

Forest Exploitation: Patterns and Processes

MADHAV GADGIL

Centre for Ecological Studies, Indian Institute of Science, Bangalore 560 012, India

The Indian subcontinent would support forest vegetation over most of its and under climax conditions. Such vegetation undoubtedly covered the country till the introduction of agriculture and pastoralism some 7,000 years ago, since the human populations that had been in existence in India for 200,000 or more years before this period had relatively limited demands on the forest resources. It is also very likely that they observed a variety of traditions of conservative use of the forest resources within their territories. The agricultural-pastoral populations depend primarily on utilization of grasses and would strive to replace large stretches of forests with grasslands and crop fields. The resultant conflicts find their reflection in the classical literature of ancient India. With the gradual saturation of the Indian subcontinent by agricultural-pastoral people a new equilibrium was reached. Substantial populations of settled and nomadic hunter-gatherers continued to exist in tracts unsuitable for cultivation. The rural society also remained heavily dependent on the resources of forest and grazing lands. This was a society in which power was highly decentralised, with the local communities having considerable autonomy. As the local demands were limited in quantity but varied in quality the multispecies forest resources were exploited by the local communities in a sustainable fashion. These communities regulated the use of

forest resources through the idiom of religious beliefs and customary practices. The state had limited interest in forest resources primarily for building ships and in the trade of articles such as spices and ivory. By and large the forest resources continued to be utilised in a conservative fashion in a land where a rich mosaic of vegetation cover was maintained.

The British conquest dramatically altered this picture. With the advent of capitalism, Europe had developed an unsatiable demand for a variety of resources including timber. The oak forests of Great Britain were all gone and the British now needed enormous quantities of teak to maintain their naval superiority. Under British rule, therefore, the forest resources were dedicated above all to these imperial needs. With the concentration of the power in the imperial authority, land was managed essentially so as to maximise land revenue from cultivated lands and production of timber from the forest lands. The British, therefore, derecognised all rights of local communities to manage their own forest resources and took these over as Government lands. These were divided into two categories, the reserve forests which were devoted to meeting the imperial needs and the protected forests in which villagers were permitted to exercise certain privileges. The reserve forests were systematically sought to be converted into monocultures of a limited number of species as teak and deodar.

*Abstract of the Twenty eighth Prof S P. Aghatkar Memorial Lecture delivered on November 18, 1988 at the M.A.C.S. Research Institute, Pune.

While the reserved forests were supposedly being managed on a scientific basis for sustainable yields; in reality there was totally insufficient data base to do so. The protected forests from which all rights of local communities were extinguished became open access resources which were rapidly degraded. The forest exploitation was particularly heavy during the two world wars. However, since the Indian industry remained stunted during the British period there was limited demand other than that for timber and railway sleepers.

Major changes naturally followed independence. The power which was centralised under the British once again became diffused. It was, however, never handed back to the local communities which had broken down under the British rule. In politics of individual States, votes of agriculturists were important. The money power of the newly emerging industry was much more important for the Central politics, although it also played a significant role in the States. There was therefore an initial spur of release of forest land for agriculture by the State Governments till the Centre checked it through the forest conservation act of 1980. The states also abolished grazing fees. The industrial influence, however, gradually gained ground and has reigned supreme since 1955. Over this period the forest based industry has grown rapidly far outstripping the carrying capacity of the resources base. The forest resources have been made available to the industry at highly subsidised rates so that the industry has brought little forest revenue for the government. In the process of dedicating the forests to fulfillment of industrial needs the subsistence needs of the village populations have been

totally ignored. As a result, a diversity of important resources of minor forest produce ranging from wild mangoes and honey to bamboo and cane have been wiped out. The conservation of watersheds has been thoroughly neglected as clearfelling has crept up steeper and steeper slopes. There has also been a rapid decimation of genetic diversity.

As the plans for exploitation of forest resources have been driven by rapidly exploding industrial demand in the absence of any scientific data on the forest ecosystems, the forest resources have been greatly over-exploited. As a result, more and more species of lower and lower girth and from less and less accessible areas have been continually exploited. There has been little adherence to any silvicultural prescriptions; which in any case had little genuine scientific basis.

Initially the industry depended on tapping the natural forest. As their production plummeted, larger and larger areas were taken up for clearfelling. The monocultural plantations of Eucalyptus and other species thus raised in the 1960's and 70's have, however, failed to perform as expected. The industry is therefore now increasingly turning to production on farm lands or on erstwhile village common lands, or its import from other countries. This crisis has also directed attention to the biomass needs of the village populations which had been totally neglected so far. We are thus at cross-roads where important choices need to be made on how to utilise the land and forest resources of the country to meet the whole range of competing demands of the village populations as well as the industry.