Role of Industrial Captive Plantation in Indian Forestry

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ABSTRACT:-- Pulp and Paper Industry in India is facing acute shortages of Cellulosic raw materials in the forest based sector. Raw material supplies from Govt. forest department/corporations, consequent to the implementation of the forest conservation act 1980, as amended in 1988 and the new National Forest Policy (1988) are being made on an extremely low scale. The long standing request of the forest based paper industry to allot to them the degraded forest lard to raise captive plantation in the joint sector with Govt. is pending Govt. sanction for the last two decades. The Paper Industry feels that this is major hurdle in creation of additional paper capacity to meet the growing demand of paper and pulp. The paper covers various issues involved in this matter and in particular.

i. Stresses and quantifies enormous gaps between demand and supply of raw materials.

ii. Highlights the extent of unproductive and utilised Govt. Forest land that could be used for raising captive plantation.

iii. Points out the major hurdles in creation of captive industrial plantation.

The objections raised by various agencies against creation of captive plantations are briefly dealt with. The paper also highlights the need to undertake a review of some of the policies enunciated in the National Forest Policy 1988.

INTRODUCTION

Most of the Indian forest based paper mills have built up their present capacities by periodical expansions. No new capacities of forest based large paper mills are likely to come up for want of wood and bamboo. Periodical expansion and modernisation programmes are essential for maintaining the competitive strength of large paper mills. Raw material supplies to the forest based mills are not adequate for optimum production even at their existing capacities, prohibiting any further expansion. The restrictions on fellings in forests and wild life sanctuaries brought about under the Forest Conservation Act 1980 & 88 and under the new Forest Policy 1988 though essential in national interest are bringing about further heavy reduction in supplies of bamboo & pulpwood to mills.

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Most of the Paper Mills (forest Based) have submitted in the last decade or so their proposals for captive plantation projects in joint venture with the forest Deptt./ Forest Development Corporations. Nearly a dozen such projects (in all covering more than 1,50,000 ha. of degraded forest lands) Were turned down by the Union Govt. on grounds of Land reforms and other policy considerations. If these projects had been initiated in time, some of them would have started yielding significantly large quantities of wood by now. The cost of raising such plantations at the current prices would be roughly around Rs. 26 million at one time as against an estimated expenditure in importing about 2 million tonnes of paper and paper boards valued at Rs. 50 million per year in foreign which otherwise would have to be incurred.

The alternative placed before the paper mills by the Union Government that the mills should make their own arrangement with farmers to grow trees on the farmers marginal lands or as a cooperative endeavor on Government Waste lands in charge of the Revenue Department is not found practicable by the industry.

This is mainly because such lands, free from burden of rights and privileges are not available in large compact blocks and also because there is no assurance to the participating industry that the wood so raised will become available at maturity to it. A strong case for raising captive plantations for pulp & paper industry in degraded forests has been very appropriately made in the Development Council sponsored 'Chug Committee Report - 1986.' The matter has been further persued from time to time by the various paper mills Associations and also by individual Industries. Govt. of India has been actively examining in the last few years the proposal of Jt. Venture. Partacipative plantations between Govt., Industry and the people or people's orginisations holding some use fauctu rights and privileges in the degraded Govt. forest lands. As per Newspaper reports Govt. of India in the last Govt. had formed a high level cabinet sub-committee to make final recommendations in this case. It was also rumored that this Sub-committee could not reach a unanimous decision in view of the differences between the Forest and Industries Deptt. on the one hand who supported the proposal and some other Departments who opposed it. In view of the recent changes in Govt. the union cabinet sub-committee automatically become infructous without reaching a final decision. Now with the formation of the new Govt. the matter is back to square one in the sense that the proposal for the formation of a new committee may have to be taken up afresh with the new Govt., it is well known that the lobby of environmentalists is opposed to the proposal of captive Industrial Plantations.

IMPORTANT ISSUES

The latest position in respect of important issue involved in decision making regarding captive plantations is given below.

i. Magnitude of shortages of Forest based raw materials to paper industry has become enormous.

ii. Extensive allotment of degraded Forest lands in charge of Govt. are lying unproductive and unutilised.

iii. Refusing allotment of degraded forest lands in charge of Govt. is a major handle in raising additional paper making capacities.

iv. Need to revise some provisions of the National Forest Policy.

Issue No.-1

ENORMOUS SHORTAGES OF BAMBOO & WOOD FOR PAPER INDUSTRY

Under the sponsorship of the Development Council, Chemprojects worked out the actual demand potential and consumption position in respect of wood & bamboos statewise for several years. The position for the year 1990-91 is given below in details as a sample.

The requirement of cellulosic raw materials for paper industry as worked out under the prudent formulae of the furnish, the corresponding supplies from Govt. Forest Dept. Forest Corporation and the resultant gaps in 1990-91 are shown in Table No.-1.

A perusal of the Table No.-1 reveals that supplies from Govt. forest/F.D.C. are inadequate to match the requirement of mills in Eight important

Table-1

STATEWISE SUPPLIES OF BAMBOO & HARDWOOD FOR PAPER INDUSTRY FROM GOVT. FOREST DEPT./FOREST CORPORATION, REQUIREMENT OF BAMBOO & WOOD BASED ON PRUDENT FORMULA AND THE RESULTANT GAPS (1990-91).

(QTY : 000' TONNES)

SL.NO.	STATE	BAMBOO & HARDWOOD SUPPLIED BY GOVT. F.D./F.D.C.		REQUIREMENT OF BAMBOO & HARDWOOD ON THE BASIS OF PRUDENT FORMULA		GAPS/SURPLUS IN BAMBOO & HARDWOOD	
1	2	3	4	5	6	7	8
		Bamboo	Hardwood	Bamboo	Hardwood	Bamboo	Hardwood
1	West Bengal	--	2.1	--	--	--	+ 2.1
2	U.P.	--	102.4	136.3	169.1	- 136.3	- 66.7
3	Karnataka	154.1	52.8	229.3	476.1	- 75.2	- 423.3
4	Tamil Nadu	7.3	299.0	217.0	355.9	- 209.7	- 56.9
5	Maharashtra	201.2	--	147.3	88.2	+ 53.9	- 88.2
6	A.P.	168.3	--	421.9	441.9	- 253.6	- 441.9
7	Orissa	201.6	14	118.7	71	+ 82.9	- 57.0
8	Punjab	--	--	--	--	--	--
9	Haryana	--	6.2	96.5	57.7	- 96.5	- 51.5
10	Himachal	--	--	--	--	--	--
11	Gujrat	--	--	--	--	--	--
12	M.P.	130.8	--	324.8	222.6	- 194.0	- 222.6
13	Nagaland	13.0	--	4.9	2.9	+ 8.1	- 2.9
14	Assam	46.2	--	270.3	161.7	- 224.1	- 161.7
15	Kerala		175.0	87.4	309.3	- 87.4	- 291.8

Note : Gap figures in (-) represent the shortfall while those in (+) is the surplus.
Source : Chemprojects Study - 1992

States in respect of bamboos and Eleven States in respect of wood. The only state with surplus bamboos in 1990-91 were Maharashtra & Orissa. Maharashtra had surplus bamboos because of a large temporary availability from gregariously flowered and dead bamboo forests. The surplus in Orissa is because of two big bamboo based paper mills having remained closed for a long period during the year.

Statewise supplies of hardwood by Govt. Forest Department/Forest Corporations, corresponding consumption at the paper mills in 1990-91 and the resultant gaps are shown in Table No.2.

The shortages of wood were quite substantial and were being met with mainly by supplies from agroforestry/ social forestry plantations both from within and outside the state. Actually out of the total demand of about 2.3 million tonnes of pulpwood only about 0.5 million tonnes were met with supplies from Govt. forests/F. Development Corporations. The balance quantity i.e. about 1.8 million tonnes came principally from the agro-forestry and social forestry plantations transported from long distances.

The Statewise requirement of Bamboos and Hardwood as per prudent furnish, corresponding consumption thereof by the mills and the resultant gaps in 1990-91 are given in the Table No.3.

These tables give the position of prudent requirement of bamboos & wood against the actual

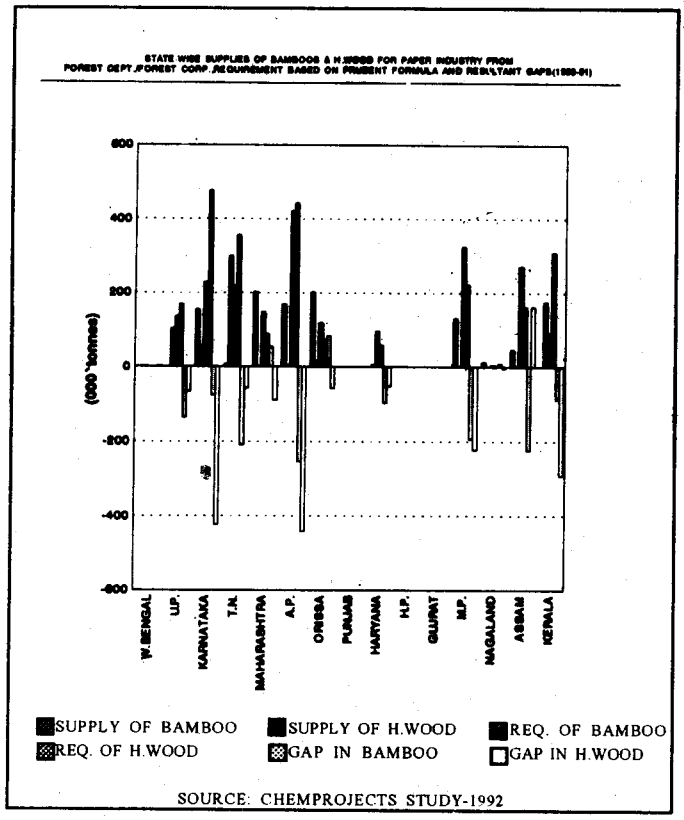
Table-2

STATEWISE SUPPLIES OF BAMBOO & WOOD FROM GOVT. FOREST DEPT./FOREST CORPORATION CORRESPONDING CONSUMPTION OF BAMBOO & WOOD AT THE PAPER MILLS AND THE RESULTANT GAPS (1990-91)

(QTY : 000' TONNES)

SL.NO.	STATE	BAMBOO & HARDWOOD SUPPLIED BY GOVT. F.D./F.D.C.		BAMBOO & HARDWOOD CONSUMED BY MILLS		GAPS/SURPLUS IN BAMBOO & HARDWOOD SUPPLIES	
1	2	3	4	5	6	7	8
		Bamboo	Hardwood	Bamboo	Hardwood	Bamboo	Hardwood
1	West Bengal	--	2.1	--	--	--	+ 2.1
2	U.P.	--	102.4	20.7	243.9	- 20.7	- 141.5
3	Karnataka	154.1	52.8	91.2	621.5	+ 62.9	- 568.7
4	Tamil Nadu	7.3	299.0	4.8	347.6	+ 2.5	- 48.6
5	Maharashtra	201.2	--	226.3	--	- 25.1	--
6	A.P.	168.3	--	237.7	514.1	- 69.4	- 514.1
7	Orissa	201.6	14.0	128.2	18.0	+ 73.4	- 4.0
8	Punjab	--	--	--	--	--	--
9	Haryana	--	6.2	105.4	--	--	-99.2
10	Himachal	--	--	--	--	--	--
11	Gujrat	--	--	--	--	--	--
12	M.P.	130.8	--	424.9	115.6	- 294.1	115.6
13	Nagaland	13.0	--	7.6	--	+ 5.4	--
14	Assam	46.2	--	295.8	76.0	- 249.6	- 76.0
15	Kerala	--	17.5	81.0	228.0	- 81.0	- 210.5

Note : Gap figures in (-) represent the shortfall while (+) is the surplus.
Source : Chemprojects Study - 1992



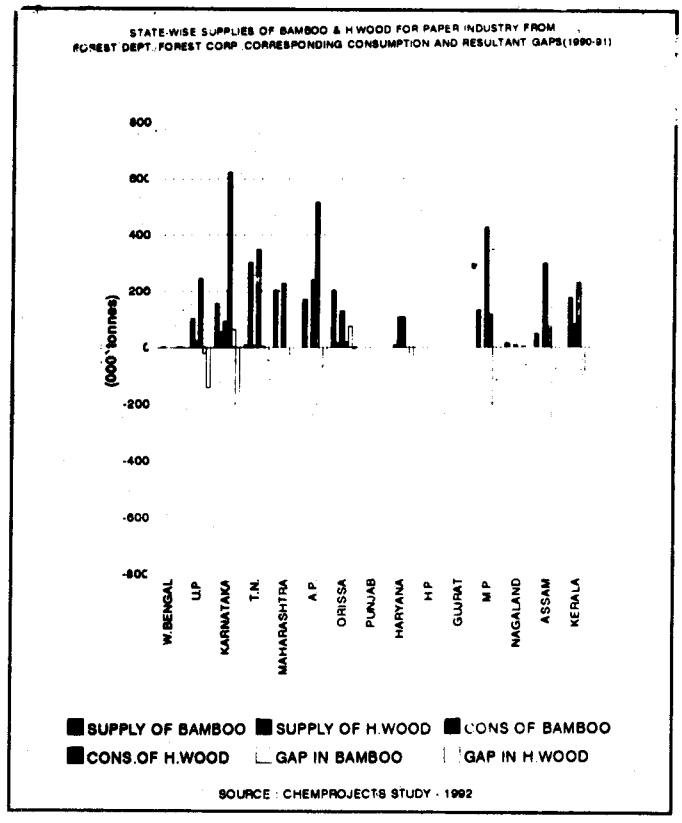


Table-3

STATEWISE REQUIREMENT OF BAMBOOS AND HARDWOOD AS PER PRUDENT FORMULA CORRESPONDING CONSUMPTION THEREOF AT THE MILLS IN 1990 - 91 AND THE RESULTANT GAPS

(QTY : 000' TONNES)

SL.NO.	STATE	BAMBOO & HARDWOOD SUPPLIED BY GOVT. F.D./F.D.C.		BAMBOO & HARDWOOD CONSUMED BY MILLS		GAPS/SURPLUS IN BAMBOO & HARDWOOD SUPPLIES	
1	2	3	4	5	6	7	8
		Bamboo	Hardwood	Bamboo	Hardwood	Bamboo	Hardwood
1	West Bengal	--	--	--	--	--	--
2	U.P.	20.7	243.9	136.3	169.1	- 115.6	+ 74.8
3	Karnataka	91.2	621.5	229.3	476.1	- 138.1	+ 145.4
4	Tamil Nadu	4.8	347.6	217.0	355.9	+ 212.2	- 8.3
5	Maharashtra	226.0	--	147.3	88.2	+ 79.0	- 88.2
6	A.P.	237.7	514.1	421.9	441.9	+ 184.2	+ 72.2
7	Orissa	128.2	18.0	118.7	71.0	+ 9.5	- 53.0
8	Punjab	--	--	--	--	--	--
9	Haryana	96.5	105.4	--	57.7	+ 96.5	+ 47.7
10	Himachal	--	--	--	--	--	--
11	Gujrat	--	--	--	--	--	--
12	M.P.	424.9	115.6	324.9	222.6	+ 100.0	- 107.0
13	Nagaland	7.6	--	4.9	2.9	+ 2.7	- 2.9
14	Assam	295.8	76.0	270.3	161.7	+ 25.5	- 85.7
15	Kerala	81.0	228.0	87.4	309.3	- 6.4	- 81.3

Note : Gap figures in (-) represent the shortfall while (+) is the surplus.
Source : Chemprojects Study - 1992

consumption figures on account of availability constraints and the resultant gaps. A perusal of the figures reveals that bamboo consumption is much less than that assessed under the prudent formulae in all the states except Maharashtra & Orissa. In respect of pulpwood, consumption has been higher than that assessed under the prudent formulae in the four states i.e U.P., Karnataka, Andhra Pradesh & Haryana. This is mainly because deficiency in bamboo supplies have been covered by substitution of other types principally Hardwood. This substitution naturally results in quality deterioration of the product and the consequent loss in monetary realisation or corresponding by large consumption of waste paper/market pulp.

Statewise potential of Bamboo & Wood, their consumption in mills and the resultant gaps in 1990-91 are shown in Table No.4.

The statewise figures of potential were arrived at on the basis of a judicious mix of primary and secondary data sources coupled with the normative approach applied by the research team in their interpretation and presentation. The resultant gaps between the availability and actual consumption reveal the shortages very clearly. A perusal of the figures in this Table reveal that bamboos were obtained by the mills from sources outside the state in all the important states of U.P., Karnataka, Tamil Nadu, Andhra Pradesh etc. In the case of pulp-wood the wide gaps between availability & consumption have been partly bridged by large scale supplies from agro-forestry plantations of Punjab and Haryana. Any further gap beyond this had to be bridged by substituting waste paper & imported market pulp at heavy expenditure on foreign exchange.

All the above eight tables undisputedly reveal the following:

(1) Bamboos are in short supply in almost all the states having paper mills

(2) Wood supplies to paper mills from Government forests/F.D. Corporations within the state are less than 25% of the total requirement at the paper mills and that the wood supplies to paper mills from all sources is Govt. lands and agro forestry plantations are not adequate to bridge the gap.

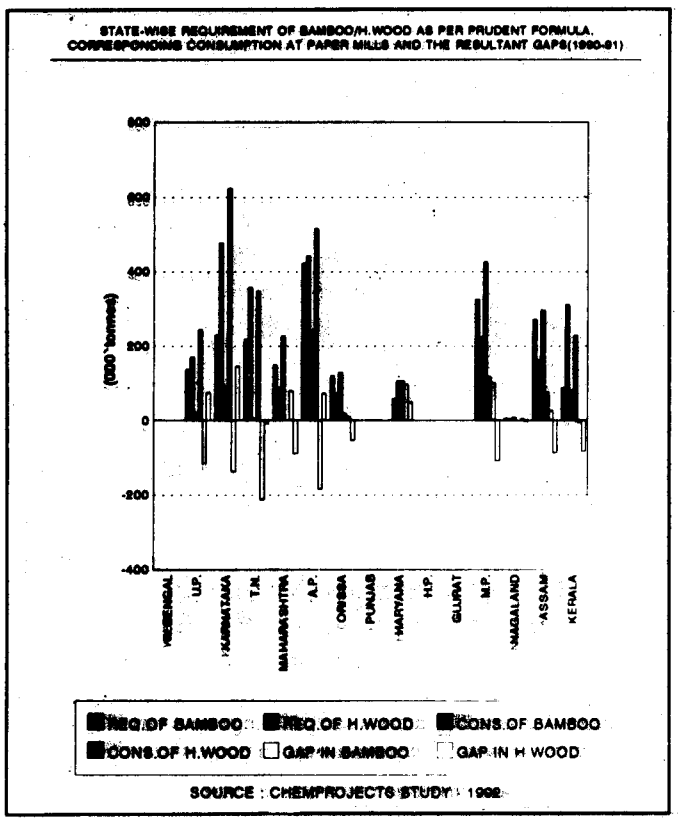
Table-4

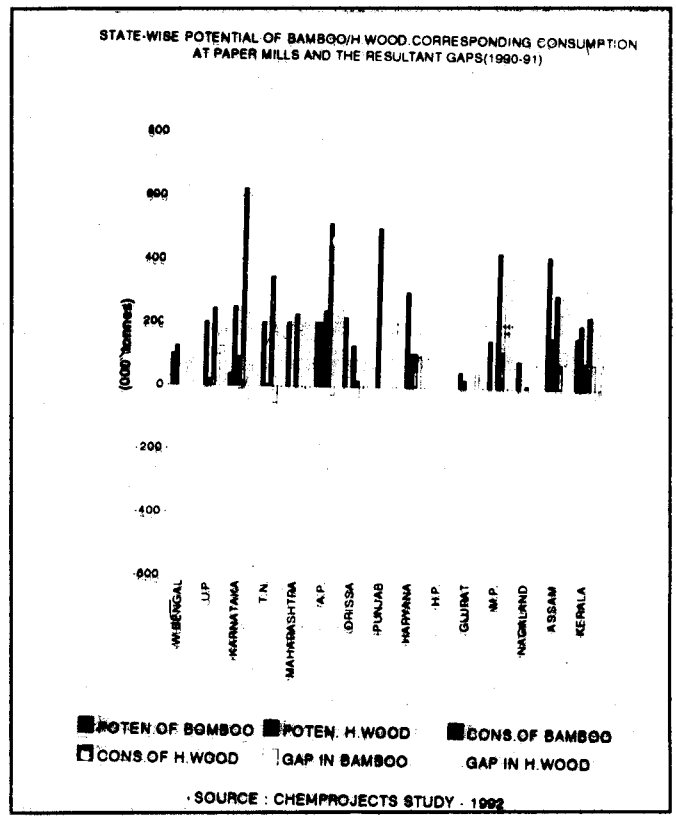
STATE WISE POTENTIAL OF BAMBOO AND HARD WOOD CONSUMPTION OF BAMBOOS AND HARDWOOD IN MILLS AND RESULTANT GAPS

(QTY : 000' TONNES)

SL.NO.	STATE	POTENTIAL		CONSUMPTION IN MILLS		GAPS		REMARKS
1	2	3	4	5	6	7	8	
		Bamboo	Hardwood	Bamboo	Hardwood	Bamboo	Hardwood	
1	West Bengal	100.0	125.0	--	--	+ 100.0	125.0	Mills not working
2	U.P.	--	200.0	20.7	243.9	- 20.7	- 43.9	
3	Karnataka	38.0	250.0	91.2	621.5	- 53.2	- 371.5	
4	Tamil Nadu	--	200.0	4.6	347.6	- 4.6	- 147.6	
5	Maharashtra	200.0	--	226.3	--	- 26.3	--	One Mill not working
6	A.P.	200.0	200.0	237.7	514.1	- 37.8	314.1	
7	Orissa	217.0	--	128.2	18.0	+ 88.8	-18.0	
8	Punjab	--	500.0	--	--	--	+ 500.0	No Mill
9	Haryana	--	300.0	96.5	105.4	76.5	+ 194.6	
10	Himachal	--	--	--	--	--	--	No Mill
11	Gujrat	48.0	24	--	--	+48.0	+ 24.0	Mill not working
12	M.P.	150.0	--	424.9	115.6	274.9	-115.6	
13	Nagaland	84.0	--	7.6	--	+ 76.4	--	Mill closed
14	Assam	416.0	160.0	295.8	76.0	+ 120.2	+ 84.0	
15	Kerala	160.0	200.0	81.0	228.0	79.0	- 28.0	One Mill not working

Note : Gap figures in (-) represent the shortfall while (+) is the surplus.
Source : Chemprojects Study - 1992





Issue No. 2

EXTENSIVE DEGRADED GOVT. FOREST LANDS ARE LYING UNPRODUCTIVE AND CAN BE UTILISED FOR RAISING CELLULOSING RAW MATERIALS.

The Forest Survey of India has already carried out a detailed exercise using the 1985-87 and later satellite imageries and estimated the extent of forest areas statewise with a further sub-classification into dense forest and open forests. As per their findings the total exlent of open forest in the country is about 25.7 million ha. These open forests have crown density of less than 0.4 and over 0.1 and therefore could be appropriately classed as degraded forests. The statewise extent of degraded forests is given in Table No. 5 along with the total area planted statewise from 1951 onward upto 1990 (wherever available). A perusal of this statement reveals that extensive areas of degraded forests are lying unproductive and unutilised and could therefore, be considered as available for raising captive plantations. Industry would prefer to raise irrigated plantations to rainfed ones using intensive plantation technics to obtain higher yields of wood/ha. lower cost per tonne. The requirement of such lands for captive plantations will be modest at least initially. The degraded forest lands in states as per 1987 satellite imagery and the extent of plantation raised from 1951 to date is shown in the Table No.5.

TABLE-5.

DEGRADE FOREST LANDS IN STATES AS PER 1987 SATELITE IMAGERY AND THE EXTENT OF PLANTATIONS RAISED FROM 1951 TO DATE.

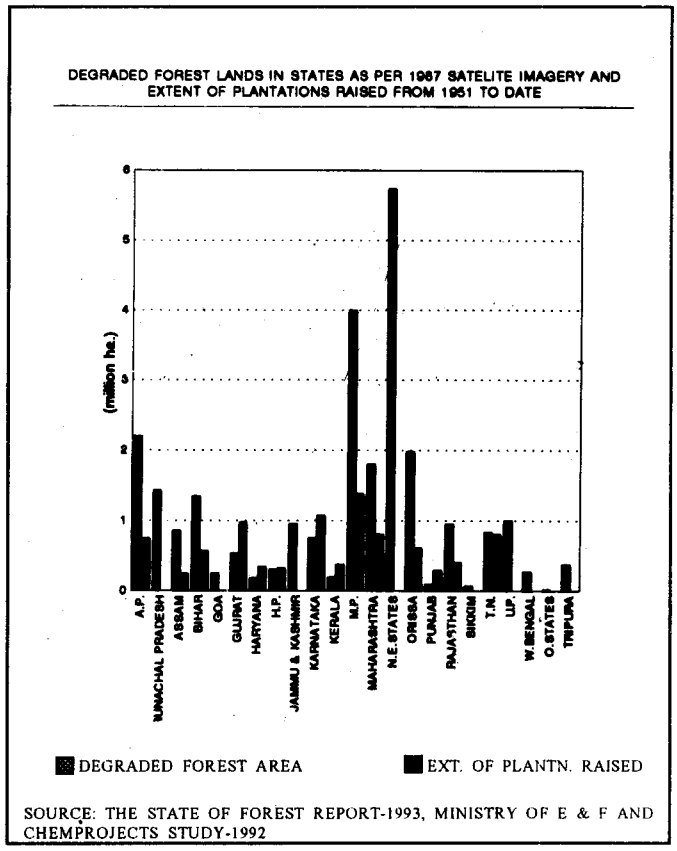
SLNO. STATE	Degraded Forest areas in Million Hac.	Extent of Plantations raised since 1951 to 1987 in Million Hac.
1. Andhra Pradesh	2.19	0.74
2. Arunachal Pradesh	1.42	N.A.
3. Assam	0.85	0.24
4. Bihar	1.34	0.57
5. Goa	0.25	N.A.
6. Gujarat	0.53	0.97
7. Haryana	0.18	0.34
8. Himachal Pradesh	0.30	0.32
9. Jammu & Kashmir	0.95	--
10. Karnataka	0.75	1.07
11. Kerala	0.19	0.37
12. Madhya Pradesh	3.99	1.37
13. Maharashtra	1.80	0.80
14. Manipur	5.74	--
15. Meghalaya	--	--
16. Mizoram	--	--
17. Nagaland	5.74	--
18. Orissa	1.98	0.61
19. Punjab	0.09	0.29
20. Rajasthan	0.95	0.40
21. Sikkim	0.07	N.A.
22. Tamil Nadu	0.83	0.80
23. Tripura	0.37	N.A.
24. Uttar Pradesh	1.00	N.A.
25. West Bengal	0.27	N.A.
26. Other States	0.015	N.A.
Total	25.03	8.89

Source: The State of Forest Report - 1993 Indian Forests Union Ministry of Environment & Forests and Chemprojects Study - 1992.

Issue No.3

REFUSING ALLOTMENT OF DEGRADED FOREST LANDS FOR CAPTIVE PLANTATIONS IS A MAJOR HURDLE IN ESTABLISHING ADDITIONAL PAPER CAPACITIES

In the coming years an additional wood based paper capacity of nearly 15 lacs tonnes per year has



SOURCE: THE STATE OF FOREST REPORT-1993, MINISTRY OF E & F AND CHEMPROJECTS STUDY-1992

to be set up to meet the growing demand of different varieties of paper. Large quantities of wood & bamboo will have to be raised for meeting the requirements of additional capacities. Surplus bamboos for the industry would be available in future only from the north-eastern region. Bamboo supplies from that region are feasible only if extensive infrastructural developments are brought about these involving massive investments. The present slow pace of infrastructural development is not adequate to attract setting up new paper units. The Pulpwood resources are inadequate even to meet the demand at existing capacities. The only feasible alternative in that event, is to raise extensive industrial plantations of wood & bamboo for the additional capacities. Raising additional paper mill capacities in developed states would possibly seem today more feasible today than that in the inaccessible north-eastern region because the additional cost on creating the infrastructure developmant in developed are would be very small comparatively. Extensive degraded forest lands are available in the developed states also.

All efforts are therefore required to make degraded forest lands available for raising captive plantations for Paper Production capacities preferably in developed states. The argument that almost all degraded forest lands are reserved for raising mainly fuel or fodder plantations does not appear rational because of the following considerations.

(1) Burning wood as fuel is one of the most destructive uses of any natural organic product capable of more valuable utility. India today is the highest fuel wood consuming country in the world and consequently one of the poorest.

(2) The unproductive cattle population in the country in so high and their health so poor that any amount of fooder provided to them will not improve their utility. It is futile to reserve large chunks of prospective degraded forests for maintains the heavy unproductive cattle population.

(3) Extensive degraded forest lands will continue to remain unutilised for useful purposes as Govt. plantation programmes will not cover even 25% of the total extent of degraded forests in the next two decades as seen from Table No.5.

DISCUSSION ON SOME OF THE RELEVANT PROVISIONS OF THE NATIONAL FOREST POLICY

i) Natural forests not be made available to industries in plantation activities.

The National Forest Policy - 1988 specifically mentions that forest based industries should raise their raw materials outside the forest area. Such areas could be waste lands in charge of State Revenue Department or marginal farm lands of private ownership. Since individual land holdings are very small in extent in most of the states it is not easy to find adequate extent of compact private land suitable for raising large scale captive plantations of suitable fast growing pulpwood species by improved modern techniques. Waste lands other than those with the State Forest Department are burdened with rights of grazing etc. and plantations therein are not feasible as they cannot be closed for grazing even for short periods. The foregoing paragraphs have revealed a wide gap between the actual requirement and supplies of bamboo and wood to the existing mills. The gap is likely to get widened with the continued implementation of the Forest conservation Act and the National Forest Policy. The existing forest based paper mills will there-by be starved of the essential raw materials and the only remedy to it is to raise captive plantations large scale imports of raw materials or finished products is to be avoided. The forest based industries make a seizable contribution to the domestic economy. Presently they are unable to play their role fully as several units are working below their respective installed capacities mainly because of inadequate supplies of bamboos and wood.

ii) Some of the relevant strategies suggested in the National Forest Policy 1988 in respect of Forest-based industries, are given below.

i. National forests not be made available to industries for plantation and other activities.

ii. Develop farm forestry nexus for meeting raw material requirements.

iii. No forest based enterprise be allowed without ensuring the availability of raw material.

These issues are briefly discussed below

In this context some contents from a paper entitled "Role for Industry in the Development of Degraded Forests: A Need for change in Policy" by Mr. J.K. Rawat, Director, Forest Research Institute, Dehradun published in 1990 are reproduced along with some relevant additions.

"The most compelling reason for suggesting change in forest policy in this respect is that the industry has resources that can be utilized for waste-land development. The technology for afforestation and reclamation of degraded forests is costly and requires heavy investment." The generally narrated objections for the leasing of degraded Govt. Forest lands are:

OBJECTION NO. 1

THE FULFILLING OF BASIC NEEDS FOR FUEL AND FODDER OF THE LOCAL POPULATION WILL BE ADVERSELY AFFECTED!

If the industry is allowed to exercise use of degraded forest lands under well thought of terms and conditions providing access of local people into the forest for grasses and other minor forest products (without of-course permitting grazing) and the need of local people for fire wood would is met from the forest produce grown in the leased area, The basis needs of fuel and fodder of the local population will be met with. Today practically very little quantity of wood and grass is available in such lands.

OBJECTION NO. 2

"RIGHTS ON FOREST LAND WILL FURTHER ENHANCE ECONOMIC AND POLITICAL POWER OF THE INDUSTRY!"

"Economic and political power is derived from the extent of asset and manpower controlled. Employing labour for plantation work and owning an inventory of tree wealth will certainly increase power of industry to a certain extent and it will be on a surer footing than before. However, to presume that this will be to the detriment of the society may not be correct, if certain suitable safeguards are kept to protect the interests of the society and the country."

OBJECTION NO. 3

INDUSTRY WILL CONTROL THE PRICE OF WOOD TO THE DETRIMENT OF PRIVATE SUPPLIERS!

"Wood is a bulky product and is difficult to transport to far off places. Therefore, by its very nature it is difficult to have a competitive market for industrial whether having lease over forest land or not, will have a say in deciding price of raw material. The wood market will either be a monopsony market where a large number of private wood growers supply to a single industrial unit, or it will be a case of bilateral monopoly where an industrial unit faces a single supplier such as forest department." In order to safeguard the interests of the local tree growers it is suggested that the industry be leased degraded forest lands adequate to meet

TABLE NO.6

OPINION POLL INDICATION REGARDING BREAK-UP BY PERCENTAGES OF END-USE CONVERSION DESIRED BY FARMERS IN FARM FORESTRY EUCALYPTUS CROP

Region No.	End-use Conversion % by Categories desired by Punjab Farmers							
	Saw Milling & Packing cases	Pulp Wood	Small Timber	Poles	Fuel	Roofing Material	Others	Total
I	--	--	44	44	--	--	12	100
II	20	--	36	36	--	--	8	100
III	20	20	20	20	--	20	--	100
IV	25	--	25	25	25	--	--	100
V	16	16	25	23	--	20	--	100
VI	25	--	25	25	25	--	--	100
VII	25	--	25	25	25	--	--	100
Total	131	36	200	198	75	40	20	700
Average	18	5	29	28	10	8	2	100

Source - Chemprojects Studies 1995

not more than 50% percent of its raw material needs. Such areas should be a little away from the industrial locations so that the industry will prefer buying wood raised by local farmers on economic price considerations.

OBJECTION NO. 4

CAPATIVE PLANTATIONS MAY DISCOURAGE FARMERS TO RISE TREES ON MARGINAL LANDS

A farmer's indicative opinion poll taken in 1995 in one state with no major wood based industry in respect of end use conversion of wood raised by them gave the following indications.

Only about 5% of the farmers showed an inclination forwards pulpwood end use as against 65% in favour of small timber, poles and rooting material and 18% for saw-milling and packaging materials. The results of the poll are detailed in the Table No.6.

On the other hand in a study of Chemprojects in 1995 in an adjoining state having well established wood-using industries the following end-use conversion of eucalyptus by percentages were indicated in a free market of the type prevailing for the farm forestry produce.

1.	sawn timber & saw logs	-	16.5%
2.	Ballies	-	32.0%
3.	Pulp Wood	-	30.0%
4.	Fuel Wood, Saw Dust & Other Residues	-	21.5%
	Total of 1 to 4	=	100 %

The above indicative divergent inclinations lead one to infer that a wood raising farmer will prefer the end-use that is most profitable to him. As no new or expansion paper capacity is likely to come up in future without captive plantation, raising them will give a better incentive to a farmer to raise more wood in his farm than otherwise.

OBJECTION NO.5

i) CAPATIVE PLANTATIONS WILL HAMPER THE GOVT. POLICY OF JOINT FOREST MANAGEMENT.

The official ground for introducing Joint Forest Management was prepared by the new National Forest policty 1988 Mr. M. Sarin in his paper entitled "Joint Forest Management ..... Challengers" (Pages 30 to 36 - Unasylva Vol. 46-1995/ -180) observes as under.

"Remote sensing satellite data are beginning to show an improvement in both quality and area under forests in south-western Bengal mainly under community protection. Forests under this form of management are regenerating with remarkable vigown and diversity. Local community institutions are protecting their forests far more effectively than the state forest departments could. Studies in Gujarat, Haryana, Madhya Pradesh and West Bengal have also recorded improvements in the productivity and diversity of vegetation."

Govt. of India in their proposed Jt. Venture Industrial Plantation Projects are likely to provided 20% of the timber grown and all grass for use of local people, rights and privilege holders to solicit their co-operation in the project specially for protection purposes. In view of the fact that the local people will get these benefits and also large scale employment in plantation and harvesting jobs in the project of Jt. Venture Industrial Plantations, there is no reason to believe that this project will hamper in any way the Jt. Forest Management as the same people will also be involved in the Jt. Forest Management.

ii) DEVELOP FARM FORESTRY RESOURCE IN MEETING RAW MATERIAL NEEDS.

If under the proposed Jt. Venture Industrial Plantations Project leasing of land not more than that required to raise 50% of the industry's needs of wood is prescribed the industry will have to depend mainly upon farm forestry supplies for the remaining quantity of wood. Mr. S.K. Kapur, Ex. Principal Chief Conservator of Forests in his paper published in IPPTA Vol.4 No.1 of March 1992 reported that Punjab farmers who had raised large quantities of eucalyptus wood with the expectation of new pulp-paper capacities on their farm lands have now resorted on a large scale to uproot them at the first harvest and switch over to land use other than farm forestry. As no pulp/paper capaci-

ties came up in Punjab against expectations the farmers had no alternative but to switch over to another use as the demand on wood grown was absolutely inadequate. The same observation got confirmed for Haryana state in the CHEMPROJECTS studies of 1995 for an industrial house, because no major additional wood based industrial capacities came up in Haryana in the last 2 decades. This leads one to conclude that new wood using capacities do not come up merely by developing a farm forestry nexus. On the other hand if the existing paper mills had been allotted to raise their captive plantations, additional paper capacities would have come up creating more demand on farm forestry wood also, as is evidenced in Karnataka state where the demand for farm forestry wood and consequently the agro forestry production increased considerably as a result of a Govt. wood based mill having raised captive plantations and increased its capacities on a very large scale. This leads one to conclude that allotting degraded Govt. lands to raise captive plantations will help further development of farm forestry instead of hampering it.

iii) NO FOREST BASED ENTERPRISE BE ALLOWED WITHOUT ENSURING THE AVAILABILITY OF RAW MATERIALS.

Discussions in the above paragraph lead to the inference that the farmers will not raise wood on a large scale on their marginal lands unless additional wood using plant capacities come up nearby. Govt. do not have at present any dependable estimates from their own departments about the availability of wood from farm forestry and therefore they are not enthusiastic about the installation of new capacities in the name of safeguarding the interest of environmental stabilization. Thus neither the farm forestry farmers get encouraged to raise wood for want of assured demand nor do new capacities come up. This leads to the unsolved puzzk as to whether tress came first to raise seeds or seeds were produced first to raise trees. In the interest of developing both farm forestry and new wood-using industrial capacities this policy provision of ensuring raw material availability before Govt. allows a new project, needs re-examination. Generally in the free economy as it exists in India today a new enterprise is sure to assure for himself adequate availability of raw materials for obvious reasons of avoiding risk in a heavy capital intensive industry like paper. Therefore it is worth considering withdrawal of Govt. from this role.

CONCLUSION

The above discussion leads to the following conclusion:

1. The magnitude of shortages of raw materials to forest based paper industry is enormous and on the verge of strangulating the industry.
2. Extensive degraded forest lands in charge of Government are lying unproductive and unutilised. Such lands can be usefully utilised by the industry without jeopardising any national interest.
3. Refusing allotment of degraded forest lands is a major hurdle in raising expansion of existing capacities and creation of new capacities for paper industry. In this context there is need to re-examine some of the provisions of the National Forest Policy 1988.
4. There is no cause to comprehend any adverse impact of industrial captive plantations on fuel and fodder supplies to local population or unhealthy increase in political and economic importance of paper industry.
5. Raising Industrial Captive Plantations help in creation of additional paper capacities and there by encourage farmers to raise more tress on marginal lands. They will not hamper in any way the Government Policy of encouraging Joint Forest Management (JMF).

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