

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 various biotic and abiotic 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 *Combretum* over appreciable areas. The extension of *Parasi* (*Cleistanthus*) over Sal and miscellaneous forests is a later trend indicating the change in this type of forests. Aspect has very strong influence on the composition of the crop lying on hills. Northern slopes maintain 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 marsipium*), Harra (*Tremanelia chebula*), Bahera (*T. belitica*), Kusum (*Schleichera trijuga*), Panjan (*Ougenia dalbergioides*), Semal (*Salmalia malabarica*), Doka (*Lannea grandis*), Bhurkend (*Hymenodictyon excelsum*), Siris, Mahua, Amla etc. on higher and drier zone Salen (*Boswellia serrata*), Telay (*Sterculia urens*), Hupa (*Cochlospermum gossypium*) etc. are found. The undergrowth in Sal forest consists mainly of *Wendlandia*, *Indigofera* *Nyctanthes* itself *Baunia*. In sal forests of Plain, the sal, on account of repeated cutting, has been laid to form undergrowth the stump mortality is not 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 regeneration 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 be 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, on forests of the hills and constitute less than 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 unworked areas. The crop on worked over area is in sapling to pole stage.

BAMBOO AND SEMAL

The occurrence of both the spp. is almost negligible.

CLASSIFICATION 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 stripped 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, Manumuria 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 species 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)

<u>Name of spp.</u>	<u>Net area in hectare</u>
Kaju	75.50
Eucalyptus	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.

UNSCIENTIFIC 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 or 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 stumps 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 regeneration to establish, hardened the soil to accelerate erosion. All these results of grazing are making forests bare and unproductive unless grazing is reasonably 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 it deserves. In fact even professional Foresters have been throwing 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, millettia 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 seedlings. 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 crop. Unpland rice and bhadaï crop, such as maize, marua, gondli, til, sarguja are grown during the rainy season. Rabi cultivation is a very recent introduction in this tract. Agriculturists are yet to develop of keenan to grown rabi crop over extensive areas lack 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 colony 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 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 ordinarily used are shown in the following statement –

Articles	Species used	Average size required (in diameter)	Species preferred
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 &

Drums	Bamboo		Bamboo
Charkhas	Gamhar	Over 12"	
	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"	Sissoo 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 dioscorea 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 extent of 4 lakh mands. The annual output 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 their 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 there are the towns of Ghatsila, Mahubhandar, Chakulia, Musaboni and large and prosperous villages like Beharagora, Kokpara, Dhalbhumgarh, 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

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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 Musabani Range
	2.	Baramara to Dighi	6 km	
	3.	Kesharde to Baramara	10 km	
	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 Range
	2.	Bataluka to Bamni via Aaapa	19 km	
	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 contractors 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 16th of oct. to 30th 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, billeting, 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
	Preparation of Pulp Wood :-	Inaccessible hilly coupe	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 Narsingharh. 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 Rakhamines, 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. Iakaragora sub-beat 13. Mohandih sub-beat 14. Chandanpur sub-beat

		3. Kowali Beat	15. Manpur sub-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 Bhangra sub-beat
		2. Narsingharh Beat	9. Basajhor sub-beat 10. Narsingharh South 11. Narsingharh 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.

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

<u>Name of services</u>	<u>Total Strength</u>	<u>Remarks</u>
<u>Permanent staff</u>		
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 allied 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.

