CHAPTER IV

MODE OF EXPLOITATION OF FOREST PRODUCES IN MANIPUR

Mode of exploitation of forest produces or resources is an integral part of - "Forest management and Planning". Exploitation of forest resources is to be made under certain schemes of forest management and conservancy adopted by the State. The forest produces of Manipur are also exploited under some specific rules of forest management or forest planning. In this study, we mainly study the exploitation of major forest produce i.e. timber, roundwood, firewood, etc. Exploitation of minor forest produces, i.e. animal, cane and bamboo, stone and earth, grass and fodder, incense and perfume, cardamom, orchid, etc. are not examined.

By exploitation of major forest produce we mean - "Logging Operation" which can be regarded as a chain of operations starting with the marking of trees and ending in delivery of the wood in the market or at the threshold of industry. In Manipur the process of logging operation or mode of exploitation of forest produces is manifold and also changes from time to time. The following section gives a history or evolution of forestry in Manipur.
4.1 A brief history of forestry in Manipur

No record for management of the forest resources of Manipur is available for the Pre-British period i.e. before 1891. In 1898 the management of Jiri-Borak Drainage Forest was entrusted to Assam Forest Department under certain conditions. The management of Jiri-Borak Drainage Forests was under the Assam Forest Department until 1936. Then the forests were formally handed over to the Manipur State Government. The agreement is shown in Appendix-F to this thesis. It led to a serious depletion in the forest resources of Manipur. The responsible person was the Divisional Forest Officer, Cachar. He was responsible only for the collection of royalty on all forest produces which were brought down from Manipur and no expenditure were made on the improvement and conservancy of Manipur forest. There was also no effective protection of the forests. The trees of commercial value were subjected to heavy illicit felling, lopping, etc. and it was accompanied by indiscriminate burning for Jhuming and hunting by the hill-people of Manipur. Thus, the dense forests of Manipur specially the Jiri-Borak Drainage Forest

were gradually converted into open grasslands dotted with scrub forests. In 1914, A.J.W. Millory, Deputy Conservator of Forests, Assam suggested the necessity for fixing a reasonable girth limit and marking of tree before felling of the trees. The minimum girth limit was 4'6" at breast high. The tree should be marked before it was felled by a trained forest employee. No tree should be felled below the minimum girth limit i.e. 4'6". This rule was normally followed for any tree species. But some exception was made in the case of Nageshwar, Mohidal and Sonaru (Casia fistula). The minimum girth limit of Nageshwar tree was fixed at 5 ft. and for Mohidal and Sonaru tree was 4 ft. The safe girth limit of evergreen tree species was fixed at 6 ft. The so-called - "Selection-System" was practised during those days in the exploitation of forest produces. The purchaser would select the tree to be felled in accordance with his own requirements but the minimum girth limit was to be marked by a trained forest personnel. Manipur Government, the owner of the forests desired maximum amount


4. Ibid. p.7.
of revenue from the forests compatible with their improvement and proper maintenance. But, there was no improvement in the practice of 'Selection-felling', because, the purchaser would select the trees to be felled in accordance with his own needs. On the other hand, there was great scarcity of trained Forest Officers in the State. As they did not work effectively and did not mark the trees with hammers or paint to show whether those trees are to be preserved or felled, the contractors felled any tree which had commercial value. They cut down even the undersized timber that could be sold in the market. In short, they began to fell the trees indiscriminately and were asked to pay royalty on what they managed to export from the forest of Manipur. For mere profit, the timber-traders began to misguide the ignorant and innocent hill-people of Manipur. Under the influence of timber-traders, the Hill-men began to cut trees indiscriminately over and above the tree felling required for their shifting cultivation.

"Block-System" was introduced in 1927 by Mr. Owden in Manipur. It was introduced with the view to maintain or manage the forest conveniently. For practising this system, the forests of Manipur were demarcated into several
blocks and a minimum annual revenue was guaranteed for each block which was sold year after year by public auction. During this period, the Assam Forest Department managed the forests of Manipur with the approval of the President, Manipur State Durbar. The Forest Department of the Princely State of Manipur was created in 1931. The Forest Member of the Manipur State Durbar was made the Head of the Forest Department. But the sale of forest produce by public auction continued. This system involved the leasing of forest blocks to registered forest contractors for extraction of timbers under certain terms and conditions prescribed by the Government. The contractors had to make a security deposit and the minimum and maximum amounts of timber to be extracted were also fixed. They were required to bid in a public auction and the highest bidder was given monopoly right to extract forest produce from a block for a fixed period, generally three years. Royalty on forest produce were also subject to revision according to the prevalent market rates.

During the rule of the Maharaja, the forests of Manipur were controlled by a State Officer under the direct control of the President, Manipur State Durbar. However, the Jiri-Borak Drainage Forest continued to be under the

control or management of Assam Forest Department. Its management was formally handed over to Manipur State Govt. in 1936. In the same year Mr. Hari Singh, the erstwhile Inspector General of Forest, Govt. of India, was appointed as the State Forest Officer of Manipur Govt. It was in the same year that public auction of all forest toll stations of valley had started in Manipur. The Government gave permission to settle inside the proposed reserve forest area and carry on wet-rice cultivation. Shifting cultivation was strictly prohibited throughout the reserve forests. However, some statutory concessions were granted to hill villages in the form of village reserve (Durbar Resolution No. 10-H of 20.7.32). The resolution permitted the formation of village-reserves within the radius of 1/4 mile around the village. The hill villagers enjoyed exclusive right of cutting fuel, small timber, shifting cultivation, collection of grasses, herbs, rhizoms, etc. for their domestic use from these forests. Even though they utilised these areas, they (Hill-people) had no ownership right on these lands. Most of reserved forests


were to be exploited departmentally, because it had some advantages like - minimising the logging waste (by using modern logging tools and techniques), making of larger quantities of good quality forest produce available to public at reasonable prices, etc. Sometimes reserved forests were also leased out to contractors for cutting firewood on payment. Permits to cut trees from certain State reserved forests were also issued on payment of royalty and monopoly fee. In this regard, no tree was also to be felled before giving necessary marking. But the departmental staff marking the trees or logs to be felled issued removal permits without any delay. As soon as removal permits were issued the timber traders were at liberty to remove the logs which were checked at different forest beats and royalty and other charges were realised accordingly.

There was also "Monopoly-right" over the forests of Manipur. It was adopted under the resolution of Manipur Durbar which was passed on 8th March 1933 to modify a previous year's Durbar resolution of Manipur Government. According to that resolution, "monopoly right" was given to the hill villagers to exploit forest produce within the village reserves. The Forest Member who was in charge of the department fixed the price of the forest produce at a
nominal rate in consultation with the Hill-office. This system was found to operate more satisfactorily as it gave the Hill-men an incentive to prevent indiscriminate cutting of timber from their own reserves. And, in the other villages which did not buy the monopoly right for their reserves, the former system of forest exploitation i.e. issuing of passes on payment by the Forest Officer to any person who intend to trade in forest produces was continued.

The fate of "Unclassed-forest" of Manipur was in a precarious condition. This was due to the failure of the State Govt. to formulate a clear policy for the exploitation of such forests. Most of these forests were worked with the objective of making room for jhuming and settlement. This was done against the privilege given by the State Govt. According to the Durbar Resolution No.16-RO-8-4-1926, the villagers who lived in the Central Valley were allowed to cut firewood free from the neighbouring hills for their personal use. And, the hill villagers were allowed to cut firewood from the surrounding forest for their personal use without obtaining the permits vide order No.21 of 14.2.33 of PMSD. But the virgin forests in the hills were not allowed to be cut, burnt and cleared for

jhuming or for any other purposes without a prior approval of the President of Manipur State Durbar vide order No. 2 of 17.4.34 of PMSD. However, this restriction of jhuming and cutting trees in virgin forests was not applied to areas purchased in auction from the State (Vide Order No. 10 of 17.12.34 of PMSD). But these regulations were not strictly enforced. In fact, it was a general practice that Hill-men were allowed to settle and practise shifting cultivation anywhere in the forests of Manipur. They considered that their right to settle and cultivate accrued from their right of ownership of these lands. But actually, the State Govt. of Manipur had always supreme ownership right over all these lands whether it was Jhum area or forest area.

However, the legal ownership of these forest areas has not been defined clearly until now. Even the rights and concessions of local people who live inside the reserved forests are not defined clearly. The rules prescribed in the working plans are also not implemented effectively or were not enforced and followed by the people of Manipur. Due to these shortcomings the forests of Manipur were getting depleted rapidly since the beginning of 20th century.
4.2 The present method of exploitation of forest produces in Manipur.

Depending upon the terrain or the topography of the area from which forest produces are to be extracted, logging may be broadly grouped or classified into three main systems: the shortwood system, the tree length system and the full tree system.

(i) The shortwood system: - In the case of inaccessible forest areas, all operations such as felling and various steps in processing the logs are carried out in the forest site itself and then logs are converted into pieces of wood or planks and transported to the market. For this operation inside the forest itself, the purchaser or contractor has to seek permission from the concerned Forest Officer by mentioning the problems like - lack of transportation facility (it might be due to road condition or due to the size of the tree). Such a system is found working mostly in the interior forest areas of Manipur where the extent of motorable roads is highly limited.

(ii) Tree length system: - In this system felling and limbing of trees are done at the site and further operations are carried out either in saw mills or in industries. This system is the most commonly practised system on Manipur.
(iii) **Full tree system**:- The felled trees are skidded as such and then transported to saw-mills or industries for further operations. This system is known as "Full tree system" and is rarely used in this State.

The above harvesting operations are performed by different agents. There may be three major agencies involved in the operation of forest produces viz., Government Agency, Combined Agency and Purchasers only.

(a) **Government Agency**:- Under this category, the entire extraction and disposal of timbers and other forest produces are carried out by the Government i.e. Forest Department itself, the net profit being the sale value less the working expenses. The departmental operations are generally done in the working of reserved forests by Government's own manpower. But due to the shortage of regular employees, the forest department engages casual labourers or muster roll basis for carrying out the various stages of operations under the supervision of forest officers.

(b) **Combined Agency (both Government and purchasers)**:- Generally it is recommended where there is apprehension that damage may be done to the forest (growing stock and other natural vegetation) if harvesting work is done by the purchasers alone. In such cases the actual felling is done
either by trained staffs or engaged labourers under the strict vigilance of the Forest Officers and the remaining operations such as conversion and transportation, etc. are being executed by the purchaser. This system is practised in the reserved forest areas of the State where conservancy is of paramount importance.

(c) *Purchasers only* :- This is by far the most common system of working adopted in Manipur. In this system, the whole operation beginning from the marking to the disposal is managed by the purchasers alone. This system of operation is highly detrimental to the forest wealth.

Thus, exploitation of forest produces are performed by three different agencies in Manipur. The main agency involved in Manipur in the extraction process is the "Purchasers only". This extraction is done after some conditions of logging operations are fulfilled. It is also differentiated according to the forest types, i.e. unclassed or unreserved forest, reserved forest and protected forests.

4.2.1 *Exploitation in unclassed forests*:

Generally, by unclassed forests we mean the private forests where tree growth is not of high economic value
and their forest produces are mostly low cost and inferior timbers, posts, poles, firewood, etc. 63.39% of the total forest areas of Manipur are occupied by this forest-type and has a major role in the production of forest produces (both major and minor) of Manipur. Most forest produces are also supplied by this forest alone and Government also expects that this forest should supply all the demand of forest produces of Manipur.

Generally, the working of this forest type is of clearfelling system and selective system. Clearfelling system is practised when there is a lump-sum sale of forest produces in the area.

a) **Lump-sum sale system:**

When the forest produces or growing trees are of low value, undersized and defective timber, these areas are sold on a lump-sum system. These forest produces are used or consumed mostly as fuelwood in the market. For this lump-sum sale, a fixed sum of money is paid to the owner of the forests i.e. local tribal chiefs or Hill Development Authority for the produce in question whether the exact quantity and quality are known or not and the right of extraction is vested with the purchasers or contractor for a given period of time. Generally this period
is one year only. Then the purchaser has the right to collect and extract the whole produce during this time. In this case, clearfelling system of felling is adopted. They extract or cut the forest produces irrespective of all silvicultural and other protective norms and guidelines. It is known that this system is very harmful and on the other hand it is very suitable for the areas which is to be clearfelled for plantation of valuable species of trees.

b) Sale by means of licence and permit:

This system is a kind of lease system and widely practised nowadays in Manipur. All the unclassed forests are controlled and their ownership rights are vested with local tribal chiefs or local Hill Development Authorities. The concerned local tribal chief or Authority lease their forest area to a timber trader or contractor for a specific period of time under an agreement. Generally, the average period of lease is 3 years. It is, however, extendable if the contractor fails to extract the forest produces during the period of lease. The intending purchaser or timber trader negotiates with the village chief or authority who controls the forests. The contractor offers to purchase the forest produces of the area and requests for
an agreement for that patch of forest area. After their agreement, the contractor applies for a permission to the concerned Forest Officer to extract the forest produces. The Government's role is confined to issuing of permit to extract forest produces out of the forest areas and to the realisation of royalty on the produce transported through the forest gates.

4.2.2 Exploitation in Reserved Forests

Reserved forest areas are generally under the direct control of Government (Forest Department). In this case, the Government takes up the plantation of economically important timber species with the aim of earning maximum possible returns or revenues. Only 9.09% of the total forest areas are occupied by Reserved forests of Manipur. Due to its small area, the reserved forests of Manipur cannot supply the demand of forest produces of the State. Here the logging operations are mainly clear-felling system by the Government agencies. Sometimes due to the scarcity of regular staffs the authority/Government engages casual labourers on muster roll basis for the execution of the various stages of operations. So far there is not a single case of working by private agencies in reserved forests.
This system of "Clear-felling" is practised on a rotational basis. The cycle of rotation depends upon the tree species, quality of soil or site, mode of utilisation of the timber say - plywood, timber, etc. According to instruction the rotation gap is about 10 years. However it is not strictly adhered to. "Selection-felling" system is also adopted in the exploitation of forest produces of reserved forests. The trees to be felled should be marked a blaze at 140 cms. height above the ground level. The blaze of (10x10) cms. will be made after removing the bark exposing the soft wood portion of the stem. A prescribed hammer mark is also instructed to be put at breast height on all the trees meant for felling. The trees are marked after selection by a trained officer. Then only the trees are felled and exploited departmentally.

"Auction-Sale" of annual coupe is also rarely practised in the reserved forest area of Manipur. The Territorial Divisional Forest Officer and Forest Range Officer inspect the forest to be auctioned immediately after the rainy season and record their observations regarding the conditions of forests. This report is put up to the Conservator of Forest for his comment. The auction sale of coupe, exploitation, including felling of marked trees and their transportation should be done departmentally
and it is also strictly instructed to finish this work of operation by April each year without fail.

4.2.3 Working/Exploitation in Protected Forests

In this State, "Protected Forests" are declared with the aim of protecting the forest for a specific purpose, such as - protection of catchment areas of rivers, land-slide zones, wild life preservation etc. which is generally meant for upkeeping the ecological balance of the state. Hence, no particular revenue earning or profitable way of approach is adopted in this forest area. But sometimes, some sort of "Selective-felling" (in a loose sense) is adopted when some mature, dead and dry, moribund trees, are available in this area. There has been numerous instances of unauthorised fellings which are at present ever on the increase. The system of felling and removal without premarking in certain areas encourage such malpractice in Manipur. This system of illegal felling is very common in most parts of Manipur forests. The extent of exploitation of forest produces through illicit trade is difficult to estimate.

4.3 Prescribed Rules & Regulations/Instructions

To improve the yield of forest produces of Manipur, the Government has adopted many rules for the exploitation
of forest produces and these prescribed rules are mainly for the Reserved and Protected forests only. The exploitation of major forest produces of reserved forests should also be carried out strictly in accordance with the prescription laid down in the working plan documents. It is also strictly instructed that the felling of trees in this reserve forests shall be done departmentally as far as possible. If any modification is necessary, the Principal Chief Conservator of Forests is empowered to modify the rules for adjusting to the exigency. All the felling in forests shall be aimed to improve and nurse the existing crop so that the remaining crop reaches the exploitable diameter in subsequent revisions. The silvicultural marking shall be carried out as per the rules laid out in each coupe. So, the staff and labour engaged in logging operation should be imparted training to improve the efficiency and output and minimize their defects. But no felling shall be carried out in the following areas -

a) Steep and precipitous areas (25° and over)
b) Blanks and understocked areas
c) Erosion prone and slip affected areas
d) River and stream banks for a distance of 15 metres on either sides
e) The fruit trees shall not be felled unless dead or diseased.

f) Well formed tree of Castanopsis, Quercus, Schima, Albizia, capable of becoming mother trees shall not be felled.

g) Patches of young crop should be suitably cleaned or thinned as necessary.

h) Bamboo will not be felled unless interfering within the growth of important species.

i) All climbers will be cut.

After considering the above conditions, the trees above 1 metre girth at breast height shall be marked for felling and the remaining trees shall be retained as future crop to give a two-tier view of the existing stock on maturity. Then, the felling shall be done and regulated as below:

a) No timber felling permit above 250 cft. shall be granted by the Territorial Divisional Forest Officer.

b) The Territorial Conservator of Forest will not issue any timber extraction permit for quantity above 2500 cft.
Any permit for extraction of timber above 2500 cft. shall require the permission of Principal Chief Conservator of Forest, subject to the condition that such fellings do not infringe the regulations of this forest.

There should be rotational-felling in a reserved forest area and the gap of rotation should be 10 year. As the existing crop is irregular and crop density is low, the yield will be regulated by area.

Not only the permission system, auction sale to purchasers can also be adopted in the reserved forests of Manipur. For auction sale, the territorial D.F.O. shall inspect the forest to be auctioned immediately after the rainy season and record his observation regarding conditions of forests. A treatment map showing all the details for light fellings, river and stream banks, steep, slopes, etc. shall be prepared for onward submission to the Conservator of Forests for his accent. This auction sale of coupe, exploitation, including felling of marked trees and their transportation should be over by April of every year without fail. The marking mentioned above should be adopted equally. Exploitation of protected forests shall be subject to the following conditions, namely:

1) No tree shall be girdled, pollarded or lopped of its branches.
ii) No tree shall be wounded for the collection of gum and resin.

iii) No tree shall be uprooted, burnt or injured in any other manner.

iv) No tree other than that specially marked for felling or permitted to be removed by a general order of the Divisional Forest Officer, shall be cut.

v) No tree under 9 inches girth at breast height shall be cut.9

vi) All trees permitted to be cut shall be cut as close to the ground as possible.

Again, no forest produce may be removed from protected forest, except by bonafide villagers of the villages notified to be located within the Protected forest. No forest produce shall be removed from a plot assigned for cultivation in protected forest or from any trees in such plot except by such bonafide villagers of such plot and no forest produce shall be removed from any Protected forest in a village or from any tree in such Protected forest except by a bonafide villager.

Some trees are declared as reserved trees in protected forests. Name of the reserved trees are indicated in Appendix-A. Cutting of these protected trees is prohibited.

The bonafide villagers residing in the notified villages within the Protected forest enjoy certain privileges. They are as follows:

1) Grazing rights - They may graze cattle in the area subject to the control of the Forest Deptt. which may close the area or part of it to grazing from time to time for regeneration.

2) Wood rights - They will have the right of obtaining wood for their own buildings and for firewood and for wooden implements for their own use only but not for sale.

3) Hunting rights - The State rules for the preservation of wild life will apply.

4) Cultivation rights - The wet-rice cultivation of the villages within the Protected forest area will continue as before. They will have no jhuming rights in general terms but may have
jhuming for certain crops at suitable places subject to the control and supervision of the Forest Deptt.

Regarding the removal of forest produce in the protected forests, no forest produce shall be removed except or unless covered by a pass or permit issued by a duly authorised Forest Officer allowing the holder to remove forest produce from a specified locality or a certificate of origin in the case of forest produce from private lands for which nothing is due to the Government. Such certificate must be issued by the owner of such land or his duly authorised agent and must bear such signature or stamp of the owner or his agent as has been previously registered in the Forest Office and such certificate shall be produced by the holder at the revenue station specified therein to be dealt with as noted hereafter. This certificate of origin must be issued in all cases whether the owner himself or any person removes the produce. A transit pass is also issued by a Forest Officer to certify full payment of all amounts due to Government on account of the forest produce covered by it. In the special cases, the Chief Forest Officer may permit the issue of transit passes by any person duly authorised by him. But no certificate of origin or other pass shall be required for the transport of home-grown bamboos. No royalty will be realised on
bamboos of any kind unless they are known to have come from Government forest.

Thus, many rules and regulations are prescribed in different forests of Manipur. If any person infringes any of the above rules or any conditions he will or may be punished under Ss.26 and 33 of the Indian Forest Act, 1927. But in fact these prescribed rules are neglected and not implemented smoothly. And as a result of these unsystematic exploitation or management of forest produces, the forest of Manipur are dwindling and degenerating, and many changes have occurred in the ecosystem of Manipur. If the above prescribed rules are implemented effectively, there should be a good forest that can maintain the eco-system of the State. On the other hand it can also play a major role in the upliftment of socio-economic condition of the State. So, it is the right time for the State Government to have a proper view in the development of forest management or exploitation of forest resources/produces.

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