

**(PART - I)**

**SUMMARY OF FACTS ON WHICH THE PROPOSLS ARE BASED.**

**CHAPTER I**

**1.1 The tract dealt with;-**

**1.1.1 Climate and Situation.**

This plan covers the entire demarcated Reserved and Protected forests of the Dumka Forest Division. The areas of this division comes under the civil subdivisions of Dumka, Godda and Pakur. The forests stretch from 23°45' to 25°15' North latitude and from 86°55' to 87°55' East longitude. The total area of the Dumka is 544 sq. kms. The major part of these forests are situated within the 'Damin-i-Koh' (Out skirts of the Hills) estate of the Government. The block lying outside the 'Damin-i-Koh' are ex-Zamindari forests now vested in Government and the Khasmahal forests.

**1.1.2 Configuration of the ground;-**

The entire forest division is an upland tract with a central block of hilly country extending from North to South. It consists of hills, plateaus, valleys and ravines. All the rivers including big rivers like Gumari and the Kajhia originated from the central ridge draining to Pakur and Godda subdivisions. The ridge eventually terminates at the river Bansoli which runs east to west forming the northern boundary of the biggest forest block 'the old reserve', situated towards the southern limit of the 'Damin-i Koh'. In this wide group of hills all aspects are fairly well represented, but the general elevation diminishes towards the south. The hill slopes are generally moderate but at times gradient is very steep. These steep slopes are found mostly towards the NorthWest corner of the 'old reserve'.

### 1.1.3 Topography;-

The forest area is mostly moderately undulated. The area is facing degradation at an accelerated rate mainly due to population explosion. Except the big valley of the Brahmini, small valleys are enclosed by forest covered hills. The height of the hills vary from 250 ft. to 1500 ft. Many isolated blank hills or with rooted wastes are met with. The valleys between the ridges are narrow. All the three rivers Bansloi, Gaura and Brahmini rivers run West to East. The Bansloi is at the Northern side, Gaura in the middle and the Brahmini at the southern side of these forests. The to most point of the Division is Mahuagarhi whose height is 1650 ft.

### 1.1.4. Geology, Rock and Soil;-

brief note on the geology and economic minerals of the Dumka Division is given below based on a Note supplied by Shri K.C.Joshi, Senior Geologist, Geological Survey of India, Patna vide his letter no. 25-83/P/BC/(E)/Mic/Tech/72 dated 21st December, 1972.

The archean gneisses and the Gondwana group of rocks constitute the major portion of Santhal Parganas. The tentative sequence of rock types of the area is given below;-

Alluvium	Recent
Laterite	Tertiary
Mica	Peridotite
Dolerite	
Trap	
Intertrappean bed )	.....Upper Gondwana

Dubrajpur sandstone )  
 and shale  
 Barakar sandstone )  
 Shale  
 Taichirs ) .....Lower Gondwana  
 Vein quarta, granite  
 and pegmatites

Hybridised nortite anorthosite ) Late to post tectonic  
 Hybridised ) Intrusives. Deformation.  
 granulitic norite ) and Igneous intrusion  
 Olivine melanorite, ) followed by metamorphism  
 metadolerite and ) and granitisation.  
 ortho-amphibolite )

Amphibolite, Hornblende, ) Parametamorphics  
 gneiss and calc. gran- )  
 ulites, Felspathic quar- )  
 tzite, granite gneisses )  
 with associated khonda- )  
 litic variants and  
 garnet-quartz granulite.)

The area represents a peneplain of a highly deformed and metamorphic archaean terrain consisting of a group of Para metamorphic gneisses intruded by a suit of syntectonic basic igneous rocks which have also been metamorphosed to the same grade as the country rocks. Subsequent localised intense potash metasomatism attended to the regional granitising process highly affected some of the rocks viz. norite and noritic anorthosite, leading to their hybridisation, pegmatites, quartz veins, small granitic stocks and discordant unmetamorphosed post archaean dolerites occur as intrusive bodies within the gneisses. The parametamorphics include various types of granite gneisses as the dominant member together with sillimanite granite gneiss varying into

khondalitic gneiss, amphibolite, felspathic quartzite and minor calc silicate rocks.

The suit of syntectonic basic igneous rocks are represented by the orthoamphibolites, metadolerite, dioritic metadolerite, hybridised norite and hybridised noritic anorthosite. The pegmatite and vein quartz rocks are in some cases brachiated and crushed in nature showing development of epidote in the crushed pegmatites. It appears, therefore, that the small granite stocks, pegmatite and quartz veins represent the late to post tectonic intrusives in the area. The post archean dolerites are unmetamorphosed and occur in the form of long and comparatively thin dyke, discordantly cutting across some of the archean intrusive viz. pegmatite.

**Gondwana group;**- Though both the lower and upper gondwana rocks are represented in the area of Gondwana system as a whole is very incomplete and is poorly represented. The lower gondwana are represented by the Talchirs and Barakar group of rocks. The Barakar rocks also contains some coal seams. Their outcrops are found as disconnected patches at several places and the rudaceous facies of the Talchirs is predominant in the area. The beds are conglomeratic and in some places highly gritty with angular fragmentary pebbles. Pebbles and boulders mostly anorthosites are of various sizes and shapes.

#### **Lower Gondwana Rocks;**-

Talachir rocks are exposed in the Barhmani river to the south of Balidih where it attains a total thickness of 181 feet. They are also found in the Bullaikandar river in the valley of Gumani near Dighi and Karmatand.

The outcrops of Barakar group are found in a number of places of which the following are important:-

- i) Tangsuli

- ii) Panchbyne
- iii) Brahmani section
- iv) Gumru
- v) Near Gopikandar
- vi) Near Narganj etc.

All these localities are situated to the west of Rajmahal hills but the out crops are also met with to the East. The thickness of the Barakars is not much and in many places they pinch out almost to insignificant thickness.

The Dubrajpur stage and traps overlap the Barakar rocks in some places. At few places the Barakar roll over directly on the metamorphics, the boundary line not being very distinctly exposed. On the southern bank of the river Brahmini the Barakars are represented by a narrow margin of sandstone and shale upto the village Taldiha. Sandstones and shales of various colours and grades are obtained in this area. The sandstone varies from coarse white gritty to grey, earthy and buff coloured fine to medium grained. Shales are generally argillaceous, black and carbonaceous, sandy shales and blue shales are also found. In the bands of the carbonaceous shales sometimes stringers of coal are noticed. Leaf impressions are abundant in these shales.

The upper gondwana is represented by Dubrajpur sandstone and Rajmahals. The Dubrajpur stage is found to rest on Barakars but at few places the Dubrajpur stages is found to overlap barakars and rest on the metamorphics, on the south of river Brahmini is faulted. The Dubrajpur rocks of this area are mostly of arena- ceous facies, but at some places a few thin layers of white shales also occur.

These rocks vary from coarse grit to fine sandstones. The grits generally have pinkish and brownish colour and contain angular fragments of quartz. Sandstones of white yellow and red brown types are generally met with. The Rajmahal group which is represented by intertrappean and traps consists of volcanic rocks, mostly represented by basaltic lavas and constitute the widest portions of the Rajmahal hills and rest most unconformably on the underlying sandstones of different ages. These basic lavas resemble with those of Deccan traps.

**Laterites:-** Laterites forming irregular patches are found at several places to the west of the Rajmahal hills from SURI northwards to the Ganges and on Mahua-garhi hills capping the basalt which often attains a thickness of 200 feet, in the area. They are mostly found in association with the basaltic rocks as cappings. These laterites are of tertiary age and might have been derived from the alteration of the traps. These laterite deposits are followed by alluvium which are of recent age. Alluvium— Both older and younger alluvium are found in the area. The older alluvium consists of clay with debris of rocks and kankar.

**Minerals;-** Economic minerals found in the area are coal, building stones, road metals, ornamental stones, ghotting lime etc.

**Coal;-** The coal of Rajmahal region are all shaly and poor in quality. Along the western border the Barakars contain several coal-fields which enumerated from north to south are as follows;-

- |      |     |              |            |
|------|-----|--------------|------------|
| i)   | The | Hura         | Coalfield. |
| ii)  | The | Chuperbhitta | coalfield  |
| iii) | The | Pachvara     | Coalfield  |
| iv)  | The | Brahmini     | Coalfield. |

**Road metals;-** Large quantities of good road metals can be obtained from the basaltic rocks which are found to

afford a very durable road metal, building stones and grinding stones etc.

**Ghooting lime;-** Considerable amount of ghooting is present everywhere in the vavalleys which are collected by the local people and burnt to lime for domestic purposes.

#### **1.1.5 Climate and Rainfall:-**

The forests lie between latitude  $23^{\circ}45'$  and  $25^{\circ}15'$  with the usual three tropical seasons, namely, the hot, the rain and the cold, the humidity being very high during the rains and very low during the hot weather, typical of a Bihar Gangetic plain. The hot season begins from the end of February and ends in middle of June. If the monsoon is late it may go up to the end of June. The temperature rises to a maximum of  $63.90^{\circ}\text{C}$  ( $115^{\circ}\text{F}$ ). Thunder storms usually occur in May or even in April causing a temporary relief in temperature. The monsoon usually breaks in the middle of June and continues until the end of September. Showers, very beneficial to paddy crop and locally called "Hathia" occur in October. The cold weather extends from about the beginning of November to February, during which period the days are pleasantly warm with temperature in open of about  $96^{\circ}\text{F}$ . The nights are cool and often cold with heavy falls of dew. The temperature drops to  $25^{\circ}\text{C}$  ( $45^{\circ}\text{F}$ ). Fogs are not so common except in the deep valleys right inside the forest. They usually occur in December and January. Occurrence of frost is very rare. The details of temperature and rainfall are given in the appendix.

#### **1.1.6 Water supply and irrigation;-**

The general slope of the country is from N-W to S-E. The Ganges touches this district a few miles west of Telegraphy and flows eastwards as far as Sakarigali where it bends to the south-east. The most important river in the north of the district is the Gumani, which rises in Rajmahal hills in the extreme east of Godda subdivision. At Burhait, it is joined by Morel river coming down from the North, and from this point the Gumani flows a short distance to the east and then turns sharply to the south.

The Bansoli rises at a hill called the Banspahar bill in the Godda subdivision and flows in the easterly direction through Pachwara pass and meandering along the northern boundary past the Silingi and Kushkira bungalow leaves district near Maheshpur and flowing past Murara station on the Eastern railway debouches in the Bhagirathi.

The Brahmini rises from west of Dudh hills outside the Damin area and flows south east forming the southern limit of the Damin-i-Koh estate. It is joined by Gumra and Iro coming from the north, the former of which passes through the southern portion of old reserves. The Brahmini finally joins the Bhagirathi in the district of Murshidabad of West Bengal.

None of the above rivers completely dries up in the hot weather and they carry three to eight feet of water at the time of flood during the rains. The smaller nallahs dry up in the hot weather and during the rains discharge their water quickly into the bigger rivers.

**Irrigation;**— A greater part of Santhal Parganas is hilly. The plains are also undulating with the result that whatever precipitation it receives is accumulated in low areas. To check the run-off hills and bandhs are being made up by the local people. There are big rivers but due to lack of big dams they are of little use as

far as irrigation is concerned, Most of the wells of the district goes dry during summer. The depth of wells varies from 20' to 45' mostly being above 30 feet.

The total area of the forests, Rangewise lying within and outside Damin is as follows:-

Name of the Range	Reserve Forest (old)	Reserve Forest	Damin P.F.	P.F.	Khasmah -al	Houl-tan block	Total Area
Dumka Damin	25068.00	-	12172.80	-	-	-	37240.8
Godda Damin	-	-	11470.52	3871.22	-	889.46	16231.2
Simra Damin	-	6468.56	14386.20	86.96	-	-	20941.7
Hizla East	-	-	-	28841.97	-	-	28841.9
Hizla West	-	95.19	-	32492.24	156.75	-	32744.10

1.1.7.2 There is vast area of undemarcated Protected Forests in the Division. During 1971-72 demarcation of this category of forests has been taken up in all Ranges. The following is the extract from the abstract of D.F.O. Dumka's letter no. 3944 dated 3.11.1971.

Name of the Range	No. of villages to be demarcated	approx. forest area to be demarcated. Acre/Hect.
Dumka	43	12413/5023.77
Godda Damin	64	13880/5617.04
	107	

After the demarcations were completed, 1871.72 acres of forest areas have been released vide D.F.O.'s memo no. 4439 dated 18.10.1968 and memo no. 4851 dt. 20.11.68 to the Secretary, Revenue Department, Bihar, Patna.

### 1.1.7.3 State of boundaries:

The exterior boundary of all the reserved and the demarcated protected forests are well demarcated on the ground by means of 6.10 metres to 9.14 metres (20' to 30') wide cleared lines and serially numbered wooden posts embedded in stone. The condition of these pillars in the interiors are tolerable, however, in the case of Houlton Blocks it is dispairing. At other places the condition of boundary pillars is deplorable. At places there is even no trace of pillars.

### **1.1.8 Legal Position;**

1.1.8.1 The Old Reserve;- The Government issued a notification on the 10th July, 1876, declaring the tract now known as the "Old Reserve" area about 90.65 sq.km. excluding cultivation, to be reserved forest governed by the provisions of Act VII of 1865. It was subsequently discovered that the Act had not been extended to the Santhal Parganas but the defect was remedied by the notification dated 1st June, 19881 declaring the 'Old Reserve' as a reserved forest. Subsequently in 1984 on the recommendation of Mr. Dancey, the then Conservator of Forests that the provisions of Chapter II were unworkable in the Old Reserve owing to the existence of a number of villages within it. In the Government notification number 4844 dt. 2nd Nov. 1894 all land except the lands already settled or to be settled under regulation III of 1872 were declared as protected forests. This notification applied to the old reserve areas which remained as Protected Forests until 1931-32, when the legal Remembrancer of the Bihar and Orissa Govt. considered it to be reserve forest.

### **1.1.8.2 Godda reserves:-**

The seven blocks in the Godda Damin which were declared closed in 1897, have been created reserved forests under section 20 of the Indian Forest Act, vide notification no. 13452-III-F-162--R dated 10th December 1932. These blocks have been reserved without any rights. They were demarcated in 1933-34.

### **1.1.8.3 Reservation for Lac cultivation;-**

Two small blocks; Pachwara (74.00 acres) & Hathibathan (53.97 acres) declared as reserve forests vide notification nos. 928-III-F-148-R dt. 19th September, 1930 and notification no. 9698-III-F-J.32-R dated 20th October, 1930 respectively. These were reserved for lac cultivation purposes..

#### **1.1.8.4 Houlton Blocks;**

The eight forest blocks in Pakur Damin known as [Houlton Blocks presently constitute the Sahebganj Division.

#### **1.1.8.5 Dumka-Damin P.Fs:**

These forests of Damin have been declared as Protected Forests vide notification no. 4844-For. dated the 2nd November, 1894. Out of 235 notified villages demarcation was completed in all the villages, but the draft forest settlement order had been passed only in 164 villages.

#### **1.1.8.6 Nankara Shankara Wards Estate Forests;-**

The management of these forests was taken under section 38 of the Indian Forest Act. Out of 40 villages notified vide no. 1985-VI-F-31 R dated 21st April 1945 demarcation has been completed in 36 villages, there being no forest in the remaining four villages worth demarcation.

#### **1.1.8.7 Khasmahal forests:-**

Out of the 13 villages notified under sec. 4 of the Indian Forest Act vide notification no. 966-VI-F-14-R dated 5th October, 1945 constituting the Khasmahal forests demarcation was completed in 10 villages rest 3 being unfit for demarcation. Khejuria forest comprising villages Khejuria, Saharghati and Bhadopara was notified as F.R. vide notification no. 1587-7 R-III-F dated 11th May, 1964.

#### **1.1.8.8 Undemarcated Protected Forests;-**

Major portion of demarcation of undemarcated forests of Dumka Damin Range was demarcated before the introduction of the Prasad's Plan. Since then major

portion of Godda Damin Ranges have also been demarcated.

#### **1.1.8.9 Protected Forests;-**

The management and control of the private Protected Forests of the Division was taken over under Bihar Private Forest Act 1946 (Bihar Act IV of 1948). Out of 1397 villages notified under section 30 of the above Act, only 576 villages were demarcated ten and the remaining 821 villages were excluded as they were not fit for demarcation.

#### **1.1.9 Rights ad Concessions**

##### **1.1.9.1 Rights in the Godda reserve;-**

The seven blocks in the Godda Daniin have been reserved without any rights vide settlement proceedings of 1932.

##### **1.1.9.2 Rights in the old reserve;-**

The old reserve was declared a reserve forest under the Govt. of Bengal notification dated 1st June, 1881. At the 1880 revenue settlement, the villages inside the "Old Reserve" were taken to be beyond the scope of that settlement and no regular settlement proceedi were carried out in res=pect of them.

The record of privileges allowed to be enjoyed by inhabitants of villages within the forest reserve and of their customary rights in the matter of providing themselves with wood for domestic and farming purposes. (Defined under section 10 of the General rules under Act VII of 1865).

1. Privilege ; Except in such tract as may be specially closed by the Forest Officer and notified as

such, the villagers, resident within the forest reserve, have the privilege of grazing cattle, fishing and hunting within it, subject to special rules forbidding kindling of fires and injury to trees already framed.

#### **1.1.9.3 Customary rights:-**

Except in such tracts as may be notified as closed by the Forest Officer, the inhabitants of the village within the forest shall enjoy the customary rights of:-

a) using dead trees and timber of all kinds and all trees other than sal, salsal, sissoo, asan, fruit bearing trees and trees marked for preservation which are under two feet in girth measured at a height of 3 feet from the ground.

b) Using brushwood known as jhanti ``.` and the fruit leaves of forest and jungle trees.

c) Using stone, clay, soil or limestone provided that the use of products mentioned above in (a), (b) and (c) is restricted to domestic purposes. Sale of these articles is prohibited.

In closing and notifying as closed any tract of forest reserve as described in the above record of privilege and the customary rights, the Conservator of Forests shall leave the villagers of each village, for the unrestricted use of the above defined privileges and customary rights on area in size not less than twice the amount of the area ordinarily set apart for cultivation or under cultivation at the time of closure.

No right of privilege of way has been provided for. Further in 1894, on the recommendation of Mr. Dancey, the then Conservator of Forests, that the provisions of Chapter II of the Indian Forest Act were unworkable in the "Old Reserve owing to the existence of a number of

villages in it and that the 'old reserve' be declared Protected Forest by the Government vide notification no. 4844-F dated 2nd November, 1894, constituted all lands belonging to the Govt. in the district of Santhal Parganas, to be protected forests with the exception of the lands that were already settled.

At the time of Mc Pherson settlement in 1898-1907 an interpretation was sought of Government if the old Reserve was a Protected Forest under Act VII of 1878. To this the Government of Bengal in their letter no. 1401-T.R. dated the 4th July 1902 replied that the Old Reserve was a protected forest and that if any area is now settled with the cultivators or others, it will cease to be a protected forests. All the villages, including the villages inside the reserve, were in consequence settled according to the regular procedure and the record of rights that was prepared then, gave the villagers the right to graze and to remove forest produce as permitted by the forest rules for the time being in force. Since then, the 'Old Reserve' was treated as a demarcated P.F. till 1931-32. The villagers did not exercise their rights probably because they had no necessity to do so, there being plenty of forest, excluded from demarcation in close proximity in their villages.

At the time of Davis's settlement of 1922-35, the Old Reserve was treated as P.F. and settlements were carried out in all the villages inside the Old Reserve. The record of rights which is in a printed standard form gives the villagers the rights to graze the cattle and to take forest produce from within their village boundaries.

All raiyats of the Damin-i-Koh Govt. estate having occupancy rights are entitled to the privileges accorded to raiyats by Regulation III of 1872 in the P.Fs of the district. All cultivating raiyats of the estate can remove free of charge trees of unreserved species for their own use from any area within their

village boundaries. The grazing of cattle and the removal of fuel and fodder from the forests within their respective village boundaries are also permitted free of charge. Trees of reserved species (numbering in all 23) are to be sold to the villagers for their own domestic use from their village forests (which include all the P.Fs) at half the ordinary schedule of rates and the trees of the unreserved species, if taken from areas other than forest within their respective villages, are also to be supplied at half the ordinary schedule of rates. In addition to the above, the privileges of selling Minor Forest Produce at forest hats specially prescribed for the purpose, is granted to all the raiyats of the estate. Paharia raiyats are specially privileged to remove trees of the unreserved species under 2' in girth from the limits of the villages in which they reside, for sale at such hats (vide rule 6 of Santhal Parganas P.Fs rule). It may be noted, however, that these special rights of the Paharias refer to the Paharia villages settled under the Paharia record of rights.

It is not intended that individual Paharia who happens to live in Santha! villages should have rights district from their Santhal and Diku civil villages.

### **Paharia rights;-**

Regarding the rights of the Paharias there is no right to do kuraon in Dumka Damin while in Godda and Simra Damin Ranges definite areas have been set apart for the Paharias to practice kuraon. They can remove trees and other produce from their areas and sell it free in forest hats levy being imposed on the purchasers of the produce Right holders have rights to lop any tree fop the cultivation of lac and feeding silk worms. Bonafide cultivators of Government land may graze free of charge, the cattle kept by them for their own household or agricusltral requirements or any forest land within the limits of the village in which

they reside. he grazing of all other cattle is prohibited except in areas set apart for them. No cattle or other animals may be grazed in area closed to grazing.

#### **1.1.9.4 Concessions;**

In addition to the above rights the D.F .0. has the power to grant annual licence to village astisans to remove fuel of unreserved species for the purpose of their trade on payment of prescribed fee enforced for the time being.

The requirements of loc Turis are met by imposing special condition in the sale list. Their requirements are met by the Bamboo coupe purchasers at rates prescribed by the Forest Department.

In consultation with the Deputy Commissioner grazing of cattle beyond the limits of their villages may be permitted.

#### **1.1.9.5 Rights outside Damin areas;**

The usual rights of timber, firewood and grazing have been allowed. Rights are confined to the residebt tenants. All therights have been allowed as per Khatihan Part II. A right holder can be allowed, subject to the availability of forest produce, to have the maximum quantity of timber and fuel as given below;-

- i) for house repairs - 4 cft.
- ii) for repair of cowshed - 2 cft
- iii) for ploughs - 3 cft.
- iv) for fuel - 14 headloads.

The rights are allowed subject to the following conditions:-

i) That in no circumstances shall goats and sheep be allowed to graze in any part of the forest.

ii) That those parts of the forests where plantations have been undertaken such areas will remain closed to grazing for 5 years'.

iii) In no circumstances fire should be used in exercise of these rights.

To meet the demands of the right holders the coupes shall be laid out according to the provisions in Part II of this plan one year in advance. The requirement of the right holders will be the first charge on these coupes. The surplus only has to be auctioned by the State Trading wing.

