

REPORT OF COMMITTEE ON
FOREST & TRIBALS IN INDIA

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GOVERNMENT OF INDIA
MINISTRY OF HOME AFFAIRS
TRIBAL DEVELOPMENT DIVISION
NEW DELHI

1982

**REPORT OF
COMMITTEE ON FOREST
AND TRIBALS IN INDIA**

**GOVERNMENT OF INDIA
MINISTRY OF HOME AFFAIRS
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Dr. B. K. ROY BURMAN,
Professor of Anthropology,
Vishva Bharati University,
Sriniketan (West Bengal)

Dear Shri Sethi,

It gives me great pleasure to submit to you the Report of the Committee on Development of Forestry, keeping in view the interests of the tribals. Among the terms of reference of our committee one was to suggest guidelines for orientation of forest policy in a way that it serves the interest of forests and tribal economy. We felt that there is a symbiotic relationship between the tribal social organisation and forest economy in the specific historical context of our country. The overwhelming majority of the population living in forests are tribal communities. They are not only forest-dwellers but also for centuries they have evolved a way of life which, on the one hand, is woven round forest ecology and forest resources and, on the other, ensures that the forest is protected against depredation by man and nature. The symbiotic relationship suffered a set-back during the colonial rule when forest was looked upon only as a source of maximization of profit and not as a vital link between human habitat and the larger environment. Fortunately, in recent years there is an all-round recognition among many, including perceptive foresters, that this line of approach requires to be completely changed. There cannot be any development of forests without development of the forest-dwelling tribal communities. It is out of this recognition that the committee of which I have the honour to be the Chairman, was constituted by the Ministry of Home Affairs. It was, however, recognised by us that in view of the preoccupation of each of the members with his normal professional activities, it would not be possible to go into the whole gamut of all the

(iii)

issues, by ourselves. We, therefore, feel happy that three other committees, as follows, have also been set up :

- (1) *Committee on orientation of forestry education.*
- (2) *Committee on rights and concessions of people and supply of forest produce, and*
- (3) *Committee to suggest introduction of family beneficiary schemes in forestry sector.*

Besides, a task force on raising trees on farm lands has been constituted by the Ministry of Agriculture.

We feel that after the reports of the aforesaid Committees have been received, it will be necessary to integrate them in a unified framework. At that stage, a number of policy decisions will have to be taken in the interest of the tribals. The report that we are submitting at present is, therefore, an interim one. After the reports of the other committees are available, we may go into the question of formulating a unified framework. It may then be discussed in a conference with the participation of members of all the committees. In the light of the same we shall submit our final report. In the meantime, this interim report may kindly be taken into consideration for re-examining the draft National Forest Policy and the Forest Bill.

I avail of this occasion to put on record on behalf of myself and of the committee as a whole, our appreciation of the perceptive manner in which Dr. Bhupinder Singh, It. Secretary, Ministry of Home Affairs (Tribal Development), brought out the relevant issues in the final stage of the preparation of the report. His dedicated work made our task easy. I would also like to put on record the appreciation of the members of the committee and of myself of the extremely useful preparatory work done by Sh. D. N. Tiwari, Deputy Secretary, Ministry of Home Affairs. He had compiled valuable data in respect of forest economy and the extent of dependence of the tribals on forest resources. We found that in his quiet efficiency he carried the spirit of a researcher.

(iv)

We hope that this report will serve to promote the interests of the tribals and help in improving the forest management system and thus in fulfilling the national target of having 60 percent of our land in the hills and 20 percent of the plains under effective forest cover.

With kind regards,

Yours sincerely,

Sd/-

(B. K. ROY BURMAN)

SHRI P. C. SETHI,
Minister for Home Affairs,
Govt. of India, New Delhi.

CHAPTER I

INTRODUCTION

Part IV of the Constitution contains two significant Directive Principles of State Policy. Article 46 enjoins on the State to promote the educational and economic interests of particularly the scheduled castes and scheduled tribes, protecting them, from social injustice and exploitation. As per Article 48A, the State should endeavour to protect and improve the environment and safeguard the forests and wild life of the country. The scheduled tribes live mostly in forest areas. Compliance with these two principles of the Constitution is mutually reinforcing.

2. Of late, an acute awareness has been growing not only among the experts in the field but also among the lay public that the alarming rate of depletion of our forests spells many hazards. Our basic resource i.e. soil is threatened, the varying rate of denudation reaching perceptible dimensions in quite a few areas. One report puts it dramatically by saying that the sub-Himalayan Shiwalik mud-mounds may disappear before our very eyes one day, causing grave damage to the Gangetic plain. Another report prognosticates desertification of the north Indian plain granary, advancing from the Thar desert. While the long-range repercussions may not be grasped readily, the scenario of the fast-disappearing forests is too vivid before us. Apart from spelling ecological insecurity, the loss to production forestry and industry and, consequently, to the national economy is enormous, liable to cause the wheels of some industries to come to a grinding halt in the not-too-distant future. Thirdly, and this is not appreciated often even now, many tribal communities live substantially off forests. To them loss of forest means further subsidence into poverty and want.

3. Directly or indirectly, in the tribal mind forest symbolise life in its manifold manifestations i.e. home, worship, food, employment, income, an entire gamut. Tribals can, in fact, be regarded as children of the forest. It has been possible for tribal communities to subsist for generations with a reasonable standard of health, because forest provided them food such as fruits, tubers, leafy-vegetables, succulent shoots, honey, flowers, juices, gums, game, fish etc. Medicinal herbs and plants which they have been using for treatment of diseases and maintaining health are today the source of modern medicine. It has been found that the tribal people are not only familiar with any number of biological species around them, but they also possess some understanding of ecological inter-relationship of the various components of forests. Most important, forest is an economic resource base. Appropriate use of knowledge of tribals in forestry operations and minor forest produce may add a significant dimension to the developmental activity in these fields.

4. In the contemporary context, the main objectives of forest planning would appear to be incremental production over consumption, improvement of the eco-system, employment and energy generation and integration of rural (particularly of tribal) and forest development. Sustainable exploitation of forests for meeting the needs of the nation and the people is possible provided sound management is practised, keeping in focus the symbiotic relationship existing between forests and forest-dwellers. The realisation that development of forests and well-being of tribals are interdependent should be deep-rooted; for sound management of the eco-system the relationship should not only be properly understood but should also be made the bed-rock of the operational policy.

5. Integrated development of forests and rural (particularly tribal) areas has been a major concern in the recommendations of various bodies and individuals from time to time. The Dhebar Commission (1961), the Hari Singh Committee (1967), the National Commission on Agriculture (1976), the Conference of State Ministers in charge of Forests

and Tribal Development (1978), the Working Group on Tribal Development during 1980-85, the Central Board of Forestry (1950, 1956 and 1980) emphasised it. The Prime Minister, Smt. Indira Gandhi, has observed that unless a public-perspective policy is introduced in the forestry sector, in the present form at best it will be indifferent and at worst a coercive policy. She has particularly stressed replacement of contract system and drive for purchase of minor forest produce through cooperatives and State organisations.

6. In the background of the aforesaid desiderata, the growing alienation between the forest managers and forest dwellers (the thin wedge of which started dividing the two more than a century ago) has been a disturbing feature. The consensus among the ecologists, planners, administrators, foresters, sociologists, has been that the gulf between the two can be bridged to the benefit of all, if the tribal is involved as an active partner in various forest operations like afforestation, harvesting, collection and processing of minor forest produce etc. With a view to achieving a coordinated policy, the Government of India in the Ministry of Home Affairs felt the need to constitute a committee to suggest guidelines for the re-orientation of forest policy. The terms of reference of this committee have been set out in the order constituting it contained in Annexure I. As will be seen from our recommendations, our main pre-occupation has been with reference to the last term i.e. guidelines for the re-orientation of the forest policy so that it serves the interest of forest and tribal economy. Frankly we have not been able to pay equal attention to other terms of reference partly because we found that the last term of reference was the most important and partly on account of the fact that the reviews and appraisal called for by the other terms of reference are implied,

leading up to the recommendations for the last term of reference. Moreover, we find that various other committees such as those listed below have been constituted to deal in depth with the issues contained in the other terms of reference :

- (i) A Committee on orientation of forestry education and preparation of syllabi and course contents constituted by the Ministry of Home Affairs headed by Shri K. M. Tiwari, President, Forest Research Institute and Colleges, Government of India.
- (ii) The Committee on rights and concessions of people and supply of forest produce in Nistar constituted by the Ministry of Agriculture headed by Shri M. S. Chaudhari, ex-Chief Secretary of Madhya Pradesh.
- (iii) A Committee to suggest introduction of family beneficiary schemes in forestry sector, constituted by the Ministry of Agriculture, headed by Shri N. D. Bachkheta, Inspector-General of Forests.
- (iv) Task force on raising of trees on farm lands constituted by the Ministry of Agriculture, headed by Shri S. A. Shah, ex-Managing Director, Forest Development Corporation, Gujarat.

As such, this Committee felt that it was not necessary for it to delve too deep into those matters. In any case, it would have required inordinate time to deal adequately and scrutinize all these issues which have been covered by this Committee as well as other Committees listed above.

7. The Committee held six meetings, five in New Delhi and one in Calcutta and made field visits. It examined the 1980 draft for Forest Act and suggested a number of amendments which were forwarded to the Inspector-General of Forests, Ministry of Agriculture.

8. This report represents the consensus of the committee as a whole. It spells out the existing situation.

the approach and the future strategy to be adopted. It must be admitted that the tasks of reviewing the forest policy and reformulating the programmes of forestry and tribal development, shifting cultivation, forest villages, minor forest produce, forest labour cooperative societies and social forestry are important but also complex. The nation as a whole is deeply concerned with the destruction and disappearance of trees and vegetal growth, fast deteriorating forest environment and tribal unrest. Our recommendations have been made after our full consideration.

9. We hope that Government of India and the States would give serious thought to the recommendations. We feel these will go a long way in ameliorating the economic condition of tribals, increased production of forest produce and protection and improvement of environment of the country.

CHAPTER II

FOREST IN INDIA

India is the seventh largest country in the world covering an area of 328.7 million hectares having 15% of the world's population but less than 1% of the total productive forest area. There is a strong apprehension that unless drastic corrective measures are taken, the forests and tree lands of the country will not be able to play their vital role in sustaining the life support system of the country's environment and improving the quality of life. The existing pattern of land-use in the country is as per Table I.

TABLE I
Land Use Pattern
(Agriculture Statistics 1976)

Land use	Area in million hectares	% of the total area	Remarks
Agriculture (cultivated land)	152.6	46.4	..
Forest	74.88	22.7	...
Other uncultivated land	42.2	12.9	Potentially productive
Land under non-agriculture use	16.4	4.9	Waste land
Barren and uncultivable land	42.7	13.1	Unproductive

2. Agriculture is the major land use in the country with 46.4% land area yielding nearly 46% of the gross domestic produce and providing employment to 75% of the rural working class. Forestry with 22.7% of land area contributes 1.6% gross domestic product and provides employment to 0.2% of the rural population.

3. The State-owned forest constituted 77.2% of the total forest area in 1949-50, rising to 92.3% during 1967-68 and 95.2% in 1973. Only 3.1% forest area is owned by corporate bodies and 1.7% by private owners in the country. The State ownership is continually increasing. The mean annual increment of the country's forest is 0.5 m³ per hectare as against 2.6 m³ in Asia, 2.5 m³ in Europe, 2.3 m³ in U. S. A. and 2.1 m³ for the world as a whole. The potential productivity of the country's forests is as high as 1.80 to 13.37 m³ per hectare or even more. The forests can give much higher return and can generate massive employment provided intensive management practices are adopted and man-made forests created.

4. By composition the forests are identified as (i) coniferous forests 5.6% (ii) broad-leaved forests 81.6% and (iii) bamboo forests including plantation 12.8%. The area under forest also includes perpetually snow-bound alpine areas, deserts, extensive marshy areas, degraded rocky areas bereft of any vegetation and large stretches of scrub land. If due allowance is made for all these factors, it would emerge that not more than 10% of country's forest area (out of 22.7% of the total forest area) is well stocked, capable of performing its protective and productive functions.

5. According to the latest assessment, the forest area in the country has receded to the extent of 4.134 million hectares i.e. 5.5% of the total forest area during the span of the quarter of the century 1951-75. In other words, the annual loss of forest areas has been 0.161 million hectares which is equal to the total forest of Haryana State. Depletion of growing stock has also taken place through degradation of forest areas. The main causes responsible for this depletion comprise over-exploitation of the resources, shifting cultivation, uncontrolled grazing and appropriation of wood for small timber and fuel.

6. Nearly 80% of the population in the country is rural-based and traditionally firewood is used for cooking. Firewood accounts for 60% of the non-commercial energy consumed in the country. As against the projected demand of 256 million m³ of fuelwood in 1980, the recorded production was around 30 million m³. The shortage of fuelwood has created tremendous pressure on existing wood-lots and has resulted in the use of cow-dung as fuel instead of manure.

7. According to the National Commission on Agriculture, the projected demand for industrial wood in the year 2000 AD is of the order of 47.18 million m³ as against the present production of 11.15 million m³ during 1977-78. Thus, the shortfall of industrial wood would be 36 million m³ at the present rate of forest harvesting.

8. The State-wise forest area, total population and per capita forest area are as per Table 2.

TABLE-2

State-wise Population, Forest Area and Per Capita Forest Area.

	Total population (1981 Census)	Forest area in the year 1980 (in thousand hectares)	Percapita forest area (in hectares)
1	2	3	4
State			
Andhra Pradesh	53,405,119	6409.2	0.1280
Assam	19,902,926	3070.7	0.1543
Bihar	69,823,154	2923.2	0.0419
Gujarat	33,960,905	1952.5	0.0575
Haryana	12,850,902	163.7	0.0127
Himachal Pradesh	4,237,569	2119.0	0.5001
Jammu & Kashmir	5,981,600	2183.6	0.3659

1	2	3	4
Karnataka	37,043,451	3786.6	0.1022
Kerala	25,403,217	1112.0	0.0438
Madhya Pradesh	52,131,717	15379.0	0.2952
Maharashtra	62,693,898	6407.8	0.1022
Manipur	1,433,691	5515.4	1.0570
Meghalaya	1,327,874	854.8	0.6437
Nagaland	773,281	287.6	0.3719
Orissa	26,272,054	6767.3	0.2576
Punjab	16,669,755	242.8	0.0146
Rajasthan	34,102,912	3491.3	0.1024
Sikkim	315,682	260.0	0.8236
Tamil Nadu	48,297,456	2179.1	0.0451
Tripura	2,060,189	593.2	0.0464
Uttar Pradesh	110,858,019	5139.2	0.0464
West Bengal	54,485,560	1183.7	0.0217
Union Territories			
A. & N Islands	188,254	714.5	3.7954
Dadra & Nagar Haveli	103,677	19.9	0.1920
Arunachal Pradesh	623,050	5154.0	8.2064
Delhi	6,196,414	Neg.	Neg.
Goa, Daman & Diu	1,082,117	105.3	0.0973
Mizoram	487,774	712.7*	1.4611
	683,810,051	74,743.2	0.1095

*Reserved forest Area only.

Source : Development of Forest & Forest Products—Ministry of Agriculture, Department of Agriculture & Cooperation, Forestry Division, July 1981.

9. Total investment in forestry sector during the Sixth Five Years Plan period Statewise and tribal sub-Plan-wise has been as follows :

TABLE 3

Statewise Sixth Plan, Tribal Sub Plan (TSP) and Forestry sector outlays

(Rs. in lakhs)

Sl. No.	State/U.T.	Total State Plan (SP)	Flow from SP to TSP	% age	Outlay on Forest Sector		% age allocation in TSP	SCA	State Plan flow to TSP (- SCA)
					SP	Flow from SP			
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh .	310000	13949	4.50	1050	285.00	27.14	62.70	347.70
2	Assam	111500	12015	10.78	2520	21.00	0.83	200.00	221.00
3	Bihar	322500	62527	19.39	1800	955.00	53.06	325.00	1280.00
4	Gujarat	368000	47729	12.97	9000	4477.00	49.74	800.00	5277.00
5	Himachal Pradesh	56000	4491	8.02	2900	235.00	8.10	12.50	247.50
6	Karnataka .	226500	2380	1.05	3075	100.00	3.25	Nil	100.00
7	Kerala	155000	2373	1.25	1862	185.00	9.94	Nil	185.00
8	Madhya Pradesh .	380000	62900	16.55	3800	1442.00	37.95	1500.00	2942.00

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9 Maharashtra	617500	30550	4.83	4875	936.70	19.21	N.A.	936.70
10 Manipur	24000	8368	31.65	475	253.65	53.40	100.00	353.65
11 Orissa	150000	53319	25.70	1250	400.16	32.00	Nil	400.16
12 Rajasthan	202500	20266	10.01	1500	246.89	16.46	360.00	606.89
13 Sikkim	3701	431	0.54	570	104.00	18.25	2.00	106.00
14 Tamil Nadu	315000	1698	20.00	5900	217.71	3.69	11.80	229.51
15 Tripura	24500	6720	0.04	1239	N.A.		10.00	
16 Uttar Pradesh	585000	313	5.15	7890	14.00	0.20	15.00	29.00
17 West Bengal	350000	18033	16.02	2200	1324.73	60.22	280.00	1604.73
18 A. & N. Island	9668.50	1548	0.79	550	12.79	2.33	Nil	12.79
19 Goa, Daman & Diu	19200	151	11.65	450	—	—	4.37	4.37
GRAND TOTAL	4230561	354900	7.83	52106	11210.63	21.52	3683.37	14894.00

*Column 7 as percentage of Column 6.

Source : Tribal sub-Plans of State Governments.

10. Forest have to fulfil three sets of needs (a) ecological security (b) fuel, fodder, timber and other domestic needs of the population and (c) needs of village, small-scale, medium-scale and large-scale industries.

(a) Ecological security

11. The extent of forest cover is a good indicator of the health of the land. The large scale deforestation in recent decades has rendered the sensitive catchment areas in the Himalayan and other hilly areas particularly vulnerable to soil erosion. The country can hope to achieve ecological security only by increasing the vegetal cover to tackle the following problems of land degradation :

- (i) According to an estimate made by the Ministry of Agriculture in March 1980 as much as 175 million hectares (mh) out of the country's total land area of 304 mh for which records exist, are subject to environmental problem. The break up is as per Table 4.

TABLE 4
Land Areas with Environmental Problems

Problem	Area (Million hectares)
(1) Serious water and wind-erosion	150.00
(2) Shifting cultivation.	3.00
(3) Waterlogging.	6.00
(4) Saline soils	4.50
(5) Alkali soils	2.50
(6) Diara land	2.40
(7) Other culturable waste land fit for reclamation	6.60
TOTAL	175.00
(57.2% of the total land area)	

Source : Ministry of Agriculture, March 1981, Sixth Five Year Plan (1980-85) Document of Planning Commission, Chapter 20, Table 20.1. 1981.

mh=million hectare

- (ii) In a study made in 1972¹, it was estimated that on an average, India was losing about 6000 million tonnes of top soil per annum through water erosion and that these represented, in terms of major nutrients NPK alone, an annual loss of Rs. 700 crores.
- (iii) Again, according to the Report² of the National Commission on Floods (1980), the losses on account of floods in 1976, 1977 and 1978 were Rs. 889 crores, Rs. 1200 crores and Rs. 1091 crores respectively. According to the same report, the total area subject to periodic floods which was estimated at 20 million hectares in 1971 now stands at the level of 40 million hectares—an increase of 100 per cent in 10 years.
- (iv) The Himalayan eco-system has considerably deteriorated, resulting in floods in the Indo-Gangetic plains thereby causing heavy damage to property and crops and untold human misery. Since the run-off of rainwater from denuded areas is far greater than from well-wooded slopes, a great deal of water which would otherwise have been retained as sub-soil and groundwater is today being lost as surface run-off, often causing further erosion and floods in the process. The agriculture of Indo-Gangetic plain which is capable of sustaining a population of 1000 millions depends on the ecological stability of the Himalayan catchment.

(b) People's Needs

12. Forestry has to provide fuel, human and animal nutrition, medicine and forest produce of daily needs.

- (i) A significant feature of the Indian energy scene is the important role of non-commercial forms of

1 A policy for land and water by B. B. Vohra, Published by Department of Environment, 1981.

2 Report of the National Commission on Floods, 1980, Sixth Five Year Plan (1980-85) Document, Chapter 20, 1981.

3 Hill Area Development, Sixth Five Year Plan (1980-85) Document, Chapter 25, 1981.

energy, namely firewood, agricultural waste and animal dung. The contribution from firewood, agricultural waste and animal dung in the total non-commercial energy consumption is 65%, 15% and 20% respectively. It has been estimated that in 1975-76, 133 million tonnes of firewood and 41 million tonnes of agricultural waste were used. The rural communities will continue to depend heavily on firewood for several decades to come. Firewood being a bulky material, if it is not grown locally it would require use of other energy inputs to transport it to the area of consumption. A large programme of fuel and farm forestry is, therefore, being taken up in the Sixth Plan, the target being set at 13 million hectares of plantation.

- (ii) In India, less than 0.4 hectare of land is available for an individual to feed himself and maintain his livestock. As per 1981 Census, the population is 683.81 million which is nearly 15 percent of the total world's population, while the area accounts for just about 2.4 per cent of the total geographical area of the world. India's livestock population is 353.34 million (1972 census). In the rural areas, it largely depends on grazing. Forest communities depend on forests for food, medicine, shelter, sport, entertainment and relaxation. Forest provides a complementary source of food such as tubers, leafy vegetables, flowers and fruits. A majority of the tribal population sustains itself on forest-gathered foods during critical months of April to September.
- (iii) The rural and urban population also depends on forest for supply of small timber, bamboo, cane, thatching grasses, resins, gums, leaves, oilseeds, tan dyes, fibre, flowers, aromatic products, medicinal plants and various other products.

(c) Industrial Raw Material

13. A number of village, small, medium and large scale industries depend on forests, for supply of raw material. Starting from basket-making, rope-making, Bidi-making to pulp and paper, rayon, panel products, match industries oxalic acid etc. all come under this category.

- (i) The importance of forest-based industries is being over-whelmingly realised due to their potential for providing large-scale employment mostly in rural areas. Planned growth of these industries will exercise a multiplier effect on the whole economy because these industries produce a range of products, many of which satisfy the basic needs of the people. These products provide important substitutes, promote export for earning valuable foreign exchange and generate employment in primary, secondary and tertiary sectors.
- (ii) Forest-based industries are now finding it extremely difficult to meet their requirement of raw material. A large number of industrial units are required to procure their raw-material from long distances causing strain on the national transport system. The situations are likely to become critical in the next decade. Immediate action is called for increasing the resource-base.

14. An allocation of Rs. 97,500 crores has been envisaged for the Sixth Plan in India out of which an allocation of Rs. 692.64 crores i.e. 0.71% is earmarked for forestry sector. Separate allocations for forestry sector are also expected under Rural Development Programme, Hill Area Development Programme, Environmental Programme, Tribal sub-Plan etc. Out of the total apportioned amount of special Central assistance Rs. 470 crores for tribal sub-Plan is Rs. 36.83 crores i.e. 7.8% have been allocated for forestry development.

15. The forestry programmes which are so important from the point of view of the four 'E' i.e. Environment, Energy, Employment and Economy can create economic impact in the rural areas only if the sector receives adequate allocations. Besides increasing the plan allocations, action is required to mobilise "People's Forestry Programme" & institutional investments by preparing suitable projects.

16. In conformity with the said objectives, the major areas of thrust in forestry development should be following :

- (i) Improving the environment by protecting the forests and undertaking massive afforestation programmes in the degraded areas by involving tribals as partners in management and profits.
- (ii) Meeting the requirements of the village and tribal communities as well as those of defence, communications and industry.
- (iii) Undertaking a massive programme of social forestry, farm forestry and village fuelwood plantation which can yield fuel, fodder, fruit and fertilizer of the soil (through fixation of nitrogen).
- (iv) Providing gainful employment to the weaker sections of the society through harvesting of timber and bamboo and scientific development of minor forest produce.
- (v) Popularising agro-forestry, silvi-pastoral etc. mixed systems.
- (vi) Affording strict protection to wild life and other gene pools which are facing the danger of extinction.

CHAPTER III

TRIBALS AND FORESTS

The tribal population of about 38 million at the time of 1971 census, increased to about 42 million when the area restriction relative to the demographic distribution of the scheduled tribe population within a State was removed. Nearly 82% of the tribal population is concentrated in central and western part of the country, about 11% in the north-eastern States and about 7 per cent is dispersed in small pockets in the southern zone. State-wise distribution of tribal population by States and coverage under tribal sub-Plan and pockets are indicated in Table 5.

TABLE 5

State-wise population of Scheduled Tribes (1971 Census)

Sl. No.	State/Union Territory	Total population	Scheduled Tribe Population			
			ST population	Percentage of total population (Col. 4 of 3).	Revised as per the Constitution Order (Amendment Act. 1976)	Percentage of total population (Col. 6 of 3)
1	2	3	4	5	6	7
1	Andhra Pradesh	435.03	16.58	3.8	22.26	5.12
2	Assam	146.25	16.07	10.99	61.07	10.99
3	Bihar	563.53	49.33	8.75	49.33	8.75

1	2	3	4	5	6	7
4	Gujarat . . .	266.97	37.34	13.99	37.57	14.07
5	Haryana . . .	100.37	—	—	—	—
6	Himachal Pradesh	34.60	1.42	4.10	1.42	4.10
7	Jammu & Kash- mir.	46.17	—	—	—	—
8	Karnataka . . .	292.99	2.32	0.79	2.62	0.89
9	Kerala . . .	213.47	2.69	1.26	1.93	0.90
10	Madhya Pradesh	416.54	83.87	20.13	98.15	23.56
11	Maharashtra . . .	504.12	29.54	5.86	38.41	7.62
12	Manipur . . .	10.73	3.34	31.13	3.34	31.13
13	Meghalaya . . .	10.12	8.14	80.43	8.14	80.43
14	Nagaland . . .	5.16	4.58	88.76	4.58	88.76
15	Orissa . . .	219.45	50.72	23.11	50.75	23.13
16	Punjab . . .	135.51	—	—	—	—
17	Rajastban . . .	257.66	31.26	12.13	31.35	12.17
18	Sikkim . . .	2.10	—	—	—	—
19	Tamil Nadu . . .	412.60	3.12	0.76	4.50	1.09
20	Tripura . . .	15.56	4.51	29.98	4.51	28.98
21	Uttar Pradesh . . .	883.41	1.00	0.23	1.99	0.23
22	West Bengal . . .	443.12	25.33	5.72	26.03	5.87
23	A. & N. Islands	1.15	0.18	15.65	0.18	15.65
24	Arunachal Pra- desh.	4.68	3.69	78.85	3.69	78.85
25	Chandigarh . . .	2.57	—	—	—	—
26	Dadra & Nagar Haveli.	0.74	0.64	86.49	0.64	86.49
27	Delhi . . .	40.66	—	—	—	—
28	Goa, Daman & Diu.	8.58	0.07	0.82	0.07	0.82
29	Lakshadweep . . .	0.32	0.30	93.75	0.30	93.75
30	Mizoram . . .	3.32	3.13	94.28	3.13	94.28
31	Pondicherry . . .	4.72	—	—	—	—
	INDIA . . .	5481.60	380.15	6.94	411.48	7.51

2. The tribal communities in India largely occupy forested regions where for long period in their history they have lived in isolation but in harmony with nature. They draw their sustenance largely from the forest. They have had symbiotic relationship with the forest which continues undisturbed in the interior areas even now.

3. The forests not only provide them food, material to build houses, fuel for cooking, light and warmth, fodder for their cattle, but also satisfy the deep-rooted sentiments. Their folk-lore revolves around forest. Tribal life is connected one way or the other with forests, right from birth to death. In times of distress like famine, forests are their last succour. Even in areas where forests do not exist, the tribals still visit the distant forests periodically and try to get their traditional requirements from there, however insignificant they may appear to others.

4. The scheduled tribes traditionally collect many items of daily use from the forest which are necessary for their day to day sustenance. Food items from forest are gathered by the young, old and the women-folk. A survey done in forest regions of Gujarat State revealed that nearly 22% to 27% of the elderly persons and 70-72% of the children go to forest for collection of tubers, leafy vegetables, bamboo shoots and a host of other forest products. Another survey (1980-81) conducted in Bastar district of Madhya Pradesh revealed the pattern of collection of forest foods and other forest produce shown in Table 6.

TABLE 6

Category-wise estimated value of forest produce collected in Bastar district (Madhya Pradesh) in 1981

Purpose and percentage of forest produce collection							
Category	Food	Cons- truc- tion ma- terial	Agri- culti- ral & allied acti- vities	For sale	Fuel wood	Socio- reli- gious acti- vity	Total
1	2	3	4	5	6	7	8
By age-group .	31.11		11.11	22.22	30.23	5.33	100
1 (i) Old persons	38.46				61.54		100
(ii) Young persons.	21.01	12.61	10.08	22.69	30.25	3.36	100
(iii) Children	52.73	15.06	13.21	5.66	39.62	3.77	100
	100.00		..	25.45	21.82	..	100
2 By land holding pattern							
(i) Big farmers	6.55	27.10	32.72	..	29.90	3.73	100
	7.69	19.23	26.93		46.15		100
(ii) Small farmers.	14.68	12.08	13.83	24.18	32.82	2.41	100
	17.77	13.34	17.77	6.77	44.45		100
(iii) Others	19.83	21.55	17.55	10.34	24.14	6.89	100
	10.21	20.41	24.49		44.89		100

Note : Figures given in the numerator are for location near dense forest and these given in the denominator are for localities near degraded forests.

5. A study conducted by Administrative Staff College of India, Hyderabad (1977-78) indicated that agricultural

production from tribal land, is inadequate to maintain a household at subsistence level. The income from labour is erratic and collection of MFP, which is important, is conditioned by availability, marketability, access to forests and various other constraints. In case of certain items, a major part of their collection is for self-consumption. During drought and adverse conditions, the tribal households live only on edible products collected from forests. Households having less than 5 acres of land mainly depend on MFP collection in Andhra Pradesh, Bihar, Madhya Pradesh and Orissa. The average income realised through sale of MFP is given in Table 7.

TABLE 7
Income realised through sale of MFP

State	Income accruing from sale of minor forest produce (% of total income)
1	2
Andhra Pradesh	10—55%
Orissa	5.4—13%
Bihar	7.4 to 4%
Madhya Pradesh	13.6 to 38%

6. A recent study regarding the impact of MFP collection on the socio-economic life of tribals conducted by Tribal Research and Training Institute, Ahmedabad has shown that about 35% of the earning of tribals in the Panchmahal District of Gujarat State was from these items. Some other studies also indicate the potential of MFP for tribal economy.

7. Agriculture and its allied activities are also dependent on forests to a large extent. Agriculture implements and tools are made from wooden poles and bamboos. The maintenance of cattle for agriculture purposes depends to a

great extent on the existence of grazing facility. Animal husbandry and dairy development programmes are related to the availability of grass, fodder, leaves, etc.

8. House construction in tribal areas is undertaken with the materials collected from forests. Timber, bamboo and grass are used in house construction. Even for the purpose of binding or fixing the poles in such construction, creepers or bark are used instead of iron nails. The importance of forest produce in house construction activity is evident from the fact that a number of villagers shifted from the forests due to submergence or mining activities could not construct suitable houses being away from the forest. The Report of the Tribal Study Team Bastar (1981) has indicated that in Chandrapur Village far away from the forests, no new houses could be constructed during the last two decades.

9. The benefits accruing to tribals from forests are various and derived in a variety of ways. The tribals are so accustomed to these benefits that they have become a part of their daily routine. In areas where forests exist, not only the able-bodied worker but also the old and infirm as well as children bring something, however modest it may be, to the household, whereby they have the satisfaction of having contributed their mite. This ensures an inbuilt system of social security in these areas.

10. A study conducted in Bastar (1981) indicates that in an average household (having two adult members, at least one child and an old person) on an average earns Rs. 1500 a year (against total annual income of Rs. 1750), from sale of MFP without any initial input or risk. The size of this contribution to the family income is significant and cannot be over-looked in the context of rural situation in the country and more so of the subsistence economy of tribal area of Bastar. This earning can be easily increased by increasing procurement of MFP items and their local processing.

11. Fuel-wood in the context of tribal people is not merely used for cooking, but also for warmth and lighting purposes. The people, by and large, do not have any warm

clothes to protect them from the winter cold and the only method by which they keep themselves warm is by being near the fire. The fire also gives them light in the absence of any other means of lighting in the areas. Fire also helps them in keeping the wild animals at bay. In fact, the material existence of the people depends on forest to such an extent that they cannot be visualised in the absence of the forests. It appears that tribals and forests are ecologically and economically inseparable. They have co-existed since time immemorial and will continue to co-exist in a mutually reinforcing relationship in future also.

12. Tribals have always been sentimentally attached to the forests and considered them to be nature's gift. Their folklore is full of references to the forest. There are several rites and rituals where some forest produce is used one way or another. Many of the leaves, climbers, etc. needed in magico-religious rites are procured from these forests. Many trees in the indigeneous forests are considered to be abode of deities and are worshipped as such. The place of worship in the village is generally below the Saja tree. The fact that they perform some sort of worship before actually cutting a tree is an indicator of their sense of attachment and reverence. Existing forest is also the resource-base for pharmacopocia. The local people are conversant with medicinal plants occurring in these areas.

CHAPTER IV

RECOMMENDATIONS OF COMMISSIONS, COMMITTEES AND WORKING GROUP

In their 1961 Report, the Scheduled Areas & Scheduled Tribes Commission (Dhebar Commission 1961) recommended following measures to be adopted for linking of forest and tribal development programmes :

- (i) A basic change in forest policy to enable tribal community have control of forest resources;
- (ii) In forest villages, assurance of security of land tenure. These villages should be made self-sufficient with the basic amenities of life such as wells, schools, dispensaries etc.;
- (iii) Vesting of management of and revenue from village forests in the village panchayats;
- (iv) Full collection and local processing of minor forest produce (MFP). Development Corporation should be created for MFP collection; and
- (v) Exploitation of major forest produce by engaging Forest Labourers Cooperative Societies.

2. The Committee on Tribal Economy in Forest Areas (Hari Singh Committee 1967), recommended the following measures for the economic upliftment of tribals :

- (i) Elimination of intermediaries in forests should be given priority and cooperative movement in forestry sector be mobilised;
- (ii) Forest-based industries should be established locally to provide regular employment to tribals; and
- (iii) National Tribal Development Cooperative Corporation may be established to look after cooperative programmes in the tribal areas.

3. The National Commission on Agriculture (1976) bestowed their attention on the inter-relationship of forest economy and tribal economy and urged rationality in forest operations and better utilisation of forest produce. Some of the important recommendations are :

- (i) Fair price shops should be opened for assured supply of essential commodities at reasonable rates to tribals, including opening of Nistar Bhandars (depots) for supply of domestic forest produce requirement of tribals;
- (ii) Tribals should be allotted homestead land, where programmes of afforestation, pasture and grassland development, introduction of horticulture crops, etc. are taken up.
- (iii) Tribals should be trained for absorption in all skilled forestry jobs and in forest-based industries; and
- (iv) For tackling shifting cultivation, multi-disciplinary approach should be adopted and institutional arrangements for maintenance of shifting cultivators should be ensured.

4. The Conference of State Ministers of Forests & Tribal Welfare on the "Role of Forest in Tribal Economy (1978)" recommended that forestry development, instead of being planned in isolation, should become an integral part of a comprehensive plan for development of the area in which the needs of local economy should get high priority and should, consequently, influence the choice of species for each area. The Conference accepted the need for associating tribals in a big plantation programme giving individual rights on the tree and their usufruct. The Conference underlined the need for establishment by Tribal Development Department of a strong cooperative base in conjunction with the Forest Department. Further, that the tribals living in forest villages should be given heritable and inalienable rights over the land which they cultivate without further loss of time. All social and

economic development programmes should be expanded to these villages on the same lines as for the residents of other villages and action should be taken to convert these villages into revenue villages.

5. The Working Group on Tribal Development during the Sixth Plan (1980-85) urged that increasing the vegetal cover to the extent of covering one-third of the country's area is a colossal programme and Forest Department in States alone cannot achieve it. To tackle the problem, people's participation should be mobilised by involving a "tree army" of Forest Development Corporations, educational institutions, voluntary organisations, communities, Panchayats and private individuals.

6. Further, comprehensive plan for all those Integrated Tribal Development Projects which have sizeable forest area may be prepared in which tribal development and forestry development could become two co-equal goals. In the forest-rich regions, forestry-based programmes may be assigned the central position, agriculture having a secondary and supplementary role. Tribals may be involved in plantation programmes by providing them right on trees and usufruct. Other important recommendations are :

- (i) Item-wise survey of minor forest produce, maximum collection and processing through cooperatives and research and development programme should be put through to aid tribal development;
- (ii) In plantation programmes, there should be mixture of species which yield fuel, fodder, small timber, fruit, MFP and other items of economic importance and for daily use;
- (iii) Tribals living in forest villages should be given heritable and inalienable rights over the land which they cultivate. These villages should be provided all facilities;

- (iv) Human resource should be developed through training and extension for conversion of natural resource endowment into ready economic assets;
- (v) Training and orientation of functionaries should be paid special attention;
- (vi) Institutional finance should be attracted for forestry schemes; and
- (vij) Measures for regulating shifting cultivation should be carried out within the existing social framework in the best interest of the individual families, the community and the ecology.

CHAPTER V

RESUME OF STATES SCENE

The State Governments have taken a number of steps in pursuance of the recommendations made from time to time particularly after the tribal sub-Plans became operative. A brief *resume* of the action taken itemwise is given hereunder :

Forest Villages

2. The Conference on the "Role of Forests in the Tribal Economy" recommended that forest villages be abolished and the States should take immediate steps to convert them into revenue villages. It was envisaged that this would enable tribals living in the forest villages acquire inalienable rights over the land and obtain benefits of the development plans hitherto denied to them. Andhra Pradesh, Maharashtra, Rajasthan, Uttar Pradesh and Orissa State Governments have converted all forest villages into revenue villages. Forest villages now remain in the States of Assam, Bihar, Gujarat, Karnataka, Kerala, Madhya Pradesh and West Bengal. In Madhya Pradesh, 15 years lease of land has been given to forest dwellers and a number of villages situated on the periphery of forest blocks have been converted into revenue villages. Forest villages were established with the primary obligation to provide labour even on payment of wage, a condition for residents in the forest villages, held *ultra vires* of the Constitution by the Kerala High Court. Much remains to be done in the States of Assam, Bihar, Gujarat, Karnataka, Kerala and West Bengal where forest villages continue to hold lease for a limited period, not receiving advantage of planned development.

Forest Labour Cooperative Societies

3. Tribal communities provide bulk of the manpower for forestry operations. In the sparsely populated areas, the

demand for labour is met through in-migration. Employment of forest labourers is generally through contractors. The contractors recruit labour in groups and bring them from outside. However, forest labour is casual and largely seasonal. Even where the working of forest is organised through the forest department itself, the work is sometime assigned to petty contractors who employ labourers on piece-rate wage system. The relationship of forest labour and employment agencies is, to a large extent, exploitative, the advantage of which is taken by the middlemen or the contractor. The arrangement may also get reflected in lower working expenses of the forest department. To ensure reasonable wage to the forest labourers and to provide them long-range employment, it has been suggested that the working of forests should be organised through cooperatives of forest labour. It has also been said that to save the tribals from exploitation, in case formation of tribal cooperatives is not immediately practicable, the contractor agency may be substituted by departmental agency in the first stage to be later replaced by forest labour cooperative societies. Action taken in this regard State-wise may be summed up as under :

- (i) Andhra Pradesh State Government took a policy decision to replace the contractor agency by departmental working of all timber, fuel-wood and bamboo coupes. The State Forest Department and Forest Development Corporations have since been harvesting the forest coupes by directly employing tribals on regular basis as well as on job basis and the contractor agency has been eliminated. Forest labour cooperative societies are yet to be organised. Bamboo coupes leased out to the paper mills should be harvested through departmental agency¹.
- (ii) Bihar State has taken a decision to eliminate contractor agency by 1982-83. Departmental working has been introduced in parts of Santhal Parganas through a revolving fund. One of the important

1. Information furnished by the Chief Conservator of Forests, Andhra Pradesh, Hyderabad.

policies of the State Government is the formation of cooperative societies of the tribal people with the sole purpose of giving them economic benefit. Timber coupes upto a value of Rs. 30,000 are settled with these cooperatives at reserve price. There are about 120 cooperative societies in the State and during 1980-81, 91 forest coupes worth the value of Rs. 15 lakhs were given to them for working. Forest department has established 19 depots for supply of fuel and bamboo to the local people. Now departmental working is being introduced for harvesting all the coupes.

- (iii) Gujarat State has viable forest labourers cooperative societies (FLCSs) structure in the State for undertaking exploitation, logging and transport of all major forest produce. There are about 141 FLCSs in the State of which 132 are in tribal areas. Almost all forest coupes of timber, fuel-wood and charcoal are being worked through the FLCSs. Tribals derive from FLCS a fair wage and a share in the profits amounting to 20 per cent of the net realisation by the Government from the societies. This share alone comes to nearly one crore of rupees every year. The societies are permitted to sell 10 per cent material derived from the coupes to local tribals and members of the society at 60% of the prevailing market rate for domestic use².
- (iv) Madhya Pradesh has nationalised timber, bamboo and Khair wood trade under the provision of a special Act "Madhya Pradesh Vanupaja (Vyappar Viniyaman) Adhinyam, 1969" and has started departmental working of the coupes by engaging tribals and others on job basis. The department is exploiting annually 40 lakh cubic meters of wood employing tribals on job basis and distributing annually Rs. 16.7 crores as wages. The Forest

Department has also started about 3,982 Nistar depots from where constructional timber, small timber, fuel-wood, charcoal and other forest produce are supplied. Urban population is also supplied fuel-wood, charcoal and bamboo at concessional rates³.

- (v) In the State of Maharashtra, there are 442 FLCs with a total membership of 59,000 of which 53,000 are tribal members. The annual turnover of the societies is about Rs. 9 crores. The total share capital is of the order of about Rs. 15 lakhs. However, this movement has not gathered momentum in the tribal districts of Chandrapur and Bhandara. The State is making efforts to organise more societies in these districts where presently the major part of the work is being done by the departmental agency and the Forest Development Corporation, 25-30 per cent of the coupes being leased out to contractors. It is expected that the contractor agency will be totally eliminated by the end of Sixth Plan⁴.
- (vi) In Rajasthan, timber, fuel-wood and Khairwood are at present exploited through departmental agency by engaging tribals on job-basis and the contractor agency has been eliminated. Further, the State Government is organising five forest labour cooperative societies annually and they expect that FLCs should be able to handle all the forest coupes towards the end of the Sixth Five Year Plan⁵.
- (vii) The State of Jammu and Kashmir has eliminated contractors and replaced them by departmental working.

3. Information furnished by the Chief Conservator of Forests (Production) Madhya Pradesh, Bhopal.

4. Tribal sub-Plan Document of Maharashtra, 1981-82.

5. Information furnished by the Chief Conservator of Forests, Rajasthan, Jaipur.

- (viii) The Uttar Pradesh State Forest Department has agreed to give the maximum number of coupes to the Forest Development Corporation, and the Tribal Development Corporation. However, the contractor agency is still in vogue and needs to be replaced.
- (ix) The West Bengal Forest Department Corporation has taken up a massive programme of mechanised logging in Darjeeling—Kalimpong hills. Departmental working has been started in a few coupes of plain areas.
- (x) Sikkim and the Administration of Andaman and Nicobar Islands have eliminated the system of contractors and replaced it by departmental agency.
- (xi) Some other States viz. Assam, Kerala, Karnataka, Manipur, Nagaland, Orissa, Tripura and Tamil Nadu have initiated the process of eliminating the contractor agency. The constraints appear to be organisational and financial.

Minor Forest Produce

4. According to the National Commission on Agriculture, minor forest produce (MFP) has the potential to bring about an economic revolution for tribals in the country. Traditionally, the middleman appreciated the value of MFP and purchased the various items from tribals on nominal cash price or by barter. In fact, before Independence the value of MFP items used to be so low that the State Forest Department did not regard them as important source of revenue. The tribal continued collection and sale of MFP for his sustenance till it gained commercial importance and attracted the attention of the State Governments as a source of revenue.

5. A large number of MFP items have acquired commercial value due to national and international demand. The

following few examples will illustrate the role of MFP in national economy :

- (a) Tendu (Bidi) leaves collection provides about 90 days employment to 75 lakhs rural people every year. Bidi industry provides employment to 30 lakhs of people. Bidi industry also gives movement to about 20,000 railway wagons by paying about Rs. 10 crores freight yearly. Tendu leaves and Bidi are also exported to different countries e.g. Sri Lanka, Malaysia, Pakistan etc.
- (b) The National Commission on Agriculture has estimated the annual potential of oilseeds of tree and forest origin as of the extent of 60 lakhs tonnes equivalent to 10 lakhs tonnes of vegetable oil, but it has been possible to produce 78,000 tonnes of vegetable oil out of the oilseeds collection i.e. only 7% of the total potential could be tapped. The country is importing vegetable oil to the extent of 9 lakh tonnes whose import value is around Rs. 900 crores, casting a heavy burden on the foreign exchange. This can be saved if oilseed collection is increased considerably improving tribal and rural economy. In fact, the available potential of oilseeds of tree and forest origin can make the country self-sufficient in respect of edible and non-edible oil.
- (c) The country's demand for tanning extract is about 1,17,000 tonnes. During 1976-77, 17,000 tonnes of extract was imported at a price of Rs. 8.1 crores. The demand for tanning extract is rapidly increasing and attempt should be made to exploit available resources whose annual potential has been estimated to be around 5 lakh tonnes.
- (d) The export of gums *Karaya* and *Gaur* fetched Rs. 19.58 crores during 1976-77 besides providing employment to 40,000 people. These gums are

in great demand for pharmaceuticals, textiles, food-stuffs etc., in the international market and call for their collection, processing and export in organised manner.

- (e) Lac, tassar, silk, essential oils, herbal medicines, spices, etc. are in great demand in the national and international market.

6. In order to have adequate and sustained supply of MFP to village, small and medium scale industries and, at the same time, to ensure remunerative rates to tribals for collection, trade of a few MFP items in some of the States was nationalised. Through suitable legislation, some States acquired monopoly rights to procure nationalised items. They also fixed collection charges of minor forest produce. Notwithstanding such steps, the economic situation of tribals hardly improved more than marginally. Even after nationalisation, the States have adopted advance purchase system for fixing rates. The alternative of negotiating with contractors and industrialists and entering into agreement with them is also adopted. Since under the law the States alone can procure the nationalised commodities, purchase should be done directly by the Forest Department from tribals. In practice, however, procurement by agents appointed by the Department is more common than direct purchase by the Department. The agents appointed by the States are, generally, men of the contractor or the industrialist, described as 'purchasers' in law. It would appear that this system makes the problems of collection, handling etc. easier since otherwise they would be the responsibility of the department. The agents purchase produce formally on behalf of the department, but the collection is channelled to the final purchaser in reality. The State becomes entitled to the difference between the agreed sale price and the collection charges. Thus, the primary objective of removing the middlemen and passing on the maximum benefit to the primary collector is defeated. The system also suffers from the defects of non-collection of material from the more interior areas, over-

exploitation of accessible areas, low payment for collection to tribals and declaration of quantities less than actually collected. As a third system, in some States collection of some of the items of minor forest produce, whether nationalised or not, is being undertaken through cooperatives of tribals (LAMPS etc.) on a monopoly basis or otherwise. In this way, three different practices are in vogue for collection of MFP viz. through contractors and industrialists, departmental agency and through cooperatives.

7. The plan of action for procurement and processing differ from State to State as described below :—

- (a) In Andhra Pradesh, tribals have been conferred the right to collect, consume and sell MFP items. The Girijan Cooperative Corporation (GCC) has monopoly rights over procurement and marketing of MFP. The Corporation has to pay royalty to forest department @ 20 per cent over and above the previous year rental without reference to rise in the normal market rates though a part of the royalty is reimbursed by the State Government. In case of gum, the rentals are being fixed @ 50 per cent extra on the value of the previous year. The GCC has engaged primary cooperatives at the grass-root level. Collection of a few MFP items had rapidly declined causing anxiety.*
- (b) In Bihar, Kendu (Bidi) leaves and oilseeds (Sal, Karanj, Mahua and Kusum) are nationalised items. Kendu leaves collection is being undertaken departmentally by the State Forest Department. Kendu leaf collection alone provides employment of 50 lakhs mandays during the collection season. The Forest Development Corporation has monopoly over oilseeds and their procurement is being done by involving LAMPS and other agency. Though lac is quite an important MFP item it is not nationa-

*Information supplied by the Chief Conservator of Forests, Andhra Pradesh, Hyderabad.

lised. Some quantity of it is procured through LAMPS and then marketed by the Bihar State Co-operative Lac Marketing Federation. The State Tribal Cooperative Development Corporation has confined its activity mainly to procurement of Barbatti (Beans), tassar cocoons and a few other items through LAMPS. Other MFP items viz. leaves, grass, medicinal plants, gums etc. are purchased direct by contractors.

- (c) Gujarat has established the Gujarat Forest Development Corporation which procures MFP like Timru (Bidi) leaves, Mahua flowers and seeds, Pusad seed, gums and other items on monopoly basis. The Corporation has started scientific collection of MFP by training tribals in methods of collection and processing and has increased collection and sale from Rs. 51.80 lakhs in 1976-77 to Rs. 205.57 lakhs in 1979-80. In the collection of MFP which is a part-time job, the Corporation employee's children, women and elderly tribals and has increased employment from 8.89 lakhs mandays in 1976-77 to 22 lakh mandays in 1979-80.
- (d) In Kerala the right of collection of all MFP has been given to tribals (Girijans). It was decided to establish a Cooperative Society in each forest range with membership reserved only for Girijans. Non-Girijans are not permitted to enter into the forest for collection on MFP. As per the norm, 56 cooperative societies were to be formed but so far only 27 have been established. Earlier, the MFP collected by these Cooperative Societies was marketed by the Kerala Pharmaceutical Corporation but now State Forest Department will take the delivery of collected MFP. Procurement price is being fixed for each collection season, by a

1. Gujarat State Forest Development Corporation Limited. its Constitution & 4 years of working, 1981 (A pamphlet issued by the Corporation).

Committee constituted by State Government. Liberal advances were given to societies by Kerala Pharmaceutical Corporations for successful implementation of MFP collection. Much remains to be done about local processing of MFP and replenishing the resource-base.¹

- (e) In Madhya Pradesh, Tendu leaves, Sal seed, Harra, gums (five types), Khair wood and bamboo are nationalised items specified for monopoly State trading. Gums, Khair wood and bamboo are collected through the departmental agency. Tendu leaves, Sal seed and Harra were largely being dealt with through purchaser-agent system till recently, but the M.P. Government have now switched over to direct tender system. However, in the districts of Bastar, Bilaspur, part-Rajnandgaon and part-Mandla, MARKFED has been appointed as the purchaser through LAMPS as agents. The turnover through LAMPS and MARKFED was of the order of nearly Rs. 6 crores out of a total sale of Rs. 34 crores. However, the collection of Sal seed and Harra through LAMPS was nominal and the tribals were not extended any better facility. The State nationalised the MFP trade with the primary objective of removing the middle-man and for improving the socio-economic condition of the primary collector i.e. the tribal. But in case of Tendu leave, Harra and Sal seed collection, there has, in reality, been a reversal of the policy of nationalisation and the old system of working through middle-man has been resumed in many districts. In order to maximise the collection of minor forest produce, much remains to be done by way of opening of interior area, improving godowning facilities and local processing by directly involving the local

population. Collection rates paid to the tribals are often less than what ought to be paid¹.

- (f) Consequent on the enactment of "Maharashtra Tribal Economic Conditions Improvement Act, 1976", trading of MFP has been entrusted to the Maharashtra State Co-operative Tribal Development Corporation on monopoly basis in tribal areas. This Corporation is at present trading in gums, Mahua, Harra, Chironji etc., but procuring them from tribals. For areas where the Tribal Development Corporation is not functioning, the contract of minor forest produce is offered to Forest Labour Cooperative Societies, but if they are not able to handle it, it is auctioned to contractors. Kendu leaves have been nationalised in the State since 1969 and are being collected through departmental agency by adopting purchaser-agents system. Under all these schemes fair wages are sought to be ensured to the tribals engaged in the collection of minor forest produce. Much remains to be done to maximise the collection of MFP by engaging LAMPS and other agencies, increasing production. The MFP collection scheme has not been able to make a major dent in ameliorating the living conditions of tribals mainly because (a) MFP quantity collection has gone down, (b) local processing could not be organised, and (c) better prices could not be obtained for the material sold in the market².
- (g) In Karnataka, in the districts of Mysore, Kodagu, Dakshina Kanada and Chikmagalur, MFP potential is good. MFP items occurring in these districts include honey, wax, Avaram bark, date leaves Korai grass, Galunts, tamarind, myrobalam,

1. *State Trading in Forest Produce in India*—a book published by Jugal Kishore & Company 23-c. Rajpur Road, Dehradun-1981.

2. Information furnished by the Maharashtra State before the Western Zonal Council of Ministry of Home Affairs.

Antauria, Soapnut, gooseberry, Chilladabeeja Honji seeds, Mogaliburu, Bolarbook etc. During 1979-80 about 3.25 tonnes of MFP was collected in the tribal area, whose value was about Rs. 10 lakhs. As a policy of State Government, tribal societies are allotted MFP leases at 17½% less than the estimated value of the produce. The Ceylonese Repatriated Plantation workers and contractors are allotted MFP leases on tender or auction sale basis. There is need to encourage MFP collection, processing and marketing in an organised manner to boost the economy of tribals.

- (h) In Orissa Tendu leaves are collected by Forest Department engaging tribals but marketing is handled by Orissa Forest Corporation. Earlier, it had been decided that procurement of Sal seeds would be through LAMPS and their trade would be nationalised ; but since then, the item has been passed on private industrialists who are likely to establish Sal seed solvent plant within the State. In Mayurbhanj District, Sal seed collection is being organised by the Simlipahar Forest Development Corporation. The Orissa Forest Corporation and Tribal Development Corporation should take up intensive procurement of MFP items which have gained commercial importance and instal processing plants.
- (i) In Rajasthan, in the tribal areas, MFP collection monopoly has been given to Tribal Area Development Cooperative Federation (TADCF). LAMPS and Cooperative Societies are being involved in collection of grasses, gums, fruits, medicinal plants etc. However, the TADCF has not been able to make much dent in MFP collection and its processing and has been suffering loss in the trade. No attempt has also been made towards regeneration of MFP items. MFP collection has in fact gone down year after year.

- (j) In Tamil Nadu tribals are permitted to collect MFP for their personal consumption and sale. In Kalrayan hills, MFP procurement is fully entrusted to cooperative societies. The items of collection include grasses, galnut, medicinal plants, etc. Much remains to be done in respect of MFP processing and its development.
- (k) In Uttar Pradesh, Tendu leaves trade has been nationalised. The Tarai Anusuchit Janjati Vikas Nigam has started collection of Tendu leaves by involving tribals in Banda and Mirzapur districts of the State. Oilseeds, gums, tannin, fruits collection leases are at present auctioned to contractors. The State Government has been thinking of boosting economic development of tribals through MFP collection, processing and marketing. But, so far contractor agency largely prevails in the trade. The Tarai, Kumaon & Garhwal Anusuchit Janjati Vikas Nigams may be involved in MFP collection.
- (l) In West Bengal, tribals have been given the right to collect all MFP for their consumption or sale. LAMPS are procuring Kendu leaves, oil-seeds (Sal, Mahua, Karanj, Kusum, Neem, Haritaki, etc.) Mahua flowers, Sabai grass, Bahera, etc. by paying attractive collection rates to tribals. The West Bengal Tribal Development Cooperative Corporation Ltd., is the apex organisation for all the LAMPS and provide financial help and takes up responsibility of marketing of collected MFP.
- (m) In other States viz. Assam, Meghalaya, Manipur, Mizoram, Nagaland, Tripura etc. there is need to carry out item-wise survey of MFP and organise collection, processing and marketing by involving tribals.

Social Forestry

8. Having regard to the low percentage of afforested area in the country and the big gap between demand and

supply of forest produce, it is essential to mount a massive effort at afforestation and involve the maximum number of people therein.

9. A large fraction of our population is today being forced to eke out subsistence by cultivating marginal land, overgrazing depleted pastures, cutting wood from dwindling forests and destroying the base of our national resource in many other ways. To save the forests it is necessary to provide economically viable scheme to such population for diverting them from their existing activity. In the tribal areas, the sub-marginal land, being used for raising agricultural crops can more profitably be put under forestry crops which incidentally help in restoring the ecological balance. This has now been made possible by the availability of choice of suitable technology and production pattern, so that a piece of land, about 1.5 hectare or so, can make a family more or less economically independent. The choice can be as wide-ranging as the capital-intensive coffee plantation at one end through plantations of fruit-bearing trees, plantation of fodder trees linked with animal husbandry programme, host-trees for tussar, fast-growing plantations linked with forest industries and fuelwood plantation at the other. The traditional programmes of forest plantation are too costly and, therefore, need to be suitably modified for raising social forestry plantations involving local people in the venture as partners.

10. A large programme of coffee plantation has been taken up in Andhra Pradesh with financial support from Agriculture Refinance Development Corporation (ARDC). Each individual tribal is assigned a piece of land for plantation and he has the right on the crop and the usufruct but does not have the right of alienation of land. The project is said to be working well.

11. In Gujarat, the lands of most of the tribals of Dangs and Dharampur regions are on steep slopes in hilly terrain with sandy soil having poor fertility. The ecological conditions are also unsuitable for good agriculture and remunerative returns. Income from such areas is, generally, not more

than Rs. 250 per hectare per year. Often, due to floods or scarcity conditions there is complete failure of crop. In such agricultural areas, the tribals are being persuaded to raise teak and bamboo plantations under community forestry schemes by the forest department. The farmer is given a subsistence allowance of Rs. 250 per hectare per year which is equivalent to his expected average annual earning from agronomic cultivation of such land up to the time of exploitation of forest crop. At the end of about 15 years period, the trees will be exploited by the forest department and sold and after deducting the cost of plantation and subsistence allowance paid to the land-holder over the intervening years without changing any interest and handover the balance net amount to him. According to an estimate, the forest crop is likely to give them a much higher return than what they are getting under agriculture. The scheme is expected not only to benefit the farmer but also protect the precious soil from erosion besides improving the environment.

The Gujarat Forest Department has started social security, afforestation schemes for tribal families. In the absence of sustained employment, landless tribals indulge in illicit fellings or migrate to far-off places every year in search of manual work resulting in dislocation of economic and social life for them. The forest department has developed a scheme as per which an assured monthly income is to be provided by permanently engaging a tribal family on forest plantation work earmarking plots of certain size, say of 2.5 hectare. Plantation of suitable forest species is raised in this land by the family under the supervision and guidance of the forest department. The required materials viz. polythene bags, seeds etc. are supplied by the forest department. The family is responsible for all operations for successful raising of the plantation i.e. digging of pits, soil conservation measures, planting, weeding, fencing and protection of the planted crops. For the labour put in, each family is paid a monthly remuneration of Rs. 250 for a period of 15 years. The family is also given small timber, bamboo etc. for constructing hut

near the plantation site and is allowed to cut grasses and collect MFP free of charge. At the end of rotation period 15 years, the family is to be given 20 per cent share in the profit derived from the sale of the material making him a partner in the profits. The measure is aimed at helping the family to stabilise and, in the process, ensure protection of the new plantation and existing forest resulting in production of scarce fuel wood and small timber. The scheme is expected to improve the socio-economic condition of landless tribals.

12. The State of Rajasthan also has started a new scheme of social security, through forest plantation, on the Gujarat pattern. Under this scheme the selected tribal families are to be given 2 hectares of degraded forest land every year for a period of 15 years and would be paid Rs. 3000 per year for planting and maintenance of quick-growing species in the area. The scheme is likely to cover 9000 hectares of such land by extending benefits to 300 tribal families every year.

13. In other States following schemes of social forestry are under implementation or consideration :

- (i) Karnataka State has prepared a social forestry project involving cost of Rs. 59 crores. It is proposed to utilise the vacant roadsides, canal banks, foreshore of tanks and reservoirs, Government wasteland and degraded forest areas. It is also proposed to encourage plantation in private lands by supply of seedlings free of cost and credit inputs.
- (ii) Maharashtra State has prepared a social forestry project involving cost of Rs. 433 crores. The project target for raising plantations is 73,195 hectares over a five-year period. In order to ensure involvement of local populace, the project envisages sharing of consumption benefits besides raising of forests over 2750 hectares of private land.
- (iii) Madhya Pradesh has prepared a social forestry project which envisages tree plantation over an

area of 1,50,000 hectares and pasture development over an area of 50,000 hectares in 29 districts out of the 45 districts in the State. The project is being executed with the help of U.S.A. Major tribal districts viz. Bastar, Mandla, Surguja, Raigarh, etc. have been excluded from the project.

- (iv) Orissa State has prepared a social forestry project which envisages mixed fuelwood, fodder, small timber and bamboo plantation in 13 districts of the State involving expenditure of about Rs. 46 crores.

Forest-based industry

14. At present forest industries are mostly located outside the tribal areas. Hence, primary forest produce has no direct link with organised market. The processing of forest produce outside the tribal area adversely affects the tribal economy in as much as value-addition on forest produce is siphoned off by the trader and industrialist and no gainful employment is generated locally for the tribals.

15. The forest-based industries in general, and paper industries in particular, have been obtaining supplies of raw materials from the forest sector by paying unremunerative prices to the State Forest Department. As a consequence, very little investment has been made in production of raw-material and regeneration of forest. Additional planned investment in the forest sector for the creation of man-made forest is essential for continued supply of raw material for the existing as well as new forest-based industries. Future expansion of pulp and paper industries will depend upon generation of additional forest resources by raising plantations of fast-growing species suitable for pulping.

16. In West Bengal, Orissa and Assam, the villagers grow bamboo and Sabai grass in their fields as industrial raw-materials which are sold to meet the requirements of local pulp and paper mills. The recently-initiated programme of social forestry by Titagarh Paper Mill in West Bengal and

Rayalaseema Paper Mill in Andhra Pradesh whereby the paper authorities provide free of cost rhizomes of bamboo and seedlings of other miscellaneous species as also technical assistance for planting and protecting them has received good response from the villagers. The forest resource so created should be able to supplement the requirement of raw material of the industry at economical rate. The tribals can take up such plantation programmes as an economic activity apart from agriculture.

17. For increasing the value of raw material and for generating employment locally, the Forest Development Corporation and the Tribal Development Cooperative Corporation have established a number of forest-based industries in the tribal areas :

- (i) The Gujarat State Forest Development Corporation has undertaken in the tribal area of Gujarat the following :
 1. Establishment of integrated wood workshop ;
 2. Preparation of cardboard from grass ;
 3. Manufacture of toys and other articles from bamboo ;
 4. Manufacture of Bidies from Timru leaves ;
 5. Manufacture of disposable leaf saucers and cups ; and
 6. Establishment of saw mills.
- (ii) The Girijan Cooperative Corporation, Andhra Pradesh has established for local processing of the forest produce the following :
 1. Sheekakai grinding plant,
 2. Honey-pasteurisation unit at Narsipatnam,
 3. Myrobalam crushing unit at Srungavara Pukola,
 4. Manufacturing unit for washing soap from edible oils at Seethampeta,

5. Extraction of fibre from Sisal leaves at Aaraku, and
 6. Gum processing unit at Nirwal.
- (iii) Madhya Pradesh Forest Development Corporation has established at Jagdalpur (in Bastar district) an integrated plywood and veneering and saw milling unit as a joint venture making the tribals share-holders. There are more than a lakh of tribal farmers in Bastar having large number of timber trees standing in their farms. The Corporation is envisaging establishment of a paper mill, in Bastar district of 50,000 ADMT capacity by providing shares to the tribals who will be encouraged to take up forest farming by providing them technical help and all inputs.

Training of Personnel

18. To achieve integration of forest and tribal development, forestry programmes require suitable modification for which re-orientation of foresters is necessary. Foresters might acquire a good knowledge of the forests and the area but may not develop appropriate perception and sensitivity to tribal needs and aspirations with the result that they unwittingly develop programmes which are not in harmony with tribal ethos, culture and way of life. To impart knowledge of tribal life, and inter-dependence of tribals and forests, training programmes (consisting of only a few lectures) have been started at the Indian Forest College, Dehradun and State Forest Officers College, Burnihat and Coimbatore. But these are not adequate. Tribal development should be introduced as a subject in all the forest colleges and schools.

Rights and Concessions of Tribals

19. The right of tribals to collect forest produce has been accepted as a policy by a number of States, though in varying form and extent.

- (i) In Madhya Pradesh, *Nistar* concessions and facilities have been granted which cover most of the basic needs of the tribals. They are permitted to remove fire-wood by headloads, fruits, leaves, bark, roots, thatching grass, medicinal herbs, fencing material free of charge, and collect and remove dry and dead firewood by carts at concessional rates. Small-size timber and bamboo required for house construction and agricultural implements are provided through *Nistar* depots at concessional rates. Grazing of cows, bullocks and buffaloes is allowed free of charge.
- (ii) In the hill area of Uttar Pradesh, 10 cft of marketable timber like pine, Kail, Sisoo or 30 crft of non-marketable miscellaneous timber is given as grant to a family every year. For every fifth house, one oak tree is given every year free. Silviculturally available trees of miscellaneous species can be removed without paying any price. Dry trees and stumps can be removed for bonafide use. Free grazing is allowed in the forest situated within a radius of 8 kilometers, for specified number of cattle, beyond which concessional grazing fee is charged. Removal of medicinal herbs, Bhabbar grass, edible fruits, limestone and other minor forest produce can be collected free from the forest for their bonafide use. In the Tarai area, the Tharu are permitted to graze any number of cattle free.
- (iii) In Gujarat, besides, allowing tribals to collect fire-wood from the forest, small timber, fire-wood and bamboo are also supplied from the depots established along the periphery of the forest.
- (iv) In West Bengal, the concessions available to tribals are :
- (a) collect brushwood/Jhanti for domestic use, one head-load per individual and one cartload per group,

- (b) gather leaves, flowers, fruits and seeds for trees like Mohua, Peasal, Kendu, Sal etc.,
- (c) have one pole per tribal household per annum for being used as plough and three poles per tribal household for house construction every five years ; and
- (d) assign any tree in the forest as "Jahar Than" for the purpose of offering prayers and worship by tribals.
- (v) In Bihar, tribals are allowed to collect small timber and dead fallen firewood free of cost from the forest. Besides, domestic consumption, they can sell firewood in the market. Collection of MFP like Sal seed, Mahua, Kusum, Karanj, Harra, Bahera, Amla and Palas, etc. is allowed free. Tassar rearing as well as lac cultivation are allowed on a nominal charge.
- (vi) Other States are gradually recognising the rights and concessions of tribals on different forest produce.

Shifting Cultivation

It is reported that there are about 233 blocks spread over 62 districts in 16 States in which shifting cultivation is practised to a higher or lesser degree, involving nearly 12% of the tribal population in the country. A resume of the States scene is herewith :

- (i) In Andhra Pradesh, shifting cultivation is restricted to 9 blocks of the three coastal districts of north-eastern corner, namely Visakhapatnam, Srikakulam and East Godavari district. Side by side, with shifting cultivation, almost in all villages a few patches of permanent cultivation can be seen at the valley-bottom or on gentle slopes. In the first and second years of shifting cultivation, varieties of millets are

replaced by pulses. As per the report of Cultural Research and Training Institute, Hyderabad, 25012 families are engaged in shifting cultivation over an annual area of 17,331 hectare land. In other words, 2.08% of the total geographical area of the State is utilised for shifting cultivation.

- (ii) In Arunachal Pradesh, 33 blocks are affected by shifting cultivation. The estimated figure of total area under shifting cultivation is 920 sq. km. It is also estimated that 14,800 tribal families are involved in shifting cultivation.
- (iii) In Assam, shifting cultivation is mainly confined to the two districts of Karbi-Anglong (Mikir Hills) and North Kachar hills. The estimated area under shifting cultivation is 690 sq. km. which is utilised by 58,000 families. This means that on an average a family of five persons may utilise 1 hectare of land for the purpose.
- (iv) In Bihar, shifting cultivation is restricted to nine blocks of only the Santhal Parganas district. Shifting cultivation is known here as Khallu or Kuruwa or Kurac. Paharias are the only tribe practising shifting cultivation in the area.
- (v) Shifting cultivation is practised in a restricted manner in three blocks of Kerala, namely Manatodi of Cannanore district, Elandasom in Iddiki district and Attappady in Palghat district. The Kurumba and the Mudugar practise shifting cultivation.
- (vi) In Madhya Pradesh, shifting cultivation is practised in Balaghat, Bilaspur, Chhindwara, Raigrah, Surguja and Bastar districts. Shifting cultivation is not encouraged officially but in practice it takes place in the interior areas.

- (vii) It is estimated that shifting cultivation is practised over 832 sq. km. in Manipur. The farmers produce cash crops like mustard, Til, sugar-cane, ginger, turmeric, cotton etc. People have realised the drawback of shifting cultivation and efforts are being made near the valleys or on gentle slopes to construct terraces for settled cultivation.
- (viii) In Meghalaya, though people primarily depend on shifting cultivation, yet its intensity is not uniform through-out the State. An estimated figure of area under Jhum cultivation is 760 sq. km. involving 68,000 families. However, estimates of the area under shifting cultivation vary.
- (ix) In Mizoram, most of the people are dependent on shifting cultivation. Every year village councils take decision about the particular hill slope to be utilised for shifting cultivation.
- (x) In Nagaland the Angami and Chokesang have developed wet terraces in Kohima district. However, in the rural areas people depend primarily on shifting cultivation. According to an estimate, shifting cultivation is practised over an area of 82,000 hectares.
- (xi) Shifting cultivation in Orissa is practised in 49 blocks spread over eight districts. According to an estimate, the effected area under shifting cultivation is 37038 sq. km. Based on 2-year holding for cultivation and 12 years fallow for regeneration of forest, it is estimated that 5,298 sq. km. area is utilised for shifting cultivation every year.
- (xii) In Tripura, though shifting cultivation is largely practised over the hilly region of the State, yet it is mainly concentrated in 9 blocks.

CHAPTER VI

RESUME OF THE NATIONAL SCENE

From times immemorial, the tribal people have enjoyed the freedom to use the fauna and flora of the forest. This has given rise to the belief that the forest belongs to them, a conviction that remains even today rooted in their mind.

Forest Policy

2. Forest resources gradually came under systematic management of the State from about the middle of nineteenth century. The State was concerned not only with maintenance of forest resources but also preservation of the environment. The following extract contains the gist of the forest policy of 1894 :

"The sole object with which State forests are administered is the public benefit. In some cases the public to be benefitted are the whole body of tax-payers, in others, people of the tract within which the forest is situated; but in almost all cases the constitution and preservation of a forest involve, in greater or lesser degree, the regulation of rights and the restriction of privileges of user in the forest areas which may have previously been enjoyed by the inhabitants of its immediate neighbourhood. These regulations and restrictions are justified only when the advantage to be gained by the public is great and cardinal principal to be observed is that the rights and privileges of individuals must be limited otherwise than for their own benefit, only in such degree as is absolutely necessary to secure that advantage".

3. The national scene remained nearly static during the early part of the twentieth century. However, the pressure of population was gradually increasing and by the mid-twentieth century the increase was more than 40 per cent.

The two world wars affected the economy in many important ways and drew heavily on the valuable forest resource-base for meeting defence requirements. After Independence, the national leadership decided to make a determined effort for fast economic development necessitating a second look at the forest policy.

4. The forest policy was revised in 1952. It laid down the following basic principles for proper management of the forests of the country to derive from them the maximum benefits, direct or indirect :

- (a) Forests are valuable not only in the physical field such as prevention of soil erosion and conservation of moisture, but also in the economic field such as development of agriculture, industry and communications;
- (b) For purposes of management, forests should be classified according to the primary functions, a role a particular forest has to fulfil;
- (c) Uncontrolled and excessive grazing is incompatible with proper growth of trees and fodder grasses and must be regulated;
- (d) It is necessary to evolve a system of balanced and complementary land-use under which each type of land should be allotted to that form of use under which it will produce the most and deteriorate the least;
- (e) Tree-lands should be established wherever feasible to promote the general well-being of the people;
- (f) Indiscriminate extension of arable land by excision of forests should be discouraged, as this not only deprives the land of its natural defence against dust-storms, hot-winds and erosion but the local population of their indispensable needs of wood, grass, etc.;
- (g) The notion widely held that forest as such has no intrinsic right to land, but may be permitted on

sufferance on residual land not needed for other purpose, must be combated.

5. Soon after Independence, with the abolition of princely States and Zamindars, action was taken to take over the private forest as Government property, resulting in a period of uncertainty causing substantial damage to the standing forest crop. Considerable effort had to be made before the new area was put under systematic administration and control by adopting a uniform forest policy. Even now there are major gaps in forest land statistics in many States.

6. Since the enunciation of the 1952 forest policy developments of far-reaching consequences have taken place in the economic, social and political fields and there has been growing awareness and concern about the ecological effects of accelerated destruction of forest tree-lands and tree-growth of all kinds. There is greater appreciation of economic and social benefits accruing to the community from forest.

7. The National Commission on Agriculture recommended revision of the 1952 forest policy by incorporating significant shifts and stresses in the forest policy arising out of the recommendations of the Central Board of Forestry. The Estimates Committee (1968-69) of the Fourth Lok Sabha in its 76th Report also recommended that the national forest policy should be reappraised so as to make the new policy more purposeful, realistic, effective and operative for the development of forests and forestry in the country.

8. A new policy resolution is on the anvil. In the next chapter, we suggest the various ingredients of a new policy.

Forest Legislation

9. Forest Legislation dates back to 1865 when the Indian Forest Act was enacted. The Madras Presidency formulated its own Act i.e. The Madras Forest Act, 1882. Till the comprehensive Indian Forest Act was formulated in

1927, the following Acts and amendments concerning forest management in British India outside the Madras Presidency were in force :

- (i) The Indian Forest Act, 1878.
- (ii) The Forest Act, 1890.
- (iii) The Amending Act, 1891.
- (iv) The Indian Forest (Amendment) Act, 1901.
- (v) The Indian Forest (Amendment) Act, 1911.
- (vi) The Repealing and Amending Act, 1914.
- (vii) The Indian Forest Amendment Act, 1918.
- (viii) The Devolution Act, 1920.

10. The NCA has given thought to the principles which should govern revision of forest legislation, and recommended the following to be adopted :

- (a) There should be uniformity in forest law so that incompatibility in forest laws among the States is removed and there is no multiplicity of legally sanctioned authorities concerned with forestry matters;
- (b) It should be possible to tackle specific problems in different parts of the country through subsidiary rules and regulations.
- (c) A developmental approach should be followed; and
- (d) There should be stringent preventive and punitive provisions, so that when a resource is allocated for development in a certain direction, it is not wasted.

11. We agree that there should be an Indian Forest Act enacted by the Parliament applicable throughout the country for the sake of uniformity. It should be possible to frame the Act in such a manner that States are free to make subsidiary rules and regulations under the Act to meet contingencies of local situations.

12. The *nistar* rights of tribals on forest produce should be duly recognised and there should be provision for creating '*nistar forests*'.

13. There should be provision in the Act to eliminate the contractor agency from forest working. Forest villages should be provided tenurial rights on land which they cultivate.

Social Forestry

14. Some United Nations experts have warned that by the turn of century India and other developing countries may have enough food to eat but hardly any fuel to cook with, unless they increase by 25 to 50 times their present rate of plantation.

15. A large programme of fuel and farm forestry is being taken up during the Sixth Plan, the target having been set at 1.3 million hectares of plantation against a calculated need to plant 4 million hectares of land every year.

16. Farmers of Jammu & Kashmir, Bihar, Orissa and Madhya Pradesh were pioneers in raising, *Poplar*, *Pulas* and *Babul* trees etc. for meeting their domestic agricultural and fuelwood needs.

17. Tamil Nadu and Karnataka farmers were pioneers in raising casuarina on poor farm-lands close to urban areas such as Madras and Bangalore and earned higher income compared to agricultural crops on the same land.

18. A farmer of Vatwa and an engineer turned farmer of Bhavnagar in Gujarat State demonstrated more money and less problem in raising eucalyptus plantation on agricultural lands. The Forest Department of Gujarat has worked out a successful scheme of supporting tribal economy by involving them in raising forestry crops.

19. Recent studies undertaken by Tirath Gupta & Deepinder Mohan of Indian Institute of Management,

Ahmedabad, have shown that in the arid region of Western Rajasthan, tree crops are more remunerative and productive than agricultural crops.

Forest Based Industry

20. There is a wide gap between the demand and supply of industrial wood in the country. According to the Sixth Five Year Plan document, the import bill of pulp and paper industry alone is to the tune of about Rs. 30 crores per annum. To increase production of pulp and paper and rayon, the Government of India advised the forest industries to take initiative to produce the raw-material by involving farmers and other agencies.

21. The Titagarh Paper Factory have established an extension organisation and provided incentives to rural people to raise bamboos in their backyard in West Bengal. The company have raised a nursery and supplied seedlings of bamboo and other pulpwood species free of charge. Local unemployed youths are being trained in plantation and protection techniques. The effort has started yielding bamboo raw-material on a big scale not thought of in the past.

22. In Tamil Nadu, the Seshayee Paper Mills, Erode have been implementing a project to raise *eucalypts* on private farms for the last 4 years. To motivate the farmers, besides providing inputs for raising of plantation, a monetary incentive has been provided at the rate of a rupee for every surviving seedling of specific size at the end of second year and at the end of fourth year. A seven-year rotation has been fixed. A tripartite agreement has been entered into between the participating farmer, the industry and the banks. One of the conditions stipulated is that the first crop is earmarked for the industry concerned at the same rate at which the Forest Department supplies eucalyptus to the industry. Out of the royalty payable, incentive amount is deducted. From second rotation onwards, the farmer is free to sell the raw-material to the industry at a competitive price.

23. WIMCO (match manufacturing companies) provides planting stock poplars clones & cuttings) free of cost to the farmers in Bareilly district of Uttar Pradesh. The farmers are ensured attractive floor prices in advance a provision that at the time of harvesting the State Government might enhance it depending on the prevailing market price of softwood at that time. This arrangement has improved the vegetal cover and increased production of poplar for utilisation in match industry.

24. The Bastar Wood Products, a joint venture of Western India Plywood & Madhya Pradesh Forest Development Corporation have been planning to allow sharecroppers on the basis of tree crop standing on their holdings. Further, incentives are expected to be provided to develop forest crop standing on their holdings. It is expected that farm forestry will be more remunerative than any other agricultural crop on such type of land especially when irrigation facilities do not exist.

Forest Food

25. Forests provide a complementary source of human food such as tubers, leafy vegetables, succulent shoots, honey flowers, fruits and tapped juices which are allowed to ferment. Insects, rats, fishes and wild animals also provide substantial food for tribals.

26. Due to over-exploitation of tubers, submergence of fruit trees in the catchment areas of irrigation projects, clear felling of fruit trees for raising monoculture plantation and restrictions on hunting of birds and wild animals, the tribal population has little supply of animal food these days.

27. In Japan, production of bamboo, specially *Phyllostachys edulis*, for food is widely practised. The forest departments of Scandinavian countries encourage production of berries, mushrooms and other edible items. In a number of European countries, wild animals game farms have been

developed and people are allowed to shoot these animals after obtaining permits.

28. In Assam, the hill tribe of Datinga village has raised fruit orchards and started tuber cultivation. Orange cultivation is very popular among the Soura tribe in Orissa and Konda Reddi in Andhra Pradesh. The Baiga tribe of Bilaspur in Madhya Pradesh has shown some interest in raising tubers and medicinal plants in forest areas. However, the present activity of raising food crop in forest areas is haphazard, ad hoc and individualistic.

29. Forestry should be a programme of scientific and multiple use of land resources. Plantation of mixed species or monoculture plantations of multiple use species capable of yielding food, fruit, fodder, fuelwood and maintaining fertility of the soil is being encouraged under social forestry schemes. However, cultivation of cashewnut, coffee, rubber, coconut, chironji, mushroom, tubers and medicinal plants need encouragement in the forest areas, inhabited by primitive tribes who largely depend on forest food.

Shifting cultivation

30. It is reported that there are about 233 blocks spread over 62 districts in 16 States as the affected area under shifting cultivation to a higher or lesser degree, involving nearly 12% of the tribal population of the country. For settling the shifting cultivators so far, only piece-meal attempts have been made but a comprehensive approach in study, research and application has yet to emerge.

31. The need for integrated approach involving multi-disciplinary teams as per different models for each separate region has been accepted at the national level. Two pilot projects one in the Nishi area of Arunachal Pradesh and another in the Juang area of Orissa, are under preparation. It is intended to regulate shifting cultivation within the existing social framework in the best interest of the individual, family, community and ecology.

32. Most of the primitive tribes practise shifting cultivation. The State Governments are preparing project reports for development of primitive tribes. It should be possible to include therein well-conceived viable alternatives.

Employment Potential of Forestry

33. The majority of the poor live in rural areas and belong to the categories of landless labourers, small and marginal farmers, rural artisans including fishermen, scheduled castes, scheduled tribes and other backward classes. The number of people living below the poverty-line in rural areas is 251.66 million.

34. Forest activities which generate employment comprise (a) production forestry including logging (b) social forestry and (c) minor forest produce collection. Forestry work is often performed in steep and rocky mountainous regions and tribals are more suited for such forestry operations.

35. According to the Sixth Five Year Plan document the present estimates show forestry and logging sector provided employment to 6.207 million standard persons year during 1978-79 which will grow to 7.794 million standard persons year during 1984-85.

36. Minor forest produce collection and its processing can generate one thousand million mandays employment as indicated by the National Commission on Agriculture. With proper development, forestry sector can generate employment to the extent of about 10 million standard person year during 1984-85 in the primary sector alone thus extending employment to about 6.25% of the rural population living below the poverty-line (as per Sixth Five Year document).

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32. Most of the primitive tribes practise shifting cultivation. The State Governments are preparing projects for development of primitive tribes. It should be planned to include therein well-conceived viable alternatives.

Employment Potential of Forestry

33. The majority of the poor live in rural areas belong to the categories of landless labourers, small marginal farmers, rural artisans including fishermen, scheduled castes, scheduled tribes and other backward classes. The number of people living below the poverty-line in rural areas is 251.66 million.

34. Forest activities which generate employment comprise (a) production forestry including logging (b) social forestry and (c) minor forest produce collection. Forest work is often performed in steep and rocky mountainous regions and tribals are more suited for such forestry operations.

35. According to the Sixth Five Year Plan documents the present estimates show forestry and logging sector provided employment to 6.207 million standard persons year during 1978-79 which will grow to 7.794 million standard persons year during 1984-85.

36. Minor forest produce collection and its processing can generate one thousand million mandays employment as indicated by the National Commission on Agriculture. With proper development, forestry sector can generate employment to the extent of about 10 million standard person year during 1984-85 in the primary sector alone thus extending employment to about 6.25% of the rural population living below the poverty-line (as per Sixth Five Year document).

CHAPTER VII

SUMMING UP

Background

Forests occupy a central position in the tribal economy. As per FAO Reports* one-third of the world's most deprived (800 million) people live in this country needing immediate help. Forests cater to the basic needs of these people by providing food, fodder, fuel for domestic purposes, timber for construction of dwelling units and agricultural implements, and other saleable products. They also generate rural employment.

2. With more than 15% of the world's population, India's forest area of 74.74 million hectares (22.7% of total land area of the country) containing less than 1% of the productive forests yielding per capita forest of 0.109 hectares, has made it a forest-poor country. Low yield from India's forests (only 10% out of 22.7% forested area is well-stocked) and steadily-increasing needs of the people and industries, have resulted in high prices and acute shortage of forest commodities.

3. The rural population, including tribals, shares the hardship of severe firewood, timber and fodder scarcity, land degradation, soil erosion and flood damage. The State-managed and private forests (notified reserve, protected village and others) have been getting depleted under pressure of heavy demand for wood and forest products in the rural areas. Further, the depletion of forests has been instrumental in destruction of the rich fauna and flora which sustained the tribal population, exposing hill-sides to land-slides and

* World Strategy for development of forestry in the rural areas of the developing countries—1980.

erosion, washing away the fertile top soil making agricultural lands un-productive, leading to silting of dams and reservoirs and driving wild-life to the point of extinction. There is an immediate need to restore an optimal vegetal cover so that the eco-system strikes the balance again and yields the resources so direly needed.

4. According to an estimate made by the Ministry of Agriculture,¹ in March 1980 as much as 175 million hectares (m h) out of the country's total land area of 304 mh (for which records exist) are subject to environmental problem. In a study made in 1972,² it was indicated that, on an average, the country was losing about 6,000 million tonnes of top soil per annum through water erosion and that this represented, in terms of major nutrients NPK alone, an annual loss of Rs. 7,000 crores. Losses on account of floods alone have been reported by the National Commission on Floods (1980)³ as of the order of Rs. 889 crores, Rs. 1,200 crores and Rs. 1,091 crores respectively in 1976, 1977 and 1978. According to the same report, the total area subject to periodic floods is estimated at 20 million hectares i.e. an increase of 100 per cent in a 10-year period. This also causes loss of a tremendous volume of water to the sea, which would otherwise have remained as ground-water, a precious resource. The Himalayan eco-system which supports the agriculture of Indo-Gangetic plains should not be allowed to deteriorate any further. The importance of forests in maintaining the physical conditions of the catchments of rivers, protecting the river-valley projects, regulating flow of water and checking deterioration in the environment has not been realised in practice. Increase in vegetal cover for the achievements of the forest to one-third level is badly required.

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1. Sixth Five Year Plan, March 1981 Chapter 20.
 2. Policy for Land and Water: B. B. Vohra, Deptt. of Environment, 1981.
 3. Sixth Five Year Plan : Planning Commission, Government of India, 1980 Chapter 20.

Forest Policy

5. The official statement of 1894 on forest policy mentioned that regulations and restrictions were justified only when the advantage to be gained by the public is great. But forestry practices during the pre-Independence period were concerned mainly with the supply of raw materials for industries and defence installations in the colonial set-up and hardly anything was done to ensure continuous supply from the forests of the basic needs of the population. Thus, historically, forestry activities became occupied with meeting the raw material requirements of wood-based industries emerging over a period of time. After Independence, rapid industrialisation made the forest authorities more concerned with financial rate of return, net revenue and such other indices of productivity-efficiency and, in the process, forestry got mainly linked with consumption of the urban society comprising a small fraction of the total population.

6. After Independence, it was considered necessary to revise the forest policy. It was felt that revolutionary changes which had taken place during the interval in the physical, economic and political fields called for re-orientation of the old policy. The value of forests was recognised not only in industry and communications, and in the later day in agriculture, but also in the physical field for conservation of moisture and prevention of erosion.

7. The policy of 1952 accepted as its primary goal the need for evolving a system of balanced and complementary land-use under which each type of land is allotted to that form of use under which it would produce the most and deteriorate the least. The policy also took into consideration other goals i.e. checking denudation, establishing tree-lands, provision of nistar facilities, defence and industrial uses and maximum revenue consistent with the primary goals. The tribal communities were granted certain concessions like collection of minor forest produce, grazing of cattle etc.

8. Developments during the three decades for the enunciation of the policy call for a review. Increasing population has given rise to demands for a variety of products on the one hand and pressure on land on the other hand, resulting in substantial loss of forest lands. The economic and social benefits accruing to the community from forests and forest-based industries have come to be understood.

9. In their Report (1961), the Dhebar Commission recommended that the policy of 1952 should be reconsidered and that, subject to safeguards, tribals should be allowed forest lands for cultivation, their needs should be met from out-lying areas in the reserve forests and their requirements for grazing and shifting cultivation should be conceded. They were also of the view that the forest department should be deemed to be charged, as a branch of the Government, with the responsibility of participating in the betterment of the tribals side by side with the development of the forest. Enlarging, they desired that a time-schedule should be prepared by the forest department in consultation with agricultural industries and development departments in each region with the intention of providing work to tribals all the year round. Such work should include services of the forest department like protection, conservation, exploitation etc. It should include work on land utilisation schemes, collection of forest produce, exploitation and processing of major and minor forest produce.

10. The National Commission on Agriculture¹ referred to the inter-relationship of forest economy with rural and tribal economy. In their view, the two should not work in isolation, and the relationship between them should be considered in terms of employment, rights of user and involvement of the local people. Forestry needs strengthening by rationality in operations, larger investments and use of new

1. Report of the National Commission on Agriculture, 1976 published by the Controller of Publications, Delhi.

technology so that it can yield a higher surplus to be shared locally, regionally and nationally as against rapid disappearance of trees and vegetation.

11. In her speech¹ at Nairobi in 1981, the Prime Minister stressed urgent and all-out scientific efforts to promote the development and utilisation of solar and other forms of renewable energy to reduce dependence on fossil fuels and to help safeguard environment.

12. FAO² has suggested that the current world strategy for development of forestry in the rural areas of developing countries should reflect the following priorities :

- (i) Eradication of poverty on the basis of greater access of the rural people to benefits generated by forestry activities;
- (ii) Equitable participation of the rural people in forestry and forest-based industries;
- (iii) Integration of the precepts of wise environmental forest-resource management and performance of the base required to secure optimal flow of benefits for the present and the future.

13. The fast depletion of forest resources owes to (a) meeting the timber, fuel, fodder and other requirements of the local people (b) requirement of land and forest materials for irrigation, industrial, mining etc, complexes (c) requirement of land and forest materials for human habitations (d) illicit exploitation by contractors. The acute demand of forest produce has resulted in destruction and disappearance of trees standing both inside and outside the forest areas. Illicit fellings outside the contracted areas have not been insignificant. According to one estimate, cutting exceeds forest growth by four times; though this may be a

1. "New and Renewable sources of energy"—Smt. Indira Gandhi's speech 1981 at Nairobi.

2. World strategy for Development of Forestry in the Rural Areas of the Developing Countries F A O, 1980.

little exaggerated, the negative growth rate is alarming. According to another estimate, out of 74.74 million hectares classified as forest land, less than half are actually under cover and as many as 20 million hectares of forest land are estimated to be subject to erosion. In fact, no more than 10% of the country's land surface is actually under adequate tree cover, harvestable for meeting the needs of the people and forest-based industries.

The underlying considerations

14. By and large, forestry operations have been regarded as revenue-earners for the State and private sectors. The economy has figured little among the parameters of a forestry policy and, at best, the tribals continue to be wage-earners. Like other developmental activities, mere growth of more trees or generation of more income is not necessarily sufficient: it cannot *ipso facto* lead to distributive justice. Benefits should flow to tribal people by imaginative forestry programmes and conservation and re-organisation of their traditional skills. *In other words, the individual tribal, the local tribal community and national interest should be regarded as the three corners of a triangular forest policy.*

15. It is conceded that the general subject of forestry transcends the limited scope of tribals and forestry. However, it is as well to recognise that while tribal life is profoundly affected by whatever happens to the forest, forest development cannot make much headway without involvement of tribals. It appears that foresters have hitherto been concerned with "forestry for forest sake" as a reference goal. This had led to alienation between the foresters and the rural community. It might have been the product of a system that defined the policy, laws and organisational effectiveness at that time, leading to primacy of revenue-generating ethos. However, we feel participation of tribals singularly important for the well-being of forest. *While, in a broad sense, forest policy and forest system should be directed towards managing a renewable endowment of vast potential for subserving*

national, regional as well as local development goals, the intimate complementarity of Forest development and tribal development should gain wide recognition in policy and action. Further, instead of relying on policing of forests, the responsibility of their preservation should be cast on the people. The recognition should be subsumed in the understanding "tribals for forests and forests for tribals". In short, there needs to be a deliberate, conscious shift in the orientation and approach of the forester towards a public perspective policy.

16. Apart from the inextricable economic relation between the forest and the tribals, a rational forest policy has to show the utmost concern for the eco-system. Again, the eco-system is best preserved not by policing the forest but through harmonising the strategy of resource utilisation with the cognitive mapping of the indigenous population and endowments of nature. Over and above this, adequate provision for the needs of the forest communities should be made to render it unnecessary for them to resort to illicit use of forests. There is lot to be said for the view that the forests should be managed primarily by the forest-dwellers and backed by technical guidance of the Forest Department. This implies that wherever the community rights exist, they should be recognised and adapted to serve the urgent needs of soil and water management and re-forestation of the denuded tracts by suitable species. In this context, we cannot help referring to our experience in the north-east where we found a number of villages maintaining their own communal-owned forests. Some of them are well managed. If the programmes of improvement of the quality of environment are based on objective study of the land-use pattern, it can reasonably be expected that the people will not fail. However, the channel and pattern of communication are important. It is necessary to build up broad-based forums at the State level involving officials, technical personnel, academics, as also leaders of public (particularly tribal) opinion, who can overcome narrow political interests in approaching

the question of environment and resource-management. Advisory bodies should be constituted of representatives of government departments, statutory bodies like the TDCs and forest-dwellers at the forest, divisional and Integrated Tribal Development Project levels. Such forums should concern themselves with environment management and integrated land-use with particular reference to social forestry. In other words, the tribals and the local villagers should be considered as potential allies in the battle for reafforestation. With it must come a profound re-organisation of the forest department. Its role should be akin to that of the agricultural extension services.

17. We observe validity in the argument that unless fruit, fuel-wood, fodder, fibre, timber and housing needs of the tribal people are met from appropriate forest species, they will have no alternative but to make use of the economically more valuable species for domestic use. Besides compelling attention towards satisfaction of the needs of the tribal communities, this raises the important issue of the land-use pattern. This pattern assumes urgency in the context of industrial and defence needs. But dependable data for policy formulation do not appear to be available at present. Comparative cost-benefit studies of industrial forestry and social forestry (particularly with reference to fuel-wood species) should be undertaken by independent professional and research organisations. Nevertheless, the significance of land-use pattern cannot be exaggerated. Technical advances have rendered some of the existing ideas of land-use obsolete. Intensive cultivation of irrigated land yielding high output on the one hand and application of new forestry technology to sub-marginal and marginal land, should be reckoned with in any scheme of land-use pattern. We recommend that there should be a Standing National Commission to coordinate State Plans, frame national goals and generally to ensure pursuit of a wholesome land-use policy in this regard. Further, the matter should be kept under constant review in the light of technological advances.

18. In a forest policy, technical i.e. silviculture considerations are important no doubt. These have been and will continue to play their due part, and we do not wish to under-rate them. But we do not appreciate the impression sought to be created that production and extraction decisions are only technical decisions. It seems to us that alternative schedules are possible for the same lands. For, instance, it is difficult to justify the tendency to replace deciduous forests by coniferous ones in many parts of the country merely on technical grounds. We harp to Singhbhum and Bastar tribal view-points in this context.

19. Apart from the economic aspect, sociological factors have to be accorded due recognition. It is the experience that when people find that their own practices and knowledge are given due consideration, they are prepared to accept suggestions and modifications where necessary. It would be useful if a separate extension wing is set up in the State forest departments not only having scientific knowledge about soil physics, soil chemistry, silviculture, entomology, plant pathology etc. but also having knowledge about social structure, differential interest of different sections of the society in land-use pattern, choice of proper forest species. The personnel engaged in the extension wing should have adequate knowledge about ethno-ecology, ethno-forestry, ethno-science etc.

Policy criteria

20. It is felt that forest policy must fulfil three sets of needs; (a) ecological security (b) food, fruit, fuel, fodder, fibre, timber and other domestic needs of particularly the rural and tribal population and (c) cottage, small, medium and large industries which would include the requirements of defence and communications. The major thrust should be towards appropriate orientation of the existing forest policy in conformity with these objectives and integration of the local economy with the regional and national economy.

21. Both the State Plans and Tribal sub-Plans should portray long-range perspectives (say upto the end of the century) of which the part assigned to each Plan period, commencing the Sixth Plan, should be spelt out clearly in terms of financial resources and physical targets under the three broad heads—reserve forestry, social forestry, and farm forestry. Year-wise targets proposed to be attained under each type of forestry should be clearly denoted. Secondly, the agencies identified for undertaking them should also be named and incorporated in the documents. Thirdly, the progress of the schemes should be monitored in financial and physical terms annually by a monitoring cell established for the purpose in the office of the Chief Conservator of Forests. The cell should analyse the feedback quantitatively and qualitatively as well as the causes for deviations, which should enable the Chief Conservator of Forests to apply necessary correctives.

22. Macro-scale plans tend to blur the perspective of micro-level requirements. It is felt that little attention has so far been paid to grass-root planning. Detailed micro projections in respect of technology to be adopted, areas to be covered, species to be included, time-frame of long-range and short-range objectives should be made and fitted into the State's over-all context of afforestation programmes.

23. In concrete terms, we recommend that

- (a) for the existing 10% forested area of the country measures for protection, conservation and regulated working should be stringent;
- (b) restocking of the existing 13% degraded forest area should be quickened;
- (c) afforestation of 10% of the country's waste-land scattered as well as in strips along-side roads, railway lines, canals, river banks, should be put under forestry with public participation.

The Agencies

24. The effort involved for (b) and (c) above would be colossal and the State Forest Departments by themselves may not be in a position to mount it, let alone achieve it. Further, the additional areas to make up to the one-third might be comprised of degraded, marginal and sub-marginal lands lying away from the existing operational and habitational areas. The task may be divided among (i) the State Forest Departments who should look after the reserve forests (ii) the village community or Panchayats or individuals charged with the responsibility of forestry in and around revenue villages and (iii) a "tree army" to be raised for undertaking silviculture operations in the more distant, degraded, marginal and sub-marginal lands.

25. The incongruity of the British forest policy followed in India was recognised by the National Commission who made suitable recommendations. In consideration of tribal revolts against encroachment and destruction of forests by the agents of colonial rule, a special system of forestry-management was introduced in the submontane region of Uttar Pradesh through the Kumaon Forest Panchayat Act, 1924. There have been popular movements like "Chipko" movement in Uttarakhand (U.P.), protest mass cutting of trees in Singhbhum district (Bihar) and elsewhere in Maharashtra. A climate of participation needs to be created keeping these movements in view. A national forest policy, should recognise the positive role of the people in maintaining their forest and environment in unambiguous terms and not merely in its implication.

26. We regard the conjoint effort of governmental, co-operative, community and private sectors as fundamental to a revised forest policy, in the sense of its making a departure from the existing policy and practice. We are aware of the experience of community-management of forests that has been prevalent particularly in some of the north-eastern States. We have also been witness to a new experiment of

social forestry successfully tried in Gujarat; experiments where might or might not have been successful. But, quite convinced that community involvement is the only range solution to the question of afforestation, preservation and management of lands outside the forest area, particularly in and around human settlements, production and management of lands outside the forest area, particularly in and around human settlements, a framework for obtaining their interest-identification view to community involvement and production oriented should be evolved. Such community forestry may be directed towards commercial forestry or social forestry or forestry. While community forestry should be undertaken on Government or communal lands, social forestry and forestry should be on Government, communal as well as private lands.

27. The organisational instrument for community social and farm forestry is important. In the north-east, village and district councils have traditionally managed the forests. Social and political organisations have been known to exist, in active or dormant states, among other tribal communities also e.g. the Santhal, Muria, Juang, Saora. It is possible that the organisations of tribal communities might in the past, have managed the surrounding forests. It might be worth-while to revitalise these organisations and involve them in the management of protected and village forests in them for commercial, social and farm forestry purposes. Alternatively, particularly in the non-tribal areas, the statutory panchayats could be thought of. However, the "tree-army" concept would need to be worked out in more details and should, in any rate, be a common child of the official and non-official agencies, the exact arrangement emerging differently in different regions. Farm forestry could be promoted individually

28. While we have been impressed with the working of Village Councils in some north-eastern regions, there is one difficulty. The rules framed under the Village Councils Act entitle the Village Development Board to operate financial transactions for obtaining bank or Government loans on

behalf of Village Council, but it has not been possible to persuade banks to lend in the context of the prevailing communal system of land ownership. It is obvious that without term-loan it will not be possible to go in for development activity of the requisite magnitude in the forestry sector. Ways will have to be found to enable Village Councils become entitled to loans against standing tree-stock in forests. The feasibility of individuals being encouraged to form cooperative societies by pooling their imputed shares in the communal lands may also be explored.

29. The roles of official organisations like the forest department, the forest development corporations, the tribal development corporations etc. need to be clearly demarcated and rationalised. We are making a reference to this again in a separate section on forest management. At this stage, we would point out to the necessity of ensuring that the official and non-official organisations operate harmoniously, keeping in view the principle spelt out in para 24 namely that a forest policy has to be founded on the bedrock of community involvement.

Financial outlays

30. The outlay in the National Sixth Plan 1980-85 for forestry in the Central sector is Rs. 105 crores out of total of Rs. 47,250 crores and in the States (including UT) sector it is Rs. 587.64 crores out of an outlay Rs. 50,250 crores, making in all Rs. 692.64 crores out of the total Plan outlay of Rs. 97,500 crores. This works out to nearly 0.7%. It is understood that the outlay in Orissa Plan is Rs. 12.50 crores forming 0.8% of the total outlay of Rs. 1500 crores of the Sixth Plan period; whereas for West Bengal it is 1.03%. The situation in other States is hardly different. Considering that forestry is coming to be recognised more and more important in the industrial, energy, ecological, employment, poverty-alleviation, etc. contexts higher financial and physical effort seems called for. A striking fact to be appreciated is that in the State of Orissa, the annual forestry revenue is over Rs. 30 crores whereas the Sixth Plan

outlay has been fixed as Rs. 12.50 crores, the average annual outlay being Rs. 2.50 crores.

Employment Generation

31. According to the national Sixth Five Year Plan document, forestry and logging sectors provided estimated employment to 6.207 million standard persons year (MSPY) during 1979-80 as against 72.184 MSPY in agriculture sector. During the Sixth Plan period, the employment is expected to grow to 7.734 MSPY in forestry sector and 85.237 MSPY in agriculture sector. Since forestry area is about half of the agriculture area in the country, free of constraints the forestry sector should be able to generate employment for about 20 MSPY. Among steps necessary for achieving this target intensive forestry, better collection of minor forest produce, local processing of forest produce etc. should be adopted.

Forestry and tribal development programmes

32. We would reiterate that forests occupy central position in tribal economy. In this context, we would like to make some specific suggestions. In regions having substantial area under forest, development of forests instead of being planned in isolation should form an integral part of comprehensive plan of integrated tribal development. In fact, in such regions, planning for tribal development or forest development, divorced from each other, would be pointless; the two must reinforce each other. The needs of the local economy should get the highest priority in forestry programmes and should influence the choice of species to be planted in the area.

33. In forest-rich regions (forest area 30% or more), forestry-oriented tribal development programmes should be framed in which agriculture may occupy secondary position. For such ITDPs separate working (management) plans would be necessary for linking forestry programmes with economic

development of tribals. Agro-forestry should replace poor agriculture in marginal and sub-marginal area.

34. In such ITDPs, all landless people should be provided gainful employment in forest working and forest industries.

35. On the pattern of Gujarat social security plantation scheme, tribal families should be involved in plantation work. Tribals should be paid wages during the gestation period and subsequently, profit from the usufruct may be shared on 50 : 50 basis between the forest department and the tribal families.

36. Farmers should be encouraged to engage themselves in farm forestry and agro-forestry (combined production system) under which production and fertility of soil and environment improve.

37. Dairy development programmes should be encouraged through planned programme of fodder production and supply of milch cattle under IRD schemes.

38. The Central Silk Board should expedite implementation of inter-State tassar development project involving 6000 tribal families who are expected to earn Rs. 2000 per annum on two month's rearing work. Tribals should also be trained in new rearing and grainage techniques. Such projects may be given priority.

39. Cottage and small-scale industries like saw-milling, particle board, small paper and pulp plants, furniture-making, match splints manufacture, leaf plate & cup making etc., should be locally established to generate gainful employment to tribals.

40. Bullock-carts should be provided to individuals ensuring them transportation work of forest produce from coupes to forest depots for at least 150 days in a year. These bullock-carts may also be engaged in transportation of seedlings from nursery to the planting sites and consumer goods from markets to tribal areas.

41. In the concerned States, a tribal wing may be created headed by a senior forest officer under the Forest department for successful formulation, implementation and co-ordination of tribal development schemes.

42. Under the Inspector-General of Forests in the Ministry of Agriculture, Government of India, an organisation of tribal development should be built headed by an officer of suitable rank to be able to pursue forestry matters in States and for closer liaison between the different Central Ministries of the Government of India.

43. State Governments might follow the example of the State of Andhra Pradesh in respect of "Kunra" cultivation. As per this practice, land in reserve forests is given over for interculture of annual crops like ginger, turmeric, horsegram etc. undertaken by tribals. This not only allows land to be put to optimal use, but also enables to keep undercover of plantation crops clean.

Shifting cultivation

44. It is reported that about 233 development blocks in 62 districts in 16 States are effected to a greater or smaller degree by shifting cultivation, involving 12% of the tribal population of the country.

45. It is recognised that shifting cultivation is one of the dominant production activities in the tribal regions being, at the same time, responsible for soil erosion. Powerful contribution to soil erosion is made also by annual burning of hill-slopes for growing grass for maintenance of cattle stock. Extraction of fuel-wood on a large scale for supply to urban areas is a third factor. Stone quarrying by blasting and destruction of trees, rolling them down along slopes has also caused considerable havoc.

46. It is learnt that a ban on shifting cultivation has been contemplated from time to time in some quarters. Such a step is not likely to achieve the object in view; it might

even provoke reaction. Measures for regulating shifting cultivation should be undertaken within the socio-economic framework in the interest of the individual family, the community and the ecology.

47. The deleterious effects of shifting cultivation on soil and water regime suggest weaning tribals away from the practice of shifting cultivation. There are, however, villages where for generations shifting cultivators have taken care of the problem of soil management in their fields. For example, at Khonoma in Nagaland, they construct contour bunds in Jhum fields with stones and also grow alder plants. At the time of slash and burn operation, they take care not to destroy the alder plants. They also undertake pollarding and retain the trunk upto a height of 1.25 meters. As a result, within three years of Jhum cultivation, the entire land is covered by green foliage. There are variations of such adaptation techniques in other villages.

48. The aforesaid protective antidotal measures are, however, not very common. What is more, for shifting cultivation as such no satisfactory answer has yet been found from the agricultural, silvicultural, sociological and other points of view. There is need for undertaking of intensive survey, studies, experiments, pilot projects etc. in the field to understand it in all its variations, ramifications, implications, aspects to evolve substitutes, remedies etc. The Forest Research Institute, the State Institute, the agriculture, environmental and other concerned bodies need to go into the matter in depth. The Ministry of Agriculture might nominate an apex national level body for coordinating such research as well as findings therefrom e.g. Forest Research Institute. It should be charged with the responsibility of evolving guide-lines within a time frame say two or three years.

49. From a macro point of view, it has been suggested that very broadly the approach should incorporate forestry on hill-tops, horticulture in the intermediate slopes and terrace-cultivation in the foot-hills. Afforestation through agro-silvicultural method might meet the psychological urge of tribals

to practice shifting cultivation. Shifting cultivation must be provided full-time occupation in rearing plantation of live-stock etc. A ten-year perspective plan may be prepared for settlement of shifting cultivation on this three-tier agro-silviculture pattern. However, each textual micro-situation needs to be studied to formulate a comprehensive programme of settlement of shifting cultivation in that situation. Thus, a variety of project reports should be formulated responding to each situation encountered. Interdisciplinary teams touching on all facets of tribal life

50. For effective implementation of the programme financial support should be available from the Agriculture Ministry, Tribal sub-Plan, Hill Area Development, State and Union Territory Plan funds, institutional finance etc.

51. There should be effective evaluation and monitoring of the programme. For the purpose, adequate staff should be provided in the forestry division of the Ministry of Agriculture.

Forest Villages

52. Forest villages were originally created for supply of manpower requirements for exploitation of forest resources. In these villages, a tribal does not have right to the land which he cultivates. We are also aware of a rider, which may or may not be applied, as per which the forest villagers can be evicted for failure to fulfil the obligations under which he has been settled in the forest villages. We have come across a form of agreement for execution between the forest department and a forest villager in which it has been indicated that the forest department has "the first claim to his labour on payment of reasonable daily wages" and further that the forest villagers is "liable to summary ejection without compensation by orders of the divisional forest officer for any breach of the terms and conditions" of the agreement. Clearly, such provisions run counter to the present political and social climate as well as against some of the land tenancy laws.

53. It appears to us that the institution of forest villages needs to be abolished. The forest villages may be converted into normal revenue-villages, enabling tribals living therein to acquire inalienable rights to land and obtain benefits of development plans. Maharashtra has already done this and the villagers have been granted land on permanent basis and inalienable tenure. The States of Madhya Pradesh, Orissa, Bihar, Uttar Pradesh etc. might follow suit.

54. As an ad interim measure we suggest that till such time as the forest villages are converted into revenue-villages, the obligation of forest villagers to provide compulsory labour by each family for forestry work should be replaced by specific contractual deals.

Social Forestry

55. Basically, social forestry is designed to meet the benefits and primary needs of the tribal and rural population as opposed to the needs of industries and the urban elite. The desiderata are (a) a mixed production system including fruit, fodder, grass, fuel-wood, fibre, small timber etc. (b) involvement of the beneficiaries right from the planning stage (c) minimal government control (d) financial contribution by local bodies, voluntary contributions, government subsidies (e) use of communal and Government lands.

56. Social forestry envisages creation of wood-lots on government, communal and private marginal, sub-marginal waste lands as per a pre-determined land-use pattern, afforestation of degraded forests, block plantation along road-sides, canal-banks, railways. Thus, it is a complete production system.

57. In social forestry, the initiative ought to come from the tribal people and other forest-dwellers. Identification of the areas, species to be planted, institutional arrangement for protection and marketing should be done by them. In other words, for its success the programmes should bear the hallmark of tribal involvement. The programme would need

to be given much higher priority than hitherto, since conceived as geared to tribal needs it will help relieve the pressure on forests. It will also tend to defuse the tension of situations like the one in the district of Singhbhum in Bihar, where the movement for felling of trees has originated out of protests against threat to their livelihood and identity as a result of substitution of purely commercial species like teak in place of natural, mixed, Sal-dominated forests. It will also yield supplementary income to tribals entrusted with the responsibility of looking after trees without owning them.

58. Sometimes, social forestry has euphemistically been used to replace mixed forests with mono-culture of teak, eucalyptus etc. It is a mixed forest which nurtures the forest-dweller like the tribals as well as birds and animals. Bird-droppings help undergrowth, without which the top soil is apt to be washed away by rain and swept away by wind. Hence we recommend mixed species.

59. One of the reasons for tardy progress of social forestry and allied programmes could be that they are being implemented without taking into consideration the corporate rights of tribal communities over lands in many areas. Democratisation of forest management is an essential, overdue step. For this purpose, the forest legislation of various States might have to be examined to see whether amendment is required. Secondly, customary rights should be codified clearly indicating the manner in which the rights are to be exercised and by whom. Thirdly, to ensure effective participation of tribals it is necessary to remove institutional barriers. The new institutional structure should involve them in making policy decisions about production and marketing. This question of institutional adjustment and innovation poses a challenge to the ingenuity of social and administrative planners.

60. It appears that a Centrally sponsored scheme has been launched to partially raise fire-wood plantations in 2.6 lakh hectares. One hundred districts in the country have been selected out of which districts containing predominant tribal population number 21. While hardly gainsaying the

fact that very many districts have seriously run short of fuel-wood, the relatively small proportion of tribal districts included is explained on the ground that the non-tribal areas are presently in severe grip of fire-wood famine. This may be broadly correct, but the acuity of the problem of the tribal areas wherein a wood-lot is not only a purveyor of fuel for the tribal hearth but also a source of his living, is equally serious. Hence, we suggest expansion of the scheme to cover tribal districts relative to the needs.

61. It is necessary to plan action-research on a large-scale with a view to harnessing the traditional skills of the tribal and indigenous population, after effecting continuous improvement for optimising production and reducing the hazards of environmental degradation. In fact, no programme of rural and particularly tribal development can be regarded as complete without an element of social forestry in it.

62. Financial allocations for social forestry are not commensurate with the role it can play. During the Fifth Plan period, it was hardly 1% of the total forestry sector outlay. In the Sixth Plan also, there is no evidence of the massive investment this branch of forestry deserves. The shortcomings should be fully made up.

63. There is hardly any inflow of institutional finance for social forestry. By and large, financial institutions, including commercial banks and cooperatives, do not appear to have evolved norms and procedures for extending term-loans for forestry on community lands. We understand that the Agriculture Refinance Development Corporation has under their contemplation some social forestry schemes in Gujarat. In our view, this is an area where mutual cooperation will be to the benefit of both the parties and, hence, should be fully explored.

64. The cooperative sector too has remained rather aloof when it should have whole-heartedly participated in this essentially community-cooperative venture. We urge that it should emerge out of inhibitions, if any.

Forest-based industries

65. It seems that forest-based activities occupy a comparatively minor position in the manufacturing activities in India. Their growth does not conform to a rational, integrated pattern.

66. In the first instance, most of the forest-based industries are situated far away from the source of raw material involving long haulage. *Prima-facie*, there is no direct linkage between raw material production and industrial activity. Raw material production has occurred at such places where the industry could not come up and some industries have expanded their production capacity without reference to location of raw material. Non-use of raw material due to the absence of industrial demand and non-supply of raw material due to distant location have led to generation of low employment potential in both sectors. This calls for the closest co-ordination between raw material production and forest-based industries.

67. The second striking fact is that the forest produce for industry has not received rational pricing treatment. The pricing seems more like a subvention rather than remunerative cost of production, allowing for essential expenses of re-generation, maintenance etc. The National Commission had mentioned how timber has been under-priced. During our tour in the north-east we observed that even public sector corporations were forcing low-level prices taking advantage of their monopoly right. Continuance of the existing practice will perpetuate distortions in forest economy and need to be eliminated. The impact of levy of the cost of production on the total economy should be looked into in depth and its repercussions assessed for adoption of a total rational cost structure.

68. The potentials for backward and forward linkages between forest and industry need to be explored and enforced logically. These emerged clearly during study of the impact likely to be caused by raising tropical pine-plantation after

clear-felling sal forests in Bastar district of Madhya Pradesh. We make the following recommendations partly based on those of the Group which was appointed by Government of India to go into the matter :

- (a) As far as possible, a forest-based industry should be a joint venture of the three parties i.e. the concerned corporation, the entrepreneur and the tribal producer and collector of raw material.
- (b) Tribals should be encouraged in the context of comprehensive land-use planning to grow in the marginal farm and waste-land, raw materials for the forest-based industry e.g. bamboo, sabai for paper and pulp. Certain industries are already doing that, as in Bengal. Incentives may be given to tribals for the purpose. This linkage should be the concern of both the public and private sectors.
- (c) The industry should assure take-over of the raw material grown by the tribals as per a schedule; the concerned extension agent should work for achievement of the schedule by the tribals.
- (d) The industry-linked plantations (pine in Bastar) should not be located close to tribal habitation in order not to cause interference in Nistar rights of tribals. Location of the plantation should preferably be determined by the local officers after discussion with the concerned local tribals.
- (e) The plantation should not be more than 300 hectares in extent at any one place. There should be an intervening forest belt of at least 250 meters width between the blocks of pine plantation.
- (f) Compensatory plantation should be raised near habitation. The choice of economic species should be made in consultation with local tribals.
- (g) The corporate body should take up strong extension activities to motivate tribals to raise industrial

raw materials on their farms as well as on community lands.

- (h) Support activities such as establishment of fuel small timber and bamboo depots, grain-banks should be undertaken to enable the basic needs of tribals being met at their door-step.
- (i) The executive in-charge of the project should be oriented adequately to tribal life and needs.

69. To our knowledge, financial institutions have not taken kindly to plantations as a resource or even raw material asset for industry. While such conservative outlook might have been justified in the earlier days of long gestation periods, advances in quick-growing species and other technological break-throughs should overcome inhibitions of volatility. We feel that the time has now come for public lending bodies to play a positive role in providing fillip to plantation industry nexus and for forestry and industry to make use of public finance.

Minor Forest Produce

70. Minor Forest Produce (MFP) is deemed to include all items of forest produce except timber. The Dhebar Commission (1961), Hari Singh Committee (1967), the National Commission on Agriculture (1976), and several others have laid stress on development of MFP for the benefit of tribals. In fact, the National Commission on Agriculture held that MFP possesses the potential of an economic revolution among tribals.

71. During drought and adverse climatic conditions tribals depend mainly on MFP for their sustenance. Further, a study conducted in 1978 by Administrative Staff College of India, Hyderabad, showed that between 10% to 55% of the income budget of a tribal family in the major tribal concentration States of Madhya Pradesh, Orissa, Bihar and Andhra Pradesh, was obtained through sale of MFP, the rest being derived from agriculture. Another study in Panchmahals

district in Gujarat indicated that 35% of the earnings of tribals were from MFP. Although many more studies are required to establish the MFP consumption pattern of tribals, it would appear that MFP items are important source of sustenance and cash income of tribes and other people living in and around forests. Apart therefrom, they are important raw material for small, village and cottage industries and contribute to national economy through import substitution and export.

72. Keeping in view the position of MFP in the food and income budgets of a tribal family the right of collection by tribals of MFP without restrictions, wherever this is lacking, should be ensured. This should be followed by organised collection and marketing of MFP.

73. Out of more than 21,000 botanical species reported from forest areas, so far less than 3,000 species have been identified yielding MFP of some commercial importance. With dependence of a large segment of the tribal population on MFP, there is need for research and development of the forest items by various bodies like the Indian Council of Scientific and Industrial Research, the Forest Research Institute (FRI), the State Forest Institutes etc. These should particularly relate to regeneration of existing species as well as discovery and multiplication of improved varieties of species having higher productivity i.e. should have applied orientation. However, one organisation like the FRI should initiate, direct and coordinate all independent research work undertaken by public and private bodies on MFP.

74. Estimates of the percentage collection of MFP of the total potential in the country vary. However, since most of the MFP items occur in widely scattered areas in difficult and inaccessible terrain, it appears that a small percentage is being actually tapped. Since the bulk of the MFP remains uncollected due to lack of infrastructural facilities in the interior areas, plans for development of roads, godowns, amenities of labour, trade channels, should be adopted aiming at full exploitation of MFP. As recommended by the National Commission on Agriculture, item-wise survey should be

undertaken for a full resource inventory for each State, made by the newly constituted Forest Survey of India. Project reports, amenable to economic appraisal, for organising collection, procurement, transport, storage, grading, local processing and marketing, should be prepared. The project reports should be State-wise and division-wise for each item. For instance, about 25% of the tribal population and 40% of the MFP resources of the country are located in the State of Madhya Pradesh. Tremendous employment potential can be generated and definite impact on tribal economy can be made through special drive launched for maximising collection of MFP by formulating itemwise location-specific projects.

75. The most crucial problem is marketing of MFP. The tribal at the lowest end receives a pitifully low recompense for the produce he collects, while the consumer has to pay an inflated price, the middle-man appropriating the large difference. The one measure of ensuring remunerative price to the tribal collector for MFP can make significant dent into his subsistence economy.

76. A definite procurement strategy for MFP is called for. We would like to cite the recommendations of the workshop on marketing of MFP held on 25-27 May, 1979 at Hyderabad that competitive procurement and marketing by cooperative bodies and other agencies might lead to better price for the tribals, while keeping the cooperative bodies in trim shape. However, this should occur at primary level to enable the price impact to be felt by the tribals. At secondary and apex levels, regional and State cooperative federations should take over from primary cooperatives, items of MFP for marketing. Thus, cooperative and private marketing channels, operating parallel to each other should set up healthy economic forces in the interest of tribals. Such an arrangement makes the need of strong public marketing structures imperative. Hence, adequate attention should be paid to LAMPS and other primary cooperatives, secondary and apex cooperatives as well as federating tribal development

corporations, forest development corporations and other corporation.

77. We understand that about 2,500 Large-Sized Multi-purpose Societies (LAMPS) have been set up in tribal areas of various States of the country with the three-fold objective of (a) procurement at remunerative rates from tribals and other population of their surplus farm and forest produce (b) sale at controlled or reasonable rates to them of their consumer necessities and (c) extension to them of production and consumption credit. The performance of some of the LAMPS has been good, of some poor and of others indifferent. It appears that Vaikunth Mehta Institute of Cooperative Management, Pune, has made evaluation of some LAMPS and, while suggesting some steps for improvement, have recommended their continuance. With tribal-majority Board of Directors, LAMPS are serving to the tribals in Bihar through procurement of stick-lac and in Orissa through purchase of tassar cocoons. We feel that either LAMPS or, if necessary, specialised co-operative societies should effect procurement of MFP from tribals and should also undertake, wherever feasible, first-stage processing. Tassar-reeling, rolling of Kendu leaves into Beedies, conversion of stick-lac into seed-lac, refinement of gums, conversion of tamarind into concentrate, preparation of brooms from broom-sticks, oil-extraction etc. can be taken up by the primary societies. Not only will this make great economic impact, it will also induce sound management practices among them. Tribal involvement would lead to a sense of pride, participation and fulfilment on the part of the members of the society. Co-operatives should be regarded as a vital instrument for energising the co-operation-minded tribals into purposeful action and achievement. The immediate effect would be to channelise the disproportionate middle-man's profit to the remote, inarticulate, poor collector of cocoons, stick-lac, oil-seeds, broom-sticks, myrobalan, etc. Even this marginal economic increment is likely to pull him back from starvation brink.

78. At the apex i.e. State-level, corporations have been set up in various States of the country like Forest Development Corporation, Tribal Development Corporation. Some of them have been performing useful role. However, an audit of their performance is called for. In no State has the original concept of non-credit linkage between LAMPS on the one hand and the TDC (or FDC) on the other, been carried out in its entirety. The feedback might not only disclose causes thereof but also indicate future lines of growth.

79. The Corporations should not be regarded as substitute for primary-level societies. The former tend to centralise direction and are capital-intensive. In other words, they lack the decentralised orientation of a cooperative. But they can, properly steered, boost primary cooperatives, keeping themselves at a low profile in the background. Hence, notwithstanding the weaknesses and limitations of working cooperatives of forest-dwelling tribals, they still offer in the long run the best available instrument for protection from exploitation and economic self-reliance.

80. The National Commission on Agriculture recommended creation of product-wise corporations in forest-rich States and a national organisation for tackling different matters connected with marketing intelligence, export etc. of MFP. We feel that a balanced approach in this matter would be needed so that commercialisation of different forest products in isolation and divested from the consideration of the roles that such products singly or in combination play in the social and cultural life of the tribals does not create new complications with serious political and economic ramifications. Besides it is also to be noted that there is a tendency of floral communities to be fixed as a natural process in specific eco-systems. The danger of ecological imbalance through commercialisation of products in isolation should not be ruled out.

81. Processing needs to be taken up by the concerned agencies systematically. Certain items of MFP e.g. lac, tassar, sal seeds, call for linkages not only with the internal but also

external markets. In the case particularly of lac and tassar, the behaviour of external markets has led to violent fluctuations down the line on the price earned by tribals. Hence, there is need to create and apply national-level correctional mechanism. This is possible only if the private channels are not permitted unbridled freedom to manipulate internal market in their self-interest, not unoften detrimental to the poor tribal collectors' interests.

82. Unscientific and indiscriminate exploitation of MFP has been making serious inroads into our resource base. Various species have been "bled" for gums, resins, medicines in various parts of the country. Bamboo and Khair forests are facing the danger of extinction over major areas. Elimination of the avaricious contractors is likely to bring in relief. Further, in order to prevent "death-tapping" and instil quality consciousness, the tribals must be trained to collect in the correct way only specific quantities without injuring the resources base.

83. We find enough attention is not being paid to storage and preservation of MFP with the result that quality deterioration takes place. Improved storage techniques should be employed, using scientific methods and personnel with the requisite technical experience. It is understood that the National Cooperative Development Corporation funds training of lower level personnel; this facility should be utilised. The storage practices of tribals should be studied for mutual benefit and improvement. Facilities for storage in a State need to be created at primary, intermediate and apex stages. They should have built-in provision for living quarters for the staff.

84. A large part of MFP is exported from tribal areas in original, raw form. Processing is essential for value-addition and can be done at three stages :

First-stage processing at the house-hold level, as in respect of hill-broom grading, tamarind deseeding and defibring. Adda-leaf, Kendu (Kendu) leaf, Pipal Modi, stick-la

to seed-lac, extraction of non-edible oil. Processing at the primary society level example being tamarind concentrate, oil-extraction (power Ghani), lac, tassar resin and spinning, bees-wax. Processing at the apex-level examples being solvent extraction of Sal, extraction of other edible and non-edible oil, shellac, Sabai grass

85. We feel that regeneration of MFP has attracted only a token efforts so far. It is of critical significance for tribal economy. Plantation of MFP should be taken up on individual or community basis in individual or communal land associating tribals in management and protection under technical guidance and supervision of the forest department while in Government land it could be taken on the basis of right of usufruct in favour of tribals. Further, the States' five year and annual working plans should include a distinct and significant finance and implementational component for the generation of MFP species.

86. The question of realisation of royalty of MFP by the forest departments from individuals, cooperatives or corporations engaged in the MFP collection should be reviewed in the interest of a suitable price to be made available to the tribal based on the market value of the community. It would appear that whereas one school of thought veers towards public ownership and general goods the notion of royalty continues to be as of old. In one instance, we found that while granting leases of MFP to public sector bodies (including cooperatives), the usual formula of a percentage increment on previous year's royalty has continued to be applied, with the result that the quantum of royalty on a Unit quantity of the concerned item of MFP has become many times the basic unit-cost. It would appear that the matter requires urgent review. We would urge exemption of MFP from royalty particularly in respect of these items which fall in cooperative sphere. But, even if royalty is to be retained, there is evidently a case for its rationalisation.

F.L.C.S.

87. It has been agreed on all hands that the contractor agency, identified partly for irresponsible decimation of forest, needs to be eliminated from forest working. Forest Labour Cooperative Societies (FLCSs) may be organised for working of forest along scientific lines. The FLCSs have been given trial in Maharashtra and Gujarat; in these States members have also participated in profits earned by them. They have a significant role to play in generating employment, countering exploitation, promoting participation of tribals in management of their affairs and creating leadership among them.

88. A national seminar on economic development of scheduled tribes held by the Tata Institute of Social Sciences, Bombay in 1979, came to the conclusion that while the FLCSs have partly succeeded in eradicating exploitation by forest contractors and in preparing tribals to participate in and manage the affairs of the societies, they have not been successful in creating additional employment. The full benefit of the societies can be obtained if they assure the tribal forest labourers work all the year round in the pursuits like collection of MFP, plantation work, nursery work, fire protection work etc. We support the recommendation.

89. Malpractices such as misappropriation of funds, maintenance of fictitious muster rolls at coupes, underpayment, submission of false vouchers etc, have hampered their growth. These should be countered through education of the members of the organisations about their rights and responsibilities and appointment of better quality staff at various levels.

90. There is need for FLCS to venture into the fields of haulage of the felled forest material making it over to forest department depots located at the periphery of forests. As much as possible, haulage in forest area should be done through animal-driven vehicles rather than through automobiles. This has the twofold advantage of offering additional employment and earnings to tribal people as well as saving POL, a

drawn on the national foreign exchange reserves. Apart from haulage, the FLCs could also undertake simple processing. But in so far as establishment and running of a forest-based industry is concerned, such units should be distinctly possible in States which have had the experience of FLCs i.e. Gujarat and Maharashtra; other States may find the idea useful after they have seen through the initial stages of FLCs, successfully.

Biosphere Reserves

91. During our visit to Nagaland, we were pleasantly surprised to find dense virgin forest being maintained for generations by the tribal population of Angami and Zeliang areas around Khonoma and Jalube villages. Such dense forest provides protective cover to the catchment area of the Barak river which passes through Manipur and Assam. In the construction of a high way and growing demand for fuel-wood and commercial timber, the hazards of destruction of beautiful forest loom large. It might be desirable to enter into dialogue with the villagers for obtaining their concurrence to declare vulnerable parts of the range as a biosphere reserve. There are many more areas in the country which are still virgin or rain forests e.g. in the Andaman and Nicobar Islands, Karnataka and Kerala. We would recommend that they should be declared as bio-sphere reserve for germ-plasm, gene pool and other purposes and strict observance of their identity as such.

92. The concept of bio-sphere reserves has been viewed as an approach for maintaining the integrity in time and space of a complex biological system. It has been urged that the diversity and integrity of biotic communities of plants and animals within natural systems should be conserved for the present and future use and genetic diversity of species on which continuing evolution depends should be promoted. Such reserves would provide vistas of future evolutionary growth, opening up vast areas of ecological and environmental research. These reserves would need to be demarcated clearly

for enabling natural processes operate without the risk of human interference. They would then be the most apt subjects for providing the deepest insights into natural phenomena. Even if the biospheres are located in the national parks, sanctuaries, they will be of an exceptional value. However, as we have mentioned above in respect of Nagaland, there are, perhaps, many more areas in the country which are still virgin or rain forests which need to be identified. We understand that the MAB Committee has completed reports in respect of two, the Nilgiri and the Mandapha biosphere reserves, and that work of preparation of documents of four biosphere reserves viz., Nandadevi, Valley of Flowers (Uttarakhand), North Andaman Islands and Mandapam Marine reserves has been taken up and would be completed soon.

93. It is essential that the potential genetic reservoir for an understanding of laws of nature, containing a huge floral and faunal potential, should not only not be lost but should be fostered. Hence we recommend speedy establishment of bio-sphere reserves for which expeditious administrative, legislative and scientific action needs to be taken in the Govt. of India and the State Governments.

94. We have come across reports of ouster of tribal families from the sites of national parks, sanctuaries etc. without providing for alternative source of their livelihood. These also indicate disregard of tribal interests in preference to those of sanctuaries in the maintenance of the latter. The situation needs to be rectified and the criticism that the needs of the animals have, in such cases, triumphed over that of man should not be allowed to hold validity. Now that the question of establishment of biosphere reserves is in view, the interest of tribal families would need to be borne in mind.

95. A suggestion has been made that there should also be "tribal reserves" with the object of fostering cultural, sociological and ecological values. We have given thought to it. We are aware of "Tribal Reserves" in A&N Islands. The

island tribes i.e. the Jarawa, Shompen and Sentineles still in a stage when they need large forest tracts for exclusive hunting and gathering pursuits. We have not across homologous tribes in the mainland, and, as such, do not feel the necessity of "tribal reserves".

Management System

96. The crux of the problem of forest management is in the need for integration of tribal and forest economy. The present atmosphere of confrontation between tribals and foresters should be transformed into one of cooperation and partnership. The human factors has been neglected in forest management which has been oriented predominantly towards forest practices. There are three salient desiderata. In the first place, an identify-interest between the forest Departments and the people (notably tribals) should be created. Secondly, the development programmes should aim at internalising its various components into the rural production system as a whole. Thirdly, the management should ensure strong backward and forward linkages between forestry and other development sectors on the local, regional, State and national levels.

97. It is conceded that realisation of the aforesaid desiderata is not an easy task. Foresters would need to project an image of themselves in the minds of the tribals better than that merely of enforcers of legal provisions of the various enactments. They would have to undergo reorientation courses for which specific and apposite contents and syllabi need to be drawn up. We understand that a committee has been constituted for this purpose. Its report should be expedited. On receipt of the report, the recommendations should be implemented.

98. All forests belonged to tribals, long before the modern forest Departments came into being and they have inherited a sense of belonging to forests. As such with appropriate extension education, they can be relied upon for

its preservation and growth. In fact, they can be inducted into a more constructive role *vis-a-vis* the forest. Tribal boys can be employed in forest services at different levels. The experience of Orissa in inducting tribal youth for raising and protecting horticultural plantations could be extended to forest plantations also. If a rapport springs up between foresters and tribals, the task of not only conservation but also protection and further development of forests will be easier. In fact, the forest should be regarded as truly public resource and not as a mere revenue-earner for forest department. It should enable the national reservoir of renewable major and minor forest produce to be drawn upon for all sections of society, including the tribals.

99. One area of management practice which needs focus is sustained employment of tribal and rural population to which scant and fitful attention has been paid so far. In the absence of sustained employment, a large number of forest-dwellers migrate to far-off places in search of manual work resulting in dislocation of their economic and social life, as also in non-availability of labour to the Forest Department for seasonal work. Forest management practices need to be modulated to be able to generate employment all the year round, dovetailing them to requirements of agriculture and industry.

100. Today, the forester regards himself as a Jack of all trades i.e. his own architect, civil engineer, botanist, horticulturist, civil administrator, business manager, economist, social anthropologist, all rolled into one. Cultivation of so many facets was once a virtue. In the changed context, the role of the forester *vis-a-vis* members of administration belonging to other disciplines needs to be reappraised. At the same time, emphasis on adoption of the role of the forester as an extension agent advising the owners or the management personnel of communal, village, private and other forests for undertaking scientific forestry is called for. Unshorn of punitive powers, with appropriate designation, the personnel of the extension wing (like *Van Sevak*s rather than forest guards, for instance) should aim at cordiality of relationship

with tribals for creating a climate congenial to setting a new phase of development forestry in contradiction to conservation forestry.

101. If the interface of forestry with development is to undergo metamorphosis in the conditions of today and tomorrow, and further if the conservation-orientation is to yield ground to development orientation, community forestry may have to be accorded a fairly high position in the emerging pattern. This necessitates forestry activities to be carried out by many, often local institutions, rather than a single forest department. In fact, the new part to be carried out by the forest authorities would be to create conditions in which the activities could be carried out in agreed conditions and priorities. In brief, meta-management system would have to be applied rather than super-management. The management system would have to remove some of the previous ills e.g. absence of institutionalised forums for dialogue between the State and the prospective beneficiary (like tribal), lack of community forestry programme, absence of functional education etc.

102. The course of the management in the progress from narrow departmental production forestry to the broad-based community forestry can be made smoother through public participation. The type of institutions required for public participation may differ from State to State. We have already mentioned earlier that, at the State level, a broad-based body comprised of officials, technical experts, academics as well as leaders of public (particularly tribals) opinion should be built up so that there is a harmonious approach to the question of resource-management, environment etc. Lower down in the field, at the forest-divisional and ITDP levels also, advisory committees should be constituted representing various interests like the government departments, statutory bodies (like the TDC, FDC, banks etc.) and forest dwellers to review, formulate programmes and oversee their implementation. Even at the next lower tier i.e. development block, such functional committees could be a useful device. These committees might

function as sub-committees of the Zila Parishads, ITDP-level committees, Panchayat Samitis etc. Notwithstanding the criticism directed against proliferation of committees and such like bodies, we make this recommendation in the belief that such a multi-tier structure subsumed within the wider politico-administrative apparatus would go a long way in generating the right conditions for forestry of the future, internalising the rural production system and forward and backward linkages.

103. Presently, a number of organisations are involved in forestry: Forest Departments, Forest Development Corporations, Tribal Development Corporation. Their respective roles have to be clearly defined. We envisage the State Forest Department to be an apex agency for the evolution of policy and programmes in consultation with the national-level Agriculture Ministry (of which forestry is a part) as well as for supervision of their implementation. Traditionally, in addition to policy programme formulation, the State Forest Department has been carrying out implementation also. In the changing context, it is worthwhile considering whether the Department's role should not be restricted and execution of programmes entrusted to field-level corporate organisations like the Forest Development Corporation (over which the former may have adequate control) as well as local representative institutions. As constituted today, the Forest Development Corporations of States play varying parts. Forest Development Corporation of States play varying parts. The Bihar Forest Development Corporation has been entrusted with afforestation programme also, while the Orissa Corporation limits itself to commercial exploitation of timber. It seems that the Gujarat Forest Corporation has been assigned a much bigger task in as much as it has been asked to execute the comprehensive Valsad Forestry Project which embraces nearly all facets like exploitation, afforestation, collection (through tribals) of MFP, its sale, processing of some items of MFP and their marketing etc. an experiment which will be watched with interest. The Tribal Development Corporations come in for forestry either partially or indirectly. In

some States they have been assigned leases for MFP; in some States they are the direct agency for procurement of MFP from tribals; in some other States they have ventured into the field of processing. The Manipur Tribal Development Corporation has been assigned a bigger role, even in the marketing of agriculture extension & development. In Maharashtra the Tribal Development Corporation has been conferred the authority to make monopoly purchases of forest and farm produce. As such, the roles assigned to the Forest Development Corporations in various States are diverse. The attempt should be to internalize the Corporation's part with the rural production system as a whole; its backward and forward linkages should strengthen the integration substantially.

104. Since conditions vary from State to State, we do not lay down any uniform dicta assigning roles to the concerned bodies for discharge of the relevant functions. However, broadly speaking we would suggest that there could be a convenient three-fold division of functions among the three bodies involved i.e. Forest Department, the Forest Development Corporation, and the Tribal Development Corporation. The Forest Departments might retain the role of formulation of overall policy and programme as well as supervision over implementation. The performance by the Forest Development Corporations in various States of the country needs to be evaluated closely and, subject to the Corporations being found suitable, they could be asked to take up the work of afforestation and exploitation of items of major forest produce. However, it would be desirable to have the working plans considered by representative bodies (elected like Panchayat Samitis and Zilla Parishads or traditional like tribal village and regional councils) as also by technical personnel for ensuring that they are properly oriented. Thirdly, the Tribal Development Corporations might procure various items of minor forest produce from LAMPS and other cooperatives, etc. for which purpose leases of forest units should be assigned in their favour and undertake their marketing processing etc. We are aware that the Tribal Development Corporations have wider role in productive assets formation in other sectors as

well, including manpower formation and skill generation. Their field potential should be tapped based on evaluative studies which the Home Ministry might like to carry out.

Legislation

105. Forest legislation dates back to 1865 when the Indian Forest Act was passed. The Act was reformulated in 1927. In pursuance of the elements of policy contained in the Government of India 1952 document, some States enacted their own full-scale Acts, while some others extended the provision of the Indian Forest Act, 1927 to their territories.

106. The National Commission on Agriculture recommended strengthening of the existing legislation for effective implementation of the forest policy. In their view, for the sake of uniformity and concerted action for forest development, passage of a revised all-India Forest Act is necessary.

107. The draft which has been under consideration of the Ministry of Agriculture was scrutinized by us and we have made a number of suggestions for its amendment, modification etc. We trust that the Ministry of Agriculture would take our views and suggestions into consideration while preparing the final draft of the Bill. We summarise hereunder some of the important suggestions made by us :

- (i) The traditional rights, concessions and privileges of tribals in respect of forest produce, grazing and hunting should not be abridged. Further, they should be appropriately incorporated in the record of rights.
- (ii) The forest villager should be given heritable and inalienable right over the land which he cultivates.
- (iii) Association of tribals with large-scale plantation programmes should be ensured by providing them share in the forest produce.
- (iv) Social forestry and farm forestry programmes should be extended to Government, communal and private holdings.

- (v) There should be restrictions on deforestation area vulnerable to soil erosion, landslides, siltation etc.
- (vi) National parks, sanctuaries, biospheres etc., not be located close to tribal villages. Persons displaced on account of their creation should be properly rehabilitated.
- (vii) Ownership right on trees growing in the hold allotted to a tribal in a forest village should be in him.
- (viii) Felling of fruit trees should, ordinarily, be prohibited.

108. We would add that there should be attempt at simplification of the laws and procedures, so that tribals can comprehend them easily. They should be disseminated widely.

109. Elsewhere, we have referred to the difficulty of village councils in obtaining loans from banks for development purposes on account of communal system of ownership of land which is to be shown as security. It seems that it is necessary that the relevant laws are modified so that the village councils can obtain term loans against standing tree-stocks in forest.

110. It might be recalled that we laid stress earlier on evolving a correct land-use pattern for optimum productivity. It appears to us germane to mention that the State can assume through appropriate legislation the right to provide guidance about land-use and resource mobilisation on communal, clan and private lands. The legislation might provide for take-over of management for specified periods, on non-compliance with the guidelines. Assumption of such power by the State might lead to introduction of scientific land-use without interfering with the ownership pattern. The power of the State should

also cover the right of providing guidance in water-management, particularly in terraced fields.

111. The State of Orissa has come forward with a Bill aiming to restrict sale of timber trees belonging to tribals by making it obligatory for permission of the competent authority to be obtained before the sale is effected, analogous to the law for prevention of alienation of land belonging to tribals. Its operation may be watched for some time and, if found beneficial, it could be adopted by other State Governments also.

CHAPTER VIII

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Background

India has a total geographical area of about 328.1 million hectares with about 683.81 million population (15% of the world population), the majority of whom reside in 6 lakh villages. The forest area in the country is reported to be 74.74 million hectares (22.7% of total land area of the country) which works out to 0.109 hectares per capita which is far below the world average of 1.04 hectares.

2. During 1951-75, the forest area in India receded by 4.134 million hectares, a loss of 0.161 million hectares every year or 441 hectares per day. The stocking of existing forest has gone down appreciably; it is estimated that only 10% of the country's forest areas are capable of performing protective, productive, and ecological functions. The consequence of destruction of tree groves from the forest area as well as outside has created a situation where :

- * there may be now enough food but not energy-fuels to cook it with,
- * there may be large number of cattle and sheep but not enough fodder to feed them,
- * there is vast area under agricultural crop but not enough organic fertiliser to keep the soil in a healthy condition,
- * crop lands have become devoid of protective cover from desiccating and soil eroding winds,
- * rivers have increased surface discharge of more than 10 times within the last 70 years, causing floods and damage, destruction and misery,

- * river waters are loaded with silt eroding away millions of tonnes of top soil every year reducing fertility of the crop land,
- * mountains have become sensitive and prone to landslides at the slightest disturbance causing untold misery and loss to the local residents and the plains are in constant danger of devastating floods.

3. We, therefore, recommend that

- (i) For the existing 10% stocked forest area of the country, measures for protection, conservation and regulated working should be stringent.
- (ii) Restocking of the existing 13% degraded forest area should be taken up quickly and at a rapid pace.
- (iii) Aforestation of 10% of the country's wasteland scattered as well as in strips alongside roads, railway lines, canals, river banks should be undertaken with public participation.
- (iv) Forest should be strengthened by rational operations, large investments and use of new technology so that it can yield a higher surplus to be shared locally, regionally and nationally as against rapid disappearance of trees and vegetation.
- (v) The symbiosis between the tribal community and the forest management should be established through imaginative forestry programmes and conservation and reorganisation of traditional skills of the tribals.

Forest Policy

4. Tribal communities in India largely occupy forested regions, where for long periods in their history they have lived in isolation. They draw their sustenance from forests. Forests not only provide them food, material to build houses, fuel for cooking as well as for light and warmth, fodder for their cattle, but also satisfy the deep-rooted tribal sentiments

connected one way or the other with forests, right from to death. In time of distress like famine, forests are last succour. Forests occupy a central position in economy.

5. The significant role that forests play in tribal economy has to be clearly recognised and forest policy under formulation should have appropriate orientation. We recommend that :

- (i) Forest policy and forest system should be directed towards managing a renewable endowment of forest potential for subserving national, regional as well as local developmental goals. In fact, the individual tribal, the local tribal community and national interest should be regarded as three corners of a triangular forest policy.
- (ii) Forest policy must fulfil three sets of needs (a) ecological security; (b) food, fruit, fuel, fodder, fibre, timber and other domestic needs of particularly the rural and tribal population; and (c) cottage, small, medium and large industries including the requirement of defence and communications.
- (iii) A national forest policy should recognise the positive role of the people in maintaining forests and environment in unambiguous terms and not merely in its implication.
- (iv) Wherever community rights exist on forest land, they should be recognised and adapted to serve the urgent needs of the soil and water management and re-afforestation of denuded tracts by suitable species.
- (v) Conjoint efforts of government, cooperative, community and private sectors are necessary to increase production of fuel-wood, fodder, fruit and industrial wood.
- (vi) It is necessary to build up a broad-based approach at the State level involving officials, technological personnel, academics as also leaders of the public

(particularly tribal) opinion which can transcend narrow sectional interests for environment and resource management.

- (vii) There should be a standing National Commission to coordinate State Plans, frame national goals and generally to ensure pursuit of a wholesome land use policy in the country, keeping technological advances in view.
- (viii) Social forestry, farm forestry, community, agro-forestry, should be encouraged as multi-use land resource pattern in the context of national land-use policy and for increased production of fodder, fuelwood, fertiliser, generating employment, improving environment, and relieving rural women from drudgery and hardship of finding fuelwood.
- (ix) A programme of large-scale plantation should be taken up with the help of tribals giving them rights on the trees planted by them in assigned areas and their usufruct. Possibilities of short-term subsidy programmes for implementing forestry programmes may be concretised.
- (x) The State Plans and Tribal sub-Plans should portray long-range and short-term perspectives clearly in terms of financial resources and physical targets under three broad heads—reserve forestry, social forestry and farm forestry. Progress should be monitored annually in physical and financial terms. Agencies for implementation should be clearly identified.
- (xi) Tribal and local organisations, may be made use of it in good shape and after revitalisation if not in good shape, for management of protected and village forests for commercial, social and farm forestry purposes.
- (xii) Considering that forestry is coming to be recognised more and more important in the economy

energy, ecology, employment, poverty, allie-
tion etc. contexts, higher financial and phys-
effort is called for.

- (xiii) For achieving employment targets, like that of MSPY, intensive forestry, better collection of mi- forest produce, local processing of forest prod- etc. are necessary.
- (xiv) There needs to be deliberate and conscious shift the orientation and approach of the foresters toward public perspective policy.

Forestry and Tribal Development Programmes

6. Forests occupy a vital position in tribal economy. In regions having a substantial area under forest, Planning for tribal development or forest development in isolation has no meaning; the two must reinforce each other. While the management of forests and vegetal resources should be such as will provide for maximum goods and services for the well-being of all sections of the country's population, there has to be judicious balance between the national and the local, particularly the tribal, needs.

7. We, therefore, recommend that :—

- (i) In forest-rich regions (forest area 30% or more) forestry-oriented tribal development programmes should be framed. For such Integrated Tribal Development Projects (ITDPs), separate working (management) plans would be necessary for linking forestry programmes with economic development of tribals.
- (ii) In forest-rich ITDPs landless people should be provided gainful employment in forest working and in forest industries so that tribal migration is prevented.
- (iii) Through selection of suitable technology and production pattern, land about a hectare or so can make a family economically viable. Hence, choice

should be made from capital-intensive coffee plantation, plantation of fruit-bearing tree, host plants for tussar, plantation of fodder trees linked to animal husbandry, fuel-wood plantation etc. Tussar cultivation with plantation of host trees is important since the tribal area has good potential for sericulture.

- (iv) On the pattern of Gujarat social security plantation schemes, tribal families may be involved in plantation work. They may be paid wages during the gestation period and subsequently profits from the usufruct may be shared on fifty-fifty basis between them and the Forest Department.
- (v) Tribal farmers should be encouraged to take up farm-forestry and agro-forestry under which production and fertility of soil and environment improve.
- (vi) Some of the cottage, small and medium forest-based industries e.g. saw-milling, furniture-making, toy-making etc. should be locally established to generate employment for tribals.
- (vii) Bullock-carts should be provided to individuals assigning them transportation work of forest produce on an average for 150 days in a year. These bullock-carts may also be engaged in transportation of seedlings from nursery to the planting sites and consumer goods from market to tribal areas.
- (viii) Beneficiary-oriented programmes in forestry sector should be identified for tribals and they should be executed under IRDP, NREP, DPAP, DDP, Hill Area Development Plan, Tribal sub-Plan, etc.

Shifting Cultivation

8. Shifting cultivation has become a way of life of the tribals. As such, change from shifting cultivation to settled cultivation has to be gradual, so that they are able to adjust

themselves. The problem has social and cultural overtones and, therefore, motivational approach through introduction of alternative programmes is recommended. Integrated programmes of forestry suitably harmonised with proper use practices may form the backbone of such strategy.

9. We, therefore, recommend that :—

- (i) Special comprehensive projects for each concrete micro-situation, with problem of shifting cultivation as their focus, should be prepared. The projects should induce in the shifting cultivators the desire for a switch-over to settled cultivation as a result of hope of better economic return from the same piece of land.
- (ii) The settlement of shifting cultivators should primarily be within the area of their traditional habitat.
- (iii) There should broadly be a programme of developing valley lands for permanent cultivation (with provision of irrigation wherever possible), horticulture in moderate slopes and forestry plantation on hill tops. Animal husbandry, poultry and pig rearing should be provided as subsidiary occupations.
- (iv) The broad approach of family-based programme should be followed in these areas, the aim being individual economically-viable schemes with a suitable mix of economic activity and choice of tree crops. Each shifting cultivators group may be accepted as a unit so that suitable leadership can emerge from within for sustaining the programme.
- (v) Comprehensive micro-plans for each group of cultivators should be prepared by inter-disciplinary teams which may be constituted exclusively for this purpose. Funds for implementation should be available from the Agriculture Ministry, Tribal sub-Plan, Hill Area Development, State and Union Territory Plan funds, institutional finance etc.

- (vi) Pilot rehabilitation schemes may be instituted including rubber, coffee, tea, cashew and horticulture (in situ or otherwise) plantations. Such schemes should be prepared on a small regional area basis keeping a mini-catchment or water-shed as the area of operation.
- (vii) Lands set free from shifting cultivation should be put under alternative use without any time-lag so that individuals in the group are not attracted again to shifting cultivation.
- (viii) There should be effective evaluation and monitoring of the programme. For this purpose adequate staff should be provided in the forestry Division of the Ministry of Agriculture.

Forest Villages

10. Forest villages were originally created for supply of man-power requirements for exploitation of forest resources. In these villages, a tribal does not have a right to the land which he cultivates.

11. We, recommend that :—

- (i) The forest villages may be converted into normal revenue villages, enabling tribals to acquire inalienable rights to land and benefits of development plans. The Forest Department should continue to play a special role in development of these villages in view of their physical location.
- (ii) All social and economic development programmes should be extended to these villages on the same lines as for residents of revenue villages.

Social Forestry

12. Social forestry is designed to meet the primary needs of tribal and rural population as opposed to the needs of industry and the urban elite. The desiderata are (a) a mixed production system including fruit, fodder, grass, fuel-wood, fibre and small timber etc., (b) involvement of beneficiary

right from the planning stage, (c) minimal government control, (d) financial or labour contribution by local bodies, voluntary contributions, government subsidies and (e) use of communal and government lands. Social forestry envisage creation of wood-lots or pastures on government, communal and private marginal, sub-marginal waste-land as per a pre-determined land-use pattern, afforestation of degraded forests, block plantation along road-side, canal banks, railways etc.

13. Several elements relevant to the success of social forestry with community participation are :—

- * strong commitment at Government as well as at communal levels;
- * substained technical support;
- * full range of development services;
- * tangible benefits for the participating community;
- * community organisation for planning work and benefit allocation;
- * the right community attitude towards tree and forests.

14. We, recommend that :—

- (i) Comprehensive approach be evolved for village wood-lots or urban tree plantations where there is an active pattern of communal land holdings or communal activities. Involvement of women of the community (who usually gather and utilise fuel-wood) in the identification, design and implementation of such project will be helpful.
- (ii) Steps be taken for planning materials, technology and trained people for a variety of forestry activities which can be locally initiated and controlled viz. tree plantation, agro-forestry, wood-lots, private holding tree-planting.
- (iii) Assistance be given for developing income-generating programmes based on managing and marketing

of forest products, on a sustainable basis so that there is local interest in maintaining natural and planted forests.

- (iv) Financial allocations for social forestry should be commensurate with the role it can play. Flow of institutional finance from commercial banks and cooperatives may be ensured by evolving norms and procedures for extending loans for forestry projects.
- (v) The cooperative sector should wholeheartedly participate in this programme.
- (vi) Action for initiating, supporting and expanding existing programmes of applied research in agro-forestry to identify, screen and evaluate trees and plants useful for solving socio-economic problems of the rural poor. This should include multipurpose species (yielding wood, forage, fertilisers, soil fertility improvements), and food.
- (vii) Action research should be planned on an adequate scale with a view of harnessing traditional skills of the tribal and indigenous population, keeping in view the objective of optimisation of production and reduction of hazards of environmental degradation.

Forest-Based Industries

15. The importance of forest-based industries in the nation's economy directly and indirectly generating rural employment and upgrading tribal economy is being realised increasingly. After agriculture, these industries have the largest potential for generating employment in rural areas. In the higher capital-intensive industry like paper, while the interests of the State, the entrepreneur and the labourers in the organised sector are adequately taken care of, the forest labourers have to be satisfied with casual employment which is generally seasonal in character. A fair deal can be given to the forest labourers (mostly tribal) if a programme for training them for higher skill/job is taken up.

16. Forest industries are finding it difficult to meet their requirement of raw materials. Further, since raw materials are required to be hauled over, the national transport system has been under strain. Immediate action is called for improving the resource base, both in its extent and location. In many areas, non-use of raw material due to the absence of industrial demand and non-supply of raw material due to distant location, have caused low employment potential in both public and private sectors. This calls for the closest coordination between raw material production and forest-based industries.

17. We, therefore, recommend that :

- (i) More and more industrial units should be set-up in cooperative sector so that there is sharing of benefits among the raw material grower, the forest labourer and the processing unit employee.
- (ii) A forest-based industry could also be a joint venture of three parties i.e., the concerned corporation, the entrepreneur and the tribal producer and collector of raw-material.
- (iii) Leases for supply of forest raw material should be assigned to cooperatives who should organise its production, harnessing transportation and undertaking delivery to forest-based industries.
- (iv) Industrial raw material production may be planned by ensuring inputs, technical know-how and financial support. Tribals should be encouraged to grow industrial raw material by providing them seedlings, technical know-how, selected subsidies and other incentives.
- (v) The industry should assure takeover of all the raw-material grown by the tribals as per schedule. The concerned extension workers should work for adherence of schedule by the tribals.

- (vi) The industry-linked plantation should not be located close to the tribal habitation and it should not be more than 300 hectares in extent at any one place to enable the local people to get their Nistar without difficulty.
- (vii) For developing cottage and small industry, beneficiaries should be identified among tribals. They should be trained and tools, machines and financial support should be provided to them.
- (viii) Public financing bodies should play a positive role in providing filip to plantation-industry nexus and for forestry and industry should to make use of public finance.

Minor Forest Produce

18. Minor Forest Produce (MFP) includes all items of forest produce other than wood. According to the National Commission on Agriculture, various items of MFP have the potential to bring about an economic revolution for tribals and other rural people in the country. During drought and adverse climatic conditions, the tribals depend mainly on MFP collection. A large number of MFP items are not collected and are wasted because tribals do not find their collection remunerative. A big percentage of tribal population is at present being forced to eke out their subsistence by cultivation of marginal lands, shifting cultivation, overgrazing of forest areas and exploitation of trees. It is necessary to provide economically viable schemes of MFP collection, processing and marketing which can ensure for tribals reasonable sustenance. MFP collection generates employment largely during the non-agricultural season when unemployment and under-employment problems are acute. MFP collection and processing can employ not only the able-bodied workers but also old and infirms, women and children in their traditional environment.

19. We, recommend that :

- (i) Item-wise resource inventory survey of MFP should be carried out for each State by involving Forest Survey of India, Botanical Survey of India and Resource Survey units. Project report should be prepared amenable to economic appraisal organising collection, procurement, transport, storage, grading, local processing and marketing of each item of MFP. The project report might be State-wise, division-wise, according to the local conditions.
- (ii) The right of collection of tribals of MFP without restriction, wherever this is lacking should be secured. This should be followed by organised collection and marketing. In fact, the most crucial problem is marketing of MFP. The question of realisation of royalty of MFP by the Forest Department from individuals, cooperatives or corporations engaged in MFP collection should be reviewed for exemption or rationalisation in the interest of remunerative price to be made available to the tribals.
- (iii) Cooperativisation of MFP should be accorded priority since this will give some additional income to the tribal and will also be in the interest of development of MFP. Adequate attention should be paid to LAMPS and other primary cooperatives, secondary and apex cooperatives as well as federating tribal development corporations, forest development corporations and other corporations.
- (iv) Cooperatives and private marketing channels, operating parallel to each other, should set up healthy economic forces in the interest of tribals.
- (v) Performance audit of Tribal Development Corporations and Forest Development Corporations is

called for to enable assess the extent of their objectives-achievement and their reorientation.

- (vi) Improved storage techniques should be employed using scientific methods. Warehouses and other facilities should be built in interior areas to avoid deterioration of MFP items.
- (vii) First-stage processing of MFP should be organised within tribal areas, particularly through cooperatives. The main objective should be to enable local retention of the maximum benefit from the activity to benefit the primary collector.
- (viii) In forest-rich States, MFP corporations may be created connected with procurement, marketing and processing at the State level.
- (ix) An All India level organisation (TRIFED) may be created federating the Forest Development Corporations, Tribal Development Corporations, and MFP Corporations for tackling different matters connected with MFP and for coordinating with the National Cooperative Development Corporation (NCDC) the State Trading Corporation (STC), the National Agricultural Cooperative Marketing Federation (NAFED) and other national organisations concerned with processing and marketing development of MFP.
- (x) Research and Development efforts are required to meet the needs of genetically improved species, better techniques of collection, semi-processing, processing, storage etc., new uses of MFP and associated technology.
- (xi) Regeneration of MFP be given special attention. Plantation of MFP be taken up on individual or community lands by associating tribals in management and protection under the technical guidance and supervision of the forest department.

Forest Labour Cooperative Society (F.L.C.S.)

20. Serious efforts need to be made to ensure that entire working of forest should be planned and executed through cooperatives. So long as the individual tribal remains a casual forest wage-earner, he is bound to seek a job in agriculture or other activity. Further, forestry management should be able to resolve the problem of seasonal employment against the desiderata of sustained regular employment through practice of intensive forestry through cooperatives.

21. We, therefore, recommend that—

- (i) Forestry operations should be executed through cooperatives of forest labourers. The agency or contractor should be eliminated. Cooperative may be organised and encouraged by the Forest Department both for economic benefit of the tribal and as a protective device for the existing forest. They should be given share in profits from those operations.
- (ii) Cooperatives should organise labour teams for working in regions which may be outside the reach of an individual. Regularity and predictability of wage employment should help stabilise local economy. Cooperatives should ensure reasonable wage for their labour.
- (iii) FLCSSs should venture into the field of haulage of forest material making it over to the Forest Department in depots located on the periphery of the forests. As much as possible, haulage in forest area should be done through animal-powered vehicles rather than through automobiles to provide employment to tribals and effect POL saving.

Biosphere Reserve

22. For affording strict protection to wild-life germ-plasm and gene pools facing the danger of extinction, attempts have been made to establish bio-sphere reserves, national parks, sanctuaries. In the process in some areas tribal interest is said to have been disregarded. We recommend that—

- (i) Virgin forest areas rich in flora and fauna should be declared as bio-sphere reserve for germ-plasm, gene-pools and other purpose over a limited area without displacing the tribal on a large scale. For the purpose, speedy administrative, scientific and legislative action is necessary.
- (ii) Tribal families having been displaced by national parks and sanctuaries should be suitably rehabilitated by providing them alternative source of habitation and livelihood.
- (iii) There is no need of creating tribal reserves on the mainland on the analogy of some in the Andaman and Nicobar Islands.

Management System

23. (i) The crux of the problem of forest management lies in the need for integration of tribal and forest economies. The relationship between forest managers and tribals should be one of partnership. This will be possible if an identity-interest between the forest department and tribals is created.

(ii) Forestry development programmes should aim at internalising its components into the rural production system as a whole.

(iii) The management should ensure strong backward and forward linkages between forestry and other development sectors on the local, regional, State and national levels.

(iv) Tribals should be inducted into a more constructive role of forestry. They should be employed in forest service at different levels by imparting specialised training.

(v) Forest management practices need to be modulated to be able to generate employment all the year round for prevention of migration and sustained supply of raw materials for the requirements of agriculture and industry.

(vi) The role of the forester needs to be reappraised. The new emphasis should be on forester as an extension agent advising the owners or the management personnel of village, communal private and other forests for undertaking scientific forestry.

(vii) The transformation from conservation to development forestry should be induced through community forestry. Forestry activities should be carried out by many, often local institutions, rather than by a single forest department. In other words, meta-management system should be applied rather than super-management.

(viii) The course from departmental production forestry to broad-based community forestry can be made smoother through public participation. At the State-level, a broad-based body comprised of officials, technical experts, academics, leaders of public (particularly tribals) opinion should be built up. At the forest, divisional and ITDP levels, advisory committees representing forest interests like government departments, statutory bodies (like the TDC, FDC, banks, etc) and forest dwellers to review, formulate programmes and over-see their implementation should be set up. Similar Committees should be set up at development block level.

(ix) The respective roles of the forest department, the Forest Development Corporations, the Tribal Development Corporations should be clearly spelt out. The forest department might be the apex agency for formulation of policies and programmes as well as for supervision of their implementation. Execution of programmes may be entrusted to field-

level corporate organisations like the Forest Development Corporations as well as local representative institutions.

Legislation

24. Forest legislation dates back to 1865 when the Indian Forest Act was passed. This Act was reformulated in 1927. New revised draft is under consideration in the Ministry of Agriculture which should take into consideration the necessary legislative provisions which will strengthen the symbiotic relationship between forests and tribals.

25. We, therefore, recommend that :

- (i) The traditional rights, concessions and privileges of tribals in respect of all forest produce, grazing and hunting should not be abridged. They should be freely allowed to visit places of their worship inside the forests. Further, they should be suitably recorded.
- (ii) In the forest villages, they should be given heritable and inalienable right over the land which they cultivate.
- (iii) There should be restriction on deforestation of the area vulnerable to soil erosion, landslide, desertification etc. Felling of fruit trees should, ordinarily, be prohibited.
- (iv) Association of tribal should be ensured in a large scale plantation programme giving them the right to usufruct.
- (v) Ownership right on the trees growing in the holding allotted to a tribal in a forest village should vest in him.
- (vi) National parks, sanctuaries, bio-sphere should normally be not located close to the tribal villages. Persons displaced on account of their creation should be properly rehabilitated.

- (vii) There should be attempt at simplification of laws and procedures so that tribals can comprehend them.
- (viii) Relevant laws should be modified so that the village councils can obtain term-loan against standing tree-stock in forests.
- (ix) If necessary, the State might assume the right to provide guidelines about land-use and resource-mobilisation on communal, clan and private lands. The operation of the Bill framed by the Government of Orissa aimed at restriction of sale of timber trees belonging to tribals might be watched for adoption by other State Governments.

No. 12023/2/79-TD

Government of India/Bharat Sarkar
Ministry of Home Affairs/Grih Mantralaya

New Delhi, the 9 April, 1980

OFFICE MEMORANDUM

SUBJECT : Constitution of a Committee to suggest guidelines to reorient forest policy to serve the tribal economy in accordance with the resolution adopted at the Conference of the Ministers in charge of Forests and Tribal Development held in July, 1978.

At the Conference of the State Forest Ministers and Ministers in charge of Tribal Development held in July, 1978, it was resolved that

- (a) The development of forests, instead of being planned in isolation, should form an integral part of the comprehensive plans of integrated tribal development;
- (b) Forest Department should constitute better organised forest labour co-operative societies within a time-bound programme of two to three years to undertake all forestry operations replacing intermediaries;
- (c) The right of collection of minor forest produce by tribals and its marketing for remunerative price to the tribals should be ensured;
- (d) Forest villages should be abolished and be converted into revenue villages.

2. Guidelines have to be prepared to enable States to orient these resolutions into practice. For drawing up the guidelines, it has been decided to constitute a committee with the following composition :

- (1) Dr. B. K. Roy Burman,
Prof. of Anthropology,
Vishva Bharati University,
Sriniketan (West Bengal).

Chairman

- | | | |
|-------|--|----------------------|
| (2) | Shri S. A. Shah,
Managing Director (Retd.),
Forest Dev. Corporation,
Baroda (Gujarat). | Member |
| (3) | Shri N. J. Joshi,
Deputy Inspector General of Forest,
Ministry of Agriculture,
New Delhi. | Member |
| * (4) | Shri Ranjit Singh,
Secretary,
Forest Department,
Government of Madhya Pradesh,
Bhopal. | Member |
| * (5) | Shri J. N. Pandey,
Chief Conservator of Forest,
Government of Bihar,
Patna. | Member |
| (6) | Shri K. S. Chandrasekharan,
Special Relief Commissioner,
Orissa. | Member |
| * (7) | Shri Munawar Hussain,
Chief Conservator of Forest,
Govt. of Andhra Pradesh,
Hyderabad. | Member |
| * (8) | Shri D. N. Tiwari,
Dy. Secretary,
Ministry of Home Affairs,
New Delhi. | Member |
| (9) | Dr. Bhupinder Singh,
Joint Secretary,
Ministry of Home Affairs,
New Delhi. | Member-
Secretary |

3. The following will be the terms of reference for the deliberation of the committee :

- (a) Appraisal of the nature of rights of tribals in respect of land and forest.
- (b) Review of integrated forestry development programmes with particular reference to social forestry.

- (c) Review of horticulture, agro-forestry and other productive programmes with particular reference to satisfaction of the basic consumption needs of tribals, generation of employment and creation of incremental income for the tribal and the non-tribal segments of the indigenous population.
 - (d) Review of the activities of the various bodies concerned with forest and tribal economy with reference to their role in promotion of interest of tribal economy.
 - (e) Concrete suggestions for guidelines to be laid down to re-orient forest policy so that, inter-alia, it serves the interests of the tribal economy.
4. The committee may hold its meetings and visit areas it may consider necessary. Its report may be submitted within six months of its constitution.

Sd/-

J. K. BARTHAKUR

Deputy Secretary

to the Government of India

*Names added later on.