



*Geology &
Topography
of the Area*

GEOLOGY AND TOPOGRAPHY OF THE AREA

In Pranhita Godavari valley the beds which over lie the Barakar Stage have been described as the Kamthi beds. It is named after a military station Kamptee situated 20 Km. northeast of the Nagpur town. The village is situated on the opposite side of Kanhan river. The Kamthi beds continue from Maharashtra and end into the east-coast near Ellore. In the Nagpur district Kamthi rocks represents conglomerate quartz, Gritts, Pebbles and sandstones. Among the sandstones there are different varieties, some are fine grained with micaceous deposits others are yellowish or reddish in colour. The thickness of Kamthi is estimated upto 5000 Ft. The beds usually lie on Barakars but most of the time they are unconfirmably overling the Barakars. At several places faulty are found and due to errosion the Talchirs and Barakars some times crop out in the Kamthis. The classic example is seen in the Rajur and Bandar coalfield.

The stratigraphy of rock series is as follows :

STRATI GRAPHY :

Formation	.. Age
Superficial Soil Laterite	.. Recent
Deccan Basalt with interterappeans	.. Late Cretaceous to Eocene.
Lametas	.. Cretaceous
Kamthis	.. Upper permian

Barakars	..	Permo-carboniferous
Talchirs	..	Carboniferous
Vindhyan quartzites and shales	..	Pre-cambrian.
Brecciated quartzites and granitic gneisses.	..	Archaean

The plant fossils are found in upper part of lower Gondwanas. The Kamthis are richly fossiliferous. According to Blanford (1879) Kamthis show a immense spreading of brown ferugenus sandstones, conglomerates and clays. Wardha-valley sandstones are yellow or reddish brown in colour forming compact layers of rocks. In Chandrapur district, typical Kamthi rocks are located which are easily compared with those found in South Rewa district of Madhya Pradesh.

The first locality ^ASatnari, which is in the Nagpur District of Maharashtra is quite rich in Plant fossils in Kamthi shales. It is situated on the Nagpur-Amravati road at the distance of 22 Km. from Nagpur. From the road a diversion arises and reaches a stone quarry situated near the base of small hillock. The quarry is opened by a firm called as Yawalkar's. The material is taken out for construction of road. The softer shales are used as a base material for insecticide powder recently the quarry is closed and hence new exposers in the area were located. Petrified woods were collected from stream banks as well as adjoining fields. The second locality Bazargaon also situated on the Nagpur-Amravati road and it is 29 Kms. away from Nagpur. At Bazargaon stone quarries are in

operation which yield the reddish white shales. This locality has yielded only plant impressions.

Pasco (1959) listed the elements of fossil flora of Kamthi stage. In the present work major addition is made by different coniferous wood genera, it also includes some new Glossopteridean fructifications hence the work adds more information to the Kamthi flora of Nagpur district.

Pasco (1959) :

1. Equisetales -

Phyllothea indica Bunb.

Schizoneura gondwanensis

2. Pteridospermae et Filicales.-

Vertebraria indica Royle

Glossopteris indica schimp.

Glossopteris stricta Bunb.

Glossopteris leptoneura Bunb.

Gangmopteris Cyclopteroides Feistm.

Pecopteris sps.

3. Cycadophyta -

Taeniopteris cf. macclellandi (Oldh).

Taeniopteris cf. daneoides Royle.

Taeniopteris cf. feddeni Feistm.

4. Cordaitales -

Noggerathiopsis hislopi Bunb.