

CHITALDRUG DISTRICT.

SECTION I—DESCRIPTIVE.

SITUATION, AREA AND BOUNDARIES.

A district in the north. Its situation, taking the extreme limits, is between $13^{\circ} 35'$ and $15^{\circ} 2'$ north latitude, $75^{\circ} 38'$ and $77^{\circ} 2'$ east longitude ; but, owing to a long and narrow projection into Bellary northwards, the main part of the District does not extend beyond $14^{\circ} 40'$ north latitude. Its greatest length from north to south is about 88 miles, the greatest breadth from east to west, about 100 miles. The arm jutting north into Bellary is 32 miles long by from 5 to 12 miles wide. Situation.

The area is 4,160 square miles, of which 1,700 square miles are cultivated and 1,540 square miles are unculturable. Area.

It is bounded on the north by the Bellary District, and on the east by the Anantapur District, both of Madras ; on the south-east by Tumkur District, south-west by Kadur District, and west by the Shimoga District, all of Mysore ; while on the north-west it is bounded by the Dharwar District of Bombay. Boundaries.

PHYSICAL ASPECTS.

The whole of this comparatively arid District is included in the valley of the Vēdāvati or Haggari, with the Tungabhadra running for a few miles along the north-western boundary. The Vēdāvati enters the District in the south-west and flows in a north-east direction to a few miles beyond Hiriur. From this point, where the stream begins to take

the name of Haggari, it runs north, within a few miles of the main eastern boundary, and leaves the District near the eastern base of the Molakalmuru projection. During the hot months it is for the most part dry, but supplies a number of wells sunk in the sandy bed.

The District is crossed from south-south-east to north-north-west by a belt, about 20 miles broad, of intermittent parallel chains of low hills, mostly bare and stony, through which are several *kanives*, or passes. The eastern line runs from the west of Hiriyur up to Chitaldrug (3,229 feet), and thence, with a break for some distance, continues from Kankuppa hill (2,721 feet) to the frontier. The summit of Jogi Maradi to the south of Chitaldrug, one of the highest points in this range, is 3,803 feet above sea level. The western parallel commences at Hosdurga (3,226 feet), and passes by Mayakonda to Anaji. Around Molakalmuru in the north are some detached clusters of rocky hills. Of these, Nunke Bhairava hill is 3,022 feet, Jatinga Rāmēsvara hill 3,469, and Santigudda 2,595. This part of Mysore, says Mr. Bruce Foote, is "occupied by a tract of country of singular beauty. The bold, rocky hills which rise out of it in every direction are divided from each other by equally picturesque valleys full of fine trees, amongst which tamarind trees, pre-eminent for their love of granitic soil, abound. The road from the travellers' bungalow at Hangal (on the Bangalore-Bellary high road), which skirts the south side of the line of hills for the first five miles, and for the next four passes right through them, takes one through scenery not easily forgotten for its striking beauty in grand rocks and rich vegetation."

Except in the region of the hilly belt, the whole extent of the District north and east is an open and level plain, entirely destitute of picturesque features, but presenting at certain seasons in favourable spots a vast expanse of verdant cultivation. Though there are no trees, there is abundance of excellent pasture, while the black and dreary-looking soil seems only to require the contact of water to

develop its productiveness. To the north and west of Chitaldrug the surface of the country is undulating and covered with thick and rich grass. Trees are few in number.

The general level of the District is about 2,000 feet above the sea. At Chitaldrug, it is 2,383, but at Hiriyyur, it is 1,965, while at Harihar, probably the lowest point in Mysore, it is only 1,830.

GEOLOGY.

The Chiknayakanhalli band of schists of the Tumkur District continuing in a N.-N.-Westerly direction constitutes the chief belt of schists in this District, where it has been split up into two divisions, *viz.*, the lower or the Javanhalli belt consisting of the dark hornblendic schists with some bands of quartzites and ferruginous quartzites, and the upper or the Chitaldrug belt consisting mostly of chloritic schists and green stones with also a few bands of ferruginous quartzite. These chloritic schists are overlaid by a series of grits, clays and ochreous schists which have of late been shown to be the altered phases of the fine grained acidic members of the Champion gneiss series. Intrusive into these chloritic schists are a class of greyish green hornblendic traps typically developed near Jogimaradi. These differ from the dark hornblendic schists in their paler colour and also in containing the remnant crystals of pyroxene.

Rocks.

Intrusive into these schists and being subsequent in age are a number of exposures of granitic gneisses and granites. This complex granitic gneissic region is found to consist of the earlier Champion gneisses (Pitlale granite) and also the subsequent Peninsular gneiss series.

Bordering the western side of the Chitaldrug schist belt and intrusive into it is an exposure of coarse grey and pink porphyritic granite. This as also the band extending from Holalkere through Hosdurga to near Hardankere were regarded as of Closepet series; but these masses are now thought to be the older Champion gneissic granites.

Of the dyke rocks, dolerites make a conspicuous feature and they cut across all the rocks previously mentioned.

Mines and Minerals.

Indications of asbestos have been found near Budihal (Hosdurga Taluk) and Mayakonda (Davangere Taluk). These are not in large quantities and the deposits have not been worked.

Copper.

Blue sulphate of copper and the carbonate-malachite are found as encrustations near Ingladhah in reefs in the altered traps. Malachite has been found in tufts of slender acicular prisms in a thin vein in quartzite near Kaidal (Davangere Taluk). At both these places, the ore appears to be of very limited extent.

Cervantite and Stibnite.

These ores of antimony are found near Chikkannanhalli, Chitaldrug Taluk, distributed to the extent of one to two per cent in the rock. The ores obtained have been smelted locally, the resultant product being sold as antimony regulus and star antimony.

Galena.

The sulphide of lead containing silver to the extent of 130 ozs. to the ton is found near Kurubarmardikere. The clean ore assays 70 to 72 per cent lead. The area has been worked to a small extent, but good payable lodes have not been located in larger quantities.

Gold.

Old workings exist near Honnemardi, Kote-mardi, Gonur, Bodimardi, Anesidri and other places.

Iron.

Iron ores are found in the form of haematite quartzites running as bands in the schists. Formerly, the ores used to be smelted near Dodkittadhalli and were also being converted into steel at Gattihoshalli. A brief account of this industry will be found in the *Records of the Mysore Geological Department, Vol. III.*

Limestone.

Bands of limestone exist at various points in the schist belt, the chief of which being the Javagondanhalli band. In the vicinity of Marikanve also are found a number of such bands.

Pyrolusite and psilomelane exist as pockets in the acidic Manganese. gritty schists of the Champion gneiss series. Manganese ores have been worked near the following areas:—

Huli-katte in the Davangere Taluk, Kandavadi, Chik-kandavadi, Sadarhalli, Mahadevapur, Shivagange, Kare-kalgudda, Kenkere and Madadkere.

The total quantity of ores extracted in this District from 1905 to 1924 is 29,681 tons, of which 17,228 tons have been exported.

Red and yellow ochres are found to some extent in the Ochres. clayey and argillitic schists near Guddad-Rangavanahalli and also near Lakkihalli (Marikanve area).

Bauxite is found in patches in lateritic region near Shiv-ganga and Bhimasandra (Holalkere Taluk). Bauxite.

Earth Soda has been noticed to occur in the Hiriyur, Chal-lakere and Jagalur Taluks. Earth Soda.

The black cotton soil prevails throughout the taluks north Soils. and west of Chitaldrug, interspersed with sandy and gravelly tracts. In the west a red and loamy soil occupies the valleys. In the south the soil contains much common salt and on that account is favourable to the growth of cocoanut trees, of which there are large plantations. The eastern taluks have a light sandy soil abounding in springs. These *tal-parges* or spring heads may be tapped at short distances from each other.

BOTANY.

The District is almost throughout a "dry and thirsty land" Vegetation. having no forest. Great undulating plains covered frequently with nothing but stones and the dwarf species of mimosa (*Hotte Jali*) are dotted at wide intervals, with villages lying in the hollows, having sometimes a few trees round them. These are the characteristics of fully one-third

of the district. The whole taluk of Challakere answers generally to this description, but where there is any water in the soil there are some fine cocoanut gardens. The pastures, too, during the cooler months of the year, are good and the Amrut Mahal has extensive grazing grounds in the Challakere, Holalkere, Hosdurga, and other parts of the district.

To the south and south-east, along the Hiriyr Hills, there are jungles of karachi (*hardwickia binata*). Again between Bommagondankere and Hangal and in the extreme north-west of the Molakalmuru taluk, there are tracts of country, covered with the karachi. In the same taluk, to the east of the *kasba* town, and on the borders of the Bellary District, is a small fuel jungle among the hills.

The quantity of timber for building purposes is, as may be supposed, very limited ; and the large towns draw their supplies chiefly from more favoured districts. Mr. Bowring remarks :—

“ It is not improbable that this portion of Mysore may have been less sterile formerly, as on many of the hills traces are to be seen of forests cut down long ago. In fact, old records mention the existence of fine timber where such has wholly disappeared, owing, no doubt, to the reckless way in which the cultivators have cut down whatever they required for agricultural implements, regardless of the destruction caused to young trees and saplings. No one ever thought of planting new trees to replace those that had been felled, and so, as population increased and agriculture spread, the few remaining forests rapidly disappeared. The denudation of trees under which the district suffers has probably had much to do with the prevailing drought, there being scarcely any vegetation to arrest the passage of the monsoon clouds, which float onwards without depositing their valuable contents.”

The State Forest covers an area of about 358 square miles and plantations, 1 square mile.

Kagli, Udi, Dindiga and Karachi are some of the species met with in the forests. Some bamboos and small teak grow on the Jogimatti hills. There are extensive grazing

grounds in Challakere, Holalkere, Hosdurga and other parts of the district. Tangadi bark is produced in large quantities.

Avenue trees have been planted along the public roads as in the other districts. But owing to the scanty rainfall the trees are kept alive with much difficulty. The most popular trees appear to be Margosa and Tamarind. According to the latest returns, there were about 12,500 trees.

Arboriculture.

There are about 2,393 *vanams* or Survey numbers in the district with a total area of 108,321 acres.

Date groves

Chitaldrug, Hiriyr, Mayakonda, Davangere and Bilchod produce cotton which is also grown, though in smaller quantities, in Anaji, Kankuppa, Molakalmuru and Challakere. Flax for the manufacture of linseed oil is raised in Davangere, Kankuppa and Bilchod. All the northern taluks produce wheat, jola, navanè, sugar-cane and chenna. Rice is less abundant. Cummin seed is grown in the north-east. In the south, about Mattod, are extensive groves of cocoanut trees, growing, as in the neighbouring parts of Tumkur, in the dry lands without irrigation. The cultivation in the south-west consists of the ordinary dry crops raised on red soil. All along the east, the *kapile* wells are largely used in raising crops by irrigation, including ragi, which on the Bellary border is cultivated in no other way.

Crops.

The following are the principal crops cultivated in the District :—

Kannada name	Botanical name	English name
<i>Cereals.</i>		
Baragu	<i>Panicum milaceum</i> ..	
Bhatta	<i>Oryza sativa</i>	Rice
Godhi	<i>Triticum aristatum</i> ..	Wheat
Haraka	<i>Panicum semiverticillatum.</i>	
Jola	<i>Holcus sorghum</i> ..	Great millet

The following are the principal crops cultivated, etc.

Kannada name	Botanical name	English name
<i>Cereals.</i>		
Navane	<i>Panicum italicum</i> ..	Italian millet
Ragi	<i>Eleusine corocana</i> ..	Ragi
Sajje	<i>Holcus spicatus</i> ..	Spiked millet
Same	<i>Panicum fremuntaceum.</i> ..	Little millet
<i>Pulses.</i>		
Avare	<i>Dolichos lablab</i> ..	Cow gram
Hesaru	<i>Phaseolus mungo</i> ..	Green gram
Hurali	<i>Dolichos uniflorus</i> ..	Horse gram
Kadale	<i>Cicer arietinum</i> ..	Bengal gram
Korasani .. ..	.. ..	Panic seed
Tadagañi	<i>Dolichos catiang</i> ..	..
Togari	<i>Cajanus indicus</i> ..	Pigeon pea, doll
Uddu	<i>Phaseolus minimus</i> ..	Black gram
<i>Oil Seeds.</i>		
Haralu	<i>Ricinus communis</i> ..	Castor oil
Huchchellu	<i>Guizotea oleifera</i> ..	Wild gingelli
Wollellu	<i>Sesamum orientale</i> ..	Gingelli
<i>Vegetables (Native).</i>		
Bellulli	<i>Allium sativum</i> ..	Garlic
Jirigē	<i>Cuminum cyminum</i> ..	Cummin seed
Kottambari .. ..	.. ..	Coriander
Mensina kāyi	<i>Capsicum annuum</i> ..	Chilly
Mentya	<i>Trigonella foenum groecum.</i> ..	Fenugreek
Nirulli	<i>Allium cepa</i> ..	Onion
Saute kāyi	<i>Cucumis sativus</i> ..	Cucumber
<i>Miscellaneous.</i>		
Adike	<i>Areca catechu</i> ..	Areca-nut
Arale	<i>Gossypium indicum</i> ..	Cotton
Bālē	<i>Musa sapientum</i> ..	Plantain
Hoge-soppu	<i>Nicotiana tabacum</i> ..	Tobacco
Hunse	<i>Tamarindus indica</i> ..	Tamarind
Kabbu	<i>Saccharum officinale</i> ..	Sugar-cane
Sanabu	<i>Crotalaria juncea</i> ..	Country-hemp
Tengina kāyi	<i>Cocos nucifera</i> ..	Cocoa-nut
Viledele	<i>Piper betle</i> ..	Betel vine

After the construction of Vāni Vilāsa Sāgara in the Hiriyur taluk, Ranikere, Chikkamaddure, Thippaiyanakote and Rāmasāgara tanks in the Challakere and the opening of a large channel from the Janigihalla, called the Rakalgere project, paddy is grown to a large extent in the Hiriyur and Challakere taluk ..

The following table shows the principal crops in the district, their distribution according to taluks and crops peculiar to each taluk :—

Principal
crops.

Taluk	Name and area of crop cropped during the year 1924-25.			
	Paddy	Ragi	Horse-gram	Cholum
1	2	3	4	5
	Acres	Acres	Acres	Acres
Chitaldrug	2,307	21,500	10,797	39,379
Challakere	6,016	10,268	16,000	8,600
Hiriyur	6,636	9,643	6,146	22,316
Holalkere	2,622	36,452	6,730	24,556
Davangere including Harihar. ..	3,150	20,220	15,268	87,220
Molakalmuru	3,137	5,130	5,586	11,525
Jagalur	1,180	9,250	5,346	31,286
Hosdurga	450	23,250	9,425	15,468
Total ..	25,498	1,44,713	75,208	2,40,150

Taluk	Sugar-cane	Cotton	Names of the crops which are peculiar to the Taluk
	6	7		8
	Acres	Acres	
Chitaldrug	402	11,700	Cholum, sugar-cane and cotton.
Challakere .. ..	..	14,882	Paddy, ragi, and horse-gram.
Hiriyur	165	18,372	Sugar-cane, cotton and paddy.
Holalkere	23	4,457	Ragi, horse-gram and cholum.
Davangere including Harihar. ..	158	25,432	Ragi, cholum and cotton
Molakalmuru	107	6,860	Paddy, ragi and horse-gram.
Jagalur	6	9,547	Cholum, cotton and ragi
Hosdurga	8	300	Ragi and horse-gram
Total ..	869	91,650	

Garden produce.

The particulars of the approximate area under fruits and vegetables grown in the district during the year 1922-23 are given in the statement appended below:—

Taluk	Mangoes	Areca-nut	Cocoa-nut	Others
	Acres	Acres	Acres	Acres
Chitaldrug	196	1,430	956	1,020
Challakere	28	430	76	61
Hiriyur	32	242	607	468
Holalkere	320	750	460	50
Davangere	122	28	212	..
Molakalmuru	9	..	23	128
Jagalur	20	120	190	35
Hosdurga .. ..	..	226	7,936	34
Total	727	3,226	10,460	1,796

FAUNA.

Wild animals.

The panther, bear, hyæna and wild hog infest the hilly and wooded tracts. Deer are found in the Hiriyur, Challakere, Holalkere and Hosdurga taluks and pea fowls in the jungles of Molakalmuru.

Birds.

All kinds of wild fowl are very numerous in the secluded tanks in the south of the district. Pelicans may be seen about Mattod.

Domestic animals.

The breed of cattle in this district has acquired a distinctive name and is known as the Chitaldrug breed. This breed belongs to the class of "Doddadana," the latter term embracing cattle of Amrut Mahal, Hallikar, Chitaldrug, Mahadesvar Betta and other kindred breeds. Cattle of the Chitaldrug breed are found all over the district and those parts of the neighbouring districts which adjoin it. The chief breeding centres in the district are the taluks of Challakere, Hiriyur, Chitaldrug and Holalkere.

The ordinary run of the cattle employed by the raiyats, both for domestic and agricultural purposes, is of small

size and stature. Buffaloes are finest in the neighbourhood of Chitaldrug.

The best sheep, and those which yield the finest wool, are bred in the north-western parts of the district. In the south and west, they are slightly inferior while those of Hiriyr are considered still less valuable. Sheep.

CLIMATE AND RAINFALL.

This is the hottest and driest district in the State; the mean annual rainfall is about 23 inches while the mean annual temperature is $77^{\circ} \cdot 3$. The relative humidity ranges from 50 per cent in March to 83 per cent in July and August. Climate.

The following tables give the mean and extreme values of the various weather elements obtained at the Chitaldrug Observatory since 1893.

Months	Pressure in inches at 8 A.M. read to 32° F.	Temperature in degrees Fahrenheit				Humidity at 8 A. M.	
		Maximum	Minimum	Mean	Range	Aqueous vapour pressure in inches	Relative humidity per cent
1	2	3	4	5	6	7	8
January ..	27·624	84·5	62·1	73·3	22·4	·445	61
February ..	27·506	89·4	65·7	77·5	23·7	·433	53
March ..	27·565	94·7	76·1	82·4	24·6	·476	50
April ..	27·516	97·0	72·5	84·7	24·5	·608	61
May ..	27·482	94·2	71·4	82·8	22·8	·658	70
June ..	27·414	86·7	69·7	78·2	17·0	·665	79
July ..	27·417	82·1	68·1	75·3	13·6	·656	83
August ..	27·452	82·4	68·1	75·3	14·3	·648	83
September ..	27·493	83·9	67·7	75·8	16·2	·641	82
October ..	27·540	85·0	67·8	76·4	17·t	·629	76
November ..	27·587	82·7	64·5	73·6	18·2	·549	68
December ..	27·619	82·1	61·3	71·7	20·8	·473	67
Total ..	27·526	87·1	67·4	77·3	19·7	·574	69

Months	Wind		Rain		
	Velocity in miles per day	Direction	Rainfall in inches	No. of rainy days	Cloud per cent at 8 A.M.
	9	10	11	12	13
January ..	102	S 69 E	0.30	..	22
February ..	92	S 23 E	0.09	..	17
March ..	91	S 58 W	0.28	1	13
April ..	90	S 71 W	0.91	2	27
May ..	142	S 79 W	3.00	4	47
June ..	171	S 75 W	3.03	6	76
July ..	184	S 75 W	3.20	9	87
August ..	168	S 78 W	2.78	7	82
September ..	138	S 82 W	4.25	7	76
October ..	84	S 43 W	4.21	6	55
November ..	91	S 83 E	2.56	4	43
December ..	110	S 81 E	0.31	1	30
Year ..	122		24.92	47	48

Months	Pressure in inches read to 32° F		Temperature in degrees Fahrenheit		Relative Humidity per cent lowest
	Maximum	Minimum	Maximum	Minimum	
1	2	3	4	5	6
January ..	27.797	27.383	93.0	52.0	10
February ..	27.742	27.321	97.0	56.3	7
March ..	27.724	27.324	101.0	61.2	5
April ..	27.690	27.255	103.0	59.3	12
May ..	27.597	27.234	102.8	59.3	12
June ..	27.544	27.177	100.2	62.8	14
July ..	27.588	27.195	92.3	62.5	41
August ..	27.573	27.209	91.0	64.7	35
September ..	27.627	27.277	95.1	63.8	27
October ..	27.684	27.297	95.9	59.9	21
November ..	27.720	27.289	91.1	51.8	19
December ..	27.823	27.391	90.1	51.2	14
Year ..	27.823	27.177	103.0	51.2	5

Months	Wind velocity in miles per day		Heaviest rainfall Inches	Number of days overcast at 10 and 16 hours.	Number of days cloudless at 10 and 16 hours
	Highest	Lowest			
	7	8	9	10	11
January	263	14	4.10	..	13
February	261	15	0.90	..	13
March	253	21	0.86	..	14
April	229	23	1.99	..	4
May	306	20	3.55	..	3
June	291	37	3.96	6	1
July	317	40	4.52	11	..
August	296	32	2.90	6	..
September	249	17	2.82	4	..
October	230	1	3.59	3	2
November	248	5	3.26	2	6
December	240	10	2.29	1	10
Year ..	317	1	4.52	33	66

The mean maximum temperature for the warmest month, *viz.*, April, is $97^{\circ}0$ and the highest temperature on record is $103^{\circ}0$ registered on the 15th April 1901 and 17th April 1903. The temperature will generally be 100° or a little over during a few days in summer, especially in the absence of summer showers. December is the coldest month of the year with a mean minimum temperature of $61^{\circ}3$. Since 1893, the temperature has not fallen below 50° during any winter night, the lowest temperature on record being $51^{\circ}2$ recorded on the 11th December 1895. The diurnal range of temperature varies from $24^{\circ}6$ in March to $13^{\circ}6$ in July. The highest monthly and annual ranges on record are $41^{\circ}2$ and $50^{\circ}7$ respectively.

The mean annual rainfall for the district is the lowest Rainfall. for the State being only 21.95 inches spread over 41 days. September and October are the rainiest months of the year and a fall of 8.37 inches can be expected during these months in a normal year. As in other districts, very little rain falls

from December to March, the total for this period being only 0·72 inch. The rainfall over the district decreases from south-west to north-east. The average annual rainfall approaches 25 inches only in parts of Chitaldrug, Holalkere and Hosdurga taluks while it is only a little over 15 inches in parts of the Challakere, Hiriyyur and Molakalmuru taluks. During years of drought, the annual aggregate will be less than 10 inches in parts of the district; in 1923, as many as 6 out of 23 stations gauged less than 10 inches of rain. Since 1893, the deficiency in rainfall exceeded 30 per cent of the normal in one year and the deficit was over 15 per cent in 8 years. The heaviest fall for a single day was 7·30 inches recorded at Davangere on the 30th November 1918.

The following table gives the mean monthly and annual rainfall at the various rain-gauge stations in the Chitaldrug District :—

Station	No. of years	Jan.	Feb.	Mar.	Apr.	May	June
1	2	3	4	5	6	7	8
<i>Chitaldrug Taluk.</i>							
1. Chitaldrug ..	51	0·24	0·06	0·28	1·10	3·18	2·60
2. Vijayapur ..	28	0·03	0·21	0·04	0·81	2·10	2·45
3. Turuvanur ..	19	0·26	0·22	0·07	0·42	2·28	1·80
<i>Challakere Taluk.</i>							
4. Challakere ..	34	0·02	0·19	0·22	1·03	2·27	1·83
5. Talak ..	28	0·01	0·17	0·08	0·65	1·90	1·84
6. Nayakanhatti	28	0·07	0·21	0·12	0·62	2·10	1·42
7. Parasuram- pur.	11	0·00	0·22	0·31	0·39	2·73	1·28
<i>Hiriyur Taluk.</i>							
8. Hiriyur ..	48	0·08	0·10	0·20	0·97	3·01	2·04
9. Yeraballi ..	27	0·03	0·19	0·27	0·93	2·30	1·60
10. Marikanive ..	19	0·06	0·21	0·19	0·89	3·66	2·11
11. Dharmapur ..	10	0·00	0·29	0·21	0·38	1·85	1·36
<i>Holalkere Taluk.</i>							
12. Holalkere ..	35	0·07	0·15	0·23	1·28	2·37	2·93
13. Ramagiri ..	28	0·02	0·12	0·28	1·02	2·64	2·15
<i>Davangere Taluk.</i>							
14. Davangere ..	47	0·03	0·09	0·12	0·85	2·46	2·82
<i>Molakalmuru Taluk.</i>							
15. Molakalmuru .	39	0·06	0·14	0·16	0·70	2·20	2·45
16. Bomma- gondankere.	22	0·04	0·16	0·08	0·58	1·93	1·60
17. Rampur ..	28	0·07	0·17	0·16	0·87	2·15	1·05
<i>Jagalur Taluk.</i>							
18. Jagalur ..	34	0·12	0·17	0·08	0·89	2·57	2·21
<i>Hosdurga Taluk.</i>							
19. Hosdurga ..	47	0·05	0·09	0·20	1·18	3·31	2·49
20. Bagur ..	21	0·11	0·04	0·35	0·55	2·35	1·39
21. Budihal ..	28	0·12	0·10	0·25	1·23	3·39	2·00
<i>Harihar Taluk.</i>							
22. Harihar ..	28	0·13	0·10	0·10	0·90	2·26	2·56
23. Malebennur ..	22	0·02	0·23	0·15	1·04	2·53	2·35

The table of mean monthly and annual rainfall at the various rain-gauge stations in the Chitaldrug District—*concl'd.*

Station	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
	9	10	11	12	13	14	15
<i>Chitaldrug Taluk.</i>							
1. Chitaldrug ..	2·89	2·94	4·20	4·61	2·23	0·37	24·70
2. Vijayapur ..	2·76	2·43	4·16	3·33	1·47	0·31	20·10
3. Turuvanur ..	1·74	2·28	3·68	3·38	1·25	0·26	17·64
<i>Challakere Taluk.</i>							
4. Challakere ..	1·61	1·72	4·04	3·00	1·50	0·20	17·63
5. Talak ..	1·65	1·76	4·28	2·95	1·25	0·21	16·75
6. Nayakanhatti ..	1·36	1·45	4·10	2·84	1·21	0·07	15·57
7. Parasurampur	2·45	2·05	4·64	2·82	1·22	0·00	18·11
<i>Hiriyur Taluk.</i>							
8. Hiriyur ..	1·86	1·56	4·05	3·59	1·80	0·28	19·54
9. Yeraballi ..	1·58	1·68	4·76	3·53	1·39	0·13	18·39
10. Marikanive ..	2·89	2·50	4·51	4·46	2·73	0·41	24·62
11. Dharmapur ..	2·21	1·49	4·41	1·91	1·58	0·01	15·70
<i>Holalkere Taluk.</i>							
12. Holalkere ..	3·49	2·85	4·41	4·46	2·02	0·40	24·66
13. Ramagiri ..	2·49	2·05	3·68	3·90	1·91	0·42	20·68
<i>Davangere Taluk.</i>							
14. Davangere ..	3·23	2·67	4·49	4·17	1·47	0·28	22·68
<i>Molakalmuru Taluk.</i>							
15. Molakalmuru	2·06	2·63	6·39	4·15	1·82	0·15	22·91
16. Bommagon- dankere.	1·47	1·84	4·19	2·39	1·17	0·12	15·57
17. Rampur ..	1·62	1·93	5·82	3·07	1·42	0·04	18·37
<i>Jagalur Taluk.</i>							
18. Jagalur ..	2·47	2·55	4·46	3·63	1·65	0·25	21·05
<i>Hosdurga Taluk.</i>							
19. Hosdurga ..	2·84	1·86	3·55	4·63	2·64	0·48	23·32
20. Bagur ..	1·97	1·68	3·01	4·00	2·10	0·40	17·95
21. Budihal ..	1·95	1·67	4·04	4·26	2·23	0·36	21·60
<i>Harihar Taluk.</i>							
22. Harihar ..	2·73	2·57	3·81	3·63	1·54	0·53	20·86
23. Malebennur ..	2·68	2·24	2·79	3·72	1·35	0·63	19·73

Even in the wettest year on record, *viz.*, 1889, the precipitation was only 44·93 inches and the rainfall was over 35 inches in 5 out of 55 years. The annual total fell short of the normal in 27 years and it was less than 20 inches during 13 years. The worst year on record is 1876 when only 9·96 inches were gauged ; during recent years, the total was very low in 1908, being only 15·40 inches.

Rainfall at
Chitaldrug.

The actual rainfall at Chitaldrug since 1870 is given in the following table :—

Year		Inches	Year		Inches
1870	.. ..	25·26	1898	.. ..	30·55
1871	.. ..	26·14	1899	.. ..	15·65
1872	.. ..	27·89	1900	.. ..	15·14
1873	.. ..	31·18	1901	.. ..	21·15
1874	.. ..	35·15	1902	.. ..	30·24
1875	.. ..	12·21	1903	.. ..	38·61
1876	.. ..	9·98	1904	.. ..	23·01
1877	.. ..	29·95	1905	.. ..	16·26
1878	.. ..	26·02	1906	.. ..	30·47
1879	.. ..	24·90	1907	.. ..	22·35
1880	.. ..	38·61	1908	.. ..	15·40
1881	.. ..	16·41	1909	.. ..	25·37
1882	.. ..	26·13	1910	.. ..	35·17
1883	.. ..	30·36	1911	.. ..	18·87
1884	.. ..	18·12	1912	.. ..	31·00
1885	.. ..	26·38	1913	.. ..	16·17
1886	.. ..	22·35	1914	.. ..	17·34
1887	.. ..	34·64	1915	.. ..	24·35
1888	.. ..	30·02	1916	.. ..	27·17
1889	.. ..	44·93	1917	.. ..	31·32
1890	.. ..	29·94	1918	.. ..	24·37
1891	.. ..	32·80	1919	.. ..	31·36
1892	.. ..	32·56	1920	.. ..	18·38
1893	.. ..	29·78	1921	.. ..	24·36
1894	.. ..	22·24	1922	.. ..	25·40
1895	.. ..	32·99	1923	.. ..	16·82
1896	.. ..	20·48	1924	.. ..	20·39
1897	.. ..	31·85			

THE PEOPLE.

The population of the district as per Census of 1921 consists of 5,74,179 of which 2,94,955 are males and 2,79,224 females. Population.

Density.

The number of persons per square mile is 138, a comparatively low rate, though better when compared with that for 1891—due to the extent of the district and the barrenness of a considerable portion of it. The Davangere taluk in which is included the Harihar sub-taluk is the most thickly populated, the ratio being 206 persons per square mile, followed by Chitaldrug taluk with 185 and Holakere and Jagalur taluks, with 150 and 138, respectively. The scantiest population was in Hosdurga taluk, with only 99 per square mile, while Challakere, Hiriyr and Molakalmuru have 107, 110 and 124, respectively.

By Religion.

According to religion, the population is distributed as follows :—

Religion	Above 15		Under 15		Total	Per cent
	Males	Females	Males	Females		
Hindus ..	1,66,308	1,51,640	1,05,270	1,06,160	5,29,378	92.19
Muham- madans. ..	9,450	8,049	6,649	6,575	30,723	5.35
Jains ..	440	277	167	125	1,009	0.18
Christians ..	100	102	62	63	327	0.05
Animists ..	3,567	3,290	2,931	2,938	12,726	2.21
Total ..	1,79,865	1,63,358	1,15,079	1,15,861	5,74,163	

Inter-Censal variations.

The following figures compare the population in the different census periods from 1871 to 1921 :—

Taluks	1871	1881	1891	1901	1911	1921
Challakere ..	57,187	45,747	60,711	74,035	80,240	85,556
Chitaldrug ..	75,442	50,834	66,546	83,205	93,251	98,259
Davangere ..	56,889	44,425	58,462	70,202	76,385	76,501
Harihar ..	37,117	28,324	36,103	38,919	39,962	38,418
Hiriyr ..	50,607	34,142	45,974	56,782	63,180	69,960
Holakere ..	50,096	31,139	43,520	53,284	62,194	61,133
Jagalur ..	40,311	28,437	38,229	47,196	53,574	51,445
Molakal- muru. ..	28,405	25,332	32,560	37,744	39,231	36,483
Hosdurga ..	56,424	56,226	49,695	42,172	29,712	50,356
Total ..	4,46,410	3,18,092	4,24,277	5,11,062	5,64,243	5,74,179

The great famine of 1877-78 fell with severity upon Chitaldrug, and the population went down 28·7 per cent by 1881. It again rose to 33·38 per cent in the 10 years to 1891, indicating considerable elasticity in the population. The percentage of increase from 1891 to 1901 was 20·4 while that from 1901 to 1911 was 10·4 per cent. The increase during the last decade ending with 1921 was comparatively very low being only 1·7 per cent.

Classified according to occupation, the population is composed of the following :— Occupation.

Occupation	Number
Agriculture	4,56,297
Industry	55,628
Commerce	27,382
Professions	5,679
Other occupations	20,193

With reference to means of livelihood, the population may be classed as follows :— Means of livelihood.

Exploitation of earth	113,714
Extraction of minerals	253
Industrial occupation	16,133
Transport	1,018
Trade	7,587
Public force	1,114
Public administration	3,257
Professions and liberal arts	2,067
Persons living on their income	167
Domestic service	1,792
Insufficiently described occupation	129
Unproductive	7,417

TOWNS AND VILLAGES.

The district contains 12 towns with a population of 55,307 Towns. composed of 43,550 Hindus, 10,237 Muhammadans, 260 Christians, 626 Jains, 16 Parsis and 618 Animists.

The following are the Municipal towns with the population of each :—

Towns						Population
Davangere	..	..	..	..	..	16,971
Chitaldrug town	..	..	..	..	..	8,520
Harihar	..	..	..	..	..	5,904
Molakalmuru	..	..	..	..	..	3,359
Holalkere	..	..	..	..	..	3,184
Nayakanhatti	..	..	..	..	..	2,704
Jagalur	..	..	..	..	..	2,668
Hiriyur	..	..	..	..	..	2,616
Hosdurga	..	..	..	..	..	2,594
Challakere	..	..	..	..	..	2,529
Malebennur	..	..	..	..	..	2,177
Mayakonda	..	..	..	..	..	2,081

Villages.

The following table gives details of villages by taluks in two different ways :—

Taluk	Villages			Villages Classified				
	Populated	Depopulated	Total	Government	Sarvamanya	Jodi	Kayamgutta	Total
Chitaldrug.	167	21	188	179	2	6	1	188
Challakere. ..	158	33	191	188	1	1	1	191
Molakalmuru. ..	81	16	97	92	1	4	..	97
Jagalur ..	136	35	171	170	..	1	..	171
Davangere	156	20	176	171	3	..	2	176
Harihar sub-taluk.	77	9	86	84	1	..	1	86
Holalkere ..	155	39	194	193	1	..	..	194
Hosdurga ..	188	44	232	236	..	6	..	232
Hiriyur ..	135	21	156	152	1	2	1	156
Total ..	1,253	238	1,491	1,455	10	20	6	1,491

STOCK AND DWELLINGS.

The following table shows the details of agricultural stock Stock. in the District as per census of 1921 :—

Names of Taluks	Oxen			Buffaloes		
	Bulls	Bullocks	Cows	Young stock	Male buffaloes	Cow buffaloes
1	2	3	4	5	6	7
Chitaldrug ..	5,647	23,964	18,948	13,617	2,288	15,416
Challakere ..	6,158	25,203	22,733	15,203	3,636	9,681
Hiriyur ..	5,044	18,407	12,863	9,996	2,397	8,873
Holalkere ..	3,525	17,270	17,445	11,016	1,405	14,035
Davangere ..	2,946	16,334	12,888	10,308	1,496	12,241
Jagalur ..	2,679	14,239	8,303	5,161	1,444	8,671
Molakal- muru. ..	2,727	9,188	7,562	4,782	1,774	4,181
Hosdurga ..	4,295	19,968	16,663	10,350	1,916	11,535
Harihar sub-taluk. ..	1,200	8,323	4,119	3,612	516	6,027
Total ..	34,221	1,52,896	1,21,524	84,045	16,872	90,660

Names of Taluks	Buffaloes	Sheep	Goats	Pigs	Horses and Ponies			
	Young stock				Horses	Mares	Young stock	Mules
	8				9	10	11	12	13	14	15
Chital- drug. ..	10,416	28,997	13,336	230	255	257	41	..
Challa- kere. ..	7,793	85,346	33,150	598	167	282	38	..
Hiriyur ..	6,811	83,136	22,181	786	267	272	11	..
Holal- kere. ..	8,557	20,046	10,517	60	79	116	10	..
Davan- gere. ..	8,359	13,235	8,777	367	172	106	8	..
Jagalur ..	6,072	18,985	6,838	30	94	149	15	..
Molakal- muru. ..	2,979	23,131	11,315	146	45	62	1	..
Hos- durga. ..	6,613	51,437	14,503	263	107	150	3	..
Harihar sub-taluk ..	3,835	7,122	4,305	55	55	62	24	1
Total ..	61,997	3,31,435	1,24,922	2,535	1,241	1,456	151	1

Table showing the details of agricultural stock in the District as per census of 1921—*concl'd.*

Names of Taluks	Donkeys	Camels	Ploughs			Carts
			Old Pattern	New Pattern	Total	
	16	17	18	19	20	21
Chitaldrug ..	947	6	11,968	206	12,174	4,599
Challakere ..	1,384	..	12,460	64	12,524	2,889
Hiriyur ..	1,152	..	91,362	203	9,565	3,029
Holalkere ..	235	..	8,530	199	8,729	3,330
Davangere ..	423	..	8,098	165	8,263	4,474
Jagalur ..	409	..	7,273	70	7,343	2,964
Molakalmuru ..	393	..	4,383	75	4,463	1,156
Hosdurga ..	552	..	10,029	29	10,058	2,574
Harihar sub-taluk.	144	..	4,333	133	4,466	2,204
Total ..	5,639	6	76,446	1,144	77,590	27,223

There were thus 3,08,641 cows and bullocks, 1,07,532 buffaloes, 2,697 horses and ponies, 3,31,435 sheep, 1,24,922 goats, 2,535 pigs, 5,639 donkeys, 77,590 ploughs and 27,223 carts.

Dwellings.

As per census of 1921, there were 1,15,033 occupied houses in the district, of which 14,607 were in towns and 1,00,426 in villages accommodating a population of 5,74,179. The best houses are most numerous in Davangere Taluk. Hiriyur and Chitaldrug follow next in order.

FESTIVALS, ETC.

The following table gives particulars of important festivals or *jātras* in the District :—

Important
Festivals
and Jātras.

Name of place	Name of Jātra	Time	Attendance at the Jātra
1. <i>Challakere Taluk.</i>			
Naikanahatti ..	Thippērudra- svāmi. ..	Phālguna (March) 3 days.	15,000
Goursamudra ..	Māremma ..	Bhādrapada 4 days.	3,000
2. <i>Jagalur Taluk.</i>			
Koligudda ..	Virabhamēsvara ..	Phāl- guna (March) 3 days.	8,000
Kalledvarapura	Car festival ..	April ..	6,000
Gurusiddapura ..	Chowdēsvari ..	March ..	3,500
3. <i>Hiriyur Taluk.</i>			
Bēvinahalli ..	Ammāna Jātra ..	Chaitra .. 7 days.	6,000
Hiriyur ..	Tēru Mallēsvara ..	Do ..	5,000
Marikanve ..	Māramma's Jātra ..	Māgha. Vaisākha.. 5 days.	2,500
Yaraballi. ..	Do ..	Do ..	3,000
4. <i>Chitaldrug Taluk.</i>			
Murgimut ..	Murigimut Festival	11th day . of Asvija.	4,000
5. <i>Hosdurga Taluk.</i>			
Devapura ..	Kereyagalamma's .. Jātra.	Pushya .. 5 days.	2,000
6. <i>Davangere Taluk.</i>			
Davangere. ..	Durgamma's .. Jātra.	Once in .. 2 years in Phālguna.	8,000
Avaragola ..	Eswara Jātra ..	Māgha ..	2,000
7. <i>Harihar Taluk.</i>			
Harihar ..	Sanganēsvara ..	March ..	15,000 (People and Cattle)
8. <i>Molakalmuru Taluk.</i>			
NunkeBhairana- gudda.	Nunke-Bhairava ..	Vaisākha	3,000
Bommagatta. ..	Rāmadēvaru ..	March .. 3 days.	3,000
Do ..	Kani-pile Dēvara Jātra.	Māgha .. 3 days.	2,000

Fairs.

Weekly *santes* (fairs) are held in all the Taluk head-quarters. The largest *sante* is that of Challakere where business to the extent of about Rs. 10,000 is transacted. The *santes* at Chitaldrug, Davangere, Holalkere are next in importance. The following is a list of the more important *santes* :—

- | | |
|---------------|-------------------------------------|
| 1. Challakere | 7. Aimangala (Hiriyur Taluk). |
| 2. Chitaldrug | 8. Devasamudra (Molakalmuru Taluk). |
| 3. Davangere | 9. Hireguntanur (Chitaldrug Taluk). |
| 4. Holalkere | 10. Jagalur. |
| 5. Harihar | 11. Budihal (Hosdurga Taluk). |
| 6. Hosdurga. | |

Cattle Shows.

Since 1909, a cattle show is held at Harihar in the month of March in connection with the Sangamēsvara Jātra and it is growing in importance. The grand open *maidan* to keep the cattle and the Tungabhadra river adjoining the ground afford great facilities for the cattle owners who come not only from the neighbouring taluks of the Chitaldrug and Shimoga Districts but from the British taluks of the Bombay and Madras Presidencies. The District Board had supervision in conducting the show till 1920 when the Harihar Municipality undertook to manage the affairs.

Vital statistics.
Diseases.

The total number of births and deaths in the District during the year 1924-25 was 12,414 and 12,440 respectively. Of the deaths, 3 were of plague, 47 of cholera and the rest of other causes.

CASTES AND OCCUPATION.

Castes.

The following are the largest castes or classes which number over 10,000, in order of strength. These account for 492,532 or 85·78 per cent of the population.

- | | |
|------------------------|-------------------------|
| 1. Lingāyet .. 122,171 | 7. Muhammadans.. 30,723 |
| 2. Bēda .. 98,174 | 8. Mādiga .. 29,189 |
| 3. Golla .. 45,123 | 9. Vodda .. 28,368 |
| 4. Vakkaliga .. 42,769 | 10. Uppāra .. 13,013 |
| 5. Kuruba .. 37,141 | 11. Lambāni .. 10,501 |
| 6. Holeya .. 35,359 | |

According to occupation and means of livelihood, the population of the District may be classified as follows :— Occupation and means of livelihood.

Exploitation of earth	113,714
Extraction of minerals	253
Industrial occupation .. .	16,133
Transport	1,018
Trade	7,587
Public Force	1,114
Public Administration	3,257
Professions and liberal arts	2,067
Persons living on their income	167
Domestic service	1,792
Insufficiently described occupation.. ..	129
Unproductive	7,417

CHRISTIAN MISSIONS.

The Roman Catholic Mission carries on evangelistic and educational work in several places in the District, the important ones among them being Holalkere, Davangere and Harihar. The Roman Catholic Mission.

The Wesleyan Mission maintains a Girls' School at Davangere and evangelists are also stationed at this place. The Wesleyan Mission.

SECTION II—HISTORY AND ARCHÆOLOGY.

A. HISTORY.

The plates existing in Shimoga District, which profess to record grants made at Harihar by the emperor Janamējaya in 3066 and 3022 B.C., have been referred to under that District, and in the general chapter on *History* in Vol. II. Legendary History.

But the oldest authentic inscriptions found in Mysore, and indeed in Southern India, are the Edicts of Asōka, Mauryas.