CHAPTER III

Geography and Geology of the Deccan

As has already been explained in the previous section, the area taken up for study is the 'Deccan' with Tapti as the northern boundary and Tungabhadra as the southern one. 'Deccan' is the corrupt form of the Sanskrit 'Dakshina' meaning 'South' or 'right hand'. However, Dakshinapatha is the most popular designation for the Deccan in the classical sanskrit literature and the epigraphs.

Geographically, the Deccan is divided into two natural divisions. Firstly, the elevated plateau flanked by the Satmāla in the north, the Sahyadris in the west and the eastern ghats; secondly, the coastal plains of Konkan and Kanara along the west coast, being overlooked by the long chain of Sahyadris.

The Sahyadris are the most conspicuous of the mountain system of the Deccan. They form an almost continuous wall with a main range of altitude varying between 2500 feet and 4000 feet above the MSL. They have a longitudinal range of 600 miles extending from Tapti downwards. The right flank of these hill ranges, however, present a contrast to left. Hence, the land looses only
a little height and in the shade of the plateau, there occur a series of low hills. Beyond the right flank is the plateau of the Maharashtra and Karnataka.

The Sahyadri, or the Sahyadri Parvat, range in the north is only a spur of the main Sahyadris. This separates the Godavari and the Tapti valleys and is the 'northern wall of the Deccan table land'. The other main spurs of hill ranges further south are the Jalna hills extending from Daulatbad to Jalna; the Dalaghat chain extending from Marischandragarh to Biloli; and lastly the Mahadeo hills beginning from Mahabaleshvar and stretching across the Satara district.

The southern boundary of the Deccan is marked by the famous granite hill ranges which may be the 'Malvavat' or the 'Rishyamaka' hills rising abruptly in the districts of the Chitradurga, Bellary, Raichur, Kurnool and other adjacent Andhra districts.

THE RIVERS

The major river systems of the 'Deccan' of our study are the Tapti, the Godavari, the Bhima, the Krishna, and the Tungabhadra. Except Tapti, which is westerly, all the others are easterly rivers.
The Tapti rises in the Satpura range near Mutai, and drains westwards reaching the Arabian sea. Its main tributary is the Girna.

The Godavari with its source in the Western Ghats, at Tryambakeshwar in the Nasik district meanders eastwards and joins the bay of Bengal, after crossing the Maharashtra and Andhra Pradesh. The tributaries of this are the Kādrāvā, the Pravara, the Purna, the Vanjra and the Prūnhita which conveys the united waters of the Penganga, the Wardha and the Wainganga.

Further south is the Bhima, taking its birth near the Bhimashankar in the Poona district. Its main feeders are the Indrayani, the Hula-Hutha, the Nira and the Kagna. However, the Bhima herself is a major tributary to the Krishna. The river drains the central part of Maharashtra plateau and the norther part of Mysore, before the confluence with the Krishna, forming the Sharapur Doab.

Krishna, literally meaning 'black' colour, as her waters are black, rises near Mahabaleshwar on the spur of the Sahyadris. She drains a stretch of about 900 miles, a little less than Godavari, flowing past the states of Maharashtra, Karnataka and Andhra Pradesh. Two
streams, the Ghataprabha and the Malaprabha which also flow from the Western Ghats, join the Krishna in the Bijapur district.

Further east, near Kurnool, the Tungabhadra, 'the Ganges of the South' joins the Krishna forming the 'Raichur Doab'. Tungabhadra herself is formed by the twin rivers, Tunga and Bhadra which rise at Gangaśīla in the Varnaparvata, a spur of the Sahyadri. After the confluence at Kudala, Tungabhadra drains the districts of Shimoga, Chitradurga and Dharwar, Raichur and Bellary, and then finally merges with the Krishna near Alampur. Tungabhadra's main feeders are the Kumudvati and Varada in the Dharwar district, and the Nagari flowing past the Chitradurga and Bellary districts.

34. GEOLOGY

Deccan has been one of the oldest landmasses of the earth. The main geological formations occurring in the Deccan are: (i) the archaean; (ii) the Kaladgi; and (iii) the Deccan traps.

The archaean are the oldest rock formations characterised by the Dharwar, and the gneisses and schists. The former have a complex series occurring in long narrow bands in roughly northwest-south-east direction. The latter, viz., the gneisses and schists, have a great lateral extent and extend south of the Krishna Valley. They form the different varieties of granites and gneisses.

These formations were followed by a long geological period of quiescence called the 'eparchaean interval' when the mountain building activity continued. Then occur the Kaladgis consisting mainly of quartzites, lime stones, shales and sandstones.

The Deccan trap occupy a major portion in between the Tapi and the Krishna valleys. They occur in lava sheets, consequent to the eruptions during the cretaceous eocene. Basalt is the most common type of rock occurring in this.

Besides these, laterites, products of the tropical weathering, under humid conditions occur.

In north Karnataka region, archaean granite rocks predominate, particularly in the Chitradurga, Bellary and
Raichur region. The texture of the granite rocks is coarse and all the mineral constituents such as felspar, quartz and biotite could be distinctly recognised macroscopically.

Due to prolonged, intensive weathering around joint planes, granite blocks have been formed which are further rounded by exfoliation. Some of the boulders so formed have been detached from their original positions, thus causing the formation of natural rock shelters.

A large number of dykes occur in the region, and particular mention may be made of the dykes which traverse the Bellary and Anantapur districts, and a number of them near the Tungabhadra. These dykes provided the necessary raw material for the inhabitants of the region in the 2nd millennium B.C.

Silicious materials such as cherts occur in the limestone deposits, which also have been utilised by man for preparing tools of blade industry. Black quartzite which is used for this industry in the sites further upstream of Tungabhadra occur in the auriferous tract of the schist belts.

The other economic materials such as Gold, Copper and Steatite also occur in the region. Special mention
may be made of the gold mines of Rutti and Naoki, in Raichur, Kublayatkatta in Dharwar, and the gold bearing auriferous tract of the Homali belt in Shimoga districts, all occurring in the Dharwar bands.

Another important metal is copper, occurring in the region, and Hyder Ali is said to have attempted mining of this metal in the famous copper mountains in the Bellary region. 35

Steatite or soapstone also occurs in the region and explains the beads of that material found in the excavations.

Thus the geology of the region was most favourable for the pastoral-agricultural inhabitants of the 2nd millennium B.C.

35. Francis, W., Madras District Gazetteers—Bellary, p. 18.