PRINT: ISSN 0970-9274 ONLINE: 2456-6608
DOI: 10.31901/24566608.1992/03.04.01

JOURNAL OF
HUMAN ECOLOGY

J. Hum. Ecol., 3 (4): 245-255 (1992)

Social Forestry in India : A Perpetuation of Dependency

Jyotsna Bapat
Department of Sociology, Bombay University, Bombay 400 098, Maharashtra, India

KEY WORDS Ecology. Social Forestry. Dependency Approach. Maharashtra.

ABSTRACT The paper suggests a dependency approach to understand the situation of Indian forests. It argues that a dependency approach will be an improvement over a purely marxian approach, because it has a better descriptive component, secondly, it is able to incorporate the recent trends related to social forestry and finally, it has better predictive powers.

INTRODUCTION

The academicians studying problems related to forests in India unanimously agree that the British rule in India was partially responsible for the present crisis. The factors that led to exploitation of forests by the British were mainly three: (i) the formulation of formal rules for forest exploitation, (ii) the transference of forest ownership right to the state and, (iii) finally the setting up of administrative machinery to help the exploitation of forests by the contractors and the state.

The main consequences of the British policy were two fold. It resulted in a systematic alienation, isolation and marginalization of the people dependent on forests. Secondly, it led to the destruction of forests through exploitation of forests beyond sustainable levels, mainly because the British were not always very mindful of maintaining forests.

Post independent India unfortunately has perpetuated these policies as is evident from the 1980 'forest conservation act'. Guha (1983) concludes that the causes of such unequal regional development are tied directly to and are a consequence of relationships within the framework of capitalism. The only difference between the British period and the post independence period is in the social imperatives. The stragetic interests of British imperialism, and of the bourgeoisie in independent India are responsible for perpetuation of these policies.

The Marxian approach to explain the current crisis in Indian forests is taken as a point of departure. The paper suggests that a dependency approach will explain the crisis better. It will be able to incorporate the social forestry programme within its framework and it has better predictive powers. Therefore, a dependency approach to explain crisis in Indian forests is an improvement over a Marxian approach as suggested by Guha (1983).

This is in accordance with the guidelines suggested by Khun in his theory about progress in science. He states that a scientific theory has two components, a referential component and a descriptive component. Two theories can be compared only if their referential component is the same. One theory can be said to be an improvement over the other if the descriptive part of a theory is better. Let us therefore, review the dependency approach.

THE DEPENDENCY APPROACH

The dependency approach adheres to the basic presuppositions of Marxian theory. It is used to account for patterns of unequal regional development (Giddens, 1982; Bernstein, 1978). From this perspective the existance and perpetuation of the underdevelopment of the hinterland cannot be seen simply as the consequence of the natural and logical disadvantage of the periphery; but as tied directly to and a consequence of

relationships within the framework of advanced capitalism.

THE STRUCTURAL DEPENDENCY APPROACH

The rise of capitalist economies, are basically oriented towards instrumental use of man and nature. These economies perpetuate industrialized centres that are geared to mass production and surplus. But the relations of production that evolve in capitalism do not favour labour. The surplus is used by the capitalist to exploit labour further. This is because according to Weber, there is an inherent (identical) logic underlying industrial production as such and this logic is repressive. (Bulbus, 1982).

A consequence of this capitalist form of development is a pattern of uneven development within the nation states. The urban industrialized centres specialize in the industrial production. This leads to a spread of secondary or ancillery industrial development, and concentration of monetary and political power within these centres. These centres however, get their raw-resources from the rural parts (Warriner, 1988).

The rural hinterlands thus specialize in raw-resource productions which are exported to urban centres; at the same time, the capital flows out of these centres, result in a pattern of underdevelopment, characterized by little or no processing industries for indigenous raw material, and lack of secondary industrial development. Thus, the lack of economic and political power of these hinterlands ensure extraction of the regional economic surplus, resulting in its inability to fuel its own development. This eventually results in poor resource husbandry and depletion of resource for the hinterland. The urban industrialized centres are referred to as core and the hinterlands as periphery.

THE DYNAMICS OF THEORY

The social dynamics of regional development of a state can be explored from the perspective of the staples-dependency framework. It is argued that regional economic disparities are created by the long-term effects of over specialized resource extraction practiced by the hinterland, but initially controlled and perpetuated by the metropolitan heartland. The heartland constitutes a constellation of nested power centres, regional centres which control a surrounding hinterland. These centres are in turn controlled by national centres, which themselves are controlled by international centres. For the hinterland the resulting lack of power ensures extraction of the regional economic surplus and the inability to fuel its own development.

An economy tied to an external dynamic, by which surplus accumulation, decision making, and entry point to occupational mobility, all occur outside its boundaries, lends itself to poor resource husbandry, depletion, outmigration, lack of industrial development and employment instability (Warriner, 1988).

SYMPTOMS OF DEPENDENCY

Several symptoms of such core-periphery relationships can be easily identified. The periphery features an over-reliance upon primary resource extraction; boom and bust prosperity, influenced by international/national markets; little or no processing of indegenous raw materials; lack of secondary industrial development; importation of technology and skilled personnel; a high rate of exportation of locally produced raw materials; and a disadvantageous trade balance with the core. These factors, combined with control of finances at the core, the outpouring of capital and an ideology based on ethnocentrism used to denigrate local/regional cultures, statuses and aptitudes, tend to entrench the disadvantages of the peripheral region and create a vulnerable and unstable economy.

CRITICISM

Dependency approach has not gone unchallenged. The criticism arises out of inadequately

defined concepts and its value premise. This arises because dependency is assumed to exist in absolute terms. But if dependency is seen as a set of relations created and sustained by the dynamics of power, then empirical validation of such relations would not prove to be problematic.

In fact, the paper attempts to validate this dependency relationship within the context of India's forests. The policies related to the exploitation of forests as land drain by the British through the post independence phase, till the latest social forestry programs, all reflect a classic dependency relationship. Historical review of this relationship is further substantiated through a case study of Maharashtra social forestry program.

HISTORICAL REVIEW

The classical dependency relationship between the British Empire and colonial India is amply documented (Guha, 1986; Citizen's Report, 1985; Bachkheti, 1984). The importance of forests in order to maintain Naval supremacy of the seas was well recognized by the colonizers. On the supremacy of the seas depended the future of mercantile capitalism. The colonies are always subordinated to the development of capitalism in core state.

But the modus operandi of this dependency relationship related to Indian forests is important here. The British policy "succeeded" in two ways. They consolidated their monopolistic power over forest lands through formal rules, implemented by the forest department. They drove the forest dwellers out of their habitat by establishing 'cultural hegemony'.

EFFECT ON FOREST DWELLERS

The dependency approach states that capitalism follows an internal logic which needs to be recognized. This logic dictates that hinterland subordination is necessary for development of the capitalist economies. As stated earlier underdevelopment of peripheral regions is caused by capitalism itself through its tendency to block economic and cultural development. An ideology based on 'enthnocentrism' used to denigrate regional cultures, statuses and aptitudes, is a necessary pre-condition for entrenching underdevelopment. A kind of cultural hegemonism directed by the core culture is implied, where by these peripheral cultures have to be considered inferior. For the hinterland, the lack of power ensures extraction of the regional economic surplus and the inability to fuel its own development.

Thus, the core culture, guided by the objective of industrialization and economic growth, be it during British or post independence periods, ensures dependency of the periphery. In order that this be complete, both cultural and economic hegemony is thrust upon the periphery.

The British forest policy was 'successful' in this in two main ways. They were able to establish monopoly rights over forest lands; their only real competitors were the forest dwellers and villagers dependent on forest for fuel and fodder needs. Both these were marginal groups, therefore, not very difficult to control. The worst hit were the forest dwellers who where driven out of their habitat, due to such a policy. They have actively resisted this kind of forest policy even today. The Bastar and Santhal uprising against the British are cases in point.

British followed a two pronged policy to eradicate the original inhabitants. a) Firstly they encouraged settled agriculture in inferior timber yielding forests, by bringing in "foreigners", b) The tribals were systematically isolated and alienated from the "peasants" of the plains. The British propagated the myth that forests dwellers are tribals, aliens, culturally different, geographically isolated, followers of animism-primitives.

Disciplines like Anthropology and Archeology have perpetuated this tendency to treat "tribals" in general and hunter gatherers in particular as primitive, not fully evolved, isolated, incomplete and outside the mainstream. Nomadic foragers are portrayed as fossilized remnants of isolated the late paleolithic hunter gatherers (Headland and Reid, Feb, 1989).

The attitude has a distinct ideological bias.

There is ample evidence in every civilization to show that tribals do practice minor desulatory cultivation and intense trade of minor forest products with non-tribal neighbours.

Some clues can be had from the staple diet. Mostly the staple diet of food-grains of tribals is no different from that of their non tribal neighbours. Grain is usually acquired by trading wild meat and minor forest products or labour with neighbouring agriculturists (Giddens, 1981).

It is said that slash and burn cultivation, or shifting cultivation as is known in India, is of a recent origin. When the so called isolated tribals met the agricultural settlers they started practicing it; but ethnohistorical, archeological, linguistic or botanical evidence fails to support this argument. This type of cultivation was practiced by the tribals all over the world for a millennium, (Rappaport, 1974; Stepelden S., 1956), and of the also in India. The reason for this practice is more biological than any other. In human bodies there is a critical nutritional need for plant starch, which can be met by food grains alone. These are got by exchange, by some tribals or where settled cultivators are not available, this kind of swiddening is the most adaptive strategy for utilizing the tropical forests (Citizens Report, 1982).

It has been observed that some bands may move sequentially from serfdom to food production, to pure foragers over a generation or two. This gives ample support to the fact that hunter gather or foraging or shifting cultivation is just one more alternate life style against settled cultivation.

But in spite of this evidence, there is a persistence of the model that views tribals as isolates. Various reasons are given for the persistence of this model. The evolutionary theories of Taylor, Morgan and Frazer are the basis of the model. This model is used as an ideological tool for exploitation and suppression (Fabian, 1983). Imperial expansionist powers emphasize savagery as justification for driving triblas the desired lands and enslaving them or out right killing them. The dominant motive is of course control over the desired lands (Wobst, 1978).

The British in India in their desire for gaining control over the "reserved forests" do not appear to be an exception. They resorted to branding certain tribes as "criminal" and indulged in genocide. They have also resorted to all methods of repressing the tribals like isolation and alienation and forcing "foreigners" on them. All these attempts relating to forest dwellers point to only one fact, the British wanted complete mastery over the reserved forests for commercial exploitation.

INDEPENDENT INDIA

In independent India, tribal suffering was only partially recognized, mainly because independent India's policy planners perpetuated the British bias against the tribals, through the post independence forest policy. Thus, at the time when 1952 Forest Act was formulated, the emergent picture of forests in India is as follows, India has agreed to follow a capitalist path of industrial development that would encourage economic growth.

The inaccessibility of many forests and the stagnant nature of industrial development in the colonial period inhabited full commercial utilization of forest products. With increasing technology, more and more tree species and minor forest products were finding foreign markets. The forests thus were evaluated purely on economic value, an attitude which persists in Indian Forestry even today. Ecological considerations were given secondary importance.

The continuity between colonial and post colonial forest policy is evident in the 1952 Forest Act. There is an explicit assertion of state monopoly right at the expense of forest communities. This unquestioning acceptance of colonial norms has characterized post colonial policy to date. It also reflects in the state policies towards cultural hegemony through its attempts to bring the tribals into the national mainstream (as though a national mainstream exists).

One important difference in the post 1947 situation has been the rapid growth of forest industries in consonance with the greatly expanded

nature of industrial development since independence. The paper industry for example, has increased its production from 92800 tonnes in 1948 to 1 million tonnes in 1978, fuelwood production has increased from 10.18 million cubic meters in 1956-56 to 121.16 in 1977 and industrial wood from 4.46 in 1956-57 to 13.21 million cubic meters in 1977. The production of pulpwood has shown a four fold (400%) increase in this period (Report, Sep 1983).

The changed circumstances of increasing pulpwood demand due to industrialization resulted earlier in state policies aimed at increased production of soft wood. This was supported and recommended by experts in 1959 (Sahu, 1986; USAID report 1970). This was achieved by clear-felling and planting of fast growing species in Indian forests.

But subsequently the experts in FAO and India recognized the dependence of local communities on forests. They realized that for successful afforestation program, peoples participation and people's needs must also be met. In this light, the National Commission on Agriculture (NCA) in 1976 (Bachkheti, 1984) for the first time used the term "Social Forestry" (S.F.P.) The NCA realized at this stage that the country could not depend for forest produce on traditional forests only and that extending forest activity outside the forest areas was imperative. They therefore, dealt with social forestry in great detail and recommended that the social functions of forests would be to meet a) agricultural timber b) grazing and grass and c) recreational needs of the community. It was also laid down that the principle objective of SFP "was to make it possible to meet the needs of various forest products, specially agricultural small timber and fuel wood, from accessible areas and thereby lighten the burden on production forestry, which as classified, was meant to be practiced in the traditional forests for production of raw material for industries and other national needs" (Bachkhheti, 1984: p. 2). The social needs were to be met by farm forestry, extention forestry and by rehabilitating degraded forests.

The Commission also indicated specific areas where it could be practiced. These are recognized as the following:

1. Creation of wood lots in the village commonlands, government wastelands and panchayat lands.
2. Planting of trees on road cannal and railside.
3. Afforestation of degraded government forests near habitation.
4. Planting of trees around agricultural fields, hedges, bunds.
5. The area available under different categories for plantation of this type as worked out by fuel wood study committee of the Planning Commission (1982) are as follow:

i) Barren and waste = 12 m. ha.
ii) Road and canal and railsides = 9, 02, 000 ha.
iii) Degraded forests = 10 m. ha.
iv) Agricultural lands = 143 m. ha.
v) Strip plantation = 3 m. ha.

The national forest policy of 1952 recommended growth of trees in deteriorated areas and investment was made right from first plan onwards during the five year plans, but since fifth five year plan (1974-79) there has been a substantial increase in the rate of planting. This coincides with the international agencies entering India to pursue social forestry programmes. This point must be noted. The progress in states of Gujarat, Karnataka, Rajasthan and Tamil Nadu, was striking and these states were also those adopted by these international agencies in India during that time. The central assistance to states and subsidy provided, has resulted in many farmers getting interested "in planting trees in their agricultural fields, marginal lands, compounds, hedges, shelter belts and small wood lots" (Bachkheti, 1986: p. 26).

An important step was taken during 1979-80 and the sixth plan period was the formulation and implementation of the social forestry schemes through foreign aid agencies like the World Bank (Uttar Pradesh and Gujarat, 1979-80, West Bengal 1981, Jammu and Kashmir 1982 and Haryana, 1982); Swedish International Development

Authority (SIDA) (Tamil Nadu 1981); United States Agency for International development (USAID) (Madhya Pradesh 1981 and Maharashtra 1982); Canadian International Development Authority (CIDA) (Andhra Pradesh); Danish International Development Authority (DANIDA) and ODA (Overseas Development Authority of U.K. (Karnataka). It would be seen that the World Bank is involved in many states.

The desirability of obtaining foreign assistance on an extensive scale for a programme like social forestry which involves neither foreign expertise nor foreign exchange has often been questioned. Foreign agencies provide aid upto 50 to 70% of the estimated expenditure. Also due to foreign agencies it is easier to arrange for training of personnel at various international institutes and participation in seminars and workshop etc. This apparantly helps international culture. Practical monitoring and evaluation systems have been developed to take timely corrective measures where needed.

This is very much in line with the country's new forest policy that gives priority to export oriented production of timber and soft wood. The consequences of this are not very difficult to perceive.

SOCIAL FORESTRY PROGRAMME (SFP) CRITICISM

Recent studies have revealed sharp divergence between officially proclaimed aims of SF and its actual operation. SFP has been used by rich farmers to plant eucalyptus (Citizen's Report II, 1985) used as raw material by the paper industry, on a large scale. Eucalyptus can fetch upto Rs. 8000 per hectare, and is therefore grown in place of inferior cereals usually consumed by the poor. It also reduces labour demand.

Forest Department has also encouraged planting of exotic species through free-seedling distribution, neglecting those trees which fulfil basic needs of fuel fodder and food. Finally, the community orientation has changed to suit individual needs of rich farmers and paper mills.

There are strong indications that SFP have been launched under a popularist guise to meet the demands of industries. The trees propagated have established uses for paper industries.

Thus, the main criticisms against social forestry cannot be refuted. The three pronged criticism against social forestry is 1) the choice of tree species; 2) the wisdom of mono culture and 3) the actual beneficiaries.

The Citizens Report (1985) has adequately pointed out the effect of SF on the rural regions of India. "Social forestry" is a term used by the national commission on agriculture to denote tree raising programmes to supply firewood, fodder, small timber and minor forest produce for rural populations. It is the most controversial initiative of the government of India. The wood produced from the SF programme is ending in urban and industrial India, instead of poor, rural India. This has resulted in reduction of rural employment and land under food production, and has increased absentee landlords.

The increased amounts of capital (both state and foreign) that is poured into this programme is amazing. In spite of this the community woodlots have failed to achieve their aims due to four main reasons: 1) heterogenous village communities; 2) mistrust of the system for ensuring equitable distribution; 3) disputes among farmers for the establishment of wood lots; and 4) shortage of funds with village Panchayats for labour and protection of plantations (NIRD 1982).

As against this the targest for private plantations are often overshot and show great success. In Gujarat alone 10,000 farmers have shifted irrigated prime agricultural land to farm forestry. Farm forestry requires less labour as against agriculture. This seems to promote an alliance between land owners and industry. Thus, at practical levels, the laudable aims with which SF started in India, do not seem to side with the marginal groups of rural India.

IMPLICATIONS OF SOCIAL FORESTRY PROGRAMME "SUCCESS"

If this trend in social forestry continues, the

implications are not very difficult to comprehend. The logic of capitalist development has resulted in the present situation. For hinterland the lack of power ensures extraction of the regional economic surplus and the inability to fuel its own development. The eventual consequence of staple led growth rooted in dependency is decline.The drawing of capital by distant cooperatives results in poor resource husbandry and depletion of natural resources, as is evident in case of Eucalyptus Controversy (Citizen's Report I). The additional investment in hinterlands is guided by economics of harvesting efficiency. The present boom in international capital investment in social forestry becomes significant. Once the competitive advantage is lost or resource exhausted, the economic viability of the region declines. In the present case in India the competitive advantage of Eucalyptus plantation is fast on the decline. Farmers who had planted these trees on private land with the hope of earning atleast Rs. 450 a tree can now hope to get not even Rs. 50 per tree today. Those who had planted Eucalyptus on their farm lands with the hope of getting more economic returns than sugar cane (in Southern Maharashtra) are at present unable to find adequate market for their tree crops.

The under-development of hinterland is tied directly to, and is a consequence of, a relationship within the framework of advanced capitalism. It is therefore claimed that the under-development of the hinterland will not simply disappear, nor will the state policies of capital transfer assure eventual transformation to an advanced state of industrial capitalism. Rather, under-development is caused by capitalism itself, through its tendency to block the economic and cultural development of rural society, leaving it permanently isolated on the margin of the economic system.

Since the rural hinterland has no powers at decision making levels, they continue to be exploited. The introduction of social forestry programme has resulted in bringing the common property resources like village forests, road sides, river banks under state control. These resources had earlier supported marginal groups for their survival needs. With strip plantations, these groups have been denied access. The choice of trees and their ownership, on these lands, is controlled by the state through local elites.

The ecological, social, and economic implications of such a trend are obvious. Ecological dangers of promoting monoculture are well known. The social implications of this programme are detrimental to the marginal groups. They will be denied their ultimate refuge for survival. Finally, linking the fate of rural hinterland economy with international market fluctuations, would further ensure extraction of economic surplus. Leaving the land, the environment, and the people worse off; this is the end to which today's social forestry programme seems to be heading.

CASE STUDY

In order to substantiate the approach discussed so far, the social forestry programme in Maharashtra is taken as a case in point. The aim of social forestry programme in Maharashtra is the same as that proposed by the Indian Government, namely to provide fuel, fodder, fruit, and small timber needs of rural poor. In Maharashtra a separate Horticulture and Social Forestry wing was set up by the forest department to oversee the social forestry programme. It has increased its 6th and 7th five year plan outlays and linked IRDE and NREP programmes to provide adequate manpower for its implementation. In October 1982, USAID provided funds for this programme to spent over next eight years. (Memograph, Midterm evaluation Report 1986). The purpose of this eight year project (October 1982-September 1990) is to develop the institutional capability of the government of Maharashtra's Horticulture and Social Forestry department (H&SFD) to assist villagers to manage their community and forest lands for increased and sustained production of forest products. The project hopes to achieve this through a demonstration effect. The principal programme thrust is to establish a 10 hectare community plantation in each village, which can then demonstrate to villagers the benefits associated with sustained

social forestry activities. Thus these common land plantations were to act as demonstration effect to promote plantations of individual private lands, field boundaries and homesteads. The project authorized cost is $60 million of which USAID's contribution is $25 million loan and $5 million grant. Table 1 indicates the plan outlay upto 1985-86. Over the life of the project, this programme is to encompass all 27 administrative districts of Maharashtra and include 4,300 individual villages and approximately 6.5 million rural population.

Table 2 indicates the estimated available barren land that can be brought under this programme. The project achievements as stated in the mid-term evaluation report (Memograph, 1987) are as follows: community and private tree planting activities have achieved or exceeded the proposed targets (Table 3). "Targets associated with the seedling distribution activities have been annually achieved and are being increasingly exceeded. Individual villagers are now approaching H&SFD and requesting that they may be included in community plantation programme. The demand for tree seedlings for planting on private individual's land holdings now is exceeding the supply" (Memograph 1987: p.2). One point needs to be noted in table 3 here, namely the achievements of actual plantations on private lands as against those achieved by block plantations on village common lands, have always exceeded the given targets.

Given this background let us see if a dependency relationship exists in this overtly 'successful' programme in Maharashtra. In order to establish this, we will have to first see if the classical symptoms of such a core-periphery dependency relationship can be identified here. If these

Table 1: Maharashtra state social forestry related programmes and their outlays by year

Name of Scheme	*1982-83*	*1983-84*	*1984-85*	*1985-86*
STATE SPONSORED SCHEMES:			... (00,000 Rupees)	
Central Nurseries	53.0[a]	40.5[b]	8.0[c]	4.5[c]
School/community nurseries	-	15.0	32.0[c]	10.0[c]
Tree for a child	25.4[a]	26.4[b]	2.0[c]	10.0[c]
Roadside/canalside plantation	350.4[a]	-	4.9[c]	4.3[c]
Employment Guarantee	-	-	119.2[c]	67.3[c]
Vanmahotsava ("Forest Festival)	-	-	20.0[c]	22.0[c]
CENTRALLY SPONSORED SCHEMES:				
Massive fruit/fuel trees for small/marginal farmers	-	-	56.0[c]	79.1[c]
Rural fuelwood plantation	32.4[a]	50.0[a]	84.6[c]	51.4[c]
Western Ghats development program	-	-	19.0[c]	16.1[c]
National rural area program	-	-	4.5[c]	22.8[c]
Drought prone employment program	-	-	471.9[c]	730.0[c]
Integrated rural energy program	-	-	6.3[c]	
Rural landless employment guarantee scheme	-	-	182.4[c]	
STATE AND CENTRAL SCHEMES	461.2	131.9	1010.8	1017.5
Maharashtra Social Forestry Project	102.4[a]	656.2[a]	800.0[b]	843.1[b]
GRAND TOTAL	563.6	788.1	1810.8	1860.6

Note: a) Figures from GOM., Planning Department, Annual Plan 1984-85, Part Two.
b) Figures from GOM, Planning Department, Seventh Five Year Plan, 1985-90 and Annual Plan, 1984-85, Part two.
c) Figures supplied by Maharashtra Social Forestry Department, Pune.

Table 2a: Available barren land in Maharashtra (ha.)

Total Geographical area by village paper (Total area in hectares)	*Not Available for cultivation Total*	*Other Uncultivated land excluding pastures/village forest/cultivable waste Total*	*Fallow Land Total*	*Gross cropped area*
3,07,583	27,209	27,546	16,574	2,33,859

Source: Statistical Abstract (1981-82) of directorate of Economics and Statistics, Maharashtra, Bombay 1983

Table 2b: Area under S.F.P. in Maharashtra

Year	*Village/Road-sides Ha. area*	*Village/Common lands Ha. area*	*Western Ghat Development Program private foods*
1982-83	303/3755.67	55/1091.25	
1983-84	540/5658.81	193/1725.80	
1984-85	810/12428.70	87/936.76	
1985-86	810/19623.96	26/245.00	
1986-87	1080/21888.94	1640/5361.36	99/408
1987-88	1061/16064.24	95/933.50	109/465

Source: Memograph 1987
Total villages covered by Area in Hectares

symptoms can be identified, one can conclude that a dependency relationship exists. The five major symptoms of such a core-periphery dependency are as follows:

a) an over reliance upon primary resource extraction.
b) importation of technology and skilled personnel.
c) high rate of exploitation of locally produced raw material
d) little or no processing of indigenous raw materials or lack of secondary industrial development.
e) boom and burst prosperity influenced by international/national markets leading to disadvantageous trade balance for the periphery.

The uniqueness of a renewable resource like wood, is that one needs to motivate humans to create it. Only after it is created can it be extracted. Thus, an effort was made to generate and extract the primary resource *i.e.*, wood, from the villages. The goal of Maharashtra Social Forestry Program was to reach 6.5 million rural inhabitants in 43000 project villages. The 10 hectare community plantation in each village was to be used by the extension officers to motivate individuals. The bait was, if each one planted 1500 seedlings of Eucalyptus on 1 acre of land they would be able to make profits equal to 1 acre of sugar cane plantation output, at the then existing price of Rs. 450/- per 25 feet of Eucalyptus pole. The advantages of this plantation of Eucalyptus were that it required no additional water or fertilizer, and lesser labour inputs. The progressive farmers fell for it very promptly. They were also the farmers who had excess fallow lands, lying vacant. The production of Eucalyptus was emphasized.

This was mainly because the demonstration plantations community plots were developed by

Table 3: Physical Targets and Achievement by Year

Activity	*1982-83*		*1983-84*		*1984-85*		*1985-86*	
	Target	*Actual*	*Target*	*Actual*	*Target*	*Actual*	*Target*	*Actual*
				(Number)				
Villages	540	540	800	810	800	810	2,140	2,160
				(Hectares)				
Plantations								
Block	2,355	2,639	5,730	5,441	6,950	6,643	15,035	14,723
Private	2,355	2,517	5,730	5,918	6,950	12,273	15,035	20,708
Watershed	40	16	90	63	110	50	240	129
Strip	200	461	500	678	590	552	1,290	1,691
Scheduled Castes/ Tribes	50	26	350	329	400	482	800	837
TOTAL	5,000	5,659	12,400	12,429	15,000	20,000	32,400	38,088

Target: Project paper target
Actual: Actual Achievement as reported by H&SFD

the horticulture and social forestry department. The forest department nurseries were initially relied upon by the plantations. The available suppling with it were mainly Eucalyptus and Australian Acacia. The secondary aim of the plantations were to provide the local village council of Grampanchayat with a source of income at the end of six years, when the plantations were to be handed over. The H&SF department personnel stated that only Eucalyptus poles grow to that size of marketability at the end of six years. Separate social forestry nurseries were subsequently developed and employment was generated for its activities, like filling of plastic bags, watering and weeding etc. These nurseries too initially grew Acacia, Eucalyptus and Subabul sapplings which were provided at a subsidy of thirty paise per plant.

The early adopters who followed the demonstration plantations have also planted Eucalyptus and Acacia trees on their barrem lands. This has given rise to some absentee landloards. They have leased their Acasia plantations to Motels and Hotels along road sides for commercial use.

Thus, a need for external technology and skilled personnel, conversant with nursery activities was created. It is only recently, *i.e.* since 1988, that fruit trees like mango tamarind, *jamun and amla*, were grown in these social forestry nurseries. But the paradox is, these local fruit trees can be easily grown in back yards by farmers without much effort. Therefore, they do not have much of a market i.e. no one is ready to pay money to buy them. Therefore, even now the H&SF personnel continue to grow proportionately more Eucalyptus, Casurina, and Acacia saplings which have commercial value and are in demand.

If the main aim of the social forestry programme was to provide firewood, fodder, fruit, and small timber, then local species that are used for this purpose must be promoted. Namely *Babul* for firewood, local fruit trees like Mango, Tamarind, Jackfruit and Guava for fruit and small timber, and Baniyan, Pipal, and *Jamun* for fodder. But, if these trees are promoted, the setting up of H&SFD's permanent and professional personnel numbering 1600, including 800 field extension officers and local motivators (Memograph, 1987) would be redundant. These technical experts and skilled personnel are required only if the renewable resource is catered for a 'high rate of exportation of locally produced raw materials' (Warriner, 1988). This is obviously the target group for promoting fast growing soft wood species. These species are useful for small and large scale forest based industries, like wood furniture, paper pulp, and construction activities (Jain, 1989).

Given the infrastructure of nurseries and technically trained personnel, the project has completely ignored the setting up of any processing units or marketing facilities for this raw material of Eucalyptus, Acacia and Casurina poles. No back-up secondary industrial development for processing of raw materials is envisaged in the project. Is one to assume that the project did not foresee at least 20,000 (saplings) x 4,300 (villages) or 43,000 (hectares of common lands) x 2,000 (saplings) = number of trees produced at the end of six years? But no provision or mention for processing unit was made in the project.

Therefore, in the absence of any marketing and processing unit, the product had to be marketed to nearby urban centers by individual growers. These centers are Kolhapur, Aurangabad, Nasik, Akola, and Nagpur and the retail prices currently prevailing are given in table 4. The current price of Eucalyptus pole for example, ranges from Rs. 150/- to .25. per 25 feet of pole as against the earlier promised price of Rs. 450/- for promoting these plantations. This is typical of a boom and bust prosperity influenced by national market forces beyond the local control. Especially in the absence of organized societies by individuals and absence of indigenous processing units, it has definitely led to disadvantageous trade balance for the farmers in the periphery. The current slump is attributed to excess production of Eucalyptus nationally. Thus we can conclude that a dependency relationship exists in S.F.F. of Maharashtra.

In addition to these typical symptoms of an exploitative "core-periphery" relationship indicated by Maharashtra Social Forestry programme, the other problems created but not covered under these symptoms are as follows.

The USAID project is a loan given to Maharashtra which would have to be repaid some time. Besides, the individual farmers who had invested in plantations on barren lands are not able to recover the input of labour and money invested. Though they may not be owing debts, because they were mainly large farmers, these plantations have definitely cut into their profits. Thus, by keeping their lands fallow they would at least not have to incur losses. In case of panchayats, the story is no different since they have to pay for the employment generated in plantations on common lands, and with no profits in view, some have even refused to take-over these plantations.

Besides these, the ecological cost of promoting monoculture is a much talked of subject but outside the scope of this paper. Thus, it can be conclusively stated that the USAID funded social forestry programme in Maharashtra at least, clearly validates the dependency approach stated above.

CONCLUSION

Thus, to conclude, viewed from the dependency perspective, as substantiated by the example quoted from Maharashtra, the trend of social forestry and forests in India indicates a bleak future. This doom is certain, unless the state is ready to re-orient its priorities. The shift in policy will have to be in favour of the needs of rural marginal groups and in favour of forests as complete/co-operative ecosystems; If the present dependency relationship continues, it will ensure further economic marginalization of rural people, and ecological degradation of Indian forests.

REFERENCES

Bachkheti, N.D. : *Social Forestry in India, Problems and Prospects.* Radiant Publishers, New Delhi (1984).

Citizens Report-I: *The State of India's Environment.* Centre for Science and Environment, New Delhi (1982).

Citizen's Report-II : *The State of India's Environment,* 1984-85, Centre for Science and Environment, New Delhi (1985).

Bernstein Henry (Ed.) : *Underdevelopment and Development in the Third World Today.* Free Press, (1978).

Bulbus Isaac : *Marxism Hegemony and Domination,* Pergemen Press, New York (1982).

Fabian, J.: *Time and the other: How Anthropology Makes its Object,* Columbia University Press, New York (1983).

Giddens, Anthony : *A contemporary Critique of Historical Materialism.* The Macmillan Press (1981).

Guha, Ramachandra : Forestry in British and Post-British India: An Historical Analysis, *Economic and Political Weekly, Vol. XVIII: 44 I & II Parts.* pp. 1982-1986-I pp. 1940-1946-II. (1983).

Headland T.N. and Reid A. Lawerence: Hunter Gathers and their Neighbours from Prehistory to the Present Anthropology, 30,1, pp. 43-51 (1989 Feb.).

Jain A.K. : *Forest Economy of India,* Vohra Publication Allahabad (1989).

Memograph : *Mid Term Evaluation Report, Maharashtra Social Forestry Project No. 386-478,* September 16 to October 10, 1985 (1987).

NIRD Workshop Proceedings : Rural Social Forestry 5-7 August 1982. (Jan 1983).

Rappaport R.A.: The flow of Energy in an Agricultural Society, *Scientific American, 24:* 117-132 (1971)

Report: *Government of Karnataka Forest Policy,* Economic and Planning Council of Karnataka. (1983 Sept).

Stepleden, S. George: Human Ecology, in Robert Weller: *India's Export Potential of Wood and Wood Products Vol. I.* New Delhi (1956).

Warriner G.K.: Common property rights and region subordination in staples economy, *CRSA 24:* 4 (1988).

Wobst H.M.: The archeoethnology of hunter gatherers or the tyranny of the Ethnographic record in Archeology. *American Antiquity, 43:* 303-309 (1978).