Chapter II

TOPOGRAPHY AND NATURAL FEATURES

(a) Geographical position of the district:

Numooli district is situated between eastern longitudes of 76° 58'-78° 58' and northern latitudes of 14° 54'-16° 14'. The district is bounded by Rangathandra and Krishna rivers on the north, Kurnool district on the east, Anantapur and Cuddapah districts on the south while Bellary district of Karnataka state forms the western boundary (Figs. 1, 2). The total geographical area of the district is 18,755 square miles.

(b) Hill ranges and elevation:

Numooli district consists of two major hill ranges viz. the Vellamalais and the Yerramalais. The width of the Vellamalais from the west to the east is nearly 40 kms. and more than half of this is now in Kurnool district. They lie about 113 kms. in this district lengthwise, extending southwards into Cuddapah district as far as the Kancharpalli and northwards into Kallakurichi district beyond the Krishna. The average height of the range is 666 m. above the mean sea level. The hills cluster near Jundla-grahamswaram, the nucleus of the Vellamalais appearing as
MAP OF INDIA
SHOWING POSITION OF KURNOOL DISTRICT
Fig. 2. Map of Burnool district.
Plateau. The highest point in the range is the Kantiakonda which is about 610 m above the mean sea level and some other prominent peaks are the Larya, Lakonda 567 m, Katalakonda 863 m, and Sundalakonda 851 m.

The hills other than Nallamala constitute the Yerraalaie, which begin at Yanavarai in Janamaladugu taluk of Cuddapah district and run northwards terminating at about 13 km. from Turnool. The eastern extensions of this range are referred to as the anya, the etanamorla and the Uyala and hills. The hills vary in width from a few kilometres near Turnool to 40 km. in the south, but throw out several spurs into the central section of the district. The Yerraalaie scarcely exceed at any point 600 m in height and are broken by two marked valleys, one near Namallakota and another near Nallalay.

The elevation in the plains vary from 250 m to 475 m above mean sea level.

b. Geology and soil:

The geological history of Turnool district is eventful, especially in the earlier stages. The oldest rocks exposed in the district are a group of metamorphic rocks belonging to the lower pre-Cambrian or Archaean era
and comprising quartzites, phyllites, schists and amphibolites.

With the passage of time the basin in the west was submerged beneath a shallow sea and in the Upper pre-Cambrian and Cambrian times the sedimentary rocks of the Kurnool system comprising limestones, shales, quartzites and conglomerates were deposited. The district is composed with three different rock formations viz., Archeean, Cuddapahs and Kurnool.

Archeean rocks constitute a major portion of the district and are found exposed in Aneni, Bellur and Battikonda taluks and western parts of Kurnool and Tadipatri taluks. Rocks of the Cuddapah system are exposed mostly in the eastern half of the district roughly in a rectangular area of about hundred km. long (north to south) and fifty km. wide extending westwards from the Sallaballai range. The northern and eastern parts of Anumakur taluk, the eastern parts of Nandyal and Alagadda taluks are made up of the Cuddapah formations. Kurnool system is predominantly calcareous with limestones and calcareous shales, which are exposed mostly in Anagana-palli, Thone, Soolkuntla, Kurnool, Nandikotkur and Nandyal taluks.

The soils of the district may be broadly classified into three types, viz., black cotton, red and mixed varieties. The Yerramalais divide the district into two
well defined sections from east to west. Between the Kallavalais and the Verramalais the eastern part of the district consists of Handikothur, Manyal, Allagada, Mallunkinta and Managandalli taluks and it is mostly covered with black-cotton soils. The western part comprises of Sattikonda, Rhone, Kurnool, Kodur, Adoni, Yendurangur and Alur taluks. The area of this section is flat and the soil is black-cotton in the north-eastern parts which is traversed by the river Hundri while towards the south-east the country is hilly with extremely poor red soil.

River Systems:

The principal rivers flowing in the district are the Trungabhadra, Krishna, Hundri, Randeru and Jundakanna. The river Trungabhadra forms the northern border of the district, which runs eastwards in a direct course until it reaches Kurnool town where it unites with river Hundri and then passing to northwards it soon joins the Krishna river (Fig. 2). The Hundri raising near Addileru in Sattikonda taluk joins Trungabhadra near Kurnool town. The Krishna enters the district at Sangan near Kurnool and from there forms the northern boundary of the district. It has entrenched its course about 300 metres below the plateau of Sivapuram and meanders the plateau of Krisilasa where the
The river Sundaruu raises on the western side of Verranallai, it flows in the northern direction and passes into Sundaruu valley from where it flows in southern direction finally falls into Kaveri river in Cuddalore district. The river Sundaruu takes its origin at Sundararreswaram, situated in the centre of Vellorealam and enters Kavaleru district.

e. Climate:

The climate of the district is characterised by a hot summer. The year may be divided into four seasons; these are:

1. From December-February: dry and comparatively cool.
2. From March-May: summer season.
3. From June-September: south-west monsoon season and
4. From October-November: post monsoon or retreating monsoon season.

The average annual rainfall in the district is 624.4 mm. Cud get less rainfall in the district whereas Sundararreswaram receives the highest rainfall. Mean minimum temperature in the district is 16.1°C and mean maximum is 30.3°C. April and May are hottest months, the mean daily maximum temperature is 40.3°C and minimum is 27.2°C.
The district possesses enormous deposits of iron ore, laterite, clay, ochre and quartz. There are several occurrences of copper, lead and silver deposits in the district which merit detailed exploration. There are several occurrences of copper, lead and silver deposits in the district which merit detailed exploration. There are several occurrences of copper, lead and silver deposits in the district which merit detailed exploration.

The district lies in the heart of the rain shadow area and is prone to drought. All the crops in the district are affected by drought very frequently. In the districts of Aajgo, Aali, Amo, Kolakote and Aamkillesa, areas are affected by drought very frequently. The average rainfall is not assured by assured sources of irrigation but mainly depends on western depressions. The average rainfall is not assured by assured sources of irrigation but mainly depends on western depressions.

The highest maximum temperature at 12 noon was 45.6°C on the 14th of May, 1921 and the lowest minimum was 6°C on the 25th of December, 1922.