



## People Oriented Management of Forests

### 1. Historical Background

Since time immemorial, man and forest have been very closely associated. This relationship is perhaps older than any form of man made laws regarding ownership of natural resources. After the advent of kingship in India until the pre British days, forests happened to be the property of the King - with no ownership rights for commoners. However, people were free to utilise forests economic gain or domestic needs, in this supply-dominated era.

The main objective of British, during their period of rule, was to exploit the colonial forest resources in order to supply timber to their Railways and the ship building industry in England. The British realised the need and importance of proper forest utilisation to meet the needs of their industries, both indigenously and in England. But this methodical endeavor initiated a system of scientific forest management in India and the judicious economic exploitation of forest resources led to steady development of forests in the country. In this period., large-scale survey of Indian forests was carried out and reserve forest areas were demarcated. The first such reservation in the country was made in the Central Provinces in 1865. These reserves were generally created in the remote forest interiors so as to create minimum disturbance to the local population, and all local rights were settled by resettling the affected villages outside these reserved forest areas. The opposition to it was forcefully put down.

The most famous case was in Bastar, where the tribals had rebelled against ban on shifting cultivation which was imposed on the persuasion of the then Dewan of Bastar State (Shri Baijnath Panda). The rebellion was forcefully put down by bringing in British troops from outside the State. Baijnath Panda had to flee to save his life, but the order stayed. This instance of peoples initiative in forest matters had significant implications which is evident even today when we see that Bastar has luxuriant forests, whereas in the immediate adjoining area pf Koraput district in Orissa forest cover is comparatively poor.

In the Central Provinces (and also in princely states, which now jointly form Madhya Pradesh). most uncultivated lands were subsequently settled with landlords, and were recorded as Dhar (jungle) in (he revenue records by the British. After independence, these were taken over by the State Government, and were either transferred to the Forest Department for management, or were allotted to the rural poor. In some cases, where private forests survive even today, farmers are prohibited from changing its land-use, as these are covered under the Forest Conservation Act, thus acting as a great dampener to private forestry efforts.

This still left a sizeable chunk of uncultivated land removed from habitation which came under government ownership as reserved forests, where all rights of the people, except those specifically mentioned, were extinguished. These lands were then used to produce valuable timber for industries, railways, markets, and export. At the turn of the century, the area with government in Central Provinces alone was 19.498 square miles (5 million Ha approximately).

After independence, it was realised that the objectives of colonial forest policy should be redefined to suit the needs of the country. The National Forest Policy, 1952 appreciated the multiple benefits of forests. The significant role played by forests in fulfilling local needs and their intangible benefits (recreational, environmental etc.) were also recognised by forestry planners. However, in congruence with the overall macro economic policies, the utilisation of forests for optimising revenue was still set to be the dominating aim of managing country's forests. Nevertheless, it was envisaged that the management of forests under the broad framework of the new forest policy would not only provide optimum revenues to the public exchequer but would also take care of the growth and development of forests. A target forest area covering one third of the total land area was to be the goal of the new National Forest Policy.

Forests were nationalised in the early fifties and were initially placed under the Revenue Department. the erstwhile owners or persons with control over forests such as the Zamindars and Malguzars, acting on the imminent

### Forests in Madhya Pradesh

The area covered by forests is 155.414 Sq.km. which accounts for about 35 percent of the total land area of the state. The forests are not evenly distributed in the State. The eastern and south-eastern districts of Bastar, Raipur, Balaghat, Rajnandgaon, Bilaspur, Surguja and Mandla have good forest areas, while the districts in the western and northern regions are poor in forest cover.

The break-up of the State's forest areas by different categories is given below.

1 Forest area (legal status)		Area in Sq. Km
	Reserved forests	80,996
	Protected forests	69,083
	Unclassed forests	5,335
	<b>Total</b>	<b>155,414</b>
2. Forest area by composition		
	Teak forests	27,783
	Sal forests	25,704
	Miscellaneous forests	101,927
	<b>Total</b>	<b>155,414</b>
3. Forest area by terrain		
	Hilly	83,242
	Plain	72,172
	<b>Total</b>	<b>155,414</b>
4. Forest area by management		
	Protection forests (for soil and water conservation)	8,400
	Production forests:	
	i) Tree forests ( Industrial & commercial wood)	40,000
	ii) Minor forests (Small timber, fuelwood etc.)	92,342
	National parks and sanctuaries	15,752
	<b>Total</b>	<b>155,414</b>

Source: Madhya Pradesh Forest Department

possibility of nationalisation and take over of forests from their hegemony/ ownership, often ruthlessly exploited forests before handing them to the Government. This trend continued for the period the forests were under the Revenue Department and subsequently the Forest Department, till proper demarcation was done, which took considerable time.

**2. Deforestation**

Due to increase in biotic pressure, and forest resources not responding to this increasing need, the old harmony between the people and forests broke down. Deforestation was one manifestation of this disharmony. In addition to increased livestock and human pressure on forests, there are various other supporting reasons for deforestation in the State. These are set out below.

Forests have received low priority in State resource allocations. Especially compared to agriculture, uncultivated lands got a very low priority in development plans. In Madhya Pradesh, the allocation to forestry sector was only 0.91 per cent of the total State Plan Budget during the Vth Plan period (1974-79). These are extremely low figures, considering that about 35 per cent of the area of the State is declared as forest.

Second, a laissez faire policy was followed with respect to revenue lands. There were no resources specifically allocated, and neither was any specific Government Department made responsible for grasses and pasture development. The lands that were left out to provide the community needs of forest produce and grazing, were often assigned and brought under cultivation in due course.

Third, depletion has taken place more in those forests which have a nebulous legal status viz. village forests. Similarly, degradation has been seen to be faster in forestlands meant for village nistar' needs. As they were close to village habitation, pressure from nistar and other uses of the forest by villagers and livestock dissuaded government from taking them up under afforestation schemes. Further, rights and privileges with village communities vis-à-vis these village forest lands were not compatible with their regeneration, and these lands as open access resources were victims to the "tragedy of the commons" phenomenon.

1. See box on Nistar

Fourth, the control and domain of State Government exercised through the Department of Forests, over forests and even on reserved lands, is fragmented and has been constrained by external factors. Given the ease of access to forests to people for legitimate as well as illegitimate uses, and the socio-political environment that often prevents strict control, it has not been very easy for the State to enforce its property rights.

Fifth, the most important cause of deforestation has undoubtedly been the increasing demands of fuelwood and

<b>Role and Importance of the Forestry Sector</b>			
The role of the forestry sector in the Stat's economy is significant. The contribution of forests to the State's total revenue receipt is around 10 percent as can be seen from the following: <span style="float: right;">(Rs. Crores)</span>			
Year	State's Total revenue	Total revenue from forests	Percentage contribution of forests
1989-90	3404.83	422.83	12.42
1990-91	3687.01	373.83	10.12
1991-92	4119.93	478.49	11.61
1992-93	5313.5	399.27	7.51
1993-94	5872.4	489.00	8.32
Source: M.P. Forest Department Apart from its significant contribution to the State exchequer, the forestry sector plays an important role in the socio-economic upliphment of the people, especially the rural population living in and around the forest areas. It provides around 100 million person-days of employment to the rural poor every year. About 43,000 persons are regularly employed in the various establishments of the forest department. The tribals forming a quarter of the total population of the state are almost entirely dependent on forestry for their livelihood. It is estimated that the sector generates employment opportunities to the tribals tot he tune of around 70 million person-days.			
Source: M.P. Forest Department			

### *Nistar*

Madhya Pradesh, as a State has accepted the responsibility of providing i.e., requirements of villagers of forest produce, to all agriculturists, village artisans and agricultural labourers.

With the formation of the State of Madhya Pradesh, the reserve forests were exclusively for the use of the State, except for certain rights given to forest villagers. The villagers, has the rights of nistar and grazing in the protected forests but the requirements were not satisfactorily available, Depots from where villagers were given forest produce for their nistar has begun in early 1955 in Mahakoshal and in Madhya Bharat but this was unacceptable particularly to villagers not living near a forest who were denied the right. Therefore in 1958 the State government brought the resolution wherein it was said that the nistar requirements of cultivators be fulfilled by nearby forests and that there should be no distinction what so ever. The forest nistar Policy of Madhya Pradesh also stated that material extracted from Nistar Forests would be supplied free of royalty. Every villager was entitled 250 bamboos per year, at fairly inexpensive rates, except in Bastar where it was free. Traditional bamboo workers or *basod*, cultivators of Pan and Orchard owners, agarbatti manufacturers were given concessions. Fuel wood supply was free, except for a fee for extraction by bullock cart. Poles and round logs for construction was also to supplied from nistar depots at highly concessional rates, except in Bastar where they were free.

But the conflict between people and foresters still exists where the latter blame the former exercising nistar rights for degradation of forests, The point of view is that unregulated grazing and removal of fuel wood and nistaris have reduced the forests, especially the partially regenerated areas that are completely destroyed The picture of nistar, which emerges from the point of view of villagers, is that supply of timber, bamboo, fuel and fodder is crucial for his /her ordinary livelihood. Next to agriculture nistar becomes the most important element in village life.

The real problem of nistar, therefore, is not necessarily the enormous gap between demand and supply, but the failure to provide those critical items, especially fuel, which is leading to an increasing biotic pressure on forests through unregulated extraction of material To avoid this the governments would have to evolve short and long terms strategies which would increase satisfaction rate in the matter of nistar. (Extracted from "Forests of Madhya Pradesh" ,MN Buch, 1991)

Nistar Policy of GOMP: In order to create better conditions to encourage the villagers to raise trees on their marginal lands and achieve self reliance in forest produce requirement, and meanwhile help reduce pressures on natural forest, the Government of Madhya Pradesh declared a New Nistar policy in 1994. According to this new policy the prevailing nistar facility shall be restricted to those villages who are located within the 5km of forest boundary This policy provides for supply of nistar forest produce at market rates to the residents of villages, located beyond 5km radius of forest boundary This policy provides for supply of nistar forest produce at market rates to the residents of villages, located beyond 5km radius of forest boundary This policy provides for supply of nistar forest produce at market rates to the residents of villages, located beyond 5km radius of forest boundary The supply of such materials in villages beyond 5km from forest boundary is to be organised through village panchayats who shall buy necessary nistar-material from scheduled depots of the Forest Department.

To dissuade villagers from resorting to illicit felling to satisfy their nistar requirement, it was felt necessary to arrange supply of such material through panchayats, at market rates.

Source: M.P. Forest Department

grazing, The estimated demand and present supply of timber, fuel wood and fodder are given in Table.

**Table 1: Estimated Demand and Supply of timber, fuelwood and fodder**

Forest	Total	present	surplus/
Produce	domestic Demand	production from Forests	Deficit
(M.Tonnes each)			
Timber	2.00	00.50	-01.50
Fuel wood	24.30	00.60	-23.70
Fodder	83.20	41.90	-41.30

Source : Madhya Pradesh Forest Department

A wide gap in demand and supply has put excessive pressure on the forests. In addition to home consumption, wood is also extracted for sale. As per the estimates, the ratio of firewood to food grain price doubled in 1975-85, which made cutting wood for sale an attractive economic proposition. There has been a rapid increase in the incidence of head loading, which in itself is attributable to declining opportunities for the landless in rural areas to earn a livelihood.

There is need to differentiate between urban and rural demand patterns and their effect on wood fuel supplies as well as inter-fuel substitution. Urban wood fuels usually traded with a much wider effect on the supply scene than village fuelwood demand, and the greater use of logs and larger branches means that reasonably-sized trees are cut with a more degrading effect on forests. Village supplies come from lopping pruning or pollarding trees. The district-wise demand and supply position for timber and fuel are given in Annexure. 1.

In the past, deforestation has often been associated with sudden policy change or periods of uncertainty like take-over of private forests and abolition of landlordism. Once large trees are felled, the old harmony between people's demands and supplies through twigs and branches gets disrupted, and government's efforts towards replanting come to naught. As these examples indicate, local patterns of deforestation vary and it is 'never a simple matter of numbers outstripping environment' (Westby, 1985) It occurs not only as a result of local pressures on resources, but also any

momentary disruption of the institutional framework responsible for resource protection at management :

### 3.Forest Policy : Independence to 1980

Till the mid-seventies the response of the government this crisis of deforestation was to bring more area under reserved category and produce market oriented timber tree in order to increase State revenues, Forestry has thus mean raising trees in order to get sustained yield of timber in perpetuity. From the First Plan in 1952 emphasis was laid on the conversion of "low" value mixed forests into "high" value plantations of commercial species like teak and eucalyptus. The 1952 National Forest Policy its resolution No. 13/52-F dated 12th May 1952, for instance declared that village communities should in no event be permitted to use forests at the cost of "national interest". In Madhya Pradesh in mid-seventies, in prevailing view was that State has taken great strides in the development of scientific forestry and there was much greater emphasis on man-made forests, designed to meet industrial requirements. Thus scientific forestry was equated with raising of industrial plantations.

This deprived millions of poor of the livelihood goods that they used to get from mixed forests. The neglect of people's demands during 1960-80 exacerbated biotic pressure and made regeneration of natural forest more difficult.

In Madhya Pradesh, after nationalisation of timber trade in 1971, there was a great emphasis on maximisation of revenues, production of wood increased by more than 40 per cent from 2.99 Mcum in 1956 to 4.21 Mcum in 1976 although there was no corresponding increase in growing stock. As in other states, the entire thrust of forestry was towards the high forest system created after clear-felling and ruthless cutting back of all growth except of the species chosen for dominance. The 6th Five Year Plan (1980-85) of Madhya Pradesh stated, "to produce 25 million cm of industrial wood it would be necessary to subject 5.5 million ha of production forest lands to intensive management, that is to clear-felling and planting. With the massive plantation programme being launched in the State, there would be extensive monocrops of teak in the forests.

As regards efforts made in the past to meet tribal demands for fruit, medicinal herbs etc. from forest lands, the same plan document admitted, "no special programmes were taken, which could directly contribute to the upliftment of the tribal economy. The programmes executed were essentially the forest

development programmes which benefited the tribals only indirectly,.. (but ) the tribals got substantial wage earning opportunities. "

**4. Social Forestry Phase**

The degradation of village lands and protected forests led to increased pressure from the people on the reserved forests. In order to reduce this pressure, the National Commission of Agriculture recommended growing trees on lands accessible to village people, To quote form its report of 1976 "Free supply of forest produce to the rural population and their rights and privileges have brought destruction to the forest Having over-exploited the resources, they cannot in all fairness expect that somebody else will take the trouble of providing them with forest produce free of charge One of the principal objectives of social forestry is to make it possible to meet these needs in full form readily accessible areas.... Such needs should be met by farm forestry extension forestry and by rehabilitating scrub forests and degraded forests. "

By the mid-seventies the realization became clear that if peoples' demands were not met it would be impossible to save forests, This as to be achieved through social forestry on village and project was launched in Madhya Pradesh in 1981- 82 and continued up to 19875 -86 in 21 districts, plantations were raised over 41,875 ha of million seedlings were distributed, mainly to the agriculturists,

Social forestry was not tried on forest lands, as such lands were sought to be used for producing timber and pulpwood and peoples' participation on such lands was not encouraged, Thus social forestry was seen as a programme which would release industrial forestry form social forestry was seen as a programme which would release But in order to keep people out it was necessary to make community and private lands to draw off the pressure on forest lands.

**5. Policy Impact**

What had been the impact of these forest related policies on the people? And more importantly have these policies been sustainable in terms of either increased production of timber, or checking the process of deforestation ?

Rights and access which the people, especially tribals, earlier enjoyed have often remained uncurtailed, but two processes have constrained and diminished them The first is deforestation , and the other is industrial them The first is deforestation and the Other is industrial Plantations. The effects on local people of the of forests can be illustrated by a recent study of areas in Chattisgarh (Madhya Pradesh ) which were heavily forested a few decades back, The distance required to collect forest products is reported to have multiplied several fold, as indicated in Table.2

**Table2: Distances traveled to collect from forests in Chattisgarh -over twenty years**

Collection of	Distance traveled in mid-sixties(in kilometres)	Distance traveled in (in kilometres)
Flowers	1.8	3.8
Leaves	1.7	3.9
Fruits	2.1	3.5
Seeds	1.4	4.4
Bamboo	1.3	5.5
Firewood	1.3	3.7
Average	6.1	4.1

Source: Fernandes and Menon 1988:15

Whereas the effect of deforestation on tribal economy is well understood the impact of industrial plantations is not so well documented, For their part, plantations have usually been single species or a few species, equally entailing loss of diversity and access, often on a large scale, It was noted in the 1981 International Conference on tropical forest management at Dehradun that, This forest (sal forest ) represents to Poor forest -fringe - entailing loss of diversity and access, for fuel and manure, The decision to convert this may or may not be used for the welfare of these same people but would certainly deprive them of an output form the forest which they were enjoying " Shri M N Buch ex-Forest Secretary of the Government of Madhya Pradesh wrote in a publication by the National Commission for Human Settlements and Environment in 1987. "This (the policy

of subsidising industrial raw material) is clearly discriminatory. The rights of huge section of society cannot be wiped out in order to benefit a few industrialists. For instance, The Orient Paper mills was promised a lakh ton of bamboo per year from 4 districts of the State, This eliminated all bamboo from Rewa,, Panna, Satna and Shahdol. When such a situation arises, the Forest Department tells the villagers to fend for themselves because there is nothing in the forests for them".

At the same time highly privileged prices have been standard practice for industries, A report by the Centre for Science and Environment in 1985 has mentioned that in Madhya Pradesh in 1981 -82 industrialists paid the Forest Department 54 Paise for a 4 meter bamboo, while forest dwellers paid a little over Rs. 2 a bamboo supplied by the Government .

### 6.Evaluation of Social Forestry Efforts

It is now acknowledged that social forestry was an initiative that just did not take off and did little to address the negative policy impacts referred to above. Evaluations have brought out the factors responsible for this lack of success.

According to the government revenue and community wastelands were not made available to the Forest Department on time and this was one of the major reasons for the lack of success. The role of the village community was not in conformity to the needs of the programme. The Panchayats did not come forward to take charge and control of the community plantations in the manner expected, The grazing of village cattle being crucial issue. The grazing of village cattle being a crucial issue, The cooperation of villager was inadequate, Since non-forest public lands in villages are devoid of administrative control, and there are large-scale encroachments on them it was impossible to locate compact areas even to the extent of 5has There was an almost total lack of organisational ability at the village level. and women' participation was poor in most districts, especially in the north To compound these weaknesses, these was no continuity or linkage in the wastelands so developed and they were scattered.

The villager felt that they or the gram panchayat has

little say i the programme. The villagers whose common lands were developed insisted on benefits being made available to them only whereas gram panchayats wanted to have control over the forest products and services arising out of the developed wastelands, Gram panchayat could not become a viable organisational or administrative unit at the grass-root level for development and management of the public wastelands, The mid-term review of Madhya Pradesh Social Forestry project (USAID, 1985) commented that the principal aim of social forestry to built up institutional capacity of panchayats has fallen by the wayside because of the existing political economy of the panchayats, It concluded that short-term political motivation of the leaders and cattle pressure would not allow community managed plantations to last very long.

In the community forestry programme of a few villages in Madhya Pradesh, it was observed in a study by an independent agency, Centre for development and Instructional Technology (CENDIT) in 1985, that there was factionalism in the villages and the poor were hardly consulted about social forestry. Government officers were mainly interested in fulfilling targets, and often adopted the line of least resistance. The panchayats were not keen to take over plantations. Often, community land was handed over to the Forest Department to avoid encroachment by the poor. The practice of the panchayat auctioning grass from such plantations reduced the availability of fodder for the poor.

Social forestry on village lands failed to take off in Madhya Pradesh because the local people were not inspire confidence in every constituent village; and there is no tradition of management (meaning protection, fresh planting and punishment to offenders) of common lands. The area available as village lands was also far less than anticipated at the project stage. Besides these structural constraints, there were shortcomings in the way the programme was conceptualised and implemented, leading to a marked divergence between the stated objectives of social forestry and the actual outcomes.

First, market oriented trees were planted which did little to improve consumption within the village. Fodder trees were generally ignored, Close spacing to accommodate more trees affected grass production.



Second, as projects did little to meet the demand of the poor for fuelwood and fodder, pressure on forest land continued.

Third, as deforestation was perceived to be due to fuelwood and fodder demands of the people it was assumed by the policy makers that given government help, people would willingly invest their labour and capital in raising fuelwood and fodder trees. However, as fuel and fodder were often collected free, farmers preferred income-generating trees, and continued to collect branches, twigs, leaves and grasses from forests as before. Thus the assumption in Social Forestry about how village. and not in the national objective of providing fuelwood and fodder to the poor.

Fourth as State funds got locked to meet the matching contributions required for external assistance for social forestry projects, forest lands were starved for funds, with several adverse effects. The neglect of forest lands hurt forest dwellers and tribals. It reduced timber supplies to the markets, resulting in price escalation, which further increased smuggling from forest lands.

Fifth, species selection and spacing were considered technical questions, and hence were not examined carefully at the project stage. Benefits, which could flow to the poor from species yielding intermediate products, were not properly appreciated. The value of a tree was linked in the minds of foresters with the final product obtained through felling. Thus production of grasses, legumes, fodder, fruit and Non Timber Forest Produces (NTFP) was neglected. Spacing has often been reduced to avoid intermediate management operations, to reduce plantation cost, and to cut down on staff supervision time. Consequently spacing thinning and pruning which could have produced intermediate yields of grass and tree products for the people have not been made use of. Technology with which the foresters were familiar for large-scale plantations for markets within Forest areas was applied to small-scale village woodlots, where the need was more for fodder and subsistence, then for timber.

### 7. Policy Initiatives after 1987

An impression was gaining ground since 1987 in the Government of India, Planning Commission and the National Wastelands Development Board (NWDB) that

the policy of producing industrial timber from lands, and subsistence goods from village and farm lands was becoming unworkable. Unlike earlier plans, where meeting industrial needs used to be one of the main objectives of investment in forestry the VIIth plan Document (1985-90) recognised the importance of non-market and ecological benefits from forests. It did not explicitly mention producing timber for commercial purposes as one of the objectives of forest policy. It also stated that raw material for forest based industries would be provided only after meeting the needs of the local people.

The Central Board of Forestry in its December, 1987 meeting presided by the prime Minister and attended by the Chief Ministers decided that forest lands would be used for preserving soil and water systems, and not for generating state incomes. All supplies to the market and industry would be met from farm forestry. Small and marginal farmers would be especially encouraged to use their degraded lands for meeting commercial requirements (GOI, 1987). This was followed by another announcement by the Forest Minister in the parliament in May 1988 that 70 per cent of the total afforestation would be in the farm sector. The Central Board of Forestry also took a courageous step in recommending a ban on commercial exploitation of forests, which was accepted by various states, including Madhya Pradesh. In fact, commercial logging operations are banned in Madhya Pradesh in 16 districts.

The new Forest Policy announced in 1988 gives higher priority to environmental stability than to earning revenue. It discourages monocultures and prefers mixed forests. Relevant paragraphs from the policy are: The life of tribals and other poor communities living within and near forests, revolves around forest. The rights and concessions enjoyed by them should be fully protected. Their domestic requirement of fuelwood, fodder, minor forest produce, and construction timber should be the first charge on forest produce. '.....As far as possible, forest based industry should raw material needed for meeting its own requirements, preferably by establishment of a direct relationship between the factory and the individuals who can grow the raw material..

The Ministry of Environment and Forests, GOI. in an official paper in March, 1991 stated, This (National Forest Policy 1988) reverses the recommendations of the

NCA , which favored commercial plantations on forest lands, and tree planting for meeting the subsistence needs on private lands of the rural people. It is visualised that industrial supply from the forest areas would eventually be phased out so that the industry meets its requirements largely from trees raised on private degraded lands.

The reasons attributed for this change in approach since the late eighties can broadly be summarised as follows:

- The definition of " development " and the strategy for achieving it has changed world over, and it is no longer equated with economic development or industrialisation.
- In all sectors, generally the government looks after the infrastructure or welfare needs are met from the private sector. In forestry this distribution responsibility was not being followed, and the reverse was being attempted so far.
- It was assumed in the late seventies that given government help, people would willingly invest their labour and capital in raising fuelwood and fodder trees. However, as fuel and fodder were often collected free, both farmers and Panchayats preferred income generating trees, and continued to collect branches, twigs, leaves and grasses from forests as before. Several forestry projects, In Madhya Pradesh, large farmers liked to grow teak, but the social forestry programmes could not satisfy this as teak is not classified as fuelwood or fodder tree.
- As funds in Madhya Pradesh got locked to meet matching contributions for external assistance for social forestry projects, forest lands were starved for funds, with several adverse effects. It reduced timber supplies to the markets, resulting in price escalation. This increased smuggling, which led state governments to clamp stricter laws on harvesting. movement and sale of trees even from private land. These regulations hit farmers,
- It appears that interests of the local population were often directly pitted against Departmental considerations. Forests were sought to be protected not for the people , but against them it was being realised at the Government of India level that other usufruct based species were required as planting of teak only transfers biotic pressure , as planting of teak only transfers biotic pressure from one region to another yet large scale propagation techniques in important, Minor Forest Produce (MFP) like tamarind, neem and mahua are still to be developed for specific sites, On the other hand teak the major planted species on forest lands, is not preferred by tribals. In districts, such as Bastar and Rajnandgaon. tribals organised themselves and resisted planting of commercial species on forest lands,
- Another issue at stake in the planting of teak and other such timber only species is sustainability. planting teak encourages smugglers or undisciplined behavior. When priorities are to be fixed, livelihood products like NTFPs on which the local population might be depending should rank high in the prevailing environment of smuggling of timber it was ironic that tribals, who for centuries lived in harmony with forests, were tempted to eke out a living by felling timber trees, although there is some evidence to suggest that the poor do not cut trees which provide usufructs, but only such trees where value is in the stem only .
- Species selection and spacing are considered technical questions, and hence are not examined carefully at the project stage, Benefits which could flow to the poor from species yielding intermediate products were not properly appreciated.

## 8. Joint Forest Management (JFM)

### 8.1 joint forest management in Madhya Pradesh

There are over 30, 000 villages in the State situated on the forest fringes, These villages constitute almost 40% of the total villages in the State, The tribal population of the State is about 15.4 million, 90% of which is living on the forest fringes, These villages are greatly dependant on forests for their livelihood and have an intimate and reciprocatory relationship with forests. It is generally understood that the biotic pressure from villagers seeking fuelwood, fodder and timber, both for their needs and for generating Any effort of the government could not check the increasing damage to the forests.

After the experience of the past that government alone cannot effectively protect and manage the vast forest resource, State Government decided to take the co-operation of people living adjoining to the forest area and finally introduced the concept of participatory management in forestry sector. With a view to involving local people in forest management, not only to check further degradation

of forest for their basic needs, but also to introduce the concept of sustainable forests development together with village development, Government of India issued a circular on 01/06/90 supporting joint planning and management of degraded forests in all parts of India. The State of Madhya Pradesh took a lead in JFM.

The concept of Joint Forest Management may be defined as - "The sharing of products, responsibilities, control and decision making authority over forest lands between Forest Department and local user group. It involves a contract specifying the distribution of authority responsibilities and benefits."

JFM is the best way to protect, regenerate and manage forests. The basic object behind it is to make the local people aware that they are owner of the forests collectively and Forest Department is a manager. It is important for people to realise the fact that they have stake in the protection and improvement of forests, and that their social and economic life becomes enriched by tangible and intangible benefits flowing from well protected and managed forest tracts near their habitation and all this is possible if they actively participate in Forest Management.

In accordance with the guidelines of Government of India, the State Government passed a resolution in December 1991 for community participation in forest management to prevent illicit felling in sensitive forest areas and to rehabilitate degraded forests. Two types of Village Committees were prescribed:

Village Forest Committees to be formed for rehabilitation of degraded forests (density upto 40%)

Forest Protection Committees to be formed to protect well - wooded forests (density more than 40%)

The State Government resolution of 1991 proved a milestone in the launch of JFM activities. JFM activities

in Harda division set the wheel of JFM in motion and it was followed in many more forest areas of the State.

In order to reduce the dependence of the villagers on forests, Village Resource Development Programme/Eco-development programmes have been taken up as important activity of the JFM. Eco-development is based on the belief that if forests support village development - its resources, cattle, veterinary inputs, schools, health, water, roads, etc. then the people will appreciate the role of forests and help in its protection.

Eco-development is different from social forestry in one respect, that is, it is implemented in fringe areas, whereas social forestry was generally in areas remote from forest lands. However, the two share a common assumption - if resources outside forest lands become more productive, people will give up gathering from forests. There are some success stories, but these are mostly pilot experiments, and their large-scale replication is still to be tried.

By itself, poverty alleviation does not reduce dependence on open resources. However it may facilitate it, if combined with measures like Joint Forest Management. Here too, Joint Forest Management should not mean just giving a share from forest produce to the people. Only when people are given greater security of access to the forest products that they depend on and a sense of partnership in forest management will have a greater motivation to ensure that the forest resource is not degraded. They will then assist or undertake the protection of the resource through regular patrolling and regulation of use. This will require fulfilling several conditions, which seem to be lacking at present in Madhya Pradesh.

## 8.2 Present Status of JFM in Madhya Pradesh

To make the provisions of 1991 resolution more effective, in 1995 a revised resolution was issued by the State Government which included elaborate arrangements to ensure participatory micro planning for the protection and management of forests and a clear approach for an integrated Village Resource Development Programme (VRDP). VRDP is viewed as a complementary activity to forest protection. Women's participation was ensured by offering them 50% membership in Committees.

As a result of the efforts made by the State Government, significant progress has been made till date. Out of the

8301 JFM committees in Madhya Pradesh, 4376 are Village Forest Committees (VFC), and 3925 are Forest Protection Committees (FPC). The total area under JFM is 38,48,261 hectares (please see table 3 for further details). The aim is to cover 50 percent of the 30,000 villages situated within a five kilometre periphery of forests with JFM activity by turn of the century.

Provisions for sharing wood products to the extent of 30% for VFC areas and free nistar to FPC areas have been made. Minor forest products are already free from government royalty and free for collection and trading, except for nationalised MFP (tendu leaves, harm, salseed, and some gums). For people residing in villages

outside the 5 kilometre periphery of forests, forest produce is available at market rates.

The World Bank assisted Madhya Pradesh Forestry Project has undertaken forestry development through JFM in both closed and open (degraded) forest area. Assisted natural regeneration (ANR) has been taken up in well-wooded areas to promote natural regeneration. In addition, VRDP is in operation in the degraded forest areas under the MP Forestry Project. Till March 1998, 146000 ha. of forest area under ANR was covered constituting approximately 800 forest protection committees. Likewise, 290000 ha. of degraded forest land is being protected by 633 village

**Table 3. Forest Committees and Forest Area under Joint Forest Management: 1998**

Forest Circle	Forest Protection Committee		Village Forest Committee		Total	
	Numbers	Area in hectares	Numbers	Area in hectares	Numbers	Area in hectares
Balaghat	133	92337	43	11840	176	104177
Betul	241	119882	42	7512	283	127394
Bhopal	124	24982	148	17091	272	42073
Bilaspur	452	319151	923	308972	1375	628123
Chhindwara	181	91016	123	44089	304	135105
Chhatarpur	54	48959	42	44358	96	93317
Durg	238	129311	157	44440	395	173751
Gwalior	5	11343	21	21645	26	32988
Hoshangabad	251	217402	136	49538	387	266940
Indore	55	31178	239	210123	294	241301
Jabalpur	238	38243	136	32369	374	70612
Jagdulpur	162	84892	20	6295	182	91187
Kanker	285	198787	139	58106	424	256893
Khandwa	122	112139	226	157071	348	269210
Rewa	47	25511	176	59433	223	84944
Raipur	363	219671	363	136589	726	356260
Sagar	110	56755	150	33986	260	90741
Shahdol	191	175772	186	122595	377	298367
Sarguja	571	203277	876	189179	1447	392456
Seoni	79	29789	61	14995	140	44784
Shivpuri	23	9808	58	20464	81	30272
Ujjain	Nil		111	17366	111	17366
<b>Total</b>	<b>3925</b>	<b>2240205</b>	<b>4376</b>	<b>1608056</b>	<b>8301</b>	<b>38482621</b>

Source: Madhya Pradesh Forest Department

forest committees and approximately 19000 ha. of degraded land has been undertaken for rehabilitation works. To assist people in villages outside the five kilometre periphery of forests, the Madhya Pradesh Forestry Project is covering them with extension forestry.

There have been many instances of petty conflicts amongst people in JFM areas, but they do not relate to usufruct distribution among themselves. Conflicts take place sometimes when the members of the committees apprehend forest offenders, but these conflicts are resolved internally. According to the new Nistar Policy, people living within 5 km periphery of forests such forest are eligible for the forest produce on concessional rates.

### 8.3 Important Components of JFM Strategy:

Some important components of JFM strategy are:

*a. Introduction of village resource development programme:* It is based on the strategy of involving communities in the management and sustainable utilisation of forests creating alternative sources of

income and employment to reduce pressure on the forests. The creation of village assets have gained the confidence of the villagers and hence, consolidated the JFM approach.

*b. Microplanning:* In this approach people are being involved in planning and it helps in proposing the management of the forests and development of village resources, as people want.

*c. Participation of Non-governmental Organisations:* NGOs are being encouraged to work as an intermediary between government and the villagers in various JFM activities.

*d. Training:* The training programmes are tailored to inculcate attitudinal changes in the staff so that they are able to communicate with the local people, especially those living in the vicinity or the forest areas, to facilitate in preparing of micro-plans of that area. This also sensitizes them into working together.

### ***Transformation of a village society The case of Village Forest Committee: Karidongri, Bilaspur***

Over the last few years, under Joint Forest Management considerable progress has been made by the Government, in involving communities in forest protection and management. Primarily, the benefits have been in awareness building, establishing linkages, and convergence between different government schemes. The example of Karidongri illustrates this.

Karidongri is a forest village in Bilaspur district. Out of 57 families of the village, 15 families were landless, while the others had un-irrigated land. All families were traditionally dependent on forests for their livelihood. A Village Forest Committee was formed in 1995, with these families, and they became actively involved along with officials in the development of the village as well as the forest resources. As a result of which, they created, a diversion channel, a new tar dam, bunding of 20 acres of agricultural land, wells with 8 electric pumps, leveling of lands and a general- store with the help of funds made available by the Government and other sources - The villagers also started pisciculture as an income generating activity. Gradually, as a result of these activities, all the families were now earning their livelihood from sources other than forests. A self-help group of women assisted by DWACRA has started manufacturing bricks. A grain bank, which provides social security to the village, has also been established.

The committee members have protected the forests assigned to them diligently from illicit felling, grazing, fire and encroachment. They have also helped in registering 51 forest offence cases. Besides protection, the Village Forest Committee has taken active interest in afforestation and have planted 54,780 plants in 60 hectares of land. They have sown 192kgsofseedin 1996-97 in blank forest area out of which 13,3000 seedlings have been established. The VFC members have resolved to plant 1,000 seedlings in non-forest area and name it as "Shakti Van". The sole objective is to raise fuel wood plantation to supplement their fuel wood requirement.

Source : Madhya Pradesh Forest Department

**Excerpts from "Documentation of Self Help Groups in Madhya Pradesh "**

*.....Several workshops were organised for all forest officers of the district, from forest guards to district forest officers, to sensitize them about the needs of JFM- to get the full support of the people, hence the need to understand and respond to their problems. These workshops revealed that the main obstacle was the existing image of the forest department as being the enemy of the villagers. To build a rapport with the villagers and improve communication, a new friendly image had to be developed. How was this to be done? The forest personnel themselves came out with the existing hurdles in the path of their friendship with the villagers and suggestion to overcome these hurdles.*

*They realised that:*

*Their contact with the villagers was not frequent. At the most they met the leaders.*

*Whatever contact they had with the villagers was of a negative nature i.e. how to punish the villagers. They never realised that with their facilities and powers they could be of some help to the villagers as human beings as well.*

*Once this realisation came to them from within themselves, there was no hurdle in overcoming it. The workers themselves felt guilty of their shortcomings due to which they could not achieve the goals of JFM nor perform the work efficiently for which they were being paid. Beside this sensitization to change the attitudes of the forest personnel, the training also included details of account keeping of self help groups.....*

A study conducted for Madhya Pradesh Mahila Arthik Vikas Nigam, Bhopal

needs are generally collected by women. Therefore, they are being actively involved in efforts to generate alternate sources for fuelwood and fodder on field bunds. An even more critical move has been involving women in formulating microplans in areas allotted to VFC's. Women leaders in villages, and women panchayat representatives are entrusted with the task of motivating and organising women to play an effective role in these activities. Existing women's groups such as the mahila mandals are also being involved in participatory management of forests.

Most of the head-loaders in the State are women, whose livelihood is curtailed by the new forest management arrangements. They have very few alternative sources of income so they need to be compensated. The formation of Self-help Groups (SHG) of women is one of the most significant strategies being adopted to involve women and compensate them. The initiation of thrift and credit activities under SHGs enables women to realise their productive potential and they could be seen as and helped to become economic actors. Making women effective income earners helps reducing their dependence on forests.

The functioning of SHGs follow almost similar pattern. Homogeneous groups of 10-20 women form a SHG. The group carries out compulsory thrift on weekly basis ranging from Rs.5-10 per person. Some of SHGs are also linked with the DWCRA programme

**9. Critical Issues in Joint Forest Management**

**9.1 Peoples choice-share in management or share in usufruct**

None of the two options i.e.. Social Forestry and Joint Forest Management, seriously question the existing objectives for which forest lands should be managed. Change in management should follow, and not precede, a change in the objectives for which forest lands are managed. In the long run, it is not management, which attracts people to forests, nor rights in forests, but the lure of obtaining livelihood products. It is increase in their incomes through enhanced supplies of NTFPs, which may induce people to give up grazing in forest lands, or invest their labour in its protection. Thus, in order to seek peoples' co-operation, it would be better if they can be guaranteed to gather more output from forest lands. Meeting peoples' requirements is one of the important objectives of managing forest lands.

This requires a complete and explicit reversal of the recommendations of the National Commission on

*e. Gender Focus of Forest Management:* Gender has become an inseparable issue of forestry development recently. With the participation of community in the management of forest resources being widely accepted now, true participation cannot be achieved without involving women. Fuelwood and fodder for domestic

Agriculture, 1976, which favored commercial plantations on forestland, and trees for consumption and subsistence on private land. It is necessary that subsistence and consumption be met from forest and common lands, and market demand should by and large be met from private lands. Using private lands for short rotation products will permit the large area of forest lands to be used for long gestation trees. "Scientific" forestry should therefore mean that wild fruits, nuts, NTFPs, grasses, leaves and twigs become the main intended products from forest lands and timber a by-product from large trees like tamarind, jack and sal.

Although the above suggestion has been accepted to some extent in the current Forest Policy, its implementation relating to a change in the choice of species or silvicultural practices by the States is still in initial stage. Sharing management of forest lands with the people is an important goal, but the process will proceed at different paces in different conditions. In the meantime, what is essential is to develop usufruct-based trees, shrubs and grasses on degraded forestlands to meet their livelihood needs. Where a large number of people have claim to forest produce, low management and low value output (but high in bio-mass) solutions have perhaps a better chance of success. Practical political-economy considerations suggest that technology is easier to change than institutions.

## 9.2. Administrative Issues

Under the JFM programme, an enormous range of activities are to be tackled in the initial years covering improved health, improved drinking water, improved school facilities, stop dams, income generating programmes, better access roads etc. There should be emphasis on bio-mass increase, development of fodder resources, & veterinary medicine. There is emphasis on improved agriculture through horticulture, soil and moisture conservation activity, improved fields, better crop varieties etc. These and other activities under the programme raise the question of practicality of management and implementation.

Secondly, it is believed that JFM will reduce the workload to a great extent. In JFM experience, there is already the feeling in government that the staffing levels are inadequate, especially at guard level. The lack of vehicles is seen as a major constraint. State government feels that JFM, setting up the institutions, agreements,

persuasion, monitoring etc. all require great inputs, and cannot be entirely left to village communities.

Thirdly, different sections of forest bureaucracy have different workload. The staff in Social Forestry and Production (as well as the FDC staff) may be under worked while Territorial staff may be overworked.

Fourthly, decision on the extent to which creation of Eco-development and Joint Forest Management activities is envisaged, has to be taken.

There is need to involve other rural development agencies of the State Government in the implementation of these highly specialised activities. There may be a need for a co-ordination committee at District level under the auspices of the Collector, but ways to achieve this have to be worked out.

Care will need to be taken to ensure that JFM does not just become the next development bandwagon. JFM is process oriented and does not lend itself to becoming a target and product oriented programme. There is a need to consolidate the JFM experience in Madhya Pradesh. Along with expansion of the programme, the capacity of institutions to support it should also be critically evaluated and improved.

The constraints to be eliminated at all levels include social, ecological, physical, historical, attitudinal and institutional. The social, political and economic relations of forest users (who are predominantly from tribal groups) with the State have all too often been one of mistrust. The State government itself, responsible for regulating land use in the vast area is closely associated with this process. Building confidence between the State Government, and its forest related Departments and the local people would be a necessary condition for successful devolution of authority. The managers of the forests have to accept the peoples depending on these forests as their partner in managing the forest resources.

The State Government is now faced with the task of planning and implementing the forestry management system (as well as a wide range of other development activities) suitable to a wide range of agro-environmental conditions and local needs. Further this task is to be accomplished in partnership with the communities, which are both socially and culturally diverse and widely disbursed. Such a complex task requires effective and

mutual communication (both within the State Government and between staff and villagers), flexibility and the devolution of responsibility and initiative to the field and village level.

#### 10. Non Timber Forest Produce (NTFP) or Minor Forest Produce (MFP)

The Minor Forest Produce (MFP) of Madhya Pradesh can be categorised as nationalised and non nationalised products based upon the State control on the trade of these products. The major nationalised products are Tendu leaves, Sal Seed, Harra and Gums. The major forest products under the non nationalised category are Chironjhi, Mahua flower, Bahera, Bel etc.

**Tendu leaves:** Prior to 1964, Tendu leaves growing on government lands were sold unplucked to contractors and those that grew on private lands were disposed by the owners of the land in the manner they saw fit. This provided a space for market intermediaries. Also there was high volume of theft of tendu leaves from government lands. In order to control this and check the exploitation by middlemen, the State took over the trade of tendu leaves by enacting the Madhya Pradesh Tendu Patta (Vyapar Viniyaman) Adhiniyam, 1964.

Under this Act, agents were made responsible for the collection of tendu patta. The price paid by the purchaser depended upon the number of standard bags delivered to him. However, the agents who were usually private individuals or private companies, heavily exploited the primary collectors in this system. To improve the condition of the collectors, the Madhya Pradesh State Minor Forest Produce Co-operative Federation was formed in 1984, whose mandate was to free the primary collectors from exploitation by the middlemen. Between 1984 and 1988, the Federation experimented collecting tendu leaves under the auspices of institutions such as MARKFED, LAMPS and PACS.

The State Government in 1988 decided to totally eliminate the middleman, following which a three tier co-operative institution was designed. At the first tier, the body consists of Primary Forest Produce Co-operative Societies whose members are the tendu leaf collectors. The Primary Society appoints a Phad Munshi to procure the leaves and pay wages to the pluckers. The secondary level consists of the District Primary Forest Produce Co-operative Unions headed by the District

Collector. At the apex level of this institution is the Madhya Pradesh State Minor Forest Produce Co-operative Federation. Each tier is allotted commission rates on the total sale done by them. The government also operates a group insurance scheme for the members of primary societies. The premium is borne by the Government of India and Madhya Pradesh State Minor Forest Produce Co-operative Federation.

**Harra:** The collection of Harra, a nationalised forest produce is done by the Minor Forest Produce Federation through the Primary Societies in Harra producing districts. The total quantity of Harra produced in the State during the year 1990-91 was reserved for TRIFED (Tribal Co-operative and Marketing Federation). In subsequent years, the disposal of Harra was done through auctions/ tenders.

**Sal Seed:** MP State Minor Forest Produce Co-operative Federation collects Sal seeds through Primary Co-operative Societies. The collected seeds are supplied to 4 industries, which have entered into an agreement with the government. The extraction costs and the royalty are recovered from the industries.

**Gum :** Gum collection of both Salai and Kullu gum was banned in Madhya Pradesh in the forest circles of Gwalior, Shivpuri, Ujjain & Khandwa and the submergence areas of Narmada Sagar in Badwani and Jhabua forest divisions. In case of Kullu gum the State government lifted the ban in 1996 in Morena, Khandwa and Bastar districts. The process of advance sale has been adopted in the sale of nationalised gums. The State government has fixed the collection rate of Kullu gum at Rs.750/- to 3,000/- per quintal depending upon collection season. The collection rate of Salai gum has been fixed as 1550/- per quintal for the year 1996-97.

**Non Nationalised Forest Products:** State Government has de regulated non nationalised forest produce trade from 1984 onwards, and any individual is free to collect these forest products in any quantity for domestic or commercial consumption.

The importance of minor forest produce or NTFP, lies not only in the gainful employment provided through activities related to collection and utilisation of MFPs in conjunction with usual agricultural activities, or in the annual revenues provided to the State government to the



tune of around Rs 75 crores. The importance lies in the role these produce play in the livelihoods of tribal communities and forest dwellers, providing them with diverse products for consumption for their houses, for requirements of energy. etc.

**Collection and Sale of Minor Forest Produce in the State**

The collection and sale of MFP are done through three tier Co-operative structure;

- An Apex Federation at the State level
- The district union at the forest district level (Total SO]
- The primary Forest Co-operative Societies at the village level (Total 1947)

*After the 76th amendment of the Constitution and enactment. of Panchayats (Extension to the Scheduled Areas) Act, 1991 (PSEA, 1996), the Government of Madhya Pradesh defined the term MFP as follows: "MFP is the first produce which. can be harvested on a non-destructive basis". The Government of Madhya Pradesh has also decided that the entire net profit coming out of the business of MFPs will be given to co-operative societies. Out of the total pro fit to the societies, 20 % would be spent on forest regeneration. 50 % would be distributed among tendu patta collectors and remaining amount would be spent for village development .*

The quantity of nationalised MFPs collected and wage: paid during last few years are given in Table 4.

Jila Union-wise MFPs (tendu patta, sal seeds and harra) collection and wages distribution during last two years are (given in Annexure 2 & 3.

**Collection of Non-nationalised MFP:**

The Madhya Pradesh Minor Forest Produce Federation was given the job of collecting Non-nationalised MFP in the year 1995-96 through its Primary Co-operative Societies. The process adopted for collection is: A short listing of species has been done by the Apex Federation ii which 100 species of commercial importance have been identified. The Primary Co-operative Societies and the District Unions have been asked to survey the possibilities; of collection and marketing of these produce. The Apex Federation acts as a facilitator in marketing the product collected by the Primary Co-operative Societies. The amount of collection of various species done by the Primary co-operatives and wages paid during the last two years an given in Annexure-4.

**11. Privatisation of Forest Lands**

The present policies regarding government forests have not been adequately successful in either improving productivity, or improving welfare of the people. Several alternatives have been suggested including leasing of forest lands to user-industries.

**Table 4. Collection of Minor Forest Produce in Madhya Pradesh by the State**

Year	Tendu Patta		Sal Seed		Harra	
	Quantity collected/(lakh standard bags)	Wages paid (Rs. in crores)	Quantity collected/(lakh standard bags)	Wages paid (Rs. in crores)	Quantity collected/(lakh standard bags)	Wages paid (Rs. in crores)
1992-93	44.64	112.65	5.47	7.38	1.40	1.54
1993-94	40.98	123.93	4.38	5.91	0.88	0.96
1994-95	42.08	127.14	1.39	2.09	0.55	0.61
1995-96	39.36	118.68	3.61	5.79	1.07	1.39
1996-97	44.42	155.75	7.90	12.64	0.92	1.57

Source : Madhya Pradesh State Minor Forest Produce Federation

The estimated demand by Industry for wood and bamboo has been assessed at 6.4 million tonnes in 1991 as against the current utilisation of 3.2 million tonnes, increasing to 20.2 million tonnes by the year 2015. Assuming a low productivity of 3 tonnes per ha per annum, the requirement can be met from 2 million ha. There is 141 m ha of cultivated land in the country, 60% of which is owned by rich and affluent farmers, who are market oriented, and can be trusted to fulfill the requirements of Industry. Industries require fast growing species viz. eucalyptus or bamboos, which can be easily produced in 5-8 years time. Those varieties are eminently suitable for farm forestry. Leasing out lands to industries is thus not necessarily the only solution to meet this demand.

It may be relevant here to mention the recent upsurge in the number of companies offering private teak plantations to the urban rich. Commercial sector in forestry, if desirous of acquiring large chunks of degraded land to take advantage of economy of scale, can follow this example and learn from the experience of such private sector initiatives. Leasing of forestlands on a large scale even to the poor is not desirable. First, a great deal of private land, often with the poor, is uncultivated, but may be suitable for trees. More than 5 to 6 million-hectare lands have been leased to the poor in the last two decades. In addition, in semi-arid regions a great deal of private land is either uncultivated or yields very low output. The total area of such land is estimated at 35 million hectares, which is comparable with the area of degraded forest lands. Hence there is no case for further privatisation, unless suitable technological and institutional arrangements have been worked out to bring this huge chunk of land under trees or agro-forestry. Second, privatisation would encourage farmers or the poor to plant short-term exotics, or use land for agriculture. Both forms of land-use for degraded lands are environmentally not desirable. The limited market demand is another constraint. What is required, is to put degraded public lands under shrubs, bushes, or slow growing multi-purpose trees (MPT), which are environmentally more sustainable. However, this does not bring immediate returns, and if such land is leased to the poor, the " are unlikely to be motivated to undertake this kind of plantation.

Third, the number of the poor families is very large, and privatising in favour of some while ignoring others, is likely to produce social tensions. Fourth, villagers have rights of collection on most degraded forest lands, and privatisation would perhaps go against existing settlement laws, and be opposed by other villages, having usufructory rights in the concerned forest land. Fifth, the experience of some of the NGOs like Sewa Mandir in Rajasthan shows that they were more successful when they undertook afforestation of public lands, rather than of private lands. This is because the constraints in semi-arid monocropped areas are such that an individual approach is less likely to succeed than working with groups. Lastly, most forestlands are in tribal areas, where market penetration is weak. The population per village is not high, and hence working with groups does not raise the kind of problems encountered in non- forest public lands, where penetration of markets and large size of villages have eroded the cohesive nature of village society.

On the whole, there is no escape from continuing the present system of government management on forest lands.

## 12. Other State Level Initiatives

**Encouraging tree planting and private investment on non- forest wastelands:** The State Government has taken many important decisions to encourage and assist the farmers and other private growers for raising plantations on private and public waste lands. Efforts have also been made to overcome the factors that discourage the farmers to go in for plantations. The thinking is that farmers can play an important role to bridge the big gap between the demand and supply of the forest produce. Some of the efforts made by the State Government are enumerated below:

1. In 1997, the State Government amended M.P. Land Revenue Code 1959, where following changes have been introduced:
  - Power to permit felling of dead/dying trees of Mango, Jarnun, Tamarind, Mahua, Sandalwood, Harra on private lands has been delegated to Panchayats.
  - No permission for felling and transit for timber in the holding of any private owner will be required when

such trees are planted, including commercial plantations.

2. In 1997, the State Government declared a Policy of leasing non-forest (revenue) wasteland to private companies to produce tree based raw material for their industries. This will definitely go a long way in reducing pressure on natural forests, and in stabilising tree-based industries,
3. Lands under tree plantations have been exempted from the provisions of Land-Ceiling Act.
4. Transit permit rules have been liberalised to promote tree plantation on private lands.
5. Contractual supplies to industries beyond 31.12.1998 have been terminated to create better market condition for private growers.

These efforts made by the government have encouraged farmers to take up more forestry activities on private degraded/ wastelands.

*Market information* There is generally little awareness amongst farmers about the kind of price that they could reasonably expect to get for their trees. To overcome this problem, forest department has established an Industrial Liaison Unit, which would co-ordinate between the tree grower and consumer and will provide all necessary market information.

Research is needed to identify other short-rotation, high-value species besides eucalyptus. Farmers should have a range of trees on their land, which meet various needs, and spread the risk of the collapse of any one market. Such activities have already been initiated in 14 Extension and Research Divisions, and the State Forest Research Institute, Jabalpur.

*Choice of species* In addition to the growing of eucalyptus, there is a strong demand by farmers for growing fruit trees and bamboo. Women are particularly keen on species that produce fruit for consumption and sale. While one need not be unduly pessimistic about what has been achieved, there certainly is a good case for distributing more fruit seedlings. Where fruit trees had been supplied, farmers addressed the problem of protection and management by planting them around the homestead on currently under- utilised land. Farmers have expressed willingness to pay for seedlings of fruit bearing trees in many instances, indicating the strength

of the demand. Therefore, providing seedlings, or grafted varieties of fruit species can be an effective step.

*Nurseries* Fruit seedlings, which require longer duration to raise, are, not being distributed, one of the reasons is the lack of certainty on budgets for nurseries provided by the government. Money is available for nurseries only as a part of plantation programme, and this deters officers from planting seedlings, which require to be kept for a long time in the nurseries.

There is urgent need for large quantities of improved high yielding and disease resistant planting material. Assurance on purity of the material is more vital in fruit and forest seedlings than in seasonal crops, since the test and taste of the fruits and trees can be had only after 3 to 5 years. Moreover, not much research data has been generated on the 'rainfed' horticultural crops.

The primary objective of every forestry project states that it wishes to help people. However, in many cases it has been seen that direct support to people's lives does not extend beyond wages. It is advisable that programmes attempt, to both aim for and assess the non-monetary benefits to people, so that programmes in future can be evolved and designed with increased direct and tangible benefits for communities.

### 13. Towards People Oriented Management

With livelihood forestry, subsistence and consumption would be met more from forest land, and market demand would be met more from private land. Using private lands for short rotation products will permit the large area of forest lands to be used for long gestation trees, which enrich the environment and provide a range of products to the

poor. Choice of species and management practices should be radically changed to suit the new policy. In Madhya Pradesh, changes at the policy level has allowed government to harness the tremendous attachment of the tribals for forests. The schemes have been conceived to demonstrate that development of forests also benefits the tribals. This has initiated a new era of partnership between the tribals and the government.

There are technical, environmental, political, economic, and managerial aspects of the people oriented management of the forests.

*Technical* If the site is bare and degraded to the point that it cannot support trees, then grasses, legumes, local shrubs and agave may be the only alternative. Attempting to plant trees on bare soil, would result in low survival, or poor growth. Besides, grass cover can reduce run-off of rain and soil loss. Protection of bare areas has resulted in excellent growth of grasses in Jhabua and it has become good source of income for members of Village Forest Committee.

*Environmental* The maintenance of life support system is a function performed mainly by the crown bio-mass of trees. It is this component of trees that can contribute positively towards the maintenance of the hydrological and nutrient cycles. Trees, which provide a lot of leaves, twigs, and branches, enrich the soil much better than those, which provide poles and timber alone. One of the main outputs from forests should be water, which is possible only when forests are considered more in the context of local rather than "national" needs.

*Political* If trees for timber are grown primarily on forest lands, no matter what instructions are issued by the government for giving a particular share to the poor (such as in Hitgrahi scheme in Madhya Pradesh), they are difficult to implement, as supply is not equal to demand. Besides this, the chances of intermediaries and trader-smugglers benefiting from this arrangement increases. If low value (low in market value terms, but high in bio-mass) output is planned, government may try to restrict the entry of people into the forests, the poor will still manage to access the forest lands and fulfill their needs. If species suitable for individual gathering by households are planted, the poor would directly appropriate the benefits. Unlike commercial timber species, relatively low value non-rotational trees for intermediate products would not attract the attention of rich farmers and contractors. What people get out of trees can depend more on what is planted than on who manages them.

This is not to suggest that forestlands will not produce any high value timber, or that conflict between the poor and the rich can always be avoided in the changed policy framework. Trees like Sal will continue to produce timber, as well as MFP. There would be species like bamboo, which would be demanded by many groups, the best part can be given to the people and the rest to industry. All that is being suggested here is that once the objective of forest lands is redefined, problems are likely to get reduced, if not disappear.

*Economic* The demand for marketed wood in India is limited. By duplicating the same species like eucalyptus on forest lands as on farm lands, we are ultimately cutting into the profits of the farmers, and thus undermining the farm forestry programme itself. It would be ironic if production of eucalyptus on farm lands, which is far cheaper, is discouraged because the production of more expensive eucalyptus is on government lands. Although there is yet no glut of eucalyptus in Madhya Pradesh, the experience in several parts of the country point to a possibility of market saturation, if common species are planted on both forest and private lands.

Demand and Supply position shows that the demand for commercial wood, although at present unsatisfied, is only a small fraction of the demand for fuelwood. The gap between supply and demand of timber and pulpwood can be met by afforestation of private and revenue wasteland.

Unlike timber which is bought from markets, fuelwood is generally gathered by rural people and even by the urban poor. Only the lower middle class (the middle class use kerosene and the rich use gas) in urban areas and the very rich in rural areas buy fuelwood. Moreover, in some parts of the country cow-dung and husk are used as fuel. The source of supply is thus varied. Farmers' produce has to compete with supplies from head-loaders, bullock carts, and merchants who buy wood from forest auctions.

The fact that fuelwood markets supply hardly 10-15% of the total fuelwood consumed has two implications. First, the gatherers can always beat the producers over the pricing of fuelwood; the producers would be price-takers, rather than price-makers. Second, the market price of fuelwood would always be lower than its social cost for replacement of growing stock through investments in plantations. These make production of wood for fuelwood markets a non-viable proposition. It may also be mentioned here that although the real price of fuelwood in urban markets increased steadily between 1975 and 1985, it started declining after 1985, causing further loss to the producers (Singh 1985, Chambers 1989, Saxena 1990). These considerations prove beyond any doubt that the fuelwood gaps can be met only through trees which produce a lot of twigs and branches, grown in public land.

There are several implications of this. First, in case degraded lands are to be used for wood production, there must be reservation for this sector as far as poles, pulpwood, and timber (to the extent possible) is concerned, and these species should not be raised on forest lands. Second, research needs to identify other short-rotation, high value species, which suit farmers' requirements of planting on marginal lands and bunds. Third, such species should be promoted in forest lands where the main product is different from wood, like MFPS.

*Managerial* A further advantage of planting "trees of the poor" (which are essentially employment augmenting trees, as they require labour for gathering and collection, as opposed to trees which are clear-felled) on forest lands is the likelihood of improved co-operation. People are reluctant to protect trees, which will be auctioned or felled to the benefit of government, contractors and forest staff. They are much more likely to collaborate in protection of trees from which they, much more than others, are in a position to benefit.

Forest lands have a comparative advantage in growing long gestation trees which may be less attractive to farmers. Fortunately, these are also the source of several MFPS. Rather than raise plantation crops, these lands should be used for non-rotational trees and natural forests, the produce

of which is gathered. Bamboo, amla, fruit and oil trees like mahua and karanj, which provide income to the poor and raw material for artisans, should get a priority. These should be supplemented with shrubs, and bushes to yield fibre, fuelwood and fodder in the shortest possible time, and some trees which can go well with teak and can provide fuelwood in the short time. the policy should be to encourage usufruct-based am 21 place of trees which require felling.

The suggestions given here require 'productivity', and 'economic value' to be redefined in terms or multipurpose utilisation and satisfying basic human needs, rather than maximise the timber value, the objective scientific forestry should be to maximise biomass, allowing a tree to expand horizontally rather than to pm in the vertical direction only. In place of stem-based forestry, crown based forestry will be environmentally, superior, as well as satisfy people's needs. Thus it will be more sustainable than conventional forestry. This requires a new outlook and a new silviculture, in which the of all poor people to secure rights of gathering would paramount.

The lessons of experience are clear. Addressing the livelihood security needs of the poor has to be the essential touchstone of any vision that seeks to ensure long term sustainability of forest resources.

**Annex.1 Demand Production Potential of Forest Produce**

District	Total Demand in Thousand			Potential Production in Thousands			Surplus/Deficit in Thousands		
	M3 Timber	M3 Fuel	N.T. Bamboo	M3 Timber	M3 Fuel	NT Bamboo	M3 Timber	M3 Fuel	N.T. Bamboo
Bhind	27.6	309.903	2.23	2.29	20.64	1.15	-25.31	-289.26	-1.08
Gwalior	56.19	195.36	1.34	9.87	88.85	4.93	-46.32	-106.51	3.59
Datia	9.3	98.41	0.71	3.12	28.06	1.56	-6.18	-70.35	0.854
Guna	29.06	337.52	2.43	41.19	370.75	20.59	12.13	33.75	17.86
Shajapur	22.06	271.63	1.95	3.06	27.51	1.53	-19.00	-244.12	-0.425
Ujjain	43.09	272.04	1.92	1.72	15.47	0.86	-41.37	-256.57	-1.06
Ratlam	26.94	213.78	1.52	12.71	114.39	6.35	-14.23	-99.38	4.82
Mandsaur	36.95	383.55	2.75	20.13	181.19	10.06	-16.82	-202.36	7.31
Dhar	26.41	378.63	2.73	11.54	103.89	5.77	-14.87	-274.74	3.03
Rajgarh	20.81	263.81	1.9	4.01	36.11	2.05	-16.80	-227.7	0.151
Bhopal	66.65	100.2	0.62	4.29	38.64	2.14	-62.36	-61.56	1.51
Vidisha	21.75	248.03	1.74	11.67	104.99	5.83	-10.08	-143.04	4.04
Tikamgarh	19.75	249.77	1.8	8.51	76.61	4.25	-11.24	-173.16	2.452
Rewa	31.48	420.56	3.03	11.44	102.93	5.72	-20.04	-317.63	2.689
Morena	43.17	525.96	4.08	85.79	557.86	42.89	42.62	31.7	38.81
Shivpuri	26.07	370.64	2.88	53.40	345.15	26.55	27.02	-25.49	23.66
Indore	83.7	231.99	1.68	15.81	102.76	7.9	-67.89	-129.23	6.217
Jhabua	22.94	396.86	3.1	37.14	241.43	18.57	14.20	-155.43	15.47
W.Nimar	46.55	664.49	5.17	89.58	582.27	44.79	43.03	-82.22	39.62
Sehore	20.33	266.48	2.07	32.11	208.71	16.05	11.78	-57.77	13.98
Raisen	20.39	285.09	2.22	43.15	280.44	21.57	22.76	-4.65	19.35
Chhatarpur	28.67	361.36	2.80	40.75	264.89	20.37	12.08	-96.47	17.565
Sagar	47.51	453.32	3.5	47.62	309.53	23.77	0.11	-143.79	20.27
Damoh	21.28	283.89	2.2	50.42	327.72	25.21	28.64	44.39	23.00
Satna	36.49	454.6	3.53	46.2	300.27	23.1	9.71	-154.33	19.572
Dewas	32.25	361.05	2.91	86.41	345.66	43.2	54.16	-15.39	40.29
E.Nimar	45.47	489.21	3.94	165.66	662.65	82.83	120.19	173.44	79.89
Panna	18.22	280.29	2.27	133.13	532.52	66.56	114.91	252.23	64.28
Jabalpur	101.64	689.95	5.49	93.92	375.67	46.96	-7.72	-314.28	35.92
Narsinghpur	21.34	313.78	2.54	34.02	136.07	17.01	12.64	-177.71	14.46
Sidhi	33.07	600.89	4.88	115.28	461.12	57.64	82.21	-139.77	52.75
Durg	82.94	735.56	5.9	68.45	273.81	34.22	-14.49	-461.75	28.32
Hoshangabad	43.25	511.16	4.14	224.62	314.47	112.31	181.37	-196.69	108.17
Betul	36.88	532.03	4.33	347.09	485.93	173.54	310.21	-46.1	169.21
Chhindwara	51.25	668.11	5.43	398.92	558.49	199.46	347.67	-109.62	194.03
Shahdol	50.02	760.36	6.19	446.59	625.22	223.29	396.57	-135.14	217.09
Rajnandgaon	43.61	670.18	5.46	272.99	382.18	136.49	229.38	-288.00	131.03
Bilaspur	116.32	1740.53	14.17	670.03	938.04	335.01	553.71	-802.48	320.84
Raigarh	48.47	859.62	7.01	533.33	746.95	266.76	485.06	-112.67	259.74
Seoni	32.72	529.73	5.16	279.72	279.72	139.86	247	-250.01	134.69
Mandla	41.53	696.61	6.79	781.68	781.68	390.84	740.15	85.07	384.04
Surguja	69.56	1071.36	10.44	1257.73	1257.73	628.86	1188.17	186.37	618.42
Raipur	139.09	1839.49	17.87	786.48	786.48	393.24	647.4	-347.98	375.36
Balaghat	48.74	784.49	7.04	561.23	436.51	280.61	512.49	476.4	273.56
Rastar	79.66	1971.08	17.72	3146.76	2447.48	1573.38	3067.1	128.42	1555.65
Grand Total	1971.69	24143.36	199.62	11091.46	17659.24	5545.42	9119.75	-6483.01	15256.82

Annex.2

Wages Distribution in Tendu Patta Collection in the year of 1996 & 1997

Jila Union	Wages		Jila Union	Wages	
	1996	1997		1996	1997
N. BALAGHAT	23139725.000	22705931.500	C.BASTAR	4914737.100	4474434.00
S.BALAGHAT	24925012.000	21689419.500	S.BASTAR	15644373.850	6495086.850
BILASPUR	19165352.500	18477394.250	W.BASTAR	13684305.250	14237007.050
JASHURNAGAR	14932215.200	14088414.200	BADWAHA	3394048.350	3605010.500
KORBA	30597559.650	28513450.000	BADWANI	303654.750	206781.000
N.BILASPUR	39363907.100	39476470.520	BURHANPUR	6094319.350	4726299.550
RAIGARH	67985081.850	60893014.000	KHANDWA	12450413.150	13260289.000
BHOPAL	12248689.250	12924911.650	KHARGONE	249550.750	2203542.600
OBEDULLAHGANJ	9639634.200	995704.950	BHANUPRATAPPUR	1444748.550	1577787.150
RAJGARH	2876707.400	1927433.200	KONDAGAON	84952511.000	69377000.000
RAISEN	22641940.300	21701420.300	KANKER	34215893.950	29459391.500
SEHORE	12186415.500	10373407.100	NARAYANPUR	11094723.850	893190.300
VIDISHA	19949611.500	19057200.400	E.RAIPUR	42320113.500	41011007.800
N.BETUL	14537502.000	13572816.250	N.RAIPUR	57169894.250	56796545.750
S.BETUL	5526960.250	5385334.150	S.RAIPUR	18698652.700	18827341.400
W.BETUL	7145408.900	6524278.250	E.SIDHI	53641506.800	5544024.850
E.CHHINDWARA	9239214.950	7698345.200	REWA	19733433.300	12231572.950
S.CHHINDWARA	8197250.600	7324176.300	SATNA	31804687.250	27687800.000
W.CHHINDWARA	6253034.900	508050.250	W.SIDHI	43888479.250	40067982.500
CHHATARPUR	48204109.800	5371042.750	N.SHAHDOL	37664900.00	28221900.000
N.PANNA	1772953.250	16129415.050	S.SHAHDOL	2267305.050	21467243.000
S.PANNA	10885388.150	9006489.450	UMARIA	25185622.700	21371439.600
TIKAMGARH	1187227.250	10450497.750	NARSINGHPUR	18449617.900	14773496.500
DURG	14380549.750	13977988.500	N.SEONI	19821432.750	15306709.250
KAWARDHA	13080401.250	11742869.250	S.SEONI	15193867.500	13572659.100
RAJNANDGAON	65643538.050	46979632.000	DAMOH	8997699.200	6714786.750
DATIA	366467.500	284765.000	S.SEONI	10269005.250	10698506.700
GWALIOR	2298069.900	1759247.350	DAMOH	107571136.250	994591.150
MORENA	3011688.400	2528676.850	S.SAGAR	3092306.250	28936983.600
SHEOPUR	14715475.950	1276807.550	E.SARGUJA	1197496.450	1128218.500
HARDA	9496789.750	8345414.000	KOREA	50209369.000	46554929.750
HOSHANGABAD	9237882.150	82387220.450	N.SARGUJA	30656386.250	28136566.150
DHAR	4374936.650	2665697.300	S.SARGUJA	15860922.700	12997459.650
DEWAS	25510293.550	21775735.100	W.SARGUJA	3719813.100	3084621.650
INDORE	101983.350	799188.150	GUNA	37703838.900	376000506.300
JHABUA	398980.650	2898732.900	SHIVPURI	2631962.200	2603627.600
DINDORI	14302221.150	13959505.000	MANDSAUR	1674047.200	1858907.750
E.MANDAL	18058233.900	15179575.250	RATLAM	958710.900	718354.000
JABALPUR	35047508.300	26887350.000	SHAJAPUR	95810.900	718354.000
W.MANDLA	28872523.750	220.3268.000	UJJAIN	472041.500	243972.050
<b>GRAND TOTAL</b>				1540715237.750	1817546962.350

**Annex.3 Wages Distribution in Sal Seed and Harra Collection in the year of 1996 & 1997**

**Sal Seed**

NAME OF THE JILA UNION	WAGES	
	1996	1997
N.BALAGHAT	2 588552.00	55307.200
JASHPURNAGAR	69110200.000	7553444.800
KORBA	141246.400	71996.800
N.BILASPUR	1707992.000	291321.600
RAIGARH	6598062.400	124626.400
KAWARDHA	1943086.400	26113.600
DINDORI	2189187.200	17235.200
E.MANDLA	4234521.600	29833.600
C.BASTAR	8800000.000	5889561.600
S.BASTAR	372800.000	513568.000
BHANUPRATAPP UR	1454198.400	23780.800
KONDAGAON	41825984.000	66097.200
KANKER	9179787.200	946745.200
NARAYANPUR	5797816.000	502091.200
E.RAIPUR	9274326.400	266636.800
N.RAIPUR.	195785.600	24739.200
S.RAIPUR	7338148.800	944385.600
S.SHAHDOL	1352859.200	24116.800
E.SARGUJA	2812800.000	7488286.400
KOREA	259081.600	355952.000
N.SARGUJA	803529.600	1959547.200
S.SARGUJA	4757160.00	16572114.400
W.SARGUJA	247353.000	29368.000
<b>G.TOTAL</b>	<b>125786473.800</b>	<b>35621280.200</b>

**Harra**

NAME OF THE JILA UNION	WAGES	
	1996	1997
N.BALAGHAT	1643980.000	686181.200
S.BALAGHAT	150319.000	141783.400
BILASPUR	534.300	170.000
JASHPURNAGAR	5010.200	562546.200
KORBA	35613.500	1318081.000
N.BILASPUR	4856.800	1972.00
RAIGARH	119696.200	254806.200
N.BETUL	3250.000	2779.500
S.BETUL	82453.800	60052.500
E.CHHINDWARA	605651.800	730133.00
W.CHHINDWARA	561193.100	635859.500
S.PANNA	5655.00	4845.000
DURG	74846.200	197733.800
KAWARDHA	276126.500	217917.900
RAJNANDGAON	423636.200	147943.690
DINDORI	947295.700	1639180.800
E.MANDLA	174608.200	284450.800
JABALPUR	35750.000	30838.000
W.MANDLA	396981.000	569466.000
C.BASTAR	46278.700	60327.900
S.BASTAR	40669.200	15444.500
W.BASTAR	44881.200	34000.000
BHANUPRATAPPUR	984490.000	917500.200
KONDAGAON	1495000.000	752549.200
KANKER	3635294.000	5111860.900
NARAYANPUR	752865.100	87917.500
E.RAIPUR	182369.200	28124.800
N.RAIPUR	24078.600	38216.000
S.RAIPUR	290112.550.	330458.750
N.SHAHDOL	40942.200	109140.000
S.SHAHDOL	594100.000	1241646.000
S.SEONI	161236.400	75923.700
KOREA	4500.600	30685.000
N.SARGUJA	9464.000	15398.600
S.SARGUJA	9908.600	609960.000
W.SARGUJA	65790.400	86343.000
<b>G.TOTAL</b>	<b>13929438.250</b>	<b>15581972.540</b>



**Annex4 NON NATINALISED MINOR FOREST PRODUCE**

<b>Minor Forest Produce Collection Through Primary cooperative Societies 1996-96</b>							
Name of M.F.P	Actual Collec tion (Qntis )	Collecti on rate in 95-96	Collectio n rate in 95-96	Amount Disburs ed 95-96	Additiona l Amount Disbursed (Rs. Lac)	Total Revenue (Rs. Lac)	Net Revenue to Societie s (Rs. Lac)
		(By middle men) (in Rs.)	(by societies) (Rs./Kg)				
Charpta Seed	6163	0.60	2.25	13.88	10.		
Amla Dairy	1206	2.00	4.00	4.82	2.41	7.34	2.42
Amla Green	2100	1.00	2.00	4.20	2.10	5.25	1.05
Chironji	2360	5.50	15.00	35.40	22.42	59.00	23.6
Seed							
Chironji Kernal	15	20.00	190.00	2.35	2.55	3.15	0.30
Baheda	262	1.00	2.00	0.52	0.26	1.05	0.53
Safed Musli Green	260	6.00	10.00	2.50	1.00	5.00	2.50
Belguda	639	1.00	3.00	19.20	1.28	3.20	1.25
Satawar	368	2.00	5.00	1.54	0.92	2.16	0.62
Nagarmotha dry	312	2.00	3.00	0.94	0.32	1.25	0.31
Nagarmotha Green	125	1.00	1.50	0.19	0.06	0.38	0.19
Sitaphal	450	2.00	4.00	1.60	0.80	2.40	0.60
Honey	236	12.50	35.00	8.28	5.32	1.83	3.55
Imli	110	2.00	4.00	0.44	0.22	0.66	0.22
Mahul Patta	2360	1.00	2.00	5.90	3.54	3.26	2.36
Chiraita	709	2.00	4.00	2.84	1.42	3.55	0.71
Lac	100	6.00	10.00	1.00	1.00	1.50	0.50
Broom (Nos.)	9450	3.00	5.00	47.25	47.25	7.25	0.60
Mahua Flower	6923	3.00	4.50	31.18	10.40	62.35	31.17
Neem	1837	1.00	2.00	3.67	1.83	8.27	4.60

<b>Minor Forest Produce Collection Through, Primary cooperative Societies 1996-97</b>			
Name of M.F.P.	Actual Quantity (Qntis)	Collection Rate (Rs./Kg)	Amount Paid (Rs. Lac)
Charota Seed	43817.12	2.00	87.63
Amla Dry	2397.45	5.00	10.79
Amla Green	2100.00	2.00	4.15
Achar Guthli	1026.00	30.00	30.78
Chironji Seed	26.00	190.00	4.94
Baheda	262.00	2.00	0.52
Safed Musli Green	2522.27	25522.27	25.22
Belguda	669.00	3.00	2.00
Satawar	336.00	5.00	1.93
Nagarmotha	269.00	2.00	0.54
Mahul Patta	559.57	2.00	11.12
Chiraita	723.39	4.00	2.89
Lac	7683.10	4.50	34.57
Mahula Flower	7683.10	4.50	34.57
Neem Seed	1863.37	2.00	3.67
Mahua Gulli	94.00	9.00	0.67
Honey	263.21	35.00	9.21
Broom (Nos)	9450.00	5.00	0.47
Saidhoop	110.00	15.00	8.65
Gilo	1.00	4.00	0.00
Teekhur	7.00	4.00	0.03
Bhilwa	3.65	3.00	0.01
Beejaphal	112.00	2.00	0.22
Kosam Gutli	22.00	3.35	0.07
Phool Behri	2850.00	5.00	0.14
Tulsi Seed	395.00	3.00	1.19
Char gond	194.00	15.00	2.91
Dhavai Flower	5.00	3.50	0.02
Khokri Puttu	264.00	5.00	1.23
Kanta Broom	7534.00	3.50	0.26
Bechandi	1.00	5.00	0.01
Brijdanti Seed	3.60	4.00	0.01
Ghagra	271.00	3.00	0.81
Bilora	38.75	3.50	0.14
Godlajari	99.50	4.00	0.40