# CHAPTER –II
# THE FOREST

## COMPOSITION AND CONDITION OF THE CROP

The forests of Dhalbhum Forest division conform to Dry peninsular sal Type SB/C/C as classified by champion & seth on account of varioius Biotic and adaphic factors the true character of the forest is differently modified depending on the degree of play of their factors. It is not uncommon to find pure stand of Hallarhena or combretun over appreciable areas. The extention of Parasi (cleistebthus) over Sal and miscellaneous forests is a later trend indicating the change in this type of forests. Aspect has very shining influence on the composition of the crop lying on hills. Northern slopes maintains miscellaneous crop. In the plain, however pure sal crop is present. Though the forest of the division may be primarily classified as sal forests, then miscellaneous crop extends over fairly large tract where principal parts of Singhbhum viz Asan (Terminalia tomentosa), Kend (Diospyros malanaxylon), Piar (Buchanania latifolia), Dhaw (Anogeissus latifolia), Sidha (Lagerstroemia parviflora), Karam (Adina cordifolia), Bija (Pterocarpus mar-supium), Harra (Tremanelia chebula), Bahera (T.belrtica), Kusum (Sohlechera trijuga), Panjan (Ougenia dalbergioide), Semal (Salmalia malabarica), Doka (Lannea grandis), Bhurkend (Hymeno dictyon excelsum), Siris, Mahua, Amla etc. on higher and drier zone Salen (Boswellia serrata), Telay (Sterculia urens), Hupa (Cochlosperm gossypium) etc. are found. The undergrowth in Sal forest consists mainly of wendlandia, Indegoferak NYetanthus itself Baunia. In sal forests of Plain, the sal, on account of repeated cutting, has been laid to form undergrowth the stump mortality is ot high climber incidence is rather low. In spite of showing inhibitory factors natural regeneration does appear particularly in comparatively inaccessible tract and moist Valley. There is strong indication of getting better stocking of natural regeneration provided factor inimical to nature regenration is minimized if not completely eliminated even for 5-10 years.

The crop is generally open with density varying from 0.2 to 0.6. In most of forests, there occurs blanks of appreciable extent. In hills, forest is receding towards the top. In several places the crop has to turned into rooted waste with no prospect of improvement under special treatment is given.

Sal crop is commonly of polesize and of coppice origin. Large trees to yield timber of quality are few. In atkosi areas only. Wherever reasonable protection has been possible, poles are straight with well developed crown and healthy.

MISCELLANEOUS CROP

The occurrence of main associate of Sal mention foregone para, in varying preparation depending on scope and soil constitute the miscellaneous forests. In such forests, Sal does occur in pockets, onforests of the hills and constitute less then 15% of crop. One present crop is by & large of coppice origin. Wherever Parasi occurs, its tendency to form principal species is in evidence. Natural regeneration of Parasi is fairly extensive in some of the miscellaneous forests. Bija in the hills of Ghatsila Range is extending appreciably.

Miscellaneous forests are also open. Scattered large size trees Asan, Dhaura etc. Occur in better proportion than Sal over unwoeked areas. The crop os worked over area is in sapling to pole stage.

BAMBOO AND SEMAL

The occurrence of both the spp. is almost negligible.

CLASSFICATION OF FORESTS

From the working plan point of view the forest of Dhalbhum division may be broadly divided into the following categories.

1. The less accessible forests where human interference is limited. Under this category come the forests where population is sparse and lie at comparatively inconvenient position and distance from the populated tracts. In such forests, the indiscriminate felling, grazing and exercise of concessions granted by Government are rather nominal. Such forests having either Sal or miscellaneous, still cover up quickly growth is satisfactory and the chances of reduction in stocking on account of human interference are remote., Such forests mainly lie in Musabani and Rakhamines Ranges and to certain extent in Ghatsila Range. Generally these forests are Reserve forests.
2. Comparatively accessible forests where human interference is more than the forest could bear.

Under this category come forests which are situated in the vicinity of thickly populated villages & industrial towns. In such forests, theft, and indiscriminate felling, in the guise, of exercise of concessions and an account of intense demands and handsome price of forest produce are so intense and regular that there exist remote chances of getting back a forest crop, once if existing forest has been harvested. These along with heavy grazing are making the foot of the hills bare of vegetation and gradually the forests are receding. similar situation exists in plan forests too. The forests under this category casnet been even be maintained much less they would improve, unless measures to minimise the human interference along with measures to rehabilitate these forests are earnestly taken. Such forest occurs in all the Ranges.

Easily accessible forests where human interference has annihilated the forests – Under this category come the forests where human interference had been since long and lie very close to thickly populated towns, and villages with heavy demands of forest produce. Such forests have now been completely stripled of vegetation and are either completely blank or under different stages of encroachment. Forest lands (Mango, Pardih) have been stealthily turned into township.

PLANTATION

Raising of Plantation, prior to 1952,was largely dependent on the interest D.F.O. when funds were scanty and irregular. There was no regular scheme of afforestation. Now a regular five years plantation scheme for Singhbhum district have been prepared by Sri D. Chatterjee, I.F.S.

Since 1952, however, under the aegis of Five Years Plan of GOVT. of India, a separate afforestation division for the entire state was created exclusively to undertake plantation to find out suitable such as Chaitha, Chutiya, Manusmuria were raised under this process, In 1956 five new afforestation divisions were created and the Dhalbhum Division become the overlapping Jurisdiction of Singhbhum afforestation Divisions.

Till 1984(from 1975 to 1984) plantation of different specis have been raised over 12549.89 Hect. area. There are failed and poorly stocked patches in the plantation area which immediately require restocking. main species raised in the course of afforestation are, Kaju,Eucalyptus miscellenious (cassia siamea and Acacia ouriculseformis with Ailenthus) Species the break up of the total planted area is given below.

TABLE : - Statement of Plantation area under different spp. (From 1975 to 1984)

| Name of spp. | Net area in hectare |
|---|---|
| Kaju | 75.50 |
| Eucelyptus | 2054.40 |
| Misc. (Acacia spp. etc) | 10419.99 |

The reasons of failure vary from place to place but important reasons are wrong selection of site and species, lack of protection, poor supervision, etc. In order that fuller and quicker utilization of plantations become possible, much more attention

has to be given towards the consolidation of these plantations even if so required by having a separate organization at the field level.

## INJURIES TO WHICH THE CROP IS LIABLE

The factors largely responsible for destruction of forests and slackening of their improvements are attributable to MAN. For the sake of enumerating these factors, they are unscientific and unauthorised cutting of forests, grazing and fire but it is the MAN who causes these factors to operate in the forests of Dhalbhum Forest Division.

## UNSCEINTIFIC AND UNAUTHORISED CUTTING

Aided by the concessions granted by government the man plunders the forests all over without much of fear and risk. Since the removal of dry fuel wood by head load is free, people go to forests with axe, cut down young sapling and pole, leave them in the forest to dry for a day a two and come out of forests with headload of such manufactured dry fuel wood in full view of the local staff. Had it been for bonafide consumption, only perhaps the forests might have depleted gradually but the high price of firewood, has led many to utilise this concession as a convenient source of living causing extensive destruction to forests.

Under the impression that forest land free of vegetation may be released for cultivation, people cut down forests adjoining their cultivation and clear it of vegetation, this impression has again been caused by the land Release Policy.

A visit to Mango Hat where hundreds of headload of firewood and hundred of Charpai and fashioned poles are sold will indicate the extent of unauthorised cutting in the forests in the vicinity of Mango.

The unauthorised cutting is also invariably done at high level leaving quite a few fee high stupps which either do not throw shoots or the coppice shoots are not of much commercial value.

Even the plantation are not spared of such unscientific and unauthorized cutting.

GRAZING

Rights to graze in forests without limiting the heads of cattle and regulating the incidence of grazing, has led to very high incidence of grazing particularly in the forests, Close to villages and towns. Even professional graziers awho have no rights, are camping near the forests where in their cattle graze without let and hindrance. This has made the forests open, inhibited the natural regenration to establish, hardened the soil to accelerate erosion. All these results of grazing are making forests bare and unproductive unless grazing is reasonally controlled the forests in the vicinity of the thickly populated pockets have indeed a dark future.

FIRE

Most parts of these forests are annually visited by Fire; Severe or light depending on the accumulation of inflammable materials on the floor of the forest. It is not uncommon to find Fire in the same forests more than once during the Fire season. Most commonly it is ground fire that sweeps away through forests, and burns away the leaf litter humus, seedling and young plants but not the bigger stems or trees. Since all the species vigorously coppice the forests recuperate in rainy season that follows close upon the forests fire and to common eye not much damage is visible. In fact, quit of number of educated persons look forward Fire-season to enjoy the garland of fire in Dalama Hill that pleases the eye immensely.

The damage done by fire has not yet received the measure of recognition that if deserves. In fact even professional Foresters have been threwing scant attention to this problem. A part from directly killing the young plants, Fire burns leaf litter, humus, fallen dry twigs and all organic matter which together form the base of the productively

of forest land. It also reduces the rate infiltration and effects the texture of soil. The hardened bare surface becomes more liable to erosion on account of higher run off.

The larger trees not looking apparently damaged may develop rots. Many stumps in Kapargadi F.S. were found affected with roots.

In forest fire in Dhalbhum division is caused by Man. On two main accounts (1) illicit distillation. (2) collection of mahua flower in the forests.

In Dalma hill, illicit distillation goes on all the year round, the site remains changing and so far no curb has been successfully exercised on the people concerned with it. During summer season when the forest become dry and leaf fall accumulate the Forest Fire occurs fire coming from there centres.

Where as people burn fallen leaves round mahua trees when the season of collection of Mahua, flower starts. They do not extinguish the fire which sweeps through the forests Fire in the forest of Dhalbhum division.

The thrown burning cigarette, Birds have also been sources of fire but in very few cases.

International burning of Forests to get better growth of grass and ash at washed down to their fields on the foot of hills, has also been located to a limited degree.

NATURAL CAUSES

Damage caused to trees on account of Forest, wind and insects and fungi is rare and negligible where as climber does cause malformation and affects growth in the forest occurring in moist areas. The commonest climbers are Bauhinia vahili, combretun dedcandrum, milletia auriculate etc.

DROUGHT

Though slightly better off compared to the forests of Palamau and Hazarbagh district, Drought often appears as a severe inhibiting factor in the work of afforestation of the denuded lands. Occurrence of drought when monsoon appears will set, is not uncommon. Such droughts greatly hamper the progress of plantation and kill the young seadlugs. Drought also damages the natural forests extensively when it occurs in severe form.

# CHAPTER – III

## UTILISATION OF THE PRODUCE

## AGRICULTURAL CUSTOMS AND WANTS OF THE POPULATION

The total population of Dhalbhum forest division which comprises of entire Dhalbhum sub-division and a part of Saraikella sub-division of singhbhum district according to last census of 1981 is it forms 48.34 of the total population of the district of Singhbhum. The average forest area per capita of population is 0.03 hect. about 20% of the population is entirely dependent on agriculture and the rest 80% is engaged in industries and mines within the territorial jurisdiction of dhalbhum forest division or out side of it. Local population largely consist of schedule tribes, schedule cast, backward, kharias etc. These residing in villages are either agriculturists or work as agricultural labour rice is the most important corp. Unpland rice and bhadai crop, such as maize, marua, gondli, til, sarguja are grown during the rainy season. Rabi cultivation is a very recent introduction is this tract. Agriculturists are yet to develop of keenan to grown rabi crop over extensive areas lock of facilities of irrigation, seeds, fertilizers and field demonstration and education are still great handicaps.

Kharias who practice shifting cultivation in the thick forests of Dhalbhum division particularly near about Kali kapur till recently, are permanently settled in small colonies established by government. Such conony are located at Ghatsila & Rakhamines. First colony was established in 1954-55 in Chandpur forests. But they subsequent abandoned that colony and took to their old habits. Subsequent efforts, of Government however succeeded. They have been provided with house, agricultural land, agricultural implements bullock etc. by Government.

Others are mainly engaged in various industries in Jamshedpur such as Tisco, Telco, Cable co, Agrico, Mines at Musabani Kendadih, Surda etc. too provide employment to local people. Jadugora uranium mill started in the year 1960 is a in the heart of forest generally local people work as skilled and unskilled labourers, who either stay the townships or in the villages in the suburbs.

Small commercial centers at Chakulia, Ghatsila, Hata too provide employment to local people.

State Trading wing engage labour on coupe works felling, logging, sawing, earting etc. Collection of biri leaves is an important subsidiary source of earning. Large scale plantations engage local people in an appreciable number. About 60% of the budget for afforestation is spent as wages to labourers. Other developmental work, such as roads, buildings, minor irrigation projects, too provide casual, temporary and semi permanent employment.

(a) WANTS OF THE PEOPLE

The wants of the population in respect of forest produce are many and revived. The impact of various industries and mines reflects in the tendency of better standard living even in the Adibasis who predominate in these forest tracts. This tendency has increased the demand of timber which is favoured for furniture, building materials etc. But at the same time, the agricultural wants in respect of forest of forest produce remains the same as the agriculturists have not so far taken to mechanized cultivation. The demands, therefore forest produce fit for house building agricultural implements, household articles, firewood etc. is fairly heavy. Bulk of the forest produce is therefore consumed locally.

An appreciable number of landless labourers and those owing insufficient land where main source of livelihood is sale of forest produce. They sell chiefly firewood poles, manufactured agricultural implements, Bed frame, Bed log etc. They invariably cut timbers and poles surreptitiously to earn maximum by their sale. Many persons prepare combs, grain measured and toys from timbers of Papra, Gamhar, Bhurkund, Kurchi, Green leaves of Sal and Bauhinia Vahli are sold in large quantities in Jamshedpur as also strings made of the fibre of the latter.

The chief requirements of the people for own use and for sale together with specified ordinarlly used are shown in the following statement –

| Articles | Species used | Average size required (in diameter) | Species prefered |
|---|---|---|---|
| 1. House construction and repairs | | | |
| (a) Posts | Sal, Asan, Panjan, Karla, Bija, Karam, Jamun, Sidha, and Dhaura | 8”-12” | Sal, Panjan, Sidha and Jamun |
| (b) Ridge | Sal, Karam, Guri, Panjan, and Asan | 8”-10” | Sal and Karam |
| (c) Rafters | Sal, Guri, Kend, Sidha, Karam, Asan and rohen | 4”-8” | Sal, Sidha & Karam |
| (d) Door leaves | Sal, Karam, Arjun, Mahua, Bija, Jamun, Simal and Kusum | 16”-24” | Karam, Sal & Bija |
| (e) Door frame | Sal, Karam, Panjan, Bija and Arjun | 12”-20” | Karam & Sal |
| 2. Agricultural implements | | | |
| (a) Plough | Sal, Panjan, Asan, Mahua and Kusum | 12” | Sal & Mahua |
| (b) Jaunth (Yoke) | Gamhar, Siris, Sissoo, Panjan, Karam | 12” | Gamhar and Siris |
| (c) Axe handles | Dhau, Dhawa & Bamboo | 6”-8” | Dhaw |
| (d) Levelling board (henga) | Sal, Guri, Karam and Siris | Over 12” | Sal & Karam |
| (e) Cart axles | Sal, Arjun, Siris, Panjan and Dhaw | 6”-12” | Dhaw & Panjan |
| Felloes | Panjan, Siris, Arjun | 12”-16” | Panjan |
| Spokes | Sal and Panjan | 10”-16” | Panjan |
| Hubs | Panjan | 12”-16” | |
| Yokes | Gamhar, Sisa, Karam | 12” | Gamhar & Sisa |
| Body frame | Sal, and Dhaw | 6”-8” | Sal & Dhaw |
| 3. Household articles | | | |
| Bahangi poles | Dhaman, Asan and | 6”-8” | Dhaman & |

| | | | |
|---|---|---|---|
| | Bamboo | | Bamboo |
| Drums | Gamhar | Over 12” | |
| Charkhas | Sal, Gamhar, Karam and Bhurkund | Over 10” | Gamhar & Karam |
| Combs | Salai, Gamhar, Karam, Bija and sisso | 8”-12” | Gamhar |
| Glogs | Salai, Sissoo and Gamhar | 8”-12” | Sisso and Gamhar |
| Kneeding rols | Sal, Bija, Bhurkund, Sissoo and Kaji (Bridelia retusa) | 8”-12” | Sissoo and Gamhar |
| Gram and Oil Machines | Bhral, Gamhar, Bija Salai, and Karam | 12”-20” | Gamhar and Bheral |
| 4. Furniture | | | |
| Lables | Karam, Gamhar, Bija, Sissoo and Sal | 14”-20” | Gamhar and Bija |
| Chairs | Karam, Gamhar, sissoo, Bija and Panjan | 10”-20” | Gamhar and Bija |
| Bed frames | Siris, Gamhar, Sissoo, Dhaman, Bija & Sal | 8”-16” | Siris, Sal and Bija |
| 5. Miscellaneous Items | | | |
| Machan | Sal, Asan, Dhaura, Jamun, Sidha and Kend | 5”-10” | Sal and Asan |
| Oil mill | Kusum, Panjan, Mahua and Sal | 4”-6” | Kusum and Sal |
| Paila (Measuring cup) | Bhurkund | 4”-6” | Bhurkund |
| Fencing | Icha, Karla, Dhaura, Sal, Asan & Aola | Any size | Sal, Karla and Icha |
| 6. Firewood | All kinds | Any size small size preferred | Sal |

The villages also need bamboos for house building and facilities for grazing their cattle. Their requirement of other minor forest produce are as follow:-

(1) Thatch grass (Heteropogen contortus) for roofing.

(2) Flower and fruits of Mahua (Madhuca latifolia) for food, liquer, oil.

(3) Edible fruits roots etc. of mango, kend, char, Jamun, Gardenia

qumifera and etc. latifolia, tuber of many dioscore a creepers etc.

MARKETS AND MARKETABLE PRODUCTS

The most important market for forest produce are the industrial centres of Jamshedpur, the Indian copper corporation at Maubhanda Jamshedpur market consumes forest produce of all description in huge quantities. The industries Tisco, Telco, Indian Tube company, Tinplate etc. consume timber of miscellaneous species such as Asan, Dhaura, Arjun, Bahera, Kend etc.

The public demand of these species at jamshedpur is worth Rs. one lakh. Indian wire product and Telco consume timber of sal. Consumption of firewood both industries, public and burning ghats is to the exten of 4 lakh mands. The annual out turn of timber of Dhalbhum Forest Division hardly meets 5% of the demand of Jamshedpur. Demand of firewood is fully met from the Mango Range alone. There are about 20-25 Saw Mills in Jamshedpur which generally obtain there requirements from outside the Dhalbhum Forest Division. Indian copper corporation too consumes a large quantity of Sal pit props and green poles of miscellaneous species. Only a part of its demand is fulfilled from the forest produce of Dhalbhum Forest Division. Demand of soft wood in Jamshedpur is worth Rs. 8 lakh. Ghatsila and Rakhamines Range commonly supply Doka to Jamshedpur. Demand thus it will be appear outstrips supply creating favourable condition for the illicit felling in the surrounding forests then thee are the towns of Ghatsila, Mahubhandar, Chakulia, Musaboni and large and prosperous villages like Beharagora, kokpara, Dhalbumgarh, Galudih, Kalikapur etc all of which require considerable quantities of firewood, agricultural implements, house building material, poles etc. However, there are left firewood and poles and sufficient surplus to be exported to Calcutta.

The most important item of minor forest produce is biri leaves which is required for manufacture of Biri. A considerable amount of Government revenue is obtained from this source and it also provides a means of livelihood. kaju grown in plantation some 20 years back is now sold for collection of its fruits. It provides another

short term means of livelihood to people residing near about the plantations. Paper industries are showing keen interest in Eucalyptus plantations Euclyputs is now used as raw material in paper factory. The yield of sabai grass is not enough to require outside market; the quantity available annually is not sufficient even to satisfy the local needs. There is scope of developing the trade in Mahua, Myrabolaus, gums and medicinal fruits, roots etc.

LINES OF EXPORT

The most important line of export is the Nagpur Howrah Main line of Eastern Railway which almost forms the mid rib of the division. The Tatanagar-Badampahar Branch is another railway line available for export.

The roads passing through the territories of Dhalbhum Forest Division are –

1. National Highway NO. 33
2. Chaibasa Jamshedpur
3. Haludpokhar-Kalikapur-Ghatsila-dhalbhumgarh-Chakulia-Baharagora road.
4. National High No.
5. Mahubhandar Musaboni Road
6. Musaboni-Dumaria-|Dubalabera-Haludpokhar road.

There are main roads through which forest produce may be transported conveniently in all directions. The number of forest roads constructed previously has made the forests of the interior accessible. However, there is still need of feeder roads of smaller distance. The list of forest roads along with the length is given in the statement below.

Statement of Forest Roads of Dhalbhum Forest Division

| Name of the Range | Sl. No. | Name of the Forest Roads | Total Length | Remarks |
|---|---|---|---|---|
| Chakulia | 1. | Dhalbhumgarh to Surangi | 10 km | Part in |
| | 2. | Baramara to Dighi | 6 km | Musabani |
| | 3. | Kesharde to Baramara | 10 km | Range |
| | 4. | Bahragora to Gandhinata | 10 km | |
| | 5. | Dudhkundi to Jaipura | 3 km | |
| Rakhamines | 1. | Roamato Badal Kocha via Bakai-Kakhrajharna | 32 km | |
| | 2. | Kalikapur to Dublaberra via Sadedih | 27 km | |
| | 3. | Kalikapur to Bakai | 8 km | |
| | 4. | Butgora to Dublabera | 14 km | |
| | 5. | Sadedih to Butgora | 8 km | |
| Ghatsila | 1. | Ghatsila to Narsighpur | 28 km | |
| | 2. | Basadera to Phuljore | 13 km | |
| | 3. | Mirgitanr to Phuljore | 14 km | |
| | 4. | Darisari to Gurajhore | 8 km | |
| Mango | 1. | Mirjadih to Narsinghpur via Bataluks Aamda Pahar | 30 km | Part 6 km Ghatsila |
| | 2. | Bataluka to Bamni via Aaapa | 19 km | Range |
| | 3. | Chakulia to Dalma Top | 18 km | |
| | 4. | Saldoha to Konkadasha Bamni | 17 km | |
| | 5. | Bataluka to Nutandih | 1.5 km | |
| | 6. | Chimti Madhopur via Baram | 16 km | |
| | 7. | Macha to Kantagora via Kakidih- Beldih | 11 km | |
| Musabani | 1. | Gurabandha to Chotabotla via Bakrakocha | 27 km | |
| | 2. | Bhitaranda to Chakri | 21 km | |
| | 3. | Badalkocha to Bhitaramda via Lakharidih | 21 km | |
| | 4. | Bhitaramda to Karida | 13 km | |
| | 5. | Bhalki to Rurabandha | 21 km | |
| | 6. | Surangi to Bakrakocha | 5 km | |
| | 7. | Surda to Somaidih | 9 km | |
| | | Total | 423 km | |

The forest produce is commonly transported by trucks right from the forests to markets falling within the territory of the division and its vicinity. Railway is also used for transporting forest produce to Calcutta and other places.

METHODS OF EXPLOITATION AND THEIR COST

The usual method of harvest up to 1980 was to auction the annual coupes by public auction in August and September and the contracters do felling, Logging and Sawing etc. Now from 1981 the system has been changed & the forest depart a separate unit i.e. state trading wing make their own arrangements for recruiting labourers, saw years, carters its for doing felling, logging and sawing etc. The period of exploitation is same as it was before, that is from 16$^{th}$ of oct. to 30$^{th}$ June. No felling is allowed during rains. Generally minor forest produce is sold for three years such as Kendu leaves, Kaju et.

Axes are mainly used for felling. The scope for sawing is limited as the produce available is mostly poles and firewood. Poles are generally cleaned of branches, debarked and transported. Large size trees which are few, are converted into logs of transportable size and extracedly trucks.

Felling, billetting, debarking and transporting etc. to truck heads are done generally on contract. The rates different items of work, are as under.

STATEMENT

| Sl. No. | Items of work | Approved Rate as per C.F. State Trading Circle, Jamshedpur |
|---|---|---|
| A. | Timber :- | |
| 1. | Clearance of Coupe boundary line | 23.00/ Hect. |
| 2. | Log cutting, logging and stacking – | 50.00/M$^3$ |
| | (a) In general coupe | |
| | (b) inaccessibility area | |
| | (c) Selection coupe | 65.00/M$^3$ |
| 3. | Preparation of extraction path/excelled firewood | 13.00/M$^3$ |
| 4. | Fire protection work | 1.25/M$^3$ |
| 5. | Miscellaneous item-Paper, Carbon, Register, Chalk | |
| 6. | Misc. item-Coaltar, Sharpner, Chair wire etc. | 3.00/M$^3$ |

| | | |
|---|---|---|
| 7. | Arrangement of drinking water in the coupe | |
| 8. | Preparation of hut (In coupe) | 250.00/$M^3$ |
| B. | | |
| 1. | Preparation of tram line pole and stacking :- | 0.35/ item |
| | Preparation of tram line pole and debarking :- | 0.50 /item |
| 2. | Preparation of cogging and stacking :- | 0.40 /item |
| | Preparation of cogging and debarking :- | 0.60 /item |
| 3. | Props Khunta each 1" dia :- | 0.35/inch dia. |
| | Rolla 1" dia :- | 0.40/inch dia. |
| | Pole 1" dia :- | 0.45/inch dia. |
| 4. | Fencing post (debarked) :- | 0.60/item |
| C.5. | Preparation of Firewood and stacking at the place of lodging | 6.00/$M^3$ Inaccessible hilly coupe |
| | Preparation of Pulp Wood :- | 7.00/$M^3$ |
| 6. | Preparation of Charwal :- | 4.25/Bag |
| D. | Copping – Except selection coupe :- | 125.00/hect. |
| | P.B. I Coupe | 250.00/hect. |
| E. | Depot Expenditure | |
| 1. | Preparation of Timber lot :- | 13.00/$M^3$ on place surface |
| 2. | Preparation of Timber lot :- | 15.00/$M^3$ on hilly surface |
| 3. | Collection of firewood and making of lot :- | 2.00/$M^3$ |
| 4. | Making of tramline cogging lot :- | 6.00/hundred |
| 5. | Making of Khunta lot :- | 0.25/piece |
| 6. | Making of Rola lot :- | 0.35/piece |
| 7. | Making of Poles lot :- | 0.50/piece |
| F. | Sawing (Saw) Machine | |
| 1. | Sawing for T.L. Cogging :- | 0.20/item |
| 2. | Other sawing charges :- | 35.00/$M^3$ |
| 3. | Stacking of T.L. & coggin for the purpose of sawing | 6.00/hundred |
| G. | Waged – Daily | |
| 1. | Meth , Khalishi, Chawkidar :- | 13.00/daily |
| 2. | Truck Driver :- | 600/- to 660/- per month according to ability |
| 3. | Jeep Driver :- | 525/- per month |
| 4. | Munshi :- | 425/- per month |

PART – I

CHAPTER – IV

STAFF

One Deputy Conservator of Forester is incharge of the division with headquarters at Jamshedpur. Appendix XII contains the list of the officers who held incharge of the Dhalbhum Forest Division when the division created on 2nd Jan. 1937. It had then three Ranges viz. Upper subernrekha range, Lower subernrekha range and the Manbhum Forest Division when it was newly created in 1946. The division expanded for proper supervision and administration, the upper and lower subernrekha range were split up and constituted into four ranges viz Rakhamines, Musabani, Guludih and Narsinghgarh. Consequent upon merger of the feudatory states of Saraikela and Kharsawan, two more fenges saraikela and Kharsawan were added. Subsequently, the forest of Saraikela and Kharsawan were transferred to newly created Chaibasa North Forest Division. The forests of Patamda thana and 22 villages of Chandil thana were then added to this division. At present there are five ranges in this division viz Rakhamunes, Musabani, Ghatsila, Chakulia and Mango. The following statement gives the present distribution of the division into Ranges, Beats and Sub-beats.

| Sl. No. | Name of Ranges | Name of Beats | Name of Sub-Beats |
|---|---|---|---|
| 1. | Rakhamines | 1. Rakhamines Beat | 1. Rajdoha sub-beat |
| | | | 2. Kumiruri sub-beat |
| | | | 3. Kapargadi sub-beat |
| | | | 4. Rohinbera sub-beat |
| | | | 5. Damdih sub-beat |
| | | | 6. Bakai sub-beat |
| | | | 7. Kendadih sub-beat |
| | | | 8. Roam sub-beat |
| | | 2. Kalikapur Beat | 9. Dhauladih sub-beat |
| | | | 10. Kudada sub-beat |
| | | | 11. Orkabera sub-beat |
| | | | 12. lakaragora sub-beat |
| | | | 13. Mohandih sub-beat |
| | | | 14. Chandanpur sub-beat |

| | | | |
|---|---|---|---|
| | | | 15. Manpur sub-beat |
| | | 3. Kowali Beat | 16. Kowali sub-beat |
| | | | 17. Sindurpur sub-beat |
| | | | 18. Dublabera sub-beat |
| | | | 19. Roteda sub-beat |
| | | | 20. Jojodih sub-beat |
| | | | 21. Harina sub-beat |
| 2. | Ghatsila | 1. Galudih | 1. Burudih sub-beat |
| | | | 2. Bankali sub-beat |
| | | | 3. Chekam sub-beat |
| | | | 4. Basadera sub-beat |
| | | | 5. Shyam Nagi sub-beat |
| | | | 6. Phuljhor sub-beat |
| | | | 7. Digha sub-beat |
| | | | 8. Kasida sub-beat |
| | | 2. Galudih Beat | 9. Kaljhor sub-beat |
| | | | 10. Kesharpur sub-beat |
| | | | 11. Kaspari sub-beat |
| | | | 12. Barahadih sub-beat |
| | | | 13. Sukhlara sub-beat |
| | | | 14. Ulda sub-beat |
| | | 3. Bhilaipahari | 15. Ghorabandha sub-beat |
| | | | 16. Hathibindam sub-beat |
| | | | 17. Malianta sub-beat |
| | | | 18. Assanbari sub-beat |
| | | | 19. Pipla sub-beat |
| | | | 20. Bhilaipahari sub-beat |
| | | | 21. Beko |
| 3. | Chakulia Range | 1. Chakulia Beat | 1. Jamira sub-beat |
| | | | 2.Baramara sub-beat |
| | | | 3. Baikunthpur sub-beat |
| | | | 4. Chakulia sub-beat |
| | | | 5. Chandua sub-beat |
| | | | 6. Jorisa sub-beat |
| | | | 7. Bankati sub-beat |
| | | | 8. Sunkha Bhanga sub-beat |
| | | 2. Narsinghgarh Beat | 9. Basajhor sub-beat |
| | | | 10. Narsinghgarh South |
| | | | 11. Narsinghgarh North |
| | | | 12. Dhanghuri sub-beat |
| | | | 13. Kokpar sub-beat |
| | | | 14. Ghaghara sub-beat |
| | | | 15. Bhera sub-beat |
| | | 3. Kesharda | 16. Chundanpur sub-beat |

| | | | |
|---|---|---|---|
| | | (Baharagora) | 17. Dudkundi sub-beat |
| | | | 18. Manusmuria sub-beat |
| | | | 19. Kesarda sub-beat |
| | | | 20. katasol sub-beat |
| | | | 21. Pitajuri sub-beat |
| | | | 22. Nayagram sub-beat |
| 4. | Musabani | 1. Musabani Beat | 1. Musabani sub-beat |
| | | | 2. Surda sub-beat |
| | | | 3. Benasol sub-beat |
| | | | 4. Dumuria sub-beat |
| | | | 5. Murakanjia sub-beat |
| | | 2. Gurabanda | 6. Mucharisol sub-beat |
| | | | 7. Dongadaha sub-beat |
| | | | 8. Gurabanda sub-beat |
| | | | 9. Paharpur sub-beat |
| | | | 10. Murathakura sub-beat |
| | | | 11. Bhalki sub-beat |
| | | 3. Besarpahari | 12. Khairbani sub-beat |
| | | | 13. Manikpur sub-beat |
| | | | 14. Lakaaidih sub-beat |
| | | | 15. Harda sub-beat |
| | | | 16. Besharpahari sub-beat |
| | | | 17. Katakuti sub-beat |
| 5. | Mango | 1. Mango Beat | 1. Mango East sub-beat |
| | | | 2. Mango West sub-beat |
| | | | 3. Mirjadih sub-beat |
| | | | 4. Ramgarh sub-beat |
| | | | 5. Kathjhor sub-beat |
| | | | 6. Konkadhasa sub-beat |
| | | | 7. Bonta sub-beat |
| | | | 8. Hamsada sub-beat |
| | | 2. Gobarghusi Beat | 9. Gobarghusi West sub-beat |
| | | | 10. Gobarghusi East sub-beat |
| | | | 11. Bataluka sub-beat |
| | | | 12. Jamdih sub-beat |
| | | | 13. Lailam sub-beat |
| | | 3. Patamda Beat | 14. Patamda sub-beat |
| | | | 15. Goilkata sub-beat |
| | | | 16. Jorisa sub-beat |
| | | | 17. Beldih sub-beat |
| | | | 18. Hathiadih sub-beat |
| | | | 19. Kuini sub-beat |

TABLE ‘B’

| Name of Ranges | Head Quarters | Name of Beats | Number of Sub-Beats |
|---|---|---|---|
| Rakhamines | Roam | Rakhamines | 8 |
| | | Kalikapur | 7 |
| | | Kawali | 6 |
| Ghatsila | Ghatsila | Ghatsila | 8 |
| | | Galudih | 6 |
| | | Bhelaipahari | 7 |
| Chakulia | Chakulia | Chakulia | 8 |
| | | Narsingharh | 7 |
| | | Keserda (Baharagora) | 7 |
| Musabani | Musabani | Musabai | 5. |
| | | Gurabanda | 6 |
| | | Besarpahari | 6 |
| Mango | Mango | Mango | 8 |
| | | Goberghusi | 5 |
| | | Patamda | 6 |

The present strength of the subordinate executive staff, office assistance including draftsman and other are an under shown in Table no. 'C'

TABLE 'C'

Total strength of staff of Dhalbhum Forest Division.

| Name of services | Total Strength | Remarks |
|---|---|---|
| Permanent staff | | |
| Forest Range | 4 | |
| Forester I/C Ranger | 1 | |
| Forester | 15 | (One hundred for sub-beat five |
| Forest Guard | 105 | as leave reserved) |
| Clerk | 8 | |
| Office Peon | 1 | |
| Orderly Peon | 7 | |
| Total | 141 | |

| Name of services | Total Strength | Remarks |
|---|---|---|
| Permanent staff | | |
| Forester | 1 | |
| Clerk | 1 | (For court work) |
| Deport Clerk | 2 | |
| Mines Moharir | 5 | |
| Coup overseer | 15 | |
| Draftsman | 1 | |

| | | | |
|---|---|---|---|
| Naka guard | | 1 | |
| Chaukidar | | 7 | |
| Dak Runner | | 1 | Appointed for eight month only |
| Jeep Driver | | 1 | in working season |
| Mali | | 1 | |
| Night Guard | | 2 | |
| Sweeper | | 1 | |
| | Total | 39 | |

Total staff permanent & temporary 180.

Executive and Ministerial staff together are 180. Out of these 141 are permanent and 39 temporary, this includes the seasonal appointment.

LABOUR SUPPLY

There are various industries, mines and development works which have all to complete for recruitment of labour, sufficient labour is, however available locally for working the annual coupes, for planting and alied forestry works. The needs for getting labourers from outside arises only occasionally. Some labour scarcity is felt during sowing and harvesting seasons.

Skilled labour such as sawyers, charcoal burners, carpenters and mason are also recruited locally, but some times they have to be imported from the adjoining districts.