

CHAPTER – 1

NAME AND SITUATION

Koderma Forest Division was created vide govt. of Bihar Revenue Dept notification no C/F-7014/56-2348R, dated the 5th of October 1956 and it started functioning from 24.4.1957. This Chatra. Initially, the following areas were taken out from the above division to from the Koderma division.

(a) Entire Koderma range consisting of the forest of Koderma and Jainagar P.S. Barhi Range, Bagodar Range, Idhak East beat of Hazaribag range and the Forest Guardas Trauning School, Koderma of Hazaribagh division.

(b) Entire Chauparan range consisting of the forests of Chauparan and Itkhori P.S. from Chatra division.

1.1.2 When the Hazaribagh Division was further bifurcation no C/F-(A) – 013/61-608R. Dated 10.4.1961, some readjustment of areas took place, Barhi range along with 10 P.Es of Chauparan P.S. Bagodar range and Ichak East beat reverted to Hazaribagh East and Hazaribagh West division.

1.1.3 Forest guard's training school located at Koderma was transferred to Hazaribagh Afforestation division in 1958. The school was finally shifted to Hazaribagh and placed under the director, Forestor Training school, Hazaribagh.

1.1.4 Subsequently, Koderma range was split into Koderma and Domchanch ranges and Chuparan into Chauparan and Gajhandi ranges respectively.

1.1.5 Subsequently the Gautam Buddha wild life sanctuary was created wherein certain areas of Chauparan ranges were included. Following the Govt of Bihar, Forest and Environment forests deptt resolution no you Budget 53/90-133 dated 15.1.1990, the forests included in the sanctuary were transferred to the Wild Life division Gaya on 17/8/91. The total area involved was 10,005.74. The list of forests and the area transferred are mentioned below:

Sl. No.	Name of the village	Thana	Thana No.	Transferred (Ha)
(1)	Sikda	Chauparan	1	346.01
(2)	Morainia	Chauparan	2	379.29
(3)	Muria	Chauparan	3	1122.61
(4)	Pathalgara	Chauparan	5	121.45
(5)	Duragara	Chauparan	6	222.67
(6)	Dhoria	Chauparan	7	1159.51
(7)	Kabilas	Chauparan	8	125.49
(8)	Murtiakalan	Chauparan	9	333.27
(9)	Silodar	Chauparan	10	220.90
(10)	Chordaha	Chauparan	11	138.98
(11)	Kenduadih/Danua	Chauparan	12	444.32
(12)	Ahri	Chauparan	13	1556.21
(13)	Sanjha	Chauparan	14	412.25
(14)	Garmorwa	Chauparan	15	619.99
(15)	Kathodumar	Chauparan	16	389.26
(16)	Mainukhar	Chauparan	17	97.99
(17)	Pathalgarwa	Chauparan	18	324.13
(18)	Asnachuan	Chauparan	19	242.91
(19)	Khairtanr	Chauparan	233	177.93
(20)	Bukar	Chauparan	234	1370.76
			Total	10,005.74

The total areas of the forests covered under this working plan are 78,973.01 ha.

The Koderma division has Chatra North and Chatra South division on the West, Gaya division on the North, Giridih Division on the East and Hazaribagh division on the south.

These forests lie between '24 12' N and 24 38 N latitude and "85 05 15" E and 47 30" E longitude.

GEOLOGY, ROCK AND SOIL

The geology of this area is rich and varied. This area has the biggest concentration of Mica in the country. The mine located in the division produce almost the entire Mica of the country. The salient features are given below.

The Archaeans and the lower Gondwanas are the two main rock formation found in the Koderma forest Division, bounded by latitudes 24 12' N and 24 38' n and longitudes 85 05' 15" and 85 05' 15" and 85 47' 30" E. the Archaeans occupy almost whole of the area, while the lower Gonawanas occur in the form of a few detached outliers unconformably overlying the former and are represented by shale, sandstone and boulder bed of Talcher stage and sandstone and shale of Barakar Stage . The Archaeans comprise two main groups (1) metamorphosed sedimentaries which include mica-schist, quartz-mica-schist, hornbloene-schist, amphibolites, quartzite and granulite, and (2) Intrusives which consist of grante and granite-gneisses, metadolerite, dolerite, gabbro, pyroxenite, Pegmatite and quarts-vein. The above formations are overlain by the Recent Alluvium and gravels brought down by the rivers flowing in the area.

ARCHAEANS

1.1.10 the general trend of regional foliation in the Koderma Forest area is E-W or WNW-ESE with moderate to steep dips (25 to 80) towards north-east. They have been initially folded into a series of antiolines and synclines with variations in the foliation trends are due to large and small megascopic folds occurring within the limits of the area.

1.1.11 Mica-Schist and quartz-Mica-Schist, forming the low lying mounds and the gentle rolling topography, are the widespread rocks of the area. They also represent a highly rugged and dissected topography marked by extensive mines and old mine working as well as dumps. They occur in wide patched around Dhab(24 35; 85 46) Kabrabunt (24 32' :85 45' 00),Jorasemar (24 34 ;0085 43' 05"), Raghwatanr (24 26' 30 ;85 28 00")and other areas separated by granite gneuss. The typical mica-schist consists mainly of biotite, muscovite and quartz with subordinate tourmsline, garnet, oligoclases zircon, epidote and occasionally sillimanite. The micaschist from north-east of Ahrai (24 32; 85 46') from Pipradan Nala, section, two Kilometre south of Dhab and other places is found to contain fibrolite and Kyanite. The schists with augmentation of coarse quartzofeldspathic material pass to hybrid mica-schist or granite-gneiss. Extensive hybirdisation of mica-schist by intrusion of concordant coarses pegmatite veins has completely obliterated the original character of mica-schist, including its distinet foliation. One such significant occurrence is noted to the south-west of Dhab along Piorakoni nala section.

1.1.10 Hornblende-schist and amphibolites occur in the form of bands and lenses lying conformably within the foliation of the gneisses and the schists distributed all over the area. The outcrops are found along the outer fringes of granite massifs, interlayered between mica-schist, and granite. Such occurrences are seen around the granite massifs, north-east, South and South-east of Sapahi tola (24 35'00:85 40 15"), South-east of Dhab (24 35:85 46) and north and north-east of Manjhne 924 41' 15":85 51' 15'). The exhibit intricate fold patterns. A band of hornblende-schist, outcropping south of Gajhandi 924 (30:85 28'), extends in NW-SE direction for over 5 km. having a width of about 200m. Hornblende-schist is a dark coloured hard, medium to coarse grained and well foliated rock. It consists essentially of dark greenish prisms of hornblende and whitish grey feldspar and occasionally some amount of quartz. Amphibolite through very similar in composition lacks schistosity.

1.1.11 Quartzite forms steep ridges and exhibits weathering and highly complicated jointing due to shearing. With the gradual increase in mica and feldspar content the rock grades into quartz-mica-schist and micaceous quartzite. Micaceous quartzite is distinctly flaggy, compact, and schistose as well tough. With the addition of hornblende the rock becomes hornblende quartzite. An outcrop of quartzite and quartz-schist is observed at about 2km east of Jainagar 924 22'30":85 39 00") where the rock shows steep dips. The patch of mica-schist at Dhab has a border of quartz-schist and quartzite around it.

1.1.12 Granulite occurs in the form of thin bands and lenses lying conformably within the gneisses and the schists. A 12 km long and 5 km to 15 km wide continuous band of garnet-amphibole-granulite occurs at the contact of granite and quartz-schist, extending in a NW-SE direction from east of Nawadih (24 33'10 ;46 10') to Goriadih 924 (35'85 43' 40' 00) and from there swinging back towards north-east. The granulite band has been folded into a broad asymmetrical isoclinal fold, which has been further cross folded into an anticline and a syncline and a syncline of small dimension. It is a dark coloured rock having moderately high specific gravity.

1.1.13 The weathered surface of the rock soils the finger due to its high content of iron oxide developed due to grained granulose to a very coarse aggregate of fine grained amphibole and quartz. Garnet forms roughly as equidimensional grains. The amphibolites include hornblende, cummingtonite and tremolite.

1.1.14 Granite and granite-gneiss are exposed over an extensive area. South of Jorasemar (24°34'85" 43°05") and south east of Pandaria (24°33'35" 85°45'00"0) the granite forms typically dome shaped hills namely Bagrujot (515m) and Bhattipahari (435m). The high hills of Mahuda (/2407) and Sindrail (/2215) situated at the south-western boundary of the Koderma Forest Division, are made up of granite-gneiss. With development of feldspar sugens the rock grades into augen gneiss, also occurs in narrow tongues and apophyses as observed to the north and north-east of Sapani tola as well as to the north-east of Jagdishpur (24°39'20" :85°42'50") North of Jorasemar and Goriadih and north-west of Dhab it occurs as lowlying mounds forming undulating topography. Granite and granite-gneiss are leucocratic, medium to coarse grained and very in color from pink and grey to buff Kaolinisation of feldspar makes the rock friable. The typical coarse-grained gneissic granite consists chiefly of pink.

