25%	60%
Fibre board of wood or other ligneous material	35%	100%
Particle board and similar board of wood or other ligneous material	35%	60%

* plus Rs. 1000/ tonne

<i>Item</i>	<i>Basic duty 2000–01</i>	<i>Basic duty 1990–91</i>
Veneer sheets, sheets for plywood, other wood sawn lengthwise (<6mm thick)	35%	60%
Plywood, veneered panels and similar laminated wood	35%	60%
Densified wood frames, packing cases, tools, table and kitchen ware, marquetry, inlay work, statuettes	35%	60%
Wooden furniture	35%	100%
Miscellaneous paper products	35%	100%
Bamboo, rattan, and other material used for plaiting	35%	60%
Plaits, mats, basketwork, wickerwork	35%	60%
Vegetation material used primarily in brooms and brushes	35%	60%
Brooms, brushes and pencils	35%	100%
Natural honey	35%	100%
Lac, natural gums, resins, gum resins, oleoresins	35%	60%
Cinnamon and cinnamon tree flowers, cloves, nutmeg, mace and bay leaves	35%	150%
Colouring matter of vegetable origin	35%	150%
Silk worm cocoons	35%	50%
Raw silk	35%	30%
Silk yarn	35%	50–100%
Raw or processed sisal fibre	35%	40%
Tobacco items	35%	100%

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