CHAPTER II
TOPOGRAPHY AND GENERAL FEATURES

The district derived its name from Kurnool, its headquarters town. Etymologically, Kurnool is a corruption of Kandensavolu, the Telugu name by which it is referred to in the literature in the past. This place developed round the jaghir of the Nawabs of Kurnool in the course of the last century and a half.

Kurnool is one of the four districts - Kurnool, Bellary (including Anantapur), Cuddapah and Chittoor - known as ceded districts because they were transferred from the kingdom of Mysore to the Nizam after the war in 1800 and afterwards made over to British Government in lieu of money payment (Hooker and Thomson, Flora India, p. 135, 1855).

Kurnool district is situated between the northern latitudes of 14° 54' and 18° 14' and eastern longitudes of 76° 58' - 78° 56'. The district is bounded by Tungabhadra and Krishna rivers as well as Mahaboobnagar district, on the west by Bellary district of Karnataka and the south by Anantapur and Cuddapah districts (Figs. 1, 2). The total geographical area of the district is 18,799 sq.kms.
MAP OF INDIA
SHOWING POSITION OF KURNOOL DISTRICT
(a) **Hill ranges and elevations**

Kurnool district has two major hill ranges viz., the Nallamalais and Yerramalais. The average height of the range is 606 m above mean sea level.

The hills other than Nallamalais in this district constitute the Yerramalais, which begin at Yamavaram in Cuddapah district and run northwards terminating at about 13 km from Kurnool. The Yerramalais scarcely exceed at any point 606 m in height.

The elevation in the plains vary from 450 m to 250 m above mean sea level.

(b) **Geology and soil**

The geological history of Kurnool 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.

The sedimentary rocks consists of conglomerates, quartzites, shales, dolomites, limestones and cherts were deposited in the shallow sea. With the passage of time, the basin in the west was again submerged beneath a shallow sea and in the upper pre-cambrian and cambrian times, the sedimentary
rocks of Kumool system comprising limestones, shales, quartzites and conglomerates were deposited. The overlapping nature of the different formations and lateral variation in the thickness of Kumool sediments accumulated was unstable with frequent oscillations of the sea level.

The district is composed of mainly three different rock formations viz., Archaens, Cuddapahs and Kumools. The Archaen rocks constitute a major portion of the western part of the district which are exposed in Adoni, Alur, Pattikonda and Dhone taluks. Granite is the prevalent rock in these areas. The rocks of the Cuddapah system are exposed mostly in the eastern half of the district roughly in a rectangular area of about hundred kilometres long (north to south) and fifty kilometres wide extending westwards from the Nallamalai range. The northern and the eastern parts of Atmakur, the eastern parts of Nandyal and Allagadda taluks are made up of Cuddapah formations. The Cuddapah formation are concealed by the overlying Kumools. They are exposed over smaller areas in Kurnool, Nandikotkur, Dhone, Banaganapalle and Koilkunta taluks. The Kumool system is predominantly calcareous with limestones and calcareous shales forming a major part of it.

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 Nallamalais and Yerramalais, the eastern part of the district consists of Nandikotkur, Nandyal, Allagadda, Koilkunta and Banaganapalle taluks and it is mostly covered with black cotton soils. The western part comprises of Pattikonda, Dhone, Kurnool, Kodumur, Adoni, Yemmiganur and Alur taluks. The area of this section is flat and the soil is black cotton in the north-western parts which is traversed by the river Hundri while towards the south-east the country is hilly with extremely poor red soil.

(c) **River Systems**

The principal rivers flowing in the district are the Tungabhadra, its tributary the Hundri, the Krishna, the Kunderu and the Gundlakamma. The Tungabhadra forms the northern boundary of the district which runs eastwards in a direct course until it reaches Kurnool town and unites with its tributary Hundri and then flows northwards and joins the Krishna river at Kudali Sangam about 29 kms from Kurnool. The Hundri, a tributary of the Tungabhadra rises in the fields of Maddikera (Pattikonda) taluk and falls into the Tungabhadra at Kurnool. The Krishna river enters Kurnool at Kudali Sangam from where it forms the northern boundary of the district. The river Kunderu rises western side of the Erramalais and flows in southern direction, passing through Nandikotkur, Nandyal, Allagadda and Koilkunta taluks and enters Cuddapah district.
The river Gundlakamma takes its origin from the Nallamalai hills near Gundlabrahmeswaram and enters adjacent Prakasam district.

(d) Climate:

The year is divisible into four seasons. They are:

1. From December - February
2. From March - May
3. From June - September
4. From October - November

- Dry and comparatively cool
- Hot summer season
- South-west monsoon season
- Post monsoon or retreating monsoon season.

Mean minimum temperature in the district is 16.1°C and mean maximum is 30.3°C. April and May are the hottest months. The average rainfall in the district is 729.6 mm. Owk gets least rainfall in the district whereas Gundlabrahmeswaram receives the highest rainfall.

AVERAGE SEASONAL RAINFALL IN mm (1980-86)

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<th>Hot weather period</th>
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