Chapter Two

MODES OF FOREST USE AND SUBSISTENCE :

The previous chapter has shown that cultivation practices form an intrinsic part of a forest economy. However the forest also houses other activities that make up the dhaiya subsistence system. The nature of inter-linkages between various activities has been elaborated in the last chapter. Here an attempt is made to study the nature of hunting and gathering activities of 'peasant' and adivasi communities. The term 'peasants' refers to communities which lived in predominantly sedentary cultivation economies and were primarily engaged in agricultural activities. This does not preclude the possibility of peasant agriculturists pursuing other activities as the occasion demanded. The peasants of the Central Provinces often produced lac and sold fire wood to supplement their income. They also depended on graziers and local 'craftsmen' for necessities of everyday life like the welfare of their cattle, clothes, and implements. Thus a peasant economy included other subsistence groups like craftsmen and graziers. The subsistence activities of all these communities involved the use of forests in one form or another. In this sense the forest was a meeting place of the interests of diverse groups which articulated themselves contextually.

The relationship between the adivasis and other communities which used the forest demonstrates the interface between agriculture and forests which has been elaborated in the study of bewar cultivation. There are two dimensions to this relationship : a) the correlation between the regeneration of the forest and the enriching of the soil base in bewar; and b) the dependence of the adivasi on products from hunting-gathering during some part of the agricultural year. The times of 'scarcity' and 'famine' were determined not only by the failure of the crop but by the dearth of food substitutes that these forests provided. Olphert's report on

1 This has been considered in the last chapter.
the Jabalpur scarcity of 1868-69 explicated this point. He showed that the "poorer population" of the division (comprising mainly Gonds and Baigas) suffered no starvation as they depended upon 'jungle' fruits. In some parts of Jabalpur district the effects of drought came to the fore because of the drying up of trees. In Seoni and Balaghat its effects were almost nil because the forests were unusually productive in produce like harra, mahua and chironji. Orphels marveled that the forest had provided Gonds and Baigas an "independent stature" in periods when the rest of the population was fighting 'famine' and 'scarcity'. Thus the forests provided a support base for an agricultural economy.

The second interface this chapter is concerned with is between forest and industry. With the investment of capital by European firms into forest-based industries (from the 1870s onwards), a transformation took place in the subsistence activities of the craftsmen. In some cases, like lac and tan, the British made a determined effort to incorporate the process of crafts production into a broader global economy. In other cases the need to increase the productivity of existing craftsmen like the Agaria was also felt. The impact of these processes on the relationships between the craftsmen and the forest communities determined the changes in the survival strategies of adivasi and non-adivasi people.

Thematically, this chapter is divided into four parts. The first part analyzes the official perceptions of forest produce and the changes in the categories used to describe this produce between 1860-1920. Secondly, the chapter considers the nature of hunting and gathering activities amongst different forest and peasant communities. In the third part the nature of forest control, and its effect on hunting and gathering activities are described. It also shows the effect of 'scientific

2 Report of Famines and Scarcity in the Central Provinces and Berar, 1877-78, Calcutta, pp.44-56. These pages are on the past history of famines.
forestry' on the seasonal rhythm of *dhaiya* activities. The last part of this chapter concentrates on the interface between forests and industry and its impact on the livelihood of craftsmen and forest dwellers.

**Forest Produce and the Official Mind:**

In colonial documents forest products have been classified into 'major forest products' and 'minor forest products'. The criteria of classification were based on the method of extraction of the product and its commercial value. These factors helped the colonial government to test the economic viability of each product.

Timber and fuel were classified as 'major forest products'. The demand for these products extended beyond the frontiers of the local and provincial markets. In the late 19th century sal and teak timber were exported for railway and construction works and were therefore considered the most important 'major' forest products. In the 20th century the tree types under this classification increased considerably. In the case of fuel the nature of demands and markets was more difficult to identify. Fuel was used for domestic purposes and industry. The main industrial demand for fuel came from the mining sector. The local people used fuel for cooking, selling to the local markets and for their furnaces. For this reason any effort to control fuel had to take the interests of local people into account.

In official classification, terms like 'good fuel' and 'bad fuel' were used to distinguish commercial from local interests. It is significant that fuel (like sal and oak), which is used by industrial houses and mining works was categorized as 'good fuel' because it had a commercially viable market. The Secretary to the Chief Commissioner felt that an infrastructure for mining (especially railways) should be developed so that mining in coal and iron ore could start instantly. The first
geological explorations took place in Chanda between 1867-70. This was mainly because labour was cheap and minerals were abundant. While determined efforts were made to encourage enterprises that used 'good fuels', this was not true in the case of 'bad fuels'. It will be seen later in this chapter that the attempts to derive revenue from 'bad fuels' were made only after the 1890s.

'Good fuel' comprised wood which was easily combustible and could be converted to charcoal. There were three properties of 'good fuel'. First, the moisture of the wood should evaporate with burning. Since evaporation consumed heat, dry wood was considered good fuel. Second, 'good fuel' contained volatile materials which, when vaporized, caused the flame of the fire as it burned. A poorly laid fire may consume all the heat and its resinous vapours blacked utensils over the open fire. Third, the basic cell-wall of the bark glowed and no flame appeared while burning. This conserved the heating power of the wood. Therefore dense wood had a greater heating power. The types of wood that served as 'good fuel' were: sal, babul, sisoo, oak, teak and jaman amongst others. According to this classification, 'bad fuels' were wood from salai (used by the Agaria), chir, kusum (used by the dyers) mahua and palas.

The term 'minor forest products' was used for forest produce that was rarely exported out of the region. The demand for these products came primarily from the local market. They were used both by peasants and adivasis for different purposes. They included produce like resins, gums and oils which were obtained from within the trunks of sal, saj, acacia and other locally important trees. Produce which was either nurtured on the tree like lac and tussar silk, or formed a part of the tree like

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3 CPSR Commerce and Industry Department, Compilation No: 51(D) of 1870.
4 Forest Research Institute, Indian Forest Utilization, (Volume 2, 1972, Deh:adun), pp.433-34.
mahua flowers, tendu leaves and kandas was classed as 'minor forest produce'. Grasses and seeds were also included in this category.

The nature of use and extraction of the 'minor produce' depended upon the type of forest and the communities that inhabited a particular area. Consequently any plan for the development of the market of such produce had to take into account the habits and needs of the local people (as can be seen later in this chapter). Till the last decade of the 19th century, few efforts were made to control and develop a market for 'minor' products other than lac and tans. The first official survey of resin trees was carried out as late as 1912. This survey was significant because it came on the heels of the international demand for tans. The main objective of this survey was to identify the trees whose resins could be used for industrial purposes. Table 2.1 shows the places where such trees could be found:

**TABLE 2.1 : THE RESIN TYPES AND THEIR LOCATION IN THE CENTRAL PROVINCES, 1912-13 :**

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>SPECIES</th>
<th>NAME OF FOREST</th>
<th>NUMBER OF TREES TAPPED/ PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANDLA</td>
<td>SAL</td>
<td>BANJAR, MOTINALA, DINDORI</td>
<td>BANJAR-600 MOTINALA-1500 DINDORI-500</td>
</tr>
<tr>
<td>JABALPUR</td>
<td>SAL</td>
<td>TRACT OF SHANDOL</td>
<td>NONE SO FAR</td>
</tr>
<tr>
<td>NARSINGPUR</td>
<td>SAL</td>
<td>KHAI RANGE</td>
<td>ONLY 300 TREES EXIST</td>
</tr>
<tr>
<td>HOSHANGABAD</td>
<td>SAL</td>
<td>OCCURS IN INACCESSIBLE PATCHES OF PANCHMARHI</td>
<td>LOCAL USE</td>
</tr>
<tr>
<td>MANDLA</td>
<td>SAJ</td>
<td>SCATTERED</td>
<td>NOT TOUCHED EXCEPT FOR PEASANT CONSUMPTION</td>
</tr>
<tr>
<td>HOSHANGABAD</td>
<td>SAJ</td>
<td>HOSHANGABAD RANGE, MALINI BLOCK, SOMAGPUR</td>
<td>PLENTIFUL IN BORI RANGE IN MALINI BLOCK (GOVT. WORKS)</td>
</tr>
<tr>
<td>CHHINDWARA</td>
<td>SAJ</td>
<td>SILEWAHI, AMBARA AND SANU RANGES</td>
<td>LOCAL CONSUMPTION</td>
</tr>
<tr>
<td>RAIPUR</td>
<td>SAL</td>
<td>N&amp;S SIWAHA, SINGPUR AND LONI</td>
<td>2000 TREES TAPPED 30000 POTENTIAL TAPPING</td>
</tr>
<tr>
<td>BALAGHAT</td>
<td>SAL</td>
<td>BAIHAR TRACT ADJOINING BANJAR IN MANDLA</td>
<td>LOCAL CONSUMPTION</td>
</tr>
<tr>
<td>S.CHANDA</td>
<td>SALAI</td>
<td>VERY COMMON</td>
<td>LOCAL USE</td>
</tr>
</tbody>
</table>

(Source: CPSR Commerce Department, case file No : 3, 1912-13, pp.11-15)
Table 2.1 shows that the survey identified only three types of resins that were useful for industrial purposes: sal, saj and salai. Of these, sal was most commonly found in almost all forest divisions. *Ral*, the resin of sal was used by the peasants, *adivasis* and business firms. It was one of the most important tanning resins in the Province. It was used by Chamars and European firms to tan leather. For the forest communities it was an important component of the medicine used to treat skin disease. Its roots were used in times of famine as food and its gums used in several medicines. Its seeds were sold in the market and its branches used as fuelwood to make charcoal. Commercially too, sal timber was valuable for railway sleepers. Like sal, the other species shown in the table could be utilized in many ways. *Salai* was used to cure nervous disease. The Agarias used *salai* charcoals for furnaces. The *salai*, sal and acacia were also used to breed lac cocoons.\(^5\)

Besides these species, some products were important for subsistence, but had little commercial importance. For example the mahua tree was of religious and social importance in an *adivasi* economy. Virtually every part of it was used for survival. The ritual importance of *mahua* liquor has been stressed in descriptions of ceremonies of marriage, birth and death. The *mahua* leaves were used to make plates for ritual feasts; the flowers were used as food in times of

\(^5\) *Ibid.*, p.403. The officials of post-independence India use the same classification as British documents.
famine; and tora oil was obtained from mahua seeds. Likewise products of the kusum, chir and other species, not mentioned in the table, were used in many ways by the adivasis.

The survey of 1912-13 only took into account those trees which were commercially important. The surveyors concentrated on areas which were easily accessible and had abundant trees of these species. Despite this the survey showed that the conceptual boundaries between 'major forest products' and 'minor forest products' were becoming quite obscure. The commercial criteria used to classify forest produce in the 19th century were no longer applicable. The working plans of different forest ranges showed this.

The working plans were a blue print for the management of the forests. They discussed the nature of the terrain and the resource base of a forest range in minute detail. Their purpose was to set out the economic objectives that could be achieved in a forest range within a limited time period. To this end they laid out the plans for the optimum use of natural resources in that forest range. In addition to this the working plan specified forest blocks that were to be closed for a particular season and others that which would be open for the extraction of produce and grazing. In short, the working plans controlled the extraction of produce and the movement of a 'law abiding' forest dweller within the forest.

Only one working plan can be traced before the second settlement of 1890, i.e. an 1875 working plan of Bijeragogarh forests (Hoshangabad district). In Bijeragogarh three forest tracts came under the perview of the plan: Khatoli, Manchmacha and

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Sutri. These were the best sal growing tracts of the Province. A. Smythies, the officer who made the plan wrote about the area:

The forest (sic) of this country are well known for having supplied sleepers for the Jubulpore branch of the East India Railway. They (the Inspector General and Conservator of forests) pronounced it on the whole very favourable for the growth of Sal as the principal tree.7

In the mid-19th century an important objective of forest works was to provide timber for railway sleepers. Sal was considered the best wood for this purpose. Its timber was "hard, very strong and durable, seasoning slowly". The physical condition and gregariousness of sal to all climates rendered it important that" it was abundantly available in tracts that can grow it".8

The control of sal epitomized the conflict between subsistence groups and the imperial government. The fight for sal began with restrictions over bewar and access to valuable forests soon after the formation of the Province. The aim was to regenerate sal so that the increased production of 'good' quality timber could meet the demands of railway and construction works. The Bijeragohar working plan consisted of five chapters all concerned with silvicultural operations. The first chapter dealt with the nature of forest growth; the second with the system of rotation, and the third with the hierarchical importance of these trees. The conditions of vegetation of trees were described in the fourth chapter, and the last chapter elaborated upon the method of preservation and silvicultural operations in the forest. The trees were classified as follows: a) Principal species - Sal, Bijasal and Saj; b) Auxiliary species - Tendo, Dhaora, Khair and Landeya; c) Accessory -

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7 Working Plan of Bjeragohar Forest Reserve, (hereafter Bjeragohar 1875), Part 1, 1875, Calcutta, p.4.
8 R. S. Troup, Silviculture of Indian trees, (Volume 1, 1913, London), p.56.
Rohan, Hardu, Tinsa, Mahua, Harra, and others; and d) Inferior - Salai, Palas, Achar and others.

The principal species were to form the basis of forest growth and regeneration. Foresters were to encourage the silviculture of these trees. Auxiliary species were to provide support to the first species, and the accessories were to fulfil the target out turns of the range. The inferior species were to be eradicated as soon as possible. Species, like mahua and salai, which were important for adivasi subsistence, were excluded from the blue print for regeneration. Sal was to be a principal species in the Bijeragogarh forest works. Therefore injury to the tree was not permitted and forest dwellers could not be tap it for resins. Nor were they allowed to pick its seeds. Since their access to the sal trees was confined to labour operations (if any), sal could no longer be used for subsistence purposes. Artificial silviculture by the control of seeds, shade and planting techniques formed the core of this plan.

The sole aim of the British foresters was tree regeneration for commercial purposes. Forests were seen as state owned lands with a growth of different types of trees. The conflict between forest communities and the state was thus expressed in the struggle to control the 'tree' of which sal was only one example. In this sense the 'tree' itself became a personification of a power relation between the colonial government and the adivasis. The question of access was important not only because of restriction over bewar or for fuel, but also for the reproduction of the adivasi disposition and world view that was essential for the survival of the community.

9 Bijeragogarh 1875, p.11. 10 Ibid., pp.16-17.
While the first plan aimed at establishing a system for the working of timber forests, there was a marked difference in the perspectives of the plans after the 1890s. This change was a component of wider change in imperial thinking. Inspector general Ribbentrop's report on the forest of the Central Provinces (1886) outlined the new policy:

The most important use of the forests is to cater to the public and private demand. The forests have to meet brisk local demand which requires protection in order to maintain continuity and supply.\textsuperscript{11}

The needs of the subject had become a concern of the government. What explains this shift in attitude? First, the government had penetrated into some of the most inaccessible regions in the hope of increasing its revenue in order to meet rising government expenditure. This led to the intensification of conflict between state and the \textit{adivasis}: the Baigas were refusing to comply with laws that imposed restrictions over \textit{bewar} and their access to sal forests. The refusal of the Baigas to give up \textit{bewar} and work in government plantations showed that it was necessary for the foresters to get the consent of the local population if their plans were to be successful. Secondly the nature of global demand had changed. Towards the end of the 19th century the world market for lac, bamboo and tans expanded leading to investments by European firms in 'minor' forests. The fulfilment of world market obligations, both in terms of products and increasing debts, led to greater contact and conflict between the capitalists and the \textit{adivasis}. Thirdly, many forest dwellers depended on small scale family industries like rope making, basket making and \textit{bidi} making for their subsistence. These crafts used 'minor' produce as their raw material. The control of 'minor forest produce' effected the livelihood of the local craftsmen. The state faced the problem of reconciling the demands of European

\textsuperscript{11} Government of India Records (National Archives of India), Department of Revenue and Agriculture, Forests, (hereafter ARF), Progs 'A', Number: 17, October 1886.
managing agencies and protecting the interests of artisan communities. In the 1870s the state failed to protect the subsistence of the lac jewellery makers. The fear that large scale deprivation would lead to protest and migration of the people forced the colonial government to think about the survival of artisan communities. The administrators felt that largescale migration from any one area would lead to a shortage of labour in the forests and increase the labour cost of timber and other forest works. In the 1890s the working plans made a distinction between 'timber forests' and 'revenue forests'. The plans for the timber forests were to concentrate on the regeneration of timber trees, but the plans for the revenue forests focused on managing resources for local use. These plans enquired into the geographical characteristics of the forest; its 'lines of communication' and accessibility, the nature of the population and their resource use patterns, the rates issued for extraction, and the methods for the maximum reproduction of forest use. Taking into account these the forest department would decide whether it was worth developing the tract as a 'timber' or 'revenue' forest. By the 1890's the classification had taken place:

**TABLE 2.2 : THE CLASSIFICATION OF FORESTS ACCORDING TO IMPERIAL OBJECTIVES :**

<table>
<thead>
<tr>
<th>FORESTS FOR TIMBER</th>
<th>FORESTS FOR REVENUE</th>
<th>FORESTS FOR TIMBER AND REVENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bijaragorh Forests, Jabalpur 1875.</td>
<td>Balod Forests, Raipur, 1897</td>
<td>Siwaha Forests, Raipur, 1899</td>
</tr>
<tr>
<td>Bori Forests, Hoshangabad, 1897.</td>
<td>Laun Forests, Raipur, 1899.</td>
<td></td>
</tr>
<tr>
<td>Allappilli Forests, Chanda, 1897.</td>
<td>Amarwara Forests, Chhindwara, 1897.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tringinala Forests, Chhindwara, 1897.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paraswada Forests, Balaghat, 1896.</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Working plans of various forests 1875-1900)
The classification of forests made above clearly shows that the number of revenue forests out numbered the timber forests. There were only two forest ranges that were used for both revenue and timber purposes. Let us take the example of one of these forests - Silwani-Ghat in Chhindwara district.12 This forest range comprised 122 sq.km. of government forest and includes 12 inhabited villages within its parameters. It had a metalled road that passes through its centre and the main markets were at Saunsar and Bicchea (which were also trading markets). Its location was on the alluvial soils of the Satpuras and had sandy-loam soil suitable for teak. It had a good teak growth in the valley. But it also had a good growth of tendu and khair which was used by the local population for breeding lac cocoons. By 1877 the government had to formulate rules to control its cultivation because of the rise demand for lac in the world market. In fact the European intrusion into lac production had made it one of the most important items of export by the 20th century. The case of lac showed that the interests of the capitalists, forest dwellers, and the imperial government could be complementry at times. While capitalist companies like Jardine and Skinner needed to use cheap labour to extract the maximum possible lac, for the forest dwellers of Chhattisgarh lac collecting was a common subsistence activity. The imperial government benefited either way. It got royalty from the firm which got the contract for trading in lac and it levied taxes on lac collection by individuals. Though it preferred to give the lac collecting contract to the firms, the forest communities possessed the required knowledge for breeding lac cocoons and were experts at the labour processes involved. In the second half of the 20th century they were to be used by the Colonial government for the departmental control of lac.13

13 CPSR, Forest Department, Compilation 50(6), 1875.
In this context the importance given to lac producing trees like *tendu* and *khair* in Silwani-Ghat proved significant for all interested groups within the forest. The forester had to think of all these interests while making the plan. The plan divided the forest into six circles: three for the regeneration of teak, one for grazing and two for the reproduction of produce used by the local villagers. The rates depended upon the type of population living in the forest. For 'natives' and residents the rates were lower than for non-residents and migrant population like the Banjaras.

By the 1930s it was quite clear that the main aim of the forest policy was to obtain maximum revenue from forest produce. A settlement officer was appointed for the forest areas to make a detailed assessment of the revenue potential of each forest division. Thereafter he was to suggest the best method for the management of local resources. Like the plans of the 1890s, the forest settlements of the 1930s had two objectives: a) to show the areas where capitalist investment could take place and b) to develop an 'efficient' system of resource management for meeting local demands. This showed that the government, through the exercise of its cogent and coercive power, was able to project the common interests (of the European companies, forest dwellers and imperial officials) as the collective aims of the British Empire. Perhaps it was this that helped it to survive in these areas. In this context the categories of 'major' and 'minor' forest produce became redundant.

**Hunting in the Central Provinces:**

The Baigas and the Marias were both hunter-gatherers and cultivators. For them hunting and was an important source of food. Hunting took place with three objectives: a) for a purely ritualistic purpose, b) to protect their lives and property and c) for food. The Baigas of the Chak were famous for their hunting skills. They killed peacocks or *mors*, jungle fowl or *bun moorg*, spur fowl or *chota bun moorg*, deer or *hiran*, partridge or *teetur* and other animals for their food. Within the
forests of Mandla numerous tigers, sambars and leopards were also found. Cocks and pigs or *sooar* were also of ritualistic importance.¹⁴

Of these animals the Baigas found the tiger hunt most enjoyable. The reason for this was quite obvious to the Baigas as they believed that they were the protectors of 'mother earth' and all those who lived on it. The Baigas loved to "play with danger" and were often seen wandering about in the densest part of the forest in a "carefree manner". Richard Temple noted that if a tiger killed somebody in a non-Baiga village, the Baigas were called in to deal with the situation. The Baiga went to the spot where the person has been killed, takes some of the blood stained mud in his mouth, and does an aggressive ritualistic dance to drive away the ghost of the dead person. The village which calls the Baiga pays him the necessary tribute for providing villagers a sense of security and protecting their village.¹⁵ The Baigas are thus perceived as having supernatural powers to ward off the dangers of "jungle life". The tiger hunt is significant because it provides some insights into the Baiga perception of forests.

The forest was seen as the home of both 'gods' (or those celestial beings that possessed sacred powers), and 'devils' (or those possessing harmful and evil powers). It was the home of Nanga Baiga and the source of the community's livelihood. But the Baigas were not oblivious to the dangers of forest life. The ritual hunt played an important part in conquering 'evil' spirits especially in times of epidemics. The fear of the forest and its dangers led to the Baigas propitiation of the god of the hunt, Maswasi. It was believed that gods like Raktipurbi, Alopurbi and others lived inside bows and arrows. The Baigas offered a coconut or a cock to Mawasi to ensure success on the hunt. This is

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¹⁴ Forsyth, *Highlands of Central India*. See chapter on Higher Narmada.
¹⁵ PNQ March 1884.
mainly because Baigas believed that these gods would bless them in their hunt and
turn all the "tigers and bears into stone" and "the thorns into wax" leaving only the
deer and birds that the Baiga sought to hunt.\footnote{16} This ceremony was performed
when the hunt was undertaken for food. It was assumed that gods acquired a
human form and function to protect the hunter from any danger to his life or
property; and the hunter was invincible as the personification of Nanga Baiga. The
\textit{mantras} recited by the Baigas during one of the hunt are described by Elwin as:

\begin{quote}
\textit{Saktiban, dhanuban, agniban, chirriban, bittaban, andriban, chakarban, sabdavediban!}
Who takes these arrows in hand? Nanga Baiga
takes them. Bhupipor Baiga, Bhupipor Baigin
come from Nanga Parbat and take them. O the
four quarters of earth, O the eighty four drivers
of game! Today Nanga Baiga goes forth to hunt.
Whether I kill a bear or tiger, sambar or chital, I
will give the blood and water from the eyes.\footnote{17}
\end{quote}

The hunters saw themselves as the reincarnation of Nanga Baiga; and hoped that
the Nanga Baiga would help them to defeat the 'evil forces'. Hunters also felt that
by the propiation of Mawasi they would be able kill the game that they needed for
food and ritual purposes. They claimed power both over natural things as well as
over the rest of the village population i.e. the women and the children. This power
was in turn dependent on the community's fear of the 'unknown' and the forest.
The Baiga hunters were respected in their own and other non-Baiga societies
because of their ability to protect these societies from impending dangers. Here it is
significant to note that the \textit{gaita} and the \textit{dewars} have hardly any role in the
hunting ritual. The power of protection is not endowed to selected individuals, but
to each man who saw himself as endowed with the powers to invoke the god in a
human form.

\footnote{16} Elwin, \textit{The Baiga}, p.85.
\footnote{17} Ibid.
Apart from protecting the society and propitiating gods, animals were also hunted for food. Elwin and Forsyth suggest that they were very fond of meat and went out hunting at any time of the year. But the temporal division of labour suggests that hunting probably took place twice a year. These months were Phagun and Chait i.e. just after harvesting and just before sowing or before the coming of the rains. This was true in the case of the Khonds and the Marias also. The Khond ritual hunt began on a full moon night (in Phagun) from the eastern direction when Khond men from one village got together and set out for the hunt within the boundaries set for each village. Men from each village were bound by community rules to respect the demarcation of hunting areas for each village. If the hunt crossed the boundary after being hit, the two villages split the hunt. Half of the hunted game was distributed in the village and the other half was kept by the hunter. In this way the village was paid its due for keeping the game within its boundaries, and individual skill and efforts were recognized. In the process notions of both individual and common property were affirmed.

The hunting implements used by the Baiga were made out of bamboos. They used bows, arrows, spears and traps. The Baiga spear consisted wholly of iron and was called sang. There was also another kind of spear which was made of bamboo, had an iron head and was called barchi. The bow was made of bamboo wood and the arrow of dhamin with bird feathers attached at its head. The head of the arrow was either of wood or of iron. The traps were of three types used to capture small

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18 Ibid., p.393. Also see Elwin, The Baiga, p.85.
19 Khond Notes, pp.94-95.
20 Much has been written in this regard by authors such as N. S. Jodha and others. 'Common property' has been distinguished from 'private property' in terms of communal ownership of land and equal access to resources. However studies such as Hunters-Gatherers edited by Ingold show that this access is governed by institutions of power and authority. Further this does not mean that 'individual property' can not exist within these systems. The construction of 'common property' thus seems to be a heuristic device to distinguish pre-capitalist systems from capitalist ones.
game such as hares and deer. They were made of bamboo and inserted in the fences of fields to guard them from animals. The Marias had similar kinds of implements. The ownership of these implements rested with the male members of the society. Every man had his own set of hunting implements. Their use was conditioned by the generational knowledge that a man got from his father in his youthful years. The functions of Baiga males were defined by their knowledge of the ways of guarding the society and using their hunting implements. The power of the men to control the material existence of women arose from this knowledge. In this sense the hunting process accentuated the power equations within the community and revealed the 'internal lines' that were prevalent in the Baiga society.

The social organization and the structure of authority linked hunting to bewar and revealed some significant distinctions and affinities. The hunting process aided the process of equalization within the male sex. This was seen in the marginalization of the pujari or gaita in the hunting rituals, while he was important in bewar rituals. Moreover the two activities differed in the formation of work groups. While the family was the most important unit of labour organization in bewar, hunting was both an individual and group activity. But male sexual authority was reaffirmed in times of hunting and at times of the ritual ceremonies like bidri and kaksar. This structure of authority acted as a link between hunting and bewar in the dhaiya subsistence system.

22 The term 'internal lines' is used by Mary Douglas in *Purity And Danger* (1966, New York), and denotes the social divisions which mark the political and social system of societies. These in turn are related to ritual authority and the control of power within the community.
Multiple Dimensions of Gathering Activities:

Gathering activities were undertaken by both peasant and forest communities. The significance of the produce, which has often been termed as 'minor produce', for community life was manifold: 1) for medicine and witchcraft; 2) for food and agricultural implements and 3) for dying, tanning and 'handicraft' industries (this will be considered independently in a section devoted to handicrafts). Gathering activities included the picking of flowers and other produce, tapping of trees and the cutting of wood.

**Medicine, sorcery and the forest**: The Baigas were considered expert medicine men and priests amongst all adivasi communities. The line drawn between medicine and sorcery was very thin and curing disease was often regarded as an important part of a sorcerer's craft. The forest dwellers often believed 'supernatural' phenomenon caused disease. In the 20th century the adoption of plough cultivation was seen as the root cause of all epidemics and disease. The Baigas felt that by "breaking the breasts of mother earth" they had dishonoured their chief goddess mati dharti, and therefore they fell ill. The British were seen as responsible for disease: they had compelled the Baigas to indulge in practices which had no sanction in their community life. Thus the Baigas saw an intimate connection between the "cure of disease and the pacification of spirits". An example of this is recorded in Sleeman's *Rambles and Recollections*. About the origins of the liver disease he says:

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23 The term 'witch' is used for a woman who possesses evil and supernatural powers. Her curses are meant to be the cause of diseases. The term 'sorcerer' is used for a man who possesses the power to ward of the curses and spells of 'witches'. He is also the medicine man in a Baiga society - a man who can control natural phenomenon. This distinction is not an absolute one. In some African societies some forms of sorcery are also considered 'evil'. For this point see Max Marwick ed., *Witchcraft and Sorcery*, (1970, Great Britain).

24 PNQ January 1884.
The evil spirits ate the livers, but they are set to do so by witches who get them into their power by accursed offerings and sacrifices....the belief in sorcery amongst these people owes its origin in a great measure to the disease of the liver and spleen to which natives particularly children are subject in the jungly parts of Central India....Men who practice medicine amongst them are commonly supposed to be at the same time wizards, seeking to aspire confidence in their prescriptions by repeating prayers and incantations over the patient or over the medicine they give him. They make him feel that he derives his aid from a supernatural power.25

Sorcerers or the gunia or dewar, as they were known in Baigani language, had two missions when they were summoned. They were required to diagnose and cure a disease and were also responsible for the preservation of adivasi communities. The other communities invited the Baigas to their village if an epidemic broke out. In order to cure diseases sorcerers required a knowledge of herbs, trees, plants and of mantras. The mantras were used to mollify spirits and gods that caused the disease.

Malinowski saw sorcery as an effective mechanism for the 'dramatic expression of emotion' which is born out of the sorcerer's personal experience. But other anthropologists suggest that sorcery is an effective tool for regulating social behavior.26 Both these views can hold true in the case of gunias of the Baiga society. The gunias socialized their sons (the rightful inheritors of the title) into thinking that they were different from the rest of the community, and therefore they had to experience things that were different from 'ordinary' Baiga youths. It was not uncommon to see them wandering about as if they were 'posessed by spirits'. Forsyth described the gunias as:

25 Sleeman, Rambles and Recollections, Volume 1, p.86.
26 For this point see B. Malinowski, 'Sorcery as Mimetic Representation' and Monica Hunter Wilson, 'Witch-Beliefs and Social Structure' in Marwick ed., Witchcraft and Sorcery.
The Byga medicine-man fully looks his character. He is tall, thin and cadaverous, abstraction and mystery residing in his hollow eyes. When wanted he has to be sent for to some distant haunt of gnomes and spirits, and comes with chants and simples slung in the hollow of a bottom gourd. A great necklace, fashioned with much kernels of forest fruits, marks his holy calling.27

Here it is important to note that an outsider may find gunia behavior 'abnormal'. But for the gunia the community code itself is different. Forsyth's construction of the gunia's character is quite significant as it tells us something about his social position. He was tall for he stood above the entire community as its preserver and protector. He was therefore held in great respect as well as fear. His cadaverous and ghost like appearance was a result of his conversant attitude towards witches and spirits.28 Thus the gunia's experience was given a social importance which was based on his knowledge of the means to mollify 'evil spirits', cure disease and defend the Baiga society. In this sense the gunia's need for an 'emotional outburst' was incorporated and justified by the Baiga society. The Maria leskes position was similar to the gunias. When a leske sat in the ghotul, let loose his hair, and ferociously rotated every part of his body, the Marias knew that he was trying to invoke the gods to answer their questions. They asked him questions and he replied, telling them what disease they had, what cure they should adopt, and how long it would take for them to recover. His movements and predictions of the future made people fear and respect him.29 Elwin shows that the medicine-man power was also respected because of his knowledge of the forest. Thus Elwin wrote that the:

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27 Forsyth, Highlands of Central India, p.375.
28 Ibid., p.376.
29 The leskes of Abhujmarh enjoy the same social position even today. Though modern medicine is seen as a viable substitute for his disease curing abilities, it has not been able to challenge his authority in fortelling the
Panda Baba is a celebrated Gond magician. He is believed to be in confidence of all chief Gond spirits of the Gond other world. He does not know much about history but he will give you a photographic history of the forests.30

At the same place he describes Panda Baba’s account of vegetation and climatic change with in the forests. The description by Forsyth of some common medicinal herbs and trees is shown in Table 2.3:

<table>
<thead>
<tr>
<th>ENGLISH NAME OF SPECIES</th>
<th>VERNACULAR NAME OF SPECIES</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATECHU TREE</td>
<td>KHAIR</td>
<td>The substance coming out of the red timber is catechu and is an astringent.</td>
</tr>
<tr>
<td>BAMBOO</td>
<td>BANS</td>
<td>Bans lochun is found in the joints and eaten medically.</td>
</tr>
<tr>
<td>BHUSHKHUS</td>
<td></td>
<td>Extract is a medical stimulant.</td>
</tr>
<tr>
<td>BAEEL TREE</td>
<td>BEL</td>
<td>The pulp of the fruit is used against bowel complaint.</td>
</tr>
<tr>
<td>AOLA</td>
<td></td>
<td>Virtually every part of the tree is used in ‘native’ medicine.</td>
</tr>
<tr>
<td>ELEPHANT APPLE</td>
<td>KAWEET</td>
<td>Fruit is slightly astringent and gum used in medicine.</td>
</tr>
<tr>
<td>NEEM</td>
<td>NEEM</td>
<td>Leaves are used for fomentation of strains and bruises.</td>
</tr>
<tr>
<td>RUSA GRASS</td>
<td>RUSA</td>
<td>Oil is an external stimulant for the growth of rheumatism.</td>
</tr>
</tbody>
</table>

(Source: Forsyth, Highlands of Central India, extract from appendix, pp.460-66)

The table shows that Forsyth is not able to provide full information about the medicinal uses of the forest species. The reason for this is that such knowledge was guarded with secrecy amongst the gunias and their kin groups. This privileged knowledge was the basis of the power of a kin group for many generations. Forsyth challenged this power by threatening to transform privileged knowledge into common knowledge. In the process he threatened to upset the existing power equations in the Baiga society. From their own point of view the gunias had

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30 Elwin, Leaves From The Jungles, (1957, Delhi), p.3.
averted this eventuality by the partial transmission of knowledge and thus fulfilled their task of being the preservers of Baiga society.\(^{31}\)

Because of their ability to preserve the society and cure disease, the *gunia* acquired importance in the regulation of individual and community behaviour. They interpreted personal tragedies in terms of the influences of 'witches' who were provoked by the violation of community codes. The premature death of children, or of husbands who left their wives, or of wives who left their husbands and run away with another's husband were ascribed to evil influences. Thus medicine and *gunia* power symbolized the inter-community conflict between *adivasi* and *non-adivasi* cultures in which the *gunia* played an important role through his knowledge of the forest resources. It also symbolized the relations of conflict within the community. These were explained and resolved through the *gunia*’s interpretation of the 'forces of good' and the 'forces of evil'.

**Food, implements and forests**: In order to understand the intimate nexus between agriculture and forests, there is a need to look at the diverse ways in which forest produce is used. The nature of the forest and the type of produce extracted influenced the nature of the relationship between forest and peasant communities. (See Table 2.4)

\(^{31}\) The use of a sorcerer's power against people who do not belong to the community is seen even in African situations. Alan Harwood, "Witchcraft, Sorcery and Social Categories" (in Marwick ed., *Witchcraft and Sorcery*) describes this process very well.
There was hardly any overlap between peasant and adivasi interests in periods when there was sufficient rainfall and harvest. The fruits that were eaten by the peasants, for example imli and aola were grown in baris of their houses and it was only in times of famine that peasant communities ate the same fruits as the forest communities.

Apart from using forest produce as food, peasants used forest timber for making agricultural implements. Babool was one of the most common trees that was used

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**TABLE 2.4: SPECIES WHOSE PARTS ARE USED AS FOOD AND FOR AGRICULTURAL IMPLEMENTS:**

<table>
<thead>
<tr>
<th>ENGLISH NAME OF SPECIES</th>
<th>VERNACULAR NAME OF SPECIES</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUM ARABIC TREE</td>
<td>BABOOL</td>
<td>Light red wood mainly used for wheels and implements like the nagur used by Gonds; pods eaten by goats.</td>
</tr>
<tr>
<td>Renja or Gohera</td>
<td></td>
<td>Hard yellow wood whose pods are eaten by goats.</td>
</tr>
<tr>
<td>Bamboo</td>
<td>Bans</td>
<td>It is the most common and is used in virtually every implement. Its seed dies once in 30 yrs and is eaten resembling grains of rice.</td>
</tr>
<tr>
<td>Mawah</td>
<td>Mhowa</td>
<td>Seldom used as timber but its flowers are eaten by man and animal and is used to make tali liquor.</td>
</tr>
<tr>
<td>Giant creeper</td>
<td>Mahwal</td>
<td>Seeds roasted and eaten by &quot;wild tribes.&quot;</td>
</tr>
<tr>
<td>Pader</td>
<td></td>
<td>Red wood used for implements.</td>
</tr>
<tr>
<td>Achar</td>
<td></td>
<td>Seeds called Chironji much eaten by 'natives'; resemble almonds.</td>
</tr>
<tr>
<td>Karounda</td>
<td>Karondu</td>
<td>Fruit is an excellent preserve.</td>
</tr>
<tr>
<td>Doob Grass</td>
<td>Doob or Huryali</td>
<td>Excellent pasture grass.</td>
</tr>
<tr>
<td>Gular</td>
<td></td>
<td>Fruit eaten by 'wild tribes' and birds.</td>
</tr>
<tr>
<td>Sal</td>
<td>Surye or Rinjal</td>
<td>Seeds eaten by 'wild tribes'.</td>
</tr>
<tr>
<td>Imli</td>
<td></td>
<td>Fruit eaten.</td>
</tr>
<tr>
<td>Lancewood</td>
<td>Dhamin</td>
<td>Used for shafts, bows etc.; very elastic wood.</td>
</tr>
</tbody>
</table>

(Source: Forsyth, Highlands of Central India, extract from appendix, pp.460-66)
for nagurs (ploughs drawn by one man). These ploughs were used for burra cultivation by Gonds, small scale and poor farmers. They also had adjustable iron shares. The other wood used often for implements was bamboo. It was used to make sowing drills like the teephun which consisted of two bamboo with holes in them. The wood for these was extracted from 'reserved forests' demarcated for nistar purposes. Here the quantity of wood to be extracted was determined and rates for access into forests fixed. However there were some regions where the forest communities went to the market to sell wood for cooking fuel and implements. In the Central Provinces the only those Baigas who could not cut bewars were reported to have gone to the market to sell wood.

In general those using these implements (described above) were described as more civilized than the adivasis. Their dress, food and lifestyle was considered 'advanced' as it was a stage that conformed to the principles of a settled agriculture with short fallow cycles. Of these the Kumbis and the Lodhis were considered the best cultivators. They followed complex patterns of cropping and crop rotation. Their methods of irrigation (especially the Lodhis method of tank irrigation) were considered both ecologically and economically viable, and their methods of manuring and cropping some of the best and most complex in the world. In the haveli tracts of the Narmada valley, the Kumbis were wheat cultivators who producing mainly for export. Their diet consisted basically of tur and some vegetables. They wore full length dhotis around their waists and tied a turban on their head. The wearing of a turban or the pagadi was considered the sign of a self respecting man. The Kumbis followed in the Hindu religion and

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worshipped Mahadeo (or shiv). Their main festivals were divali and dussehra and they married according to the Hindu religion.\textsuperscript{33}

Well off cultivators like the Kumbis employed others as wage labourers and graziers. The graziers were mostly Ahirs and the cultivators were Gonds who had been forced to live in 'deforested tracts'. Early colonial sources describe the process of 'deforestation' and expansion of sedentary plough cultivation as a long-term process which began in the Maratha times. This happened because the revenue pressure of the Marathas on the jagirdari and \textit{khalsa} tracts increased and the Gonds were forced to either take up the plough or to act as field labourers for Hindu cultivators.\textsuperscript{34} By the late 19th century there were enough Gonds who had given up \textit{burra} cultivation in Mandla. Unlike the Baigas the Gonds did not resist the ban on \textit{bewar} and \textit{burra} cultivation. In the 1890s the Conservator of Forests, R.H.E. Thompson, described the reasons for Gond adaptation to a sedentary lifestyle as follows: \textit{burra} cultivation had longer fallow cycles than \textit{bewar}; and it involved the use of the plough. For him as for other foresters of that era, Gond cultivation was a 'stage' closer to peasant cultivation than the Baigas.\textsuperscript{35} The Gonds were considered 'advanced' in comparison with \textit{dhaiya} cultivators. But amongst those who practised sedentary cultivation they were considered the most 'backward' caste. Most of them lived a "hand to mouth" existence and had lost their lands due to indebtedness. The Gonds lived on poor soils which had little water and whose out turn was low. They were forced to work for other peasants and depend on some forest produce for their survival. Socially, they were considered

\textsuperscript{33} The material for this paragraph has been collected from the Settlement Reports of Chanda, Chhindwara, Jabalpur and Mandla.

\textsuperscript{34} See Report on Nagpur Raja's Territories for this point. Jenkins draws a direct correlation between the denudation of forests and the Maratha rule. The questions we need to pose with respect to the relationship between politics and ecological change are - whether this change is irreversible or inevitable and what kind of change is desirable.

\textsuperscript{35} See FRCP North Circle, 1891-92.
'outcasts', their religion being considered 'devilish and evil'. No higher castes (i.e the Kumbis, Telegu and other Maratha cultivators) ate or developed any kind of kinship relations with them.36

Peasant contact with the forests and forest communities took many forms. But the direct contact between peasants and adivasis was little till the late 19th century. In a few cases like the Gond tenants went into the forests to collect forest fruits for their subsistence or buy them from the forest dwellers. The intensity of the contact between the peasant cultivators and adivasis depended on the degree of 'deforestation' and the pressure on nistar forests. If the pressure on nistar forests increased, the peasants were forced to go into the forest to fulfil their needs for wood and fuel. Similarly with deforestation of land for permanent cultivation the adivasis were forced to depend on peasant cultivators for their livelihood.

**Forest Administration from 1865 to 1900:**

'Scientific forestry' was the ideological principal of the conservation programmes followed by foresters in British India. The main objective of these programmes was to systematize the reproduction of timber and other forest produce so that perennial and long-term advantages could be derived from them. The assumptions shared by foresters of all hues were: forest resources were limited and would be exhausted if not preserved 'scientifically'; and that all previous forms of forest use and conservation (if any) were 'unscientific' and 'wasteful'. The foresters believed that these assumptions provided the justification for the formation of the forest department.

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The forest department of the Central Provinces was formed in 1865. The formation of the department coincided with the first Forest Act in British India. The main aim of the forest department and this act was to emphasize the state ownership of forest land and lay down the tenets for its administration. Though the Act declared that all forest land "belonged to the State", it also recognized existing private rights on forests - namely the malguzari and zamindari rights. Another kind of forest holding was that of 'village forests', i.e. land that was held jointly by the village and the state for the use of villagers. The 1865 Act ensured the basis of state proprietorship and control of forested areas not claimed by private individuals. Henceforth the forest department was to have the arbitrary and exclusive control over these lands. It was to develop its own police, courts and laws.

In 1877 more detailed laws were formulated for forest management. The provincial forest department divided forests into three classes: 'first class reserved' forests, 'second class reserved' forests and 'unclassed' forests. The 'first class reserved' forests consisted of the best timber areas - i.e. predominantly of sal and teak forests. Both sal and teak were the best commercial bets of these Provinces and there were areas (like the Bori forest reserve) where they both grew together. In 'second class' forests restricted rights were granted to local people. The Government of India Act, 1878 called them 'protected forests' and limited nistar rights were granted in them. Unlike the 'village forests', these were owned solely by the State. They were predominantly mixed forests important for revenue purposes. Lastly, the 'unclassed' forests were yet to be surveyed and people had unrestricted access to them till their classification took place. These forests consisted of three types of forests: a) commercially valueless lands where

unlimited access was allowed to the people and which were later to be classed as 'unreserved forests'; b) those forests that were to be later separated out for sedentary cultivation; and c) unsurveyed forests. The classification of 1877 in the Central Provinces clearly set out the frontiers of the forest which were given a formal statutory standing in the Government of India Forest Act, 1878. The Act contemplated measures for the constitution and management of 'reserved state forests'; the constitution of 'village forests'; the management of 'protected forests'; the control over private forests; and the control over some valuable trees in private forests.\(^3^9\)

By 1882, 13 per cent of the forests were 'first class' reserved forests; 85 per cent were 'second class' reserved forests and only 2 per cent were 'unclassed' forests.\(^4^0\) The boundaries of the forests were inflexible and did not show any consideration towards the needs of forest dwellers and peasant cultivators. The main aim of these laws was to control bewar and evacuate all people (except those living in government established villages) from 'reserved' forests. However the main operative feature of the rules of 1877-78 was that in most forests the people were granted limited usufructary rights. The pressure over forest resources increased with the exclusion of people from 31 per cent of the forests and unrestricted access in only 2 per cent of the forests.

By 1886 there was re-examination of this classification - one of its main objectives being to find ways of fulfilling local requirements. Commenting on the report of the Inspector-General of Forests, Anderson (the Secretary to the Chief Commissioner

\(^{39}\) The growth of teak and sal together is a peculiar feature of the Satpuras. E.P. Stebbing points out how this is possible: the germination of the sal seed is faster than that of the teak and since they both germinate at different times it is possible for them to coexist. Furthering the comparison he shows that teak needs to be conserved earlier than sal because of this and because sal wood is stronger and more long lasting than teak. For this point see E.P. Stebbing, The Forests of India, (Volume 1, 1926, London), pp.217-218.

\(^{40}\) These percentages are computed from the FRCP 1882.
of the Province), noted that the aims of conservation had shifted focus from the preservation and reproduction of trees to fulfilling the wants of the population. He wrote:

The criteria for the reservation of forests is based not only on the nature of the forest and the need for bettering it but is based on the need for taking into account the rights of the natives of the forest in so far as they effect the life of the people. Thus the importance of the forest is that its conservation should stop when the supply of forest goods for the neighbouring population is getting narrowed.41

The limits to conservation were to be defined by the practices of forest and peasant communities. But the prerogative to identify the needs delimiting policy initiatives was to remain with the government. This enabled the officials to justify their policies and identify the groups which could contribute to the government treasury. Anderson's empathy towards the needs of the local population was subject to criticism at the provincial level. The provincial government (comprising people like Doventon and Croswaithe) was more concerned about maintaining an 'efficient' administration and keeping up the revenue from timber trade. In fact R.H.E Thompson even talked of tightening the control of the district authorities over the forest. He felt that any concession to forest dwellers would lead to 'wasteful' exploitation of the forest.42

The debate over forest administration was focused on finding the best methods of bringing the 'second class' forests under stricter conservancy. People like Doventon and Thompson wanted to convert the 'second' class forests into 'first class' reserves. Other officials wanted to follow a policy of rotational closures in 'second class' forests.

41 ARF Prog 'A' No:14, 1886, p.3.
42 ARF Prog 'A' No:15, 1886, p.1.
reserves. The first alternative was rejected by Anderson and Schlich on the grounds that it was not sensitive to the demand in 'second class' forests. It would thus result in creating discontent amongst the people and contradicting the revenue generating objectives of official policy. Elaborating on the second point, Dr. Schlich held that the forest department should:

declare a maximum of, say half the area of closed blocks (in these forests), as first class reserves. When these have been fully protected from fire, sown and planted, they will be open to cutting that will be done gradually, while in the same degree blocks hitherto open for cutting will be closed for improvement.

In this way the distinction between first and second class forests was to be abolished. The forests were to be classified in only two classes - 'reserved' and 'unreserved'. The officials at the provincial level (such as the Conservator of Forests, Mr Doventon and the Chief Commissioner, Mr, Croswaithe) felt that this scheme was unviable as its implementation would require a large body of men. They contended that the success of the scheme was dependent on the rigid adherence to forest boundaries (by the local population), and the creation of contiguous forests in neighbouring districts. This task was considered "too laborious". The officers of the Province were trying to point at the loss of revenue that would be incurred if forest administration was expanded. The Inspector-General, Ribbentrop, overruled these objections by showing how forest revenue could be maximized. For this the scheme of control through a system commutation, kham and licensing was recommended.

43 ARF Prog 'A' No:17, 1886, p.1
44 Ibid., p.2.
45 CPSR Forest Department, Compilation No: 119(A) of 1886, p.57.
Differing perceptions of imperial objectives influenced the official thinking on the conservation programmes in the Central Provinces. While Ribbentrop, Schlich and Anderson were more concerned with the long term stability of British rule in India, Thompson, Doventon and Croswaith emphasized the need to fulfil short term targets. But even in this apparent conflict, the two objectives complemented each other. Only political stability could ensure revenue maximization over a long period of time.46

By 1890 Ribbentrop’s position had won the day. The government’s exposure to protest amongst the adivasis of residencies like Kalahandi and Bastar was probably responsible for this. The rotation system was a preventive measure against the spread of further discontent due to the application of forest laws. The state could now achieve both its objectives: of revenue generation; and of gaining some legitimacy in the eyes of the people. That the state lost very little in the bargain is clear from the new laws that were formulated in the 1890s. The formulation of rules for zamindari, malguzari and village forests expanded colonial control over people and resources. In addition the reclassification of forests (Table 2.5) showed that the effort to marginalize subsistence rights of certain groups (like the Baigas and Korkus) was a determined one.

46 The late 19th century debate on the (governance of India) seems to have been recreated in the context of conservation programmes in the Central Provinces. On the one hand Ribbentrop and Schlich seemed to hold the view that ‘native’ participation should be encouraged and so as to stimulate the permanency of British rule. On the other hand Doventon and Croswaith appeared more concerned with getting the maximum advantages of colonial administration while it lasted by the strict application of the rules of British conservancy. None of these positions were wholly representative of any one strand of the 19th century debate. For an elaboration of this point see Stokes, *English Utilitarians in India*; Francis Hutchins’, *Illusion of Permanence* (1967, Princeton), and Ranajit Guha, *Rule of Property for Bengal* (1982, Paris).
<table>
<thead>
<tr>
<th>YEAR/CLASS</th>
<th>RESERVED</th>
<th>UNRESERVED</th>
<th>B-1 TYPE</th>
<th>UNClassIFIED OR B-2 TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1881-82</td>
<td>13</td>
<td>85</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1886-87</td>
<td>17</td>
<td>80</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1887-88</td>
<td>98</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1888-89</td>
<td>98</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1891-92</td>
<td>47</td>
<td>nil</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>1895-96</td>
<td>54</td>
<td>2</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>1899-1900</td>
<td>69</td>
<td>1</td>
<td>13</td>
<td>17</td>
</tr>
</tbody>
</table>

(source: Compiled from *Forest Administration Reports* of various years)
(Note: * B-1 Forests were forests to be excision for permanent cultivation)

Though 'reserved' forests formed a major part of the classified area, between 1888 and 1892 there was a sharp decline in the percentage of the area under 'reserved' forests. The peculiar feature about the year 1892 was that the area of 'reserved' forests fell from 98 per cent to 47 per cent. The bulk of the forests i.e 50 per cent were considered 'unclassified' and there was no 'unreserved' forest. This was probably because the forests were reclassified in 1890-91. The merging of two classes - 'first' and 'second' class reserved forests - into one had taken place much earlier. In 1892 the forest department was reorganized into two circles - North and South. Accordingly, the forests were classified into two major categories - 'reserved' and 'unreserved' forests. Apart from this a new dimension was introduced in forest conservancy. The creation of the category of B-1 forests showed that the expansion of sedentary cultivation had become as important as the conservation of trees and revenue forests for the provincial government. Though some foresters (like Thompson) still felt that the conservation of trees was more important than the expansion of permanent cultivation, the Chief Commissioners office was keen to bring about the 'excision' of land for permanent cultivation. It is significant that in 1892,50 per cent of the forests were to be 'unclassified' forests and not 'unreserved' forests (where unrestricted rights were allowed). The category of 'unclassified' forests was an ambiguous one as it denoted that the colonial government had not made up its mind about the way it was going to use these lands. But in the next
few years the picture became clearer: almost all 'unclassified' forests were now categorized as B-1 and 'reserved' forests. The area under 'unreserved' forests remained constant.

The excision of cultivation in forested areas was to depend on the nature of the forest and its revenue-generating capacity. In areas where neither forest conservancy nor sedentary cultivation was possible (because of ecological reasons), a novel way was introduced to collect revenue. 'Patch' cultivation was introduced in the forested areas. This form of cultivation was to be a modification of bewar and burra cultivation. Under this system each cultivator was to be allowed strips of land to be cultivated inside the forest. In Mandla patch cultivation was permitted in areas where there was good land and there had already been clearings. Tracts where cultivators had obtained permission to break up land were also brought under such cultivation.47 The conditions for granting leases on patches was that cultivation would be localized to a few clearings; in others it would be absolutely prohibited. Leases would be granted for a few years rather than on a year to year basis.48 An effort to incorporate some aspects of bewar were implicit in these measures. Some previously 'cleared' bewar patches were liable to be taxed. By doing this the state was making good the losses it incurred when illegal bewars were cut in forests. It was accelerating a process of marginalization of bewars to previously 'unwanted' lands.49 A determined bid to control the 'migratory' tendency of the bewar cutters was made by localizing cultivation in 'reserved' forests.

47 CPSR Forest Department, Compilation No: 119(A) of 1886, p.2.
48 Ibid., p.1.
49 From the government point of view these lands were probably the actual wastelands. However with the beginning of the taxation of patch cultivation they seized to be waste even from the official viewpoint. The question of wastelands is considered in the next chapter.
The second question posed by the review of 1886 was concerned with the role of the revenue department in forests. This issue was resolved through patch cultivation. In areas 'reserved' for such cultivation the revenue department was to reign supreme. The tehsil office would issue licenses for cultivation and the patwari would mark out the boundaries of the patch cultivation areas. If the cultivator cultivated more than the marked out area, he would have to pay double the rates on the same patch. The rates were to be determined by the kind of soil prevalent and were to be decided by the treasurer of the district administration. For example the rate on shallow black soil was Rs 3 and 4 annas per plough; on burra Rs 2 per plough, and on first class black soil Rs 4 and 4 annas.\(^\text{50}\) By the end of the 19th century the basic administrative principles had been outlined for the forest department.

This institutionalization of the selective appropriation of 'indigenous' practice (into forest policy) had a profound effect upon the future of the forest administration. The 20th century colonial strategy was to follow this plan, the full impact of which was felt only by the 1920s and 30s. Though another Forest Act was enacted in 1927, it largely confirmed the picture created above.\(^\text{51}\) By initiating a process such as this the administration opened a pandora's box. The more the "humanization of the administration" took place, the more space was created for resistance within the colonial framework. This was seen in the marked increase of forest offences in the 20th century. In 1940 Grigson noted that these increases were mainly a result of the political agitations that took place during 1920-22 and 1930.\(^\text{52}\) The measures

\(^{50}\) CPSR Forest Department, Compilation No:119(A) of 1886, pp.3-4.

\(^{51}\) The ranges and forest divisions were continually reorganized as the area coming under British control was increasing all the time. By 1927 there were 5 forest circles in this Province - North, South, East, West and Berar. The main effort-of forest laws was to formulate procedures for administration.

\(^{52}\) Grigson, Aboriginal Problem in C.P's, (1944, Nagpur), pp.339-341. Grigson draws a direct relation between the closure of forests and the increase in forest offences.
outlined in this section show that the genesis of these agitations lay in the political importance given to the task of taming and civilizing the forest communities since the 1890s. The policy of selective appropriation thus proved to be a double edged sword. On the one hand it laid the foundation of the adivasi inclusion into modern society, economy and polity. But it also created a space for protest that threatened the stability of the state. The effect of these was felt in the 1930s when the Gonds carried out the first organized mass protest against the forest laws.

Nistar and Paidawar settlements, 1865-1933:

Nistar rights were customary community rights of peasants to collect forest produce and involved the collection of fuelwood, green grass and other wood for implements and construction of houses. Though nistar rights are considered peculiar to peasant societies, the activities performed under this system were similar to the forest community's gathering activities.

In the 19th century nistar collection was allowed primarily in revenue forests. By 1869 it was reported that these forests accounted for 40 per cent of the total forest revenue. Four systems of controlling nistar were be identified between 1866 and 1890: the kham system; the system of leasing forests for nistar; the system of summary settlements; and the commutation system. While the first two were systems of indirect management, the last two were considered more important for administrative purposes as they involved a system of direct control. Their control was justified on the following grounds by the Chief Commissioner:

The administration of minor forest products and unreserved forests had many advantages:

a) it had placed the ownership of large and

53 Baden Powell, Forest Laws and other texts of the colonial and post-colonial period assume this. This especially true of works on grazing, forests and common property resources.
54 FRCP 1868-69, p.5 & pp.29-30.
unexplored tracts on a much sounder footing, b) it had prevented the forest produce from becoming a monopoly of one class and rendered such important accessories such as wood and grass accessible to all and c) it had been raising considerable revenue. 55

Keeping these objectives in mind the systems of control were evaluated and experimented with.

In 1866 the *kham* system was considered an important mechanism through which *nistar* dues were collected. Under this system all villagers of a particular village were jointly assessed, and they collectively paid a lump sum to the revenue collector. In the villages of the Central Provinces the patel was to be the revenue collector. After paying these dues all villagers were to have a coequal access to forest produce. The patel was elected by the villagers and was a direct link between them and the government. Due to this the patel attained a considerable importance in village life and the *kham* management system reinforced his status. The *kham* system was considered viable for villages where the patel already had the authority to collect revenue. In these villages the patel was given a part of the revenue - usually 1/4th - as his revenue collecting fees. Thus the patel had an incentive to collect higher revenue. 56 Since the community was jointly assessed, the successful implementation of this system depended on the customary relations between the villagers and the patel. 57 This implied that revenue would be moderate as revenue collecting was only one of the functions of the patel. In order to maintain his position and get the support of the villages, some revenue was likely to be sacrificed. In return for this the patel possibly received a tribute of

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56 Sadr Board of Revenue, North Western Provinces, Uttar Pradesh Regional Archives, Lucknow, (hereafter SBRNWP), 23 October 1834.
57 For this point see N.B. Basu, 'Tribal village headman' in TRI, 1962.
forest produce and begar from the villagers. Thus the loss in revenue would be made good in kind, the government being the only loser.

The system of leasing forests attempted to correct the shortcomings of the kham system by giving the government a greater commercial advantage. The contractor (to whom the forest was leased) extracted the forest produce and sold it to the peasants. The government was paid a fixed sum annually. The lease was generally granted from three to ten years. Under this system the peasants were at the mercy of the contractor who often employed them as labourers. In Chhindwara it was noted that this system had evoked considerable opposition amongst the local people. 58 This opposition arose because the tendency of the contractors to monopolize the sale of produce led to inflationary trends in the prices of forest products. The contractors were the sole beneficiaries of this price-rise and the peasants the single bearers of its burden. The exploitation of the adivasis through the extraction of begar by the contractors also led to discontent amongst local people. There are many instances of this in zamindari and jagirdari forests. 59

The flaws of the lease system were not merely confined to its effects on the villagers. The state, too, was at a disadvantage for of many reasons. First, the government would only get a fixed royalty and would not be able to increase the royalty during the leased period. Thus it would lose out on revenue. Secondly their control over the method of extraction was almost non-existent since all rights over the forest were given up for the period the lease lasted. Thirdly (and most importantly), the state was losing control over land and people it had once hoped

58 CPSR Forest Department, Compilation No: 667 of 1874, p. 39.
59 These forests though privately owned, were administered by the court of wards without whose recommendation nothing could be done. Some of these forests like Ahiri and Panbaras were leased by the State themselves.
to rule permanently.\textsuperscript{60} While the lease system resulted in the beginning of commercialization of nistar rights, the officials realized that such a system could not serve imperial interests.

Under the commutation system the state was to be an active participant in the management of forest resources. The system of commutation was first introduced by Col. Lucie Smith in Chanda. Under this system the unit of assessment would be the household. Each household was to make a small annual contribution to the government and in return earned the right to pick firewood and grass, but purely for household needs. Of course, the officials termed even this as a privilege, thus denying the household all its customary rights.\textsuperscript{61} The next question related to the definition of 'household needs'. In Chanda the district administration held that every village would be assessed at two annas per household. This fixed rate would apply to the extraction of firewood and charcoal. In other words the people were allowed to take firewood, fuel and charcoal worth two annas. Other produce like mahua, lac and harra were fixed at a rate of three annas and an equivalent amount of this produce could be collected by households who chose to pay this sum.\textsuperscript{62} Though there is no evidence to show what criteria was employed to make the distinction between 2 anna and 3 anna produce, only firewood and fuel were essential for household needs and therefore a fixed rate was applicable only to them. This meant that other produce such as ritual food as liquor, harra and mahua was considered a luxury. Within this limited view, the official assumed that the 'needs' of every household were similar and that the consumption followed a

\textsuperscript{60} In Illusion of Permanence Hutchins has shown how the idea of permanence of British rule had developed by the mid-19th century. By the late 19th century this idea had become a mere illusion. The reasons for this were not only the changes in the Indian situation but also the development of the debate in England. The replacement of permanent tenures with ryotwari tenures in the last quarter of the 19th century were proof of this. For this see Stokes, English Utilitarians in India.

\textsuperscript{61} CPSR Forest Department, Compilation No:416 of 1872, p.30.

\textsuperscript{62} CPSR Forest Department, Compilation No:229 of 1878, pp.1-2.
uniform pattern - both in terms of quantity and the kind of produce consumed. Whether the household contained 4 or 8 people, they were only entitled to 2 annas worth of fuel and firewood. The quantity taken out of the forest would be checked by a chaukidar or a nakadar.

The commutation system signified the complete and direct control of the forest communities by the government. The dues were to be collected by the forest department, the nakadar and mohurir were responsible for local level administration. The most noticeable feature of commutation was the incorporation of the household into the power structure. By doing this an element of family organization was retained within the colonial set up. This meant that forms of village property and their mechanisms of control, though transformed, could coexist with forms of private property.  

Nistar rights were regularized and codified in a uniform system by the settlements of 1930-33. Before this there was a constant debate about how nistar should be managed. In 1925 rules for nistar were formulated. Under these rules each village was to be allotted a certain amount of 'waste' where the ryots had exclusive rights and all valuable trees were termed minhai darkhtan. Thee trees were to be reserved according to the malguzari forest rules. Every 'waste' would be allotted a survey number and the responsibility of ensuring that community rights were not abused would rest with the patel. But these rights would be only confined to the use of grass, fuel and thorns. There would be no users rights in produce such as mahua, harra, lac, rusa oil and gums. These would be leased out separately to the

63 Here I do not assume that the village was not subordinate to state power in pre-British India. But the panchayats and siyans had a formal relevance within that structure. In the British period this relevance was continually diminished. The patel and siyans were no longer required to act as via-media between the state and the individual. Informally, these functions may have continued, signifying the indifference or ignorance of the population to colonial interference. It was not till the late 1930s and 40s that an attempt was made to give the panchayat its due legitimacy.
patel, raiyat or the community. The last provision was important as it came on the heels of investment in lac and tan production by European managing agencies. In this way the distinction between commercial and subsistence produce was made quite clear. These measures also laid the basis of further differentiation between forest communities and village elites. The lease was a mechanism of division from the point of view of the community. But for the individual it presented a prospect of future prosperity.

The settlements of 1930-33 were made on these principles. The method of collecting revenue was mainly commutation, but its application depended on local circumstances. If the demand for the product was higher than its supply commutation was used as a mechanism of reducing demand. If the reverse was true commutation was stopped. For example the special revenue officer of Balaghat noted that people were opposed to the method of commutation being used for the extraction of mahua, as enough mahua trees were available to satisfy demand. Consequently commutation was abolished. However in areas where the exploitation of produce was very "primitive" and regular felling possible, commutation was continued. The special revenue officer felt that commutation should be replaced by a system of localized felling and extraction. Commutation was inducing the movement of people from areas that were under the commutation system to areas that were not - i.e areas where regular fellings were not possible. The result was 'wasteful' and 'illicit' fellings. In Mandla too, commutation was abolished in some forests like Shahpura and Saresat. In others like Mandla, Dhanwahi and Narainsing it was continued. The reasons given for the abolition of commutation were the same as those in Balaghat. However while recommending

64 Madhya Pradesh Secretariat Records, Bhopal Archives, (hereafter MPSR), Forest Department, Prog 'A' No:7-14 of August 1925, pp.9-21.

65 MPSR Forest Department, Prog 'A' No:8-2 of 1932, pp.22-25.
this step the special forest officer for Mandla added a proviso to it. He held that
commutation was suited to the "indolent habits of the aboriginals who did not have
enough cash to pay for the licenses and that commutation dues were to be collected
after the harvest." A system of rated passes was introduced where by each person
would have a pass to collect nistar in a particular survey number. Ever time
produce was collected, the quantity of produce extracted would be entered on the
pass and the amount paid to the nakadar. The price paid to get the pass made was
the price for access into the forest.\textsuperscript{66} Table 2.6 below shows the proposed license
rates in Mandla forest range:

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|}
\hline
\textbf{NAME OF PRODUCE} & \textbf{RATE PER CART Rs - a - p} & \textbf{PER HEAD LOAD Rs - a - p} & \textbf{PER KAWAR LOAD Rs - a - p} & \textbf{MONTHLY RATE Rs - a - p} \\
\hline
Dry Fuel. & 0 - 3 - 0 & 0 - 0 - 3 & 0 - 0 - 6 & 0 - 3 - 0 \\
Dry Bamboos. & & 0 - 0 - 3 & 0 - 3 - 0 & \\
Thorns, tendu leaves & 0 - 1 - 6 & 0 - 0 - 3 & 0 - 0 - 6 & \\
Sal leaves Green Leaves & & 0 - 0 - 3 & 0 - 0 - 6 & 0 - 1 - 0 \\
Bakhal, Palas & 0 - 0 - 5 & 0 - 0 - 6 & 0 - 1 - 0 & 0 - 3 - 0 \\
Mahua, Chironjli, Honey, Wax & 0 - 0 - 6 & 0 - 1 - 0 & 0 - 3 - 0 & \\
Grass & Fodder. & 0 - 1 - 6 & 0 - 0 - 3 & 0 - 0 - 6 & 0 - 0 - 2 \\
\hline
\end{tabular}
\caption{THE PROPOSED PRICES AND LIST OF NISTAR PRODUCTS IN MANDLA, 1933:}
\end{table}

(Source: MPSR Forest Department, Prog 'A' No:8-3 of 1933, Bhopal p.63)

From the table above we see that the produce designated as nistar, was of utility to
both peasant and forest communities. The documents do not specify whether any
exchange of forest produce took place between them. In the 1890s the Chak
officials asserted that the forest dwellers had little option but to sell forest produce

\textsuperscript{66} MPSR Forest Department, Prog 'A' No:8-2 of 1933, pp.19-40 & Prog 'A' No:8-3 of 1933, p.54.
to peasant communities for their livelihood. The restrictions over *bewar* and their refusal to take to the plough necessitated this. Numerous examples of 'illicit' extraction of produce by the forest dwellers are recorded after the 1890s. In this context situations of conflict between the peasants and the *adivasis* could arise. Conflicts may arise out of limited access to resources, and restriction of the quantity of produce extracted. However the intensity of such a conflict would depend upon the location of forests earmarked for *nistar* and their proximity to *adivasi* dwellings. In the 1890s, the 'excision policy' of the government created ryotwari villages in the vicinity of 'reserved' forests and gave rise to this eventuality. Conflicts could also arise over the transaction of buying and selling produce.

The developments in the late 19th century indicated that *adivasi* forest rights were being severely restricted. The reservation of forests and restrictions on *bewar* had succeeded in disrupting the seasonal rhythm of *dhaiya*. By 1930s even hunting practices were controlled. As a consequence of this the forest dwellers were forced to seek labour employment with contractors and forest departments.

**Capitalism and Local Industry in Forested Areas:**

'Handicrafts', a term used to describe 'pre-capitalist' and 'traditional industry', has been distinguished from modern industry in the following ways: a) the unit of work in these industries was the family unlike the factory in modern industrial enterprise; b) the tools used were simple hand tools and c) they produced "native

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67 MDR Forests, Case file No: 42(VII-8) of 1937, pp.7-9. The 'Central Provinces Games Act' (1935) dealt a further blow to the *dhaiya* system. Under this act all trapping and shooting of animals in government forests was considered an offence. The application of this act made all *shikar* 'illegal' unless the *shikari* had a license under the act of 1878.
decorative arts" that have an elite market.68 This definition assumes an opposition between small scale family and modern capitalist industry.

In India too, studies on 'handicrafts' have employed this definition and asserted that the penetration of capitalism has led to a decline in local family industry.69 In the specific context of the forest-based industries Guha and Gadgil have emphasized and overstated the conflict of interests between the forest communities and the modern economy. This perspective poses a sharp dichotomy between the pre-industrial past and the colonial industrial economy. The crafts economy is considered a 'traditional' economy where people have a control over their own resources. This changes with the penetration of the modern industrial economy into the forests. The displacement of the crafts industry is seen as a direct consequence of the control of forest resources by modern industries. This leads to a sharp conflict of interests between the two economies.70 Guha and Gadgil thus concentrate on relationships of conflict discounting the possibility of the development of any complementary relationships between the two. In this section I attempt to explore the relationship between organization of local industry and the penetration of urban capital into forested areas. By helping to organize family industry amongst some of the forest dwellers and other peasant communities like the Rangrez and Chamar, the British hoped that they would be able to bring the forest dwellers and other 'backward castes' within the fringes of capitalism.

The nature of the forest determined the nature of local industry in a region. The 'crafts' producing castes did not necessarily live inside the forest. They either

69 See the debate on deindustrialization in Indian Economic and Social History Review 1969. The discussion is between Morris, D. Morris, Bipan Chandra and others.
70 Madhav Gadgil and Ramchandra Guha, This Fissured Land: An Ecological History of India, (1992, Delhi), pp.182-245. Guha and Gadgil counterpose Gandhi's ideal to Viswewarya's model of 'industrialize or perish'.
collected forest produce (mainly gums and resins) themselves or employed the forest communities to do so. Table 2.7 shows the forest species that are useful in crafts production:

**Table 2.7: The Species Useful for the Growth of Forest-Based Industry**

<table>
<thead>
<tr>
<th>English Name of Species</th>
<th>Vernacular Name of Species</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATECHU TREE</td>
<td>KHAIR</td>
<td>The bark and wood yield a substance called Catechu. When boiled, this makes a fast red dye also used for tanning.</td>
</tr>
<tr>
<td>MAHWAH</td>
<td>MHOWA</td>
<td>Seeds yield an oil valuable for commerce.</td>
</tr>
<tr>
<td>KAN RAJ</td>
<td></td>
<td>Small tree; bark used for matches of match-lock guns and for small ropes.</td>
</tr>
<tr>
<td>GIANT CREEPER</td>
<td>MAHWAL AND PILU</td>
<td>Bark made into rope.</td>
</tr>
<tr>
<td>RED COTTON TREE</td>
<td>SEMUL</td>
<td>Light strong timber good for boxes; seeds embedded in white fiber used for padding instead of cotton.</td>
</tr>
<tr>
<td>OLIBANUM</td>
<td>SALAI</td>
<td>Yields fragrant gum resin called Labanu, utilized in arts; woods used for charcoal by Agarlas.</td>
</tr>
<tr>
<td>KINO</td>
<td>PALAS/DHAK</td>
<td><em>Butea kino</em>, used for commerce; also for tanning and dyeing; flower yields fine yellow dye, lac insect thrives on this tree and leaves used for packing and for making cups and plates.</td>
</tr>
<tr>
<td>AOLA</td>
<td></td>
<td>Red and black wood used for matches and bark as a tan.</td>
</tr>
<tr>
<td>ELEPHANT APPLE</td>
<td>KAWEET</td>
<td>Gum is used on artifacts.</td>
</tr>
<tr>
<td>KUSUM</td>
<td></td>
<td>Yields wood for sugar and oil mills; lac insect frequents it.</td>
</tr>
<tr>
<td>SAL</td>
<td>SURYE/RINJAL</td>
<td>Dhammer resin used for commerce.</td>
</tr>
<tr>
<td>TAMARIND</td>
<td>IMLI</td>
<td>Wood used for oil mills.</td>
</tr>
<tr>
<td>BLACK EYNE</td>
<td>SAJ</td>
<td>Bark used as a tan; silk worm lives on it.</td>
</tr>
<tr>
<td>IRONWOOD</td>
<td>ROHUN</td>
<td>Is employed in dyeing and tanning.</td>
</tr>
</tbody>
</table>

(Source: Forsyth, *Highlands of Central India*, extract from appendix, pp.460-66)
The most commonly mentioned industries by Forsyth (in Table 2.7) are iron smelting, dyeing, silk, tanning and lac. The Agarias were important from the point of view of both industry and mining rights of the forest dwellers. The dyeing castes of the Provinces consisted mainly of the Rangari's, Chipa's, Nillar's and the Rangrez (a Muslim caste). They dyed chiefly in 'traditional' Indian colours mainly reds and yellows got from the roots of trees like al kusum and rohun. The resin was extracted by tapping the tree and, in some, cases by pounding its roots. Forsyth does not record whether the resin or gum was extracted by the dyer or bought from the forest dweller. Hence in the case of dyeing it is difficult to work out the relationship between the forest dwellers and the artisan. This relationship is better illustrated through the example of the tanners, mainly Chamars. The Chamars tapped their own trees and made and repaired leather goods for the villagers. Therefore there was hardly any contact between the Chamars and the adivasis as far as the production of tans was concerned. Socially the Chamars were considered achuts by both the Hindus and other communities like the Baigas and Gonds. Their villages, though inside the forest, were aloof from other villages.\footnote{See Russell, \textit{Monograph on Dyeing in Central Provinces}, (1910, Nagpur). For tanning See Trench, \textit{Monograph on Tanning in the Central Provinces}, (1904, Nagpur).}

The inter-linkages between artisan and forest communities can be best elucidated in the instance of lac. Lac or lakh was a resinous incoustation produced by the lac insect on host trees such as palas and $saj$. Its uses were manifold: de-resinated twigs were generally used as fuel; lac dust and its waste was sold to makers of toys and bangles; the colouring was exported but had a greater value in the colouring of toys and bangles made by local craftsmen; and the washed seed lac was sometimes exported and with some treatment had value as shellac (in great demand by gun factories) which was also exported. Lac propagation in these Provinces was carried
out solely for subsistence use till the second half of the 19th century. It was propagated by the Gonds, Binjiwars and the Baigas. The lac seed swarmed twice a year in December and June, and the collection took place in June-July for the baisakh crop and October-November for the kartik crop when labour is available. It should be noted that this period fitted in well with the seasonal rhythm of dhaiya.

The lac needed to be under constant watch at the time of swarming when the twigs had to be dried and protected. Then the seeds germinated again for the next season. Thereafter lac was taken to the markets where the forest dwellers sold it to the craftsmen and whoever else wanted to buy it. From Mandla the main lac market was in Seoni where lac was in great demand. Artisans seldom propagated their own lac nor were they able to cultivate enough for their own needs. There is no evidence of the terms of the transactions between artisans and forest communities, but there are hints that some exchange did take place between these communities. The Baigas, Gonds or Binjiwars though not a part of the actual craft production, provided the nexus between artisanal and forest economies which was essential in the lac production process.

The rise of capitalist demand for forest produce and local industry: The first evidence of rising demand for 'minor' forest produce in the international market was found in the case of lac in 1875. The industrial uses of lac were many. It was an electricity insulating agent chiefly used as an insulating varnish. It was also used as stiffening material for felt and straw and as a preservant in coating wood or metal. Lastly lac was utilized as an adhesive material. For this purpose lac was in demand mainly in America, England and Germany.

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72 CPSR Forest Department, Case File No:22, 'B' Progs, April 1919, (hereafter Lac 1919), p.3. Also See CPSR Forest Department, Compilation 50(6), 1875 (hereafter Lac 1875), pp.85-86.
73 Lac 1919, p.5/
In 1875 the government debated whether it should grant Messrs. Jardine and Skinner, an international managing agency, a contract for lac propagation in the Loisinga and Barapahar forests of Sambalpur. The District Commissioner of Sambalpur, Bowie reasoned:

The propagation of lac is only carried on by Gonds, Binjiwars and other jungle tribes who are poor and always require advances to survive. While they propagate lac the government can only give advances if it has the lease of the jungle. By taking a royalty interests of the government and the firm will be kept identical.\(^\text{74}\)

This official assertion of the compatibility of the Gond, official and industrial interests was one of the first steps towards the inclusion of Binjiwars into the world market. The royalty and the advance, were indicative of the presence of the European agencies in the forest economy.

In the wake of such demand there were two courses open to the government. First they could allocate leases according to the axioms of a competitive market. The highest bidder (for the payment of royalty) was to get the contract. While the cultivator had a right to sell his labour at a price he decided, in practice the lessee was the only purchaser of this labour. The lessee was to pay the labour for lac propagation and fix the wage rate according to the number of maunds produced. Thereafter the lessee acquired an ownership right over this produce. According to the logic of this system, the government royalty would remain static, while the lessees profits sored or declined according to the fluctuations of the market. Alternatively the government would plan to receive a minimum royalty (to be fixed at 25 percent) of the income earned through the sale of produce by the lessee. Under this system the government would fix the wages of the lac cultivator as well.

\(^{74}\) Lac 1875, p.8.
as the price at which the lessee could sell lac in the market. The maximum price at which the lessee was allowed to sell lac in the market was Rs. 10 per maund or Rs. 30 per bullock load. By fixing the price thus, the government attempted to narrow the gap between the lease holders profit and the price he paid to the lac cultivator. For this reason it adopted the second course of action. Thus laying down the basis of the future policy on lac the Commissioner provided a further proviso. He asserted that:

It would be better if the lac was produced without human aid and the only labour used was for collecting it for then labour would make its bargain before entering the forest. The fact is that the lac produced by the Bhumia whose work it has been for generations and the present system of leasing works very badly as far as they are concerned, only tying them down to one purchaser....To remove the defects it is essential that the producer has a right to produce in the open market to get a better price....But free trade can only be granted in two ways: 1) By making the producer pay a certain sum on the quantity produced or the number of trees used, 2) To give passes to each producer to collect lac from its jungles.

The Commissioner proposed the introduction of machinery in lac cultivation. He felt that by introducing technological innovations in forests the production of lac could increased and make the production process more 'efficient'. This would save the adivasis the effort of watching the lac throughout the season, and confine their labour to the collecting process. It would also help the Gonds to strike a better bargain with the representatives of managing agencies. In order to maximize production and assess the value of lac several government sponsored experiments were carried out. Several techniques were tried to improve the quality of the seeds,

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75 Ibid., pp.26-30.
76 Ibid., pp.85-89.
minimize labour required and reduce the injury to trees. But the reported failure of all efforts, (according to the special lac officer), proved that the methods used by forest dwellers and the peasants were more effective.77

The Commissioner also held that if the people found the lease system profitable, beneficial leases would be granted to them for lac production. For the present the forests were to be worked departmentally. However the government did not get a chance to implement this policy for the lac demand had fallen by 1877.78 It was only by the first decade of the 20th century that the global demand for lac rose again.

From 1912 onwards there was another determined effort to promote the export of lac, tans and other oils and gums to Europe. In 1913 the Chief Conservator of Forests wrote:

Upto now there is only one form of preparing tan extract in India, and that too from Myrabolans. The business however has great possibilities, for the availability and supply of tan barks in Europe is already insufficient....There does not seem to be any likelihood of any great demand in India for the product.79

Officials felt that 'native industries' like tanning, dyeing etc. were on the decline, but could be rescued from an adverse trend by the influx of European capital.

The penetration of European capital in the propagation of lac helped to create labour opportunities for the Bhumias (another name for the Baigas in Chhattisgarh) and Gonds. These opportunities were important for adivasi survival in the wake of restrictions over gathering activities and other subsistence forms.

77 MPSR, Forest Department, file No: 114, September 1920.
78 CPSR, Forest Compilation, No:1278, 1877.
79 CPSR Chief Conservators Correspondence, File No:207, 1913-14.
But the nature of subsistence relationships was altered. The inter-linkages between the artisan and the forest dwellers were broken. The forest dweller started supplying lac to the agents of the European firm instead of the artisan. The leasing system created monopolies of managing firms over forests and labour, pushing out smaller lac artisans from the market.

While this was true in the case of lac, the silk industry told a different story. From Table 2.8 it is possible to gauge the sharp decline in the number of weavers and dyers in the 10 years between 1891 and 1901:

**Table 2.8: The Sharp Decline in the Work Force of Cottage Industry 1891-1901**

<table>
<thead>
<tr>
<th>NAME OF INDUSTRY</th>
<th>NUMBER OF WORKERS 1891</th>
<th>NUMBER OF WORKERS 1901</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tussar Silk Weavers</td>
<td>699</td>
<td>491</td>
</tr>
<tr>
<td>Silk Dyers</td>
<td>154</td>
<td>39</td>
</tr>
<tr>
<td>Cotton Dyers</td>
<td>15444</td>
<td>6960</td>
</tr>
<tr>
<td>Cotton Printers</td>
<td>2577</td>
<td>289</td>
</tr>
<tr>
<td>Dye Shift Growers &amp; Makers</td>
<td>522</td>
<td>587</td>
</tr>
</tbody>
</table>

(Source: compiled from *Preliminary Report on Cottage Industry in C.P & Berar, 1908*)

It is important to note that in the case of silk the decline is not a general one, it is just a regional one. For example most of the decline was in the Raipur district. But there was in fact a marginal increase in the number of weavers in Sambalpur and Bilaspur. This was accompanied by the increase in the import of silk cocoons from Bengal. Despite the increase in silk production of the Chhattisgarh region, Low insisted that the number of silk producers had declined. In fact he said that the increase in the weaving population (i.e. 9966 persons in 1891 to 23034 persons in 1901) was due to the provincial increase in cotton weavers in the southern part of the

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80 Low, *Preliminary Report on Cottage Industries*, (1908, Nagpur), p.12. The number of weavers in Raipur declined from 282 to 111 in 10 years but the number of weavers in Bilaspur and Sambalpur rose marginally by 26 and 91 respectively. Further the import of silk cocoons rose from 740 maunds to 3251 maunds between 1892-1905. The provincial decline shown by these figures was thus an artificial one as these three areas (especially Sambalpur) were the main silk producing regions. Other declines were shown in Mandla, Balaghat and other regions with minor silk production.
province. But we can see Low was mistaken about a general decline in the silk industry. His own evidence proved that the mechanization of the silk industry was taking place in order to increase production, the market for which was mainly in Nagpur. He showed that the silk workers were using the power loom and mechanizing silk weaving. Perhaps this resulted in the decline of the workers of gold and silver threads and the dyers.  

The case of lac and tussar silk shows that it is difficult to make a case for a general decline in the local industries of the Province. However with the influx of urban capital the production processes of family industries underwent a change. The efforts to mechanize the propagation of lac were confined to rearing the cocoon and not to the collection of produce. Thus an attempt was made to increase the productivity of lac cocoons by improving the propagation methods of lac. The influx of European capital in lac thus provided the adivasis seasonal employment in the forest areas. In the case of silk too, the mechanization of the weaving process was aimed at increasing the weavers production. But the survival of local industry due to the investment of urban capital did not mean that artisans felt no pressures in a changing context. Local lac artisans and silk dyers and printers lost their subsistence due to changes in the production process. In this sense the effect of the penetration of capitalism into forest-based industries cannot be generalized. The case of the Agaria shows this.

The State, Agarias and Mining:

The Agarias were people who worked iron ore and did iron smelting in the Central Provinces. They were different from the lohars in that they burnt charcoal and extracted iron from small clay furnaces. It was unusual for a lohar to carry on

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81 Low's explanation for the decline in the silk industry was the influx of goods from Manchester and restricted access to forests. See ibid., pp. 11-13. Also see p. 17 for the mechanization of the industry.
smithy work. Unlike the lohars, Agarias also used a bellow of kettledrum shapes and puts a cow hide over it. The lohars refused to touch these. Finally, Agarias worshipped adivasi gods and demons unlike lohars who worshipped Hindu gods. An interesting example of the differences in belief systems was shown by Elwin. While the lohars believed that they were the descendants of Pandavas, the Agarias believed that it was the Pandavas who destroyed their "iron city", the old Kingdom of Logundi Raja.82 Thus the Agarias visualized their relations with Hindu peasant societies as antagonistic.

The relationship of the Agarias with the forest was a complex one. Salai wood and other fuel was used by the Agaria in the smithy. Agaria smithies made the best charcoal and furnaces. Most of their mines were situated in the "most impenetrable forest". Agaria knowledge of the forest was as good as the Baiga's or the Maria's information about their region. Elwin notes that an Agaria could see the colour of the sand and determine whether there was any ore in the ground or not. Describing the pit he says:

The pits are small and generally not deeper than the height of a man, generally situated in impenetrable jungle. It is work for men, the Agaria women may generally accompany the party and spend their time sorting iron cleaning the stones or gathering what they can from the surface....There is no private ownership in these pits; there is not even village ownership. Daldal And Bahapur villagers are equally welcome to come to the Bhoria pits, in Mawai I saw three different villages come to dig in the same place. Within their clan the Agaria are a friendly cooperative and closely related people.83

The Agaria's access to the pits was regulated by community codes as the community had common rights in mining pits. Smithy was a domestic ritual which

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82 Elwin, Agaria, pp.2-3.  
83 Ibid., p.172 and p.176.
was performed by the women. Work was undertaken, mostly, at sunset and the furnace was prepared by the women. Women also worked the ore in the furnaces. The task of checking the iron, and hammering it into implements for sale was undertaken by Agaria men. The chanting of mantras for the discovery of good iron were a male preserve. The division of labour has been described in the following proverb:

A woman is gossiping in a smithy: her husband tells her to get on with her work. 'It doesn't matter what I do', she retorts, 'so long as I do my bak bak and you do your tak tak', thus contrasting the noise made by the bellows and the hammers. 84

Agaria relations with the forest dwellers were governed by the work that they undertook for the adivasis. In Mandla the main job of the Agarias was to repair old sickles, axes etc. and to supply new ones. For this they received an annual tribute of grain from the villagers called jewar. Then they got food grain in the month of asad known as bij phutti, and finally they got grains at the time of the harvest of both spring and autumn crops known as kainhari. The Agaria rates depended upon the nature of the soil. In daiya territories where there was only one crop, the Agaria had little work to do and had to rely for work on the trade routes to fulfil their needs. Agaria survival was linked to the exchange of agricultural implements for grain. 85 For example in Silpiri smithy, one of the villages in the Chak, the following rates were applicable:

84 Ibid., p.188.
85 See Mandla DG, pp.179-180. Also see the settlement of Bilaspur zamindaris where all trade takes place through the medium of iron. It is also significant to note that such trading relations are maintained till the present day. Instances of such exchange between the Marias and the Agarias are common in Bastar and Chanda.
Table 2.9: Exchanges between Silpiri Smithy and Surrounding Villages in 1939:

<table>
<thead>
<tr>
<th>NAME OF VILLAGE</th>
<th>NO. OF PLOUGH OR AXES</th>
<th>JEWAR</th>
<th>KANHARI</th>
<th>BIJ-PHUTTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chara</td>
<td>6 P.</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Silpiri (Gona)</td>
<td>19 P.</td>
<td>5</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Silpiri (Baiga)</td>
<td>12 A.</td>
<td>1</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>Tantar</td>
<td>20 P., 12 A.</td>
<td>13</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>45 P., 12 A.</td>
<td>13</td>
<td>10</td>
<td>9</td>
</tr>
</tbody>
</table>

(Source: Elwin, Agaria, p.224)

Table 2.10 shows that the Baiga-Agaria exchange was limited to the purchase and repair of axes. Since the bewars were cut only once a year, the Baiga paid only a nominal annual tribute. But the relations between the Agaria and other communities were not merely limited to formal exchanges of grain. The Agaria was considered an 'outcast' within the society. The Agaria's hut was outside the village. Russell and Hiralal noted that if a Maria took an apprenticeship with an Agaria, he had to go and live outside the village. It was believed that the Agarias were despised not only by human beings, but also by spirits. For example, Elwin noted that Gonds and Baigas sold their children to the Agarias in order to save them and deceive hostile spirits. The Agaria were seen as having extra-ordinary powers of magic and cure. Hence every new-born child was to be touched by the Agaria's hot iron.86 Two antithetical tendencies were prevalent in these relations. Strong inter-community social bonds developed amongst the Agarias, Baigas and other communities. The jewar was adequate proof of this. At the same time Agarias were socially despised by the Baigas.

The first control over the Agarias subsistence was exercised by curtailing the community's rights to mine iron ore. Till 1861, mining rights in iron ore were common rights owned by the entire community. The initial geological surveys were carried out in the 1860s and it was noticed that a vast deposit of coal, iron-ore,  

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86 Russell and Hiralal, Tribes and Caste of the Central Provinces of India Volume 4, p.122. Also see Elwin, Agaria, pp.132-33.
manganese, sandstone and limestone existed in the Province. The main iron deposits were found in Chanda district and some part of the Jabalpur division especially Mandla, Balaghat and Sagar. Remarking on the nature of the ore Temple called the Chanda ores "spectacular". The places where these ores were found were mainly Gunjewahi, Bhanpur and Lohara. The ore was considered to be of a pure quality and occurs in the form of high hills, most of which were inaccessible. By 1902 all the iron ore reserves in Chanda and the districts of Jabalpur division were considered 'reserved' by the government.\(^7\) In the process they naturally curtailed Agaria rights.

The first yearly leases for iron and coal mining were granted in 1874. The feedback from the lessees showed that labour was not easily available. In the case of the Mohpani mines, the Narmada Coal and Iron Company complained that labourers did not want to work for them because: they were prejudiced against working for big mines; there was no guarantee of long term employment; the old local people did not cooperate; and there was a communication barrier due to a language problem. While the officials dismissed this as baseless, further developments in iron ore mining in Chanda and Sagar showed that the official assertion was not entirely true.\(^8\)

In the early 1870s a tax was imposed on the Agarias who dug iron ore in the forest. There was a tax on the ore extracted, on the furnace made by the Agaria, and finally on the manufactures from the iron. The main cause of the imposition of this tax was the failure of the government to get iron ore leases. Neither capitalist companies nor the Agarias were willing to mine ore under a lease system.\(^9\) While

\(^7\) CPSR Commerce and Industry Department, Case File No:k.w of 1902, pp.2-5.
\(^8\) CPSR Commerce and Industry Department, Compilation No:236 of 1874.
\(^9\) CPSR Commerce and Industry Department, Compilation No:51(D) of 1870.
in the late 1860s and early 70s the officials spoke of the "decline" in Agaria industry, by the late 1870s there was talk of its 'revival'. The first efforts came from Sagar. In Sagar the District Commissioner proposed that the only tax that might be retained on the Agaria's smitty was the tax on the ore which was 4 pies per maund. The Agarias however, rejected this proposal as the tax would have to be paid before the articles were manufactured and sold. This they argued would drive Agarias to other areas of proximity. In 1878 the District Commissioner of Sagar reiterated the need to revive this industry because of favourable local conditions. He stated that the purchase of iron in Sagar was taking place at reasonable rates by British malguzars and dealers. These dealers gave the Agarias employment during the rainy season when trading was next to impossible.90

Between 1886-87 there were many changes in the iron industry. In the Jabalpur division yearly leases were granted for the extraction of ore within the radius of five miles around Agaria villages. But the uncertainty of the lease prevented the Agarias from making furnaces. Instead they preferred to extract ore and sell it to the new steel company started by Spiegal. The divisional administration proposed to lease out mining rights for twenty years in order that capital was collected to make a furnace.91 By the turn of the century the effects of ore extraction and charcoal making on the forest ecology were seriously considered. It was contended that the Agaria felled more trees than were necessary and dug up excess land harming forest cover. All blacksmithing activity was to be henceforth carried out under the instructions of the D.F.O. In Chanda efforts were made to find the best methods of making charcoal with minimum injury to forests.92 Despite these

90 CPSR Commerce and Industry Department, Compilation No:181 of 1878-79.
91 CPSR Commerce and Industry Department, Compilation No:182(C) of 1886-87. Also see Report of financial prospects of iron working in the Chanda district, 1901 Nagpur, pp.1-2.
92 CPSR Commerce and Industry Department, Case File No:17-G of 1907.
efforts, the Agaria industry refused to revive. The main reason for this was the curtailment of Agaria mining rights. The famines of 1892-98 resulted in the a shortage of work for the Agarias. For example Elwin held that in Sagar each furnace employed at least 6 to 7 people, whereas in Mandla 5 people were employed. If the number of furnaces in one district came down from 65 to 17 about 200 people were rendered unemployed.93 Under the policies of the government in the late 1930s and the 1940s, an effort was made to revive the industry further. For this two measures were undertaken. In the first place the Agaria tax was reduced from 2 to 1 rupee per furnace on Elwin's recommendation. Secondly blacksmithing was to form an important part of industrial education. Where these measures were unsuccessful it was hoped that the Agarias and others would gain employment either in mines or in the forest department.

In the wake of European investments in mining, efforts were made for the survival of the Agaria industry. Attempts were made to make the production process more "efficient and less harmful to forests". The state also undertook measures to induce the Agarias to revive their trade by relieving them from taxation for short periods. But the Agarias had to alter the nature of their trade in order to survive in an economy which was regulated by the demands of European firms. Instead of producing goods for the *adivasis*, they had started selling iron ore to capitalist companies. Thus the process of capitalist penetration had altered the nature of Agaria trade and incorporated the local industry within its fold.94

94 For this point see Raphael Samuel, 'Workshop of the world - steam power and technology in Victorian Britain' in *History Workshop*, No:3, 1977. Also see Charles Sabel and J. Zeitlin, 'Historical alternatives to mass production: politics, markets and technology in 19th century industrialization' in *Past and Present*, No:103, 1985. Both authors discuss the relationship between local industry and capitalism and discuss the possibility of the incorporation of the local industry in the global economy.
Conclusion:

The main thrust of this chapter has been to show the organic connections between the forest and non-forest economies. I have pointed to the relationship between forest and agriculture: the seasonal rhythm of cultivation, hunting and gathering were intrinsically linked to each other. Together they formed the dhaiya system and a modification of this inter linkage led to loss of subsistence for at least a part of the community if not the whole of it. The other nexus in the sphere of agriculture was between peasant and forest communities. The peasants were dependent upon the forest for fuel and other produce that supplemented their income. The forests also acted as a support base for the agricultural activities of the peasants. In the process, the relationships of conflict and cooperation were structured between the peasants and adivasis. The interface between forests and industry is another aspect of the relationship between forest and non-forested economies. The nature of local industry changed to suit the needs of European companies. In the process labour opportunities were provided to adivasis. Since the forest dwellers started selling forest produce, like lac, to the European agencies, loss of subsistence occurred amongst some craftsmen. But a case for general de-industrialization can not be made on this basis. The case of tussar silk has shown that the silk industry declined only in some regions. In other places efforts were made for its revival. The example of the Agarias showed that the production process in iron smelting was transformed to suit the needs of the European firms. This development assumes great significance in the context of the taxes imposed on the Agaria's extraction of iron ore.

The local use of forests depended upon a fund of knowledge that the forest communities possessed. This knowledge was perpetuated through institutions of power and authority like the gaita, gunia and leske. The maintainence of these
institutions was essential for the fulfilment of subsistence needs. Colonial forces were not averse to using 'indigenous' knowledge in commercial operations. This created the space for the survival of some traditional subsistence strategies - a point well illustrated in the case of lac, tussar silk and crafts (the potential market for which was recognized by both Elwin and Grigson) in the 1930s. 'Indigenous knowledge' also helped in the preservation of the system (as seen in the case of medicine) and thus the survival of its people. In this sense it was an essential element in the reproduction of the system.