

TUMKUR DISTRICT.

SECTION I—DESCRIPTIVE.

SITUATION, AREA AND BOUNDARIES.

TUMKUR.—A District in the centre and north-east situated Situation.
between $12^{\circ} 45'$ and $14^{\circ} 6'$ North Latitude and between $76^{\circ} 21'$ and $77^{\circ} 28'$ East Longitude. Its extreme length from North to South is 102 miles and its greatest breadth from East to West, 67 miles.

The area is 4,076.86 square miles, of which, excluding the Area.
area for which no returns exist, 2,181.72 square miles are cultivable and 1,656.76 unculturable. Of the culturable area, 1,977.88 square miles are under occupation with 1,379.44 square miles under actual cultivation.

It is bounded on the north by the Anantapur District Boundaries.
of the Madras Presidency, on the east by the Kolar and Bangalore Districts, on the south by the Mysore District and on the west by the Districts of Chitaldrug, Kadur and Hassan.

A considerable range of hills, forming the eastern boundary Physical Aspects.
of the Krishna river system in Mysore, runs north and south, through the eastern parts of the District. Entering its limits from the north with Kamandurga (3,537 feet) and Nidugal (3,485 feet) in the Pavagada Taluk, it is continued by Midigesidurga (3,414 feet) and includes the prominent peaks of the Madhugifi durga (3,935 feet), Chennarayandurga (3,744 feet), Koratagere (2,906 feet), Devarayadurga (4,154 feet, and 3,940 feet at T. B.), Nijagal (3,569 feet), Hutridurga (3,713 feet) and Huliurdurga (3,086 feet). It is a part of

the range running through the west of the Bangalore District represented by Sivaganga and Savandurga.

The following are other prominent peaks and they, along with the Devarayadurga, represent the Trigonometrical Survey Stations in the District, which are ten in number :—

(1) Rāmedēvarabetta, (2) Seethakal, (3) Dodanaramangala, (4) Byala, (5) Pavagada, (6) Bommenahalli, (7) Chowdenhalli, (8) Hemgiri, (9) Rangasvāmibetta.

The streams issuing from these hills are of small size, the principal being the Jayamangali, which rises in Devarayadurga and flows north-east into the North Pinākini; and the Shimsha, which rises to the south of the same hill and flows southwards towards the Cauvery. The North Pinākini has a course of only a few miles across the extreme north-east corner of the district, in the Pavagada Taluk.

West of the chain of hills above mentioned, a low range commencing near Kibbanhalli runs north-west past Chikkanayakanahalli and connects with the central belt of the Chitaldrug District. The watershed separating the river system of the Krishna northwards from that of the Cauvery southwards may be defined by a line drawn east and west from Koratagere to Tiptur; while the main chain of mountains forms the western limit of the upper North Pinākini basin.

The open parts of the district maintain a generally even level above the sea, the height at Tumkur being 2,678 feet. It is 2,520 feet at Kunigal, 2,734 at Kibbanhalli, 2,462 at Madhugiri and 2,479 east of Holavanahalli. But the situation of Sira is much lower, being only 2,160 feet above the sea level. This depression is evident to the eye from the neighbourhood of the Shibi temple.

The elevation of the other taluk head-quarter towns is also noted below :—Koratagere 2,906 feet, Pavagada Hill 3,026 feet, Chikkanayakanahalli 2,650 feet, Gubbi 2,569 feet, Tiptur 2,783 feet and Turuvekere 2,633 feet.

The southern taluks except around Huliurdurga, where the country is wooded and hilly, consist of undulating plains

interspersed with clumps of tall and well grown trees, where stone is scarce, except on occasional ridges or hillocks. Cocoa-nut and other palms are confined to the vicinity of tanks. Farther north, large plantations of cocoa-nuts occupy even the dry lands, especially in the Taluks of Gubbi, Tiptur and Chiknayakanhalli. After crossing Tumkur eastwards, the park-like appearance of that taluk changes, north of Devarayadurga, to the scenery of a hill country intersected by cultivated valleys, the hills and their skirts being for the most part covered with shrubs interspersed with trees which remain verdant through the greater part of the year.

To the north-east extends a very fertile tract, irrigated from perennial springs, reached at a depth of only a few feet below the surface. These springs called *talparigis*, one of the chief sources of water supply, form a marked and peculiar feature of the Madhugiri and Pavagada Taluks as well as of the adjoining Taluks of the Madras Presidency. The water obtained from the spring heads is either conducted directly by narrow channels to the fields or a *kapile* well is constructed from which the water is raised by two or four bullocks. Where the soil is not sandy, springs may be tapped at short distances from each other.

These *talparigis* are said to dry up generally in the summer, being useful only in the rainy season and not working now so satisfactorily as before. The reason assigned for this is want of sufficient and timely rainfall in recent years.

GEOLOGY.

Excepting the Charnockites, most of the other rock groups of the State are represented in this district. For descriptive purposes, the district may be roughly divided into three zones or regions as follows :—

- (1) The schist region.
- (2) The gneissic region.
- (3) The granite region.

(1) *Schists*.—The belt of schists extending north and south to the east of Huliur, known to the earlier geologists

as the Chiknayakanhalli band, forms the chief schist region of the district. These schists include members of both the lower and the upper division of Dharwars, the dark hornblende schists, epidiorites and the dark amphibolites constituting the former division, while the lighter green Chloritic schists and green-stones in association with a varied suite of rocks of fine grained gritty and slaty schists, argillitic schists, phyllitic rocks, etc., the altered variants of the acidic lavas and tuffs of the Champion gneisses, together with the ferruginous quartzites, limestone and other secondary rocks forming the latter or the upper division. The manganese ores and the limonite or hæmatitic iron ores are found in lenticular patches or pockets in these fine grained altered acidic rocks in close proximity to the basic chloritic schists. Between Huliar and Bukkapatna, is a club shaped exposure of a mass of a grey hornblendic trap, found to be intrusive into the above chloritic schists, and this is called after a prominent village, as Bellara Trap, and is of some importance on account of the old workings for gold it contains.

(2) *Gneissic region.*—Bordering the belt of schists on both the sides is the complex gneissic region consisting of a biotite granitic gneiss which has been shown of late to consist of the granitic members of both the Peninsular gneiss series and the Champion gneisses as well owing to the similarity of the constituent minerals, but for careful comparative study in the field, the two could hardly be differentiated from each other.

(3) *Granitic region.*—About the eastern end of the district running north and south through the gneissic region, is the band of the porphyritic Closepet granite, with an average width of 15 to 20 miles, forming the conspicuous chain of hills of Devarayadurga, Siddhabetta, Madhugiri and Pavagada. These, as in the Bangalore district, consist of several types varying in texture from medium even grained to coarsely porphyritic and in colour from grey to pink. The colour of the rock is chiefly due to that of the coarsely crystalline felspars, which vary from white or pale grey to pink or brownish, attaining sometimes a length of 2 inches or even more.

Dyke rocks, as usual, consist of normal dolerites which are seen in numbers to the S.-E. of Koratagere and also in the schist region. Enstatite or hypersthene bearing types are also occasionally found in the district and the one near Dodderi is partly pyroxenic and partly hornblendic and has some resemblance to the pyroxenite dykes of the charnockite series.

Building stones.—The medium even grained members of the porphyritic Closepet granitic series and also the finer grained normal granites are quarried in several places in the district, the chief among them being the Kyatsandra and Karadi quarries.

The quartzitic rock near Dodguni and Kondali are quarried to a certain extent, and carved locally into stone cisterns and also used for making grind stones.

The dark grey potstone or the amphibolite of the Turvekere Trap takes a fine polish and has been used in the construction of the Mysore Palace.

The schists are the chief mineral producing rocks of the district. Mines and Minerals.

Iron Ores.—Near Kondli, Dodguni and Karakurchi and also to the east and south-east of Bukkapatna are a number of bands of ferruginous quartzites. Some of these ores near Chiknayakanhalli and also the concentrates in the beds of streams in the Koratagere and Madhugiri Taluks appear to have been smelted previously.

Gold.—There are indications of gold in the Bellara Trap. Prospecting was carried on to a certain extent on the "Bellara Reef" and at one time the results appeared to be quite promising, but the poor results obtained in depth caused the mine to be abandoned. An account of the results of the work done in that locality is given in the *Mineral Resources of Mysore*, page 40.

Gold was also reported to occur in some of the quartz reefs to the east of Koratagere. But the analyses of a number of surface samples from these reefs have, however, failed to show any good indication.

Manganese is found to occur in fairly large quantities near Karakurchi, Dodguni and Janehar. There were four licenses current for prospecting for this ore during 1923-24 and the ores removed from 1905 to 1924 from all the blocks approximate to 36,513 tons, of which 25,767 tons have been exported.

Limestone.—Bands of limestone varying in composition from a high calcium variety to magnesian or dolomitic limestone types occur to the north-west of Kondli and also fringing the western edge of the schists to the east and north of Huli-yur. The exposure near Voblapur was worked to a small extent by the Geological Department, removing about 10,000 to 12,000 tons of limestone. These were departmentally tested for (1) the possibility of manufacturing calcium cyanamide, (2) the suitability as flux for iron smelting, and (3) after coarse crushing for using as a fertiliser for impoverished soils. The dolomitic limestone of the Shankargudda area (Shimoga District) being at present utilised as a flux for the Mysore Iron Works, the possibilities of utilising these limestone bands for other purposes have not been considered further.

Potstone.—The altered amphibolite of the nature of a potstone is quarried to a small extent and made use of for carving utensils. The crushed levigated powder, of the fine grained forms of soapstone occurring near Banasandra, has been used for the manufacture of slate pencils and at present four small factories are producing these pencils at Tumkur.

Ochres.—Yellow and red ochre, the altered and hydrated forms of iron ores, are being worked near Janehar, and the material after washing is manufactured into paints at Bangalore.

Other minerals.—Corundum. A group of deposits of corundum exist in the Koratagere, Madhugiri and Pavagada Taluks. The mineral is not usually obtained from the matrix rock, but is picked up by the villagers in the cultivated fields after the first showers of monsoon. On account of the erratic occurrences of these loose crystals, when the ground is being covered by soil, it would be difficult to locate the corundum bearing rock.

Graphite.—Small crystals of flakey graphite are found to

a small extent in the alaskite types of siliceous rocks in the Koratagere Taluk.

Earth Soda.—Alkaline efflorescences have been noticed in the Sira Taluk, at Nejanti and Tadaklur. The Geological Department conducted experiments in washing the earth soda and manufacturing sodium carbonate during 1920.

Except the Taluks of Madhugiri, Chiknayakanhalli, and the eastern and northern parts of Sira and Koratagere respectively, the soil is described as generally hard and poor, requiring much labour and manure to render it productive. Acres on acres may be seen in some parts on which there is nothing but scattered stunted shrub without even a blade of grass. This has no reference to the superior land irrigated by tanks, *nālas* and spring channels, as these soils of the taluks above referred to are exceptionally remarkable for their fertility. Pasture land is abundant, but poor, except in the Amrit Mahal *kāvāls* throughout the district. Soils.

The southern and western taluks may be described as most abundant in the red soil and contain large tanks. The eastern Taluks abound in sandy soil, the northern contain some black.

BOTANY.

The principal forest in the district is on the slopes of the Devarayadurga hills. Farther north, the hills around Koratagere are clothed with good fuel jungle. Near Madhugiri, the vegetation improves in appearance and variety. On the western range of hills running north from Kibbanhalli, there is a forest of karachi (*Hardwickia binata*), extending from Bukkapatna northwards to Gangarapente. Vegetation.

The following are the reserved or State forests in the District :—

				Sq. Miles.
Devarayandurga	..	..	..	30
Madhugiri	..	..	..	32
Bukkapatna	..	..	..	50
Huliyurdurga	..	..	..	30
Kudare-kanave	..	..	..	21
Kemplapura	..	..	..	1½

There are also nine Forest plantations, covering 963 acres, and three Revenue plantations. Of these, three are for sandal, and the others for casuarina and cassia.

The best wooded taluks are those which include the great eastern range of hills, namely, Tumkur, Koratagere, Madhugiri, and the old Huliurdurga Taluk. In these too, sandal grows. The south-western Taluks are well occupied with trees in topes, and such as have planted themselves in valleys and hedges. Cocoa-nut gardens are numerous, and in some parts the *butca frondosa* grows abundantly in waste lands. The north and centre of the Sira Taluk is badly supplied with wood, but the wild custard-apple grows in profusion in the plains.

With the exceptions above noted, the tree vegetation resembles that of the adjoining districts on the east.

The following are the State Forests and Reserved Lands in the district:—

No.	Taluk	Name	Extent	
			A.	g.
1	Tumkur ..	Devarayadurga ..	10,328	0
2	Do ..	Doddavadi Betta ..	1,042	23
3	Kunigal ..	Handalkuppa ..	3,750	25
4	Do ..	Huliurdurga, Ippadi, Ujjaini.	19,200	0
5	Do ..	Kemplapur Sandal Reserve	813	24
6	Gubbi ..	Ranganathapura ..	763	20
7	Do ..	Mancheldore ..	10,274	24
8	Do ..	Bukkapatna ..	9,959	35
9	Do ..	Thirtha Rampura ..	4,619	26
10	Do ..	Ankasandra ..	5,070	31
11	Chiknayakanhalli	Dasudi ..	3,174	36
12	Do ..	Kudrekanive Extension ..	1,544	28
13	Do ..	Bukkapatna ..	6,958	10
14	Do ..	Thirtharapura ..	3,898	31
15	Sira ..	Bukkapatna ..	18,259	21
16	Ranganathapura	Ranganathapura ..	4,568	14
17	Do ..	Anakasandra ..	2,029	26
18	Madhugiri ..	Madhugiri Forests ..	6,778	15
19	Do ..	Chikkamadhugiri ..	433	2
20	Do ..	Madhugiri Forest Extension	700	0
21	Koratagere Sub-Taluk.	Kolikall Block ..	1,208	10
22	Do ..	Kolikall Extension ..	1,649	17
23	Do ..	Kavaragal Forests ..	911	22

No.	Taluk	Name	Extent	
			A.	G.
24	Koratagere Sub-Taluk.	Madhugiri Forests ..	2,310	15
25	Do ..	Madhugiri Extension ..	1,584	18
26	Pavagada ..	Kotegudda ..	3,172	3
27	Do ..	Nidagal	3,015	11
28	Do ..	Kamanadurga ..	3,430	28
29	Do ..	Yeramanahalli ..	1,525	22
30	Do ..	Mugadal Betta, Blocks I & II.	1,132	..
31	Pavagada ..	Vadankal	1,696	..
32	Do ..	Thippaganahalli Blocks I & II.	1,890	..
33	Do ..	Rangappana Halli ..	814	..
34	Do ..	Bangaranaikana Betta ..	1,028	..
35	Do ..	Pavagada Blocks I & II ..	876	..
			140,412	17
			or	
			219-39	Sq.M.
RESERVED LANDS.				
1	Tumkur ..	Ramedevara Betta ..	1,384	..
2	Chiknaikanhalli .	Baragihalli Reserve ..	1,962	36
3	Madhugiri ..	Ramedevarabetta ..	1,603	..
4	Koratagere ..	Hirebetta Reserve ..	2,407	38
			7,357	34
			or	
			11-50	Sq.M.

Arboricul-
ture.

There are 18 *Casuarina cum* Sandal plantations in the Taluks of Tumkur, Gubbi and Madhugiri as noted below. *Casuarina* trees are disappearing and they are being replaced by indigenous species.

PLANTATIONS.

No.	Taluk	Plantations	Extent	
			A.	G.
1	Tumkur	Pandithanahalli	495	..
2	Do	Dasarahalli	290	16
3	Do	Mallasandra	107	37
4	Do	Gollahalli	72	37
5	Do	Ballapura	248	9
6	Do	Linganahalli	365	38
7	Do	Hirehalli	130	..
8	Do	Golahalli Plantation	225	28
9	Gubbi	Goravipura	247	..
10	Do	Chennasetthalli, Honnavalli and Nittagunte.	700	..
11	Do	Ammanaghatta	412	..
12	Do	Uddehosakere	502	..
13	Do	Ankapura	336	..
14	Do	Adagur	219	19
15	Do	Marasetthalli	327	..
16	Do	Harenahalli	476	..
17	Do	Bennehalla kaval	793	0
18	Madhugiri	Sulekere	172	15
Total			6,126	39 or 9.57 Sq. M.

Trees are planted along the roads to afford shade to the travellers. The kind of trees usually planted are :—Ala, Honge, Hippe, Mango, Nerle, Byala, Halasu, Hunse, Goni, Bevu, Jali, Atti, Basari and Jala. Avenues.

Besides these, 13 village forests covering an area of 4,651 acres, have been in recent years formed in the Taluks of Tumkur, Tiptur, Chiknayakanhalli and Pavagada and the Sub-Taluk of Turuvekere for the benefit of the villagers concerned and placed under the management of Panchayats constituted therefor. Necessary measures have been adopted for the expansion of such forests in all parts of the district. Village Forests.

The main roads are lined with avenues of tall and well grown indigenous trees.

The working of the system introduced during recent years of planting trees on the Arbour day every year is expected to contribute to the tree growth in the District in course of time.

The principal cultivation consists of dry crops, the more important of which are mentioned below. Ragi is the staple food crop. The following table shows the food grains raised in the District during 1925-26 :— Crops.

Food crops	Area under crop in acres
Ragi	383,017
Horse-gram	99,851
Cholam	36,762
Togari	22,232
Cowpea	19,215
Bengal-gram	8,766
Cumhu	2,124
Others	63,008
Total area under crops ..	675,715

The chief crops, food and commercial, raised in the District are, rice, ragi, jola, togari, avare, kulthi, Bengal gram, ground-nut, castor, cocoa-nut, sugar-cane, gingely, chillies and areca-nut. Other miscellaneous food and non-food crops are also cultivated. Indigo crop has ceased. Cotton, wheat and mulberry are grown to some extent.

The following statement shows the extent of crops raised in 1923-24 :—

Name of the crop	Extent cropped in acres
1. Food grains and pulses	580,641
2. Oil seeds	133,591
3. Condiments & spices	5,498
4. Sugar	1,344
5. Fibre	5,095
6. Drug & Narcotics ..	6,585
7. Fodder	7,002
8. Miscellaneous	65,527

Horticulture.

The names of vegetables and fruit raised in the district exhibit the variety of garden produce. Under the former may be mentioned brinjals, cucumbers, pumpkins, onions, garlicks, potatoes, cabbages, beans, peas, ginger and the latter includes jackfruit, mangoes, oranges, figs, grapes, apples, gooseberries, pomegranates, plantains, limes, guavas, etc.

The fruit industry consisting of figs and pomegranates for which Madhugiri was once famous, has been declining in recent years, owing to the failure of rains and the difficulty of adequate water supply.

FAUNA.

Wild and Domestic Animals.

The larger game is very scarce, and pretty nearly confined to the reserved forest tracts around Devarayadurga, where tiger, panther, bear, and wild hog are sometimes met with. In the jungly parts of the Sira Taluk, deer may sometimes be found and occasionally cheetas. There are also deer about the plantations in the Gubbi Taluk.

In the Madhugiri Taluk, cheetas are found in the Madhugiri State Forest and occasionally in Chandragiri gudda. There are also deer in the northern and eastern portions of the Taluk. In the Tiptur Taluk, there are cheetas in Konan Kaval and in Pavagada in the Pavagada Taluk small game consisting of deer and wild boar are common. Boar hunting, which was the principal pastime during new year day celebrations in the past, seems to be dying out.

Cows, bullocks, buffaloes, sheep and goats are the principal domestic animals. Good breeding bulls and buffaloes of a

fairly superior kind are maintained in some parts of the district.

Among bullocks, those of Madhugiri, Turuvekere and parts of Kadaba are highly esteemed on account of their breed but the cattle generally resemble those of other districts on the east. Buffaloes are commonly used for both agricultural and dairy purposes. Cows are plentiful but poor in size, breed and yield of milk. Sheep kept in large flocks for wool and manure are not of the highest quality, but a good breed is met with in Chiknayakanhalli and Tiptur and the Taluks to the south and west. Those of the Madhugiri and Midigesi side are considered less valuable. Swine are numerous in certain localities.

CLIMATE AND RAINFALL.

In the south and south-west parts of the district, the climate generally resembles that of Bangalore and from Sira northwards the climate is similar to that of Chitaldrug. The eastern side of every range of hills is said to be perceptibly warmer than the western. Climates.

The average annual rainfall for the district is 26·15 inches spread over 42 days. About 10·5 inches can be expected in the months of September and October in a normal year; very little rain falls from December to March, the total for this period being only 0·73 inch. The annual average ranges from 35·19 inches at Tumkur to 18·36 inches at Arsikere in the Pavagada Taluk. The heaviest fall for a single day was 9·60 inches recorded at Badavanahalli in the Madhugiri Taluk on the 27th September 1897. The annual total is over 25 inches only in the Taluks of Tumkur and Kunigal and in the Turuvekere Sub-Taluk. Pavagada is the driest taluk in the district receiving on an average less than 20 inches in a year; the rainfall in the Sira and Madhugiri Taluks is also scanty, being only a little over 20 inches in a year. During the past 31 years, the district average was over 30 per cent short of the average in three years and the deficit was over 15 per cent in nine years. Rainfall.

The following table gives the average annual and monthly
normal rainfall in inches at the rain-gauge

Station	No. of years	Jan.	Feb.	Mar.	Apl.	May	June
<i>Tumkur Taluk.</i>							
1. Tumkur ..	51	0·12	0·21	0·31	1·22	3·84	3·56
2. Hebbur ..	28	0·06	0·12	0·20	1·44	3·35	2·42
3. Urdigere ..	28	0·15	1·35	0·23	1·01	2·07	2·59
4. Bellavi ..	28	0·15	0·14	0·21	1·04	3·71	2·90
5. Nelhal ..	28	0·14	0·13	0·14	0·90	3·07	2·42
6. Kolal ..	18	0·26	0·02	0·40	0·92	2·82	2·83
7. Mavathur ..	19	0·34	0·10	0·24	1·05	2·91	2·85
<i>Madhugiri Taluk.</i>							
8. Madhugiri ..	51	0·15	0·09	0·23	0·72	2·49	2·54
9. Badavanhalli ..	28	0·10	0·16	0·20	0·80	2·46	2·38
10. Midigesi ..	28	0·13	0·14	0·21	1·07	2·83	2·00
11. Itakdibbanahalli	27	0·14	0·16	0·29	0·88	2·68	1·45
<i>Chiknayakanhalli Tk.</i>							
12. Chiknayakanhalli	51	0·05	0·16	0·31	1·12	3·83	2·48
13. Mattigatta ..	28	0·10	0·08	0·23	1·15	3·74	2·09
14. Hulyiar ..	51	0·07	0·13	0·23	1·37	3·05	2·00
15. Borankanive ..	14	0·17	0·09	0·05	0·74	2·63	1·65
<i>Sira Taluk.</i>							
16. Sira ..	51	0·11	0·09	0·18	0·80	2·52	2·10
17. Kallambella ..	28	0·19	0·13	0·19	0·95	2·83	2·09
18. Bukkapatna ..	28	0·10	0·13	0·17	1·07	3·07	2·08
19. Bargur ..	26	0·14	0·12	0·02	0·66	2·40	1·94
<i>Gubbi Taluk.</i>							
20. Gubbi ..	38	0·06	0·20	0·17	1·21	3·56	2·83
21. Kadaba ..	28	0·10	0·11	0·11	1·00	3·04	2·17
22. Chitnahalli ..	28	0·17	0·08	0·09	1·01	3·04	1·88
23. Dandinsivara ..	28	0·12	0·10	0·12	1·11	3·78	1·51
24. Hagalvadi ..	23	0·14	0·11	0·24	0·76	3·03	2·07
<i>Tiptur Taluk.</i>							
25. Tiptur ..	38	0·02	0·09	0·17	1·82	3·76	1·70
26. Honnavalli ..	27	0·07	0·12	0·23	1·39	3·82	2·00
27. Nonavinkere ..	28	0·17	0·14	0·23	1·32	3·81	1·96
28. Kibbanahalli ..	28	0·06	0·13	0·15	1·22	4·19	2·17
<i>Pavagada Taluk.</i>							
29. Pavagada ..	38	0·06	0·13	0·26	0·78	2·24	2·09
30. Tirumani ..	15	0·12	0·05	0·25	0·47	1·64	1·69
31. Arsikere ..	15	0·03	0·21	0·11	0·51	1·55	1·95
32. Hoskote ..	23	0·08	0·25	0·24	0·68	2·11	1·57
<i>Kunigal Taluk.</i>							
33. Kunigal ..	48	0·05	0·14	0·23	1·25	3·46	2·71
34. Hulyurdurga ..	13	0·06	0·19	0·08	1·32	3·97	2·79
35. Yediyur ..	13	0·06	0·08	0·17	1·37	3·92	2·17
<i>Koratagere Sub-Taluk.</i>							
36. Koratagere ..	48	0·11	0·12	0·20	0·81	2·81	2·65
37. Holavanhalli ..	25	0·18	0·12	0·18	0·81	2·89	2·46
38. Tovinkere ..	25	0·19	0·15	0·18	1·16	3·40	3·17
<i>Turuvekere Sub-Taluk.</i>							
39. Turuvekere ..	39	0·15	0·09	0·18	1·25	3·91	2·51
40. Mayasandra ..	28	0·18	0·11	0·18	1·35	3·62	1·85

rainfall at the various rain-gauge stations in the District :—
stations in the Tumkur District.

July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual	Station
							<i>Tumkur Taluk.</i>
4·48	5·38	7·32	6·14	2·27	0·34	35·19	Tumkur.
2·61	3·75	6·54	4·42	2·06	0·08	27·05	Hebbur.
4·57	4·19	6·00	5·60	2·58	0·26	30·60	Urdigere.
3·04	3·22	5·78	4·43	2·08	0·09	26·79	Bellavi.
2·85	2·99	5·98	4·11	1·92	0·09	24·74	Nelhal.
3·74	3·58	5·18	4·99	2·63	0·18	27·55	Kolal.
3·61	3·31	5·37	4·81	2·39	0·27	27·26	Mavathur.
							<i>Madhugiri Taluk.</i>
2·58	2·98	5·00	4·48	1·87	0·28	23·51	Madhugiri.
2·44	2·73	5·98	4·01	2·02	0·16	23·44	Badavanhalli.
2·48	2·14	5·64	4·37	1·75	0·21	22·97	Midigesi.
1·68	2·51	4·70	4·76	1·35	0·21	20·81	Itakdibbanahalli.
							<i>Chiknayakanhalli.</i>
2·36	2·63	5·08	4·99	2·11	0·28	25·40	Chiknayakanhalli.
2·70	1·92	4·79	5·23	2·41	0·37	24·81	Matigatta.
2·02	1·61	4·80	5·53	2·92	0·59	24·32	Hulyar.
2·20	2·04	4·52	3·42	1·90	0·17	19·58	Borankanive.
							<i>Sira Taluk.</i>
1·94	2·12	4·26	3·68	1·73	0·22	19·75	Sira.
2·27	2·66	5·33	4·11	1·79	0·15	22·60	Kallambella.
2·12	2·12	5·23	4·74	1·97	0·29	23·09	Bukkapatna.
2·25	2·45	5·73	3·50	1·25	1·25	20·56	Baragur.
							<i>Gubbi Taluk.</i>
3·76	4·30	6·54	5·12	2·43	0·28	30·46	Gubbi.
2·34	3·11	6·45	4·38	1·65	0·21	24·72	Kadaba.
1·92	3·02	6·31	4·10	1·62	0·12	23·26	Chitnahalli.
2·10	2·81	5·55	3·99	2·28	0·36	23·83	Dandinaivara.
2·79	2·77	5·44	4·63	2·04	0·13	24·15	Hagalvadi.
							<i>Tiptur Taluk.</i>
1·96	2·63	4·80	5·20	2·59	0·40	25·24	Tiptur.
1·94	2·38	4·42	5·08	2·69	0·36	24·50	Honnavalli.
2·00	2·55	5·01	4·67	2·55	0·35	24·66	Nonavinkere.
2·51	3·03	5·39	4·80	2·33	0·33	26·31	Kibbanahalli.
							<i>Pavagada Taluk.</i>
2·06	2·35	4·95	3·64	2·08	2·26	20·90	Pavagada.
2·23	3·13	5·85	2·26	1·95	0·36	20·00	Tirumani.
3·11	3·22	4·44	2·24	0·87	0·12	18·36	Arsikere.
2·40	2·38	4·76	2·95	1·89	0·23	19·54	Hoskote.
							<i>Kunigal Taluk.</i>
3·14	4·38	6·93	5·73	2·09	0·22	30·33	Kunigal.
2·49	3·92	6·26	4·61	2·61	0·08	28·38	Huliyurdurga.
2·12	3·69	5·92	4·52	2·94	0·20	27·16	Yediyur.
							<i>Koratagere Sub-Tk.</i>
2·62	2·92	4·99	4·35	1·88	0·31	23·77	Koratakere.
2·53	3·06	5·67	4·13	2·30	0·12	24·45	Holavanhalli.
3·45	3·85	6·69	3·89	2·36	0·16	28·65	Tovinkere.
							<i>Turuvekere Sub-Tk.</i>
2·03	2·99	5·42	5·67	2·47	0·35	27·02	Turuvekere.
1·94	3·37	6·76	5·64	2·37	0·23	27·60	Mayasandra.

Rainfall at
Tumkur.

The Table appended shows the annual rainfall at Tumkur since 1837. A periodicity is noticeable in the early records but the recent records do not show any such marked variation. From 1846 to 1870 the rainfall reached a maximum every sixth year and the period became one of four years from 1870 to 1886 and from 1893 to 1903 the period is one of five years. The rainfall was over 50 inches in eight years and the wettest year on record is 1874 when 62·00 inches were registered. During recent years, a fall of 53·21 inches in 1903 is remarkable. The annual aggregate was less than 20 inches in six years; the worst years on record were 1838 and 1875 with 13·80 and 8·98 inches respectively. During recent years, the amount for 1923 was very low, being only 19·60 inches. Out of 88 years, the rainfall in 51 years was below the normal.

Table showing the annual rainfall at Tumkur from 1837 to 1927.

Year	Inches	Year	Inches	Year	Inches
1837	26·00	1867	34·23	1897	46·07
1838	13·80	1868	32·69	1898	49·66
1839	31·20	1869	26·11	1899	17·20
1840	22·70	1870	56·41	1900	29·74
1841	29·20	1871	32·71	1901	30·93
1842	27·50	1872	21·34	1902	36·12
1843	42·00	1873	20·01	1903	53·21
1844	24·70	1874	62·00	1904	32·70
1845	26·50	1875	8·98	1905	28·19
1846	56·90	1876	19·99	1906	45·02
1847	31·50	1877	24·92	1907	36·36
1848	17·20	1878	43·75	1908	24·14
1849	31·60	1879	34·36	1909	40·63
1850	36·30	1880	37·93	1910	39·78
1851	31·30	1881	27·39	1911	20·03
1852	57·40	1882	39·40	1912	32·58
1853	21·10	1883	38·98	1913	28·60
1854	30·00	1884	21·32	1914	25·05
1855	22·50	1885	26·07	1915	26·61
1856	39·60	1886	52·33	1916	45·60
1857	22·10	1887	31·19	1917	39·73
1858	55·60	1888	37·99	1918	20·04
1859	26·40	1889	57·22	1919	32·63
1860	30·00	1890	35·14	1920	21·37
1861	37·80	1891	21·44	1921	30·53
1862	33·20	1892	41·34	1922	25·00
1863	28·80	1893	48·13	1923	19·60
1864	41·80	1894	40·73	1924	30·09
1865	35·30	1895	38·36	1925	29·93
1866	34·70	1896	30·36	1926	24·19
				1927	25·65

THE PEOPLE.

The population of the district was 773,122 according to the Census of 1921, 394,897 being males and 378,225 females. Distribution.
(a) Number.

The number of persons to the square mile is 190. The most thickly populated taluks at the time of the Census were Tumkur, where the number was 276 to the square mile, Kunigal, Madhugiri including Koratagere Sub-Taluk and Tiptur including Turuvekere Sub-Taluk, where the rate was 233, 221 and 202 respectively. The most sparsely populated taluks were Pavagada with only 125 and Chiknayakanhalli, with 139 per square mile. (b) Density.

The following table compares the population of the district from 1871 to 1921 during the different Census periods :— Inter-censal
Variations.

Taluks and Sub-Taluks	1871	1881	1891	1901	1911	1921
Tumkur ..	116,919	70,176	90,863	107,513	116,854	125,294
Madhugiri ..	78,578	53,127	68,127	82,742	88,483	91,874
Koratagere	36,998	22,104	29,765	33,953	40,718	41,955
Sira ..	75,815	51,780	68,327	77,604	89,311	93,324
Pavagada ..	62,178	42,732	53,377	61,241	61,171	65,529
Chiknayakanhalli.	54,888	32,743	44,067	51,286	57,484	60,498
Gubbi ..	91,423	57,588	73,570	87,468	96,820	102,967
Tiptur ..	53,682	39,090	47,327	54,354	61,518	63,051
Turuvekere..	35,068	26,516	31,540	36,355	39,175	39,537
Kunigal ..	75,416	51,250	66,502	77,861	83,812	89,093
Total ..	680,965	447,106	573,465	670,377	735,346	773,122

During the decade preceding 1881, the population met with a severe check from the results of the great famine of 1876-77 ; and it took over 20 years to reach again the pre-famine figure. During the ten years from 1901, the population increased by 64,969 or about 9.69 per cent against a general increase of 4.8 per cent for the whole State.

Religion.

The following table shows the distribution of population in the District according to religion :—

Religion	Above 15		Under 15		Total	Per cent
	Males	Females	Males	Females		
Hindus ..	227,732	213,127	141,919	141,887	724,665	93.73
Mussalmans	11,093	10,211	8,625	7,975	37,904	4.90
Jains ..	1,126	969	645	583	3,323	.42
Christians ..	400	298	287	204	1,189	.15
Animists ..	1,693	1586	1377	1,385	6,041	.78
Total ..	242,044	226,191	152,853	1,52,034	7,73,122	..

Occupation.

According to occupation or means of livelihood, the population may be classed as follows :—

Exploitation of earth .. 148,173	Trade .. 8,328	Persons living on their income .. 280
Extraction of minerals .. 13	Public Force. 1,138	Domestic service .. 2,017
Industrial Occupation .. 14,055	Public Administration .. 3,205	Insufficiently described occupation .. 275
Transport .. 658	Professions & liberal arts .. 3,345	Unproductive. 2,730

TOWNS AND VILLAGES

Towns.

The district contains ten municipal towns with a population of 51,528, composed of 41,252 Hindus, 8,980 Mussalmans, 820 Christians, 384 Jains and 92 Animists. The following is the list :—

Tumkur	14,246
Chiknayakanhalli	6,432
Sira	5,596
Gubbi	5,263
Madhugiri	5,143
Tiptur	4,311
Kunigal	3,044
Koratagere	3,028
Pavagada	2,529
Turuvekere	1,936

The number of villages in the District was 2,713 and the population 7,21,594 composed of 3,68,241 males and 3,53,352 females. Villages.

The following table shows the classification of villages by Taluks :—

Taluk	Classified							Total
	Populated	Depopulated	Hamlets	Government	Sarvamanya	Jodi	Khayangutta	
Tumkur ..	345	75	239	420	9	36	4	469
Madhugiri ..	223	43	74	266	4	27	22	319
Chiknayakan- halli.	196	32	134	228	..	6	..	234
Sira ..	212	30	187	242	2	5	..	249
Gubbi ..	342	75	6	417	..	6	..	423
Tiptur ..	213	20	161	233	2	3	..	238
Pavagada ..	130	10	74	140	2	3	..	145
Kunigal ..	245	31	227	276	6	29	4	315
Koratagere .	127	22	56	149	5	11	6	171
Turuvekere .	133	14	25	147	..	3	..	150

STOCK AND DWELLINGS.

The agricultural stock of the district according to the Stock. quinquennial census of 1920-21 consisted of 5,99,348 cows and bullocks, 1,12,496 buffaloes, 3011 horses and ponies, 9457 mules and donkeys, 9,18,494 sheep and goats, 28,662 carts and 1,19,017 ploughs.

The total number of occupied houses in the District, accord- Dwellings. ing to the census of 1921, was 1,54,328, composed of terraced, tiled, and mud-roofed ones and other tenements.

The principal concourse of people occurs at the following Festivals, et religious festivals during the different months in the year as

per particulars given in the sub-joined table :—

Name of the place at which the jatra is held	Name of jatra	Approximate month in which the jatra falls	Number of attendance at the jatra	Number of cattle brought for sale
<i>Tumkur Taluk.</i>				
Sibi ..	Sibi Narasimhasvāmi rathotsava.	February, for about 15 days from full moon day of <i>Magha</i>	5,000	500
Siddaganga Devarayadurga hill.	Siddaganga jatra Narasimhasvami rathotsava.	Feb. 10 days March, for about 3 days from full moon day of <i>Phalgunā</i> .	3,000 2,000	2,000 ..
Settihalli ..	Settihalli jatra (Anjaneyasvami car festival.)	Do ..	1,000	..
<i>Madhugiri Tk.</i>				
Madhugiri Town	Dandi Marammana jatra.	Feb. 10 days	6,000	6,000
Doddahalli betta.	Sri Lakshminarasimhasvami jatra	July, 7 days	5,000	..
Gauri ..	Do do ..	April ..	1,500	2,000
<i>Sira Taluk.</i>				
Rattanayakanhalli.	Sri Ganga Brahmesvara jatra.	Jan. 5 days .	2,500	1,500
<i>Pavagada Tk.</i>				
Nagalnadike	Sri Subramanyasvami jatra.	Do ..	6,000	2,000
<i>Chiknayakanhalli Tk.</i>				
Chiknayakanhalli.	Haliyur Sri Anjaneyasvami jatra	March, for about 7 days.	1,000	500
Yelnadu ..	Siddaramesvara Bilpatri Vahanam.	Oct. for 3 days.	1,000	..
Godekere ..	Siddaramesvara Deepotsavam.	Dec. for 2 days.	2,000	..
<i>Tiptur Taluk.</i>				
Karagodi ..	Sankaresvarasvami jatra.	March, for 3 days.	10,000	..
Hathgal ..	Sri Narasimhasvāmi jatra.	April, 4 days	6,000	..
Peddihalli ..	Kariammanadēvara jatra.	March ..	1,500	..
Bidarammanagudi.	Bidarammadēvaru jatra.	April ..	3,000	..

Name of the place at which the jatra is held	Name of jatra	Approximate month in which the jatra falls	Number of attendance at the jatra	Number of cattle brought for sale
<i>Turuvekere Sub-Taluk.</i>				
Kanthur ..	Kanthuramma jatra.	April ..	1,000	..
<i>Kunigal Taluk.</i>				
Bylahalli ..	Marammana jatra	March ..	1,500	..
Yedyur ..	Siddalingesvara-svami jatra.	Do 5 days	5,000	1,000
Kaggeri ..	Kaggeri jatra ..	Do 2 days	3,000	..
Haleyur ..	Haleyuramma jatra.	Do 1 day	2,000	
Hemagiri Hill	Hemagiriappana jatra. ..	January ..	1,500	
<i>Gubbi Taluk.</i>				
Gubbi ..	Pattalammana jatra.	April ..	1,000	
	Channabasavesva-rasvami car festival.	A week in March.	3,000	
<i>Koratagere Taluk.</i>				
Kyamenahalli	Anjaneyasvami Car Festival.	10 days in February.	40,000	2,000
Dodda Saggere	Ahobala Nara-simhasvami Car Festival.	5 days in March.	6,000	A cattle show is also held

The following are the more important weekly fairs where extensive trade is carried on :—

Weekly Fairs.

Place	Taluk	Day	Number of visitors
1. Bellavi ..	Tumkur ..	Monday ..	1,000
2. Gubbi ..	Gubbi ..	Monday ..	2,000
3. Tiptur ..	Tiptur ..	Saturday and Sunday.	10,000
4. Nidasale ..	Kunigal ..	Monday ..	15,000

The weekly markets in other places are comparatively modest in scale and are useful in supplying local wants and also in affording facilities for the disposal of the surplus produce of the *raiya*t class.

Vital statistics.

The birth rate of the District in 1922-23 was 19·18 per mille of the population, while the death rate was 13·33 per mille. The number of births registered was 14,820. The total deaths registered during the year were 10,217.

The following were the causes of deaths registered :—

From Cholera 1, Small-pox 122, Plague 76, Malarial fever 5,156; other causes 4,862.

It is reported that Madhugiri Taluk is not generally subjected to epidemic diseases and that even plague has not made its appearance for many years, *i.e.*, from 1905-06 and that in Midigesi and other villages, there was no outbreak of plague at all from the beginning.

The following statement shows the variations in the number of births and deaths during the five years 1918-19 to 1922-23 :—

Year	Deaths						Births
	Cholera	Small-pox	Plague	Malarial fever	Other causes	Total	
1918-19..	21	1,228	188	..	51,801	53,238	15,742
1919-20..	118	2,278	77	3,260	5,017	10,750	14,031
1920-21..	5	748	108	4,450	4,204	9,515	13,877
1921-22..	2	228	94	5,009	3,971	9,304	13,771
1922-23..	1	122	76	5,156	4,862	10,217	14,820

CASTES AND OCCUPATIONS.

Castes.

The castes or classes among the Hindus numbering over 10,000 come in the order as noted below :—

1. Vakkaligas .	1,88,805	8. Tigalas ..	21,783
2. Lingayets ..	1,19,019	9. Brahmans ..	20,276
3. Madigas ..	65,840	10. Vaddas ..	18,288
4. Bedas ..	58,311	11. Banajigas ..	15,099
5. Gollas ..	50,553	12. Agasas ..	13,444
6. Kurubas ...	46,024	13. Panchalas ..	13,213
7. Holeyas ..	38,207	14. Upparas ..	13,165

The following table shows the distribution of population Occupations according to the occupation :—

Occupation	Total including dependants	Actual workers			Dependants
		Males	Females	Total	
Exploitation of animals and vegetation.	6,59,388	2,22,073	26,100	1,48,173	5,11,215
Exploitation of minerals.	55	12	1	13	42
Industry ..	48,929	12,286	1,769	14,055	34,874
Transport ..	1,791	647	11	658	1,133
Trade ..	27,523	6,232	2,150	8,382	19,141
Public force ..	4,229	1,094	44	1,138	3,091
Public Administration.	11,482	3,045	160	3,205	8,277
Profession & liberal arts.	9,879	3,055	290	3,345	6,534
Persons living on their income.	905	213	67	280	625
Domestic service	2,342	1,706	311	2,017	415
Insufficiently described occupation	1,991	228	47	275	924
Unproductive ..	5,310	1,375	1,355	2,730	2,580
Total ..	7,73,122	151,966	32,305	1,84,271	5,88,851

Percentage of actual workers to total population : 23·82.
Percentage of dependants to total population : 76·18.

CHRISTIAN MISSIONS.

The Wesleyan Mission maintains four Night Schools, eight Elementary Schools, five Middle Schools, a Boys' Orphanage and Boarding School, and a flourishing industrial school. The Union Kanarese Seminary for the training of Evangelists, the men's Normal Training School and a School for the training of Bible women are all located in Tumkur.

The Wesleyan Mission.