GULBARGA DISTRICT

CHAPTER I

GENERAL

Origin of name

GULBARGA is not only the headquarters of the district but also of the division, comprising the four districts of Bidar, Gulbarga, Raichur and Bellary and both the district and the division are called by its name. In former days, Gulbarga was known as Kalburgi which means a 'stony land' or 'stone roofing' or a 'heap of stones' in Kannada. In 1445, Abdur Razzak describing the extent of the Vijayanagar Empire, stated that it extended up to the extremities of the country of *Kalburgah*. Another version is that Gulbarga was so named to connote a leaf with flower, since 'Gul' means 'flower' and 'Burg' means 'leaf' in the Persian language. It is also said that Kalburgi, known later as Kalburgah, came to be pronounced as Gulbarga when it was under the Muslim rule. The fort at Gulbarga was originally built by Raja Gulchand and afterwards strengthened by Ala-ud-din Bahmani, but it is not certain if the name of the Raja had anything to do with the name of the town which grew around it. Nothing definite is known about the origin of the name, but this much is certain that it was known as Kalburgi in earlier days and was later on changed to Gulbarga. Even now, it is not uncommon to hear people calling the place as Kalburgi.

Location

Gulbarga district is situated in the northern part of Mysore State. Among the three districts of the former Hyderabad Karnatak area which, after the reorganisation of States, formed part of Mysore State, Gulbarga occupies a central place with Bidar to its north and Raichur to its south. It lies between longitude 76°04′ and 77°42′ and latitude 16°12′ and 17°46′.

General boundaries

It is bounded on the north by Bidar district of Mysore State and Osmanabad district of Maharashtra, on the east by Medak and Mahabubnagar districts of Andhra Pradesh, on the south by Raichur district and on the west by Bijapur district of Mysore State and Sholapur district of Maharashtra State.

The river Krishna runs in the southern side of Gulbarga district and forms the natural boundary between Gulbarga and Raichur districts. The river Bhima, another important river in the district, forms the western boundary between Bijapur and Gulbarga districts for some distance.

Area and Population

The total area of the district is 6,271.2* square miles or 16,242.4* square kilometres. Its population according to the 1961 census was 1,399,457. In area, it occupies the second place among the districts of Mysore State, but in population it stands seventh. In density, it is the fourteenth with a population of 223 per square mile, which is far below the State average of 319.

Administrative history

The course of history of the Karnatak areas of the former Bombay and Hyderabad States, now forming the Belgaum and Gulbarga divisions, is closely inter-connected. The earliest reference to the area now comprising the Gulbarga district occurs in an inscription of the reign of the Chalukyas in the sixth century. About the year 550 A.D., the Chalukyan ascendancy in the Deccan was a landmark in the history of India. Their first appearance south of the Narmada river was in the 4th century, previous to which they are said to have had fifty-nine predecessors, but of these nothing has been known authoritatively. There was a long drawn-out conflict between the Chalukyas and the Pallavas. In the 6th century, Pulikeshin I occupied Vatapi and made it his capital. By the middle of the eighth century, the Chalukyas were displaced by the Rashtrakutas who reigned in this part for over two centuries, with their capital at Manyakheta, now called Malkhed in Seram ** taluk of Gurbarga district. After the Rashtrakutas, the Chalukyas again came to power and ruled for over two hundred years with their capital at Kalyana which now forms part of Bidar district.

The Chalukyas were succeeded for a short while by the Kalachuris. They were obviously the feudatories of the Chalukyas and when the strength of the Chalukyas waned, they asserted themselves. Their capital was also Kalyana. About the close of the 12th century, the Yadavas of Devagiri and the Hoysalas of Dwarasamudra destroyed the supremacy of the Chalukyas and Kalachuris. About this time, the Kakatiya kings of Warangal came into prominence and the present Gulbarga and Raichur districts formed part of the dominions of the Raja of Warangal.

Under the Rashtrakutas, the Chalukyas of Kalyana and the Yadavas of Devagiri, the kingdom was divided into separate

* According to the figures furnished by the Survey of India, the area of the district is 6,265.56 square miles or 16,227.68 square kilometres. *See* also Appendix—Table I.

* * Seram is also pronounced and written as Sedam.

regions for administrative convenience and the administrative set-up of each region differed slightly from the other. The administrative pattern described below relates to the Kannada region to which the present Gulbarga district belonged.

The Rashtrakutas were first feudatories of the early Chalukyas, but later overthrew them and assumed the imperial title and position. The crown prince was next only to the king in dignity. The high offices of the State were generally assigned to the sons of nobles and bore the titles of *Mahasandhivigrahika* (Minister for foreign affairs), *Bhandagarika* (Treasurer), *Baladhikrita, Dandanayaka* and *Mahaprachandadandanayaka* (three grades of military officers).

The pattern of local government under the Rashtrakutas was of the regional type. A number of villages were grouped into units and each unit had the number of villages comprising the group affixed to its name. There were separate officers known as *Nalgavundas* in charge of smaller groups of 300 and sometimes there was a single officer known as *Dharmamaharaja* in charge of two such small groups. The towns were ruled by *Ur-gavundas* and the villages had bodies known as *Mahajanas* which attested gifts by private individuals, received assignments of local taxes and made gifts of land for religious purposes.

The Chalukyas, besides their usual imperial titles, added to their names such epithets as *Samastabhuvanashraya* (refuge of the whole world), *Sriprithvivallabha* (favourite of fortune and the earth), *Satyashraya-kulatilaka* (forehead-ornament of the Satyashraya) and *Chalukyabharana* (ornament of the Chalukyas). High officers of the State consisted of *Dandanayaka* (General), the *Mahaprachandadandanayaka* (great august General), the *Dharmadhikarin* (Chief Justice) and the *Tadeyadandanayaka* (General in charge of reserves). There were also separate ministers for each region and the minister for peace and war for the Kannada country was known as *Kannada-Sandhivigrahika.* Some of the officers held combined charge of two or more offices. For purposes of local administration, the area was divided into large and small divisions with numeral endings varying from *32,000, 12,000, etc., through 3,000, 2,000, 1,000, etc., to 500, 300, etc. *Kampanas* (counties) of 20 and 30 were included in a group of 500. Besides

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* What these figures signify is uncertain but a reference to Aihole inscriptions seems to indicate that they refer to villages.

There is also a reference to this in "The Struggle for Empire", Bharatiya Vidya Bhavan Series, Vol. V, page 278. The relevant paragraph is quoted in full:—

"When we turn to the branch of local administration, we find that the towns and villages belonging to the South Maratha country were grouped into Districts containing small numeral endings (30 etc.), which again were

these divisions with numeral endings, there were also a number of *nadus*. Usually, the larger administrative divisions were governed by princes, high officials and feudatories and often governors of large divisions also held charge of smaller divisions. *Prabhus, Nal-gavundas* and *Dandanayakas* held charge of smaller divisions. There were also instances of both civil and military officers jointly governing a *nadu*.

The provincial governors were assisted by subordinate officers called *Mahaprachandadandanayaka* (great august General), *Sandhivigrahadhikari* (Minister of peace and war) who also often held additional charge of offices like that of *Mahapradhana* (Chief Minister) and steward of the royal household. There have been a number of instances where divisions, both big and small, were being administered by queens and princesses assisted by a council of ministers comprising the *Mane-perggade* (steward of the household), *Tantrapalas* (Councillors), *Pradhana* (Minister), *Aliya* and a secretary to the council. There were also separate officers administering different branches of taxation. Wives of governors were also sometimes associated with the administration of the provinces.

The towns and villages had a corporate constitution and there were assemblies known as *Mahajanas* consisting of several members, who sometimes numbered a thousand. The head of the assembly was known as *Ur-odeya* and there were also the *Gavunda* (sheriff) and *Perggade* (steward). These local bodies were also entrusted with the work of administering the permanent endowments made by queens, high officials and private individuals in favour of temples.

There were also a number of feudatories enjoying limited autonomy. They bore the title of king or *Mahamandaleshvara* and had a staff of officials similar to that of the paramount power. These chiefs also had sub-feudatories under them holding seigniories (*manneyas*). The wives of these chiefs were also associated with the administration of the area under them either along with their husbands or as subordinates to them. Both the feudatories and the holders of *manneyas* could assign lands on their own authority.

The Yadavas of Devagiri who took over the administration of the Gulbarga area from the later Chalukyas continued the Hindu traditions of governing the country. The king assumed the title of *Maharajadhiraja* together with other titles. His principal officers

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united into Divisions with higher numeral endings (1,000 etc.). Reference is also made to units of 70 and 300 villages which were comprised within the larger groups of 500 and 2000 respectively. The districts were ruled by officers called *Mahamandalesvara* and the like, whose office was sometimes shared by their wives."

were the *Mahapradhana* (Chief Minister), the *Senapathi* (Commander-in-Chief) and the *Dandanayaka* (Officer maintaining law and order). The Chalukyan type of administrative divisions with numeral endings was continued.

In 1294 A.D., when Jalal-ud-din Firuz Shah was the Sultan of Delhi, his ambitious nephew, Ala-ud-din carried on an unauthorised campaign against the Yadavas and subdued them. He treacherously killed his uncle, the Sultan, in 1296 A.D. and proclaimed himself king. In 1318 A.D., the rebellion of the Devagiri ruler led to the final suppression of the Yadava dynasty. Similarly, the Kakatiya power was subdued in 1321 and the entire Deccan including the districts of Gulbarga, Raichur and Bidar, passed to the control of the Muslim Emperors at Delhi. From 1294 to 1347, it remained as a part of the Delhi Empire. The Delhi Empire was divided into a number of provinces and tributary States. With the growth of provincial administration, it became necessary to divide the province into shiqqs which were managed by the *shiqqdars;* these shiqqs were nothing but paraganas, the central authority always having the final say. The paragana to which a larger portion of the Deccan belonged was an important administrative unit. The various officials under the *shiqqdar* were the *mushrif* or *munshif,* a treasurer, two *karkuns* and a *qanungo.* The *amil* was the chief executive officer and the head of the paragana administration. The *mushrif* was the principal assessment officer. The *karkuns* were the registrars of the paragana. The village was the basic unit of the administration. It was allowed to retain the tradition of self-government.

In the middle of the 14th century, the revolt of the Muslim officers appointed from Delhi resulted in the founding of the Bahmani Kingdom in 1347 A.D. and the accession of Hassan Gangu to the throne at Daulatabad under the title Abu-i-Muzaffar Ala-ud-din Bahman Shah. Soon after the ceremony at Daulatabad, he selected Gulbarga as his capital. It remained the seat of the Bahmani Government till about 1424 when during the reign of Ahmad Shah, the capital was shifted to Bidar. After the conquest of Warangal, Bidar was the most central point and strategically it was of a much stronger situation and had a better climate than Gulbarga.

Under the Bahmanis, the kingdom was divided into four divisions and they were called tarafs. The officers in charge of these divisions were known as tarafdars who were supreme in their respective divisions. They collected the revenue, raised and commanded the army and made all appointments, both civil and military, in their provinces. They were liable to be transferred from one division to the other; this was intended to control the power of the tarafdars and to check them from becoming powerful. Some of them, in addition to being tarafdars, were also ministers

at the Bahmani court. Each taraf was sub-divided into what was known as sircar which in its turn was further divided into paraganas. The village was the smallest unit of administration and a number of villages formed a paragana.

When the Bahmani dynasty came to an end, the kingdom broke up into five independent kingdoms (Sultanates) of (1) the Adil Shahi of Bijapur, (2) the Qutb Shahi of Golconda, (3) the Nizam Shahi of Ahmadnagar, (4) the Barid Shahi of Bidar and (5) the Imad Shahi of Berar. The present Gulbarga district came partly under Bidar and partly under Bijapur. On the conquest of the Deccan by Aurangzeb in the 17th century, the area covered by the districts of Gulbarga, Bidar and Raichur, passed to the Mughal Empire of Delhi. In the early part of the 18th century, when the Mughal Empire was in the throes of decline, Asaf Jah, a distinguished general of Aurangzeb, who was appointed the Subedar of the Deccan with the title "Nizam-ul-Mulk", asserted his independence and formed the Hyderabad State in which a major part of the area now forming the Gulbarga district was also included. Surapura (Shorapur), comprising Shorapur, Shahapur and Jevargi, was a separate principality ruled from 1707 to 1857 by Rajas who had their capital at Surapura. The last of the Rajas, Venkatappa Naik, revolted against the British and the principality was made over to the Nizam after the suppression of the revolt.

During the rule of the early Nizams, there was no real administration in the modern sense. A good deal of land was given in the form of grants, jagirs and inams to nobles and others who promised to perform certain services, mainly, the maintenance of troops for use by the ruler. Considerable portions were also given as security for the payment of debts to people who had advanced money, or to the leaders of mercenary bands which had been recruited for military service and the payments for which could not be made. That portion of the land which remained with the State was farmed out on rent, the farmer being entitled to collect the State's share, deducting a percentage for cost of collection.

The ruler's privy purse was separated from the State revenue and he claimed a particular amount from the Government and if the State failed to pay that amount, he took over a portion of the land as his own for his own maintenance, but his claim on the Government for a fixed annual sum, however, continued.

The land given to nobles was known as paigah and those given to others for meritorious services rendered to Government were called jagirs. Land taken over by the Nizam from the Government for failure to pay his privy purse was known as Sarf-e-khas and the land that remained under Government control was

called Diwani land. Each had a separate administrative machinery of its own. This position continued till all the jagirs were abolished in 1949 and integrated with the Diwani (Government) areas of the State in May 1950. In Gulbarga district alone, out of the total number of 1,682 villages, 563 villages were jagirs.

In order to grant security to the peasantry and to increase the revenues, the areas directly under the Government were, after much struggle and experiment, divided into districts. A district was divided into taluks. Government officers were appointed to hold charge of the revenue and judicial administration. Zillabundi, as the formation of districts was called, was first done in 1863 and constituted one of the most remarkable reforms of Salar Jung, the then Prime Minister of Hyderabad. The State was divided into subas, each consisting of four districts and sadar taluqdars, who were later termed subedars, were in charge of them. The taluqdar, as he was termed, was in charge of each district and he had under him a second taluqdar for a sub-division, of which there were two or three in a district. There were two or three tahsils in each sub-division and a tahsildar was in charge of each of them.

The first district to be formed in the area at the time of Zillabundi was the Shorapur district, which originally had only five taluks but within a decade almost doubled itself on account of the annexation to it of several paraganas, and had nine taluks, namely, Shorapur, Gulbarga, Andola, Dehgaon, Chincholi, Seram, Kodangal, Gurmatkal and Mahagaon (Narona). On account of the difficulty experienced by the Sadar Taluqdar in supervising the offices of the Shorapur district, which had grown in size, the Prime Minister sanctioned the formation of a separate district by detaching some of the taluks from Shorapur district. The present Gulbarga district was thus first formed in 1873 consisting originally of six taluks, *i.e.*, Gulbarga, Chincholi, Seram, Kodangal, Gurmatkal and Mahagaon (Narona), detached from Shorapur district to form the new district. Shorapur district was again broken up in 1883, and Andola taluk was transferred to Gulbarga. At the time of the census of 1901, the division included the four districts of Gulbarga, Lingsugur, Osmanabad and Raichur. Gulbarga district, besides jagirs, had the following seven taluks* :—

Taluk	*Area in sq. miles*	*Number of Towns*	*Villages*
1. Gulbarga ..	524	1	108
2. Mahagaon (Narona) ..	307	..	81
3. Chincholi ..	277	..	69
4. Kodangal ..	141	1	60
5. Seram ..	267	1	72
6. Gurmatkal ..	304	..	86
7. Andola ..	608	..	117
Jagirs, etc. ..	1,664	4	509
Total ..	4,092	7	1,102

* Imperial Gazetteer of India, Vol. XII, 1908, P. 377.

Considerable administrative changes were made under the reconstitution of 1905. Lingsugur district was abolished and divided between Gulbarga and Raichur. Yadgir taluk was transferred from Raichur to Gulbarga district. Gurmatkal and Mahagaon (Narona) taluks were dvided among Seram, Kodangal, Gulbarga and. Yadgir taluks. Shahapur and Shorapur from the former Lingsugur district were added to Gulbarga district and 73 villages from Mahabubnagar district were included in the Kodangal and Yadgir taluks. In place of Lingsugur district, which was abolished, Bidar district was added to Gulbarga Suba. After the reconstitution of 1905, the Gulbarga Suba consisted of Gulbarga, Osmanabad, Raichur and Bidar districts. Gulbarga district consisted of eight taluks—Gulbarga, Andola, Chincholi, Kodangal, Seram, Yadgir, Shahapur and Shorapur, five paigah *ilakas* of Aland*, Firozabad, Afzalpur, Kalgi and Chittapur and two jagirs of Tandur and Kosgi.

The district was divided into three sub-divisions, the first comprising the taluks of Seram, Kodangal and Yadgir, under a second taluqdar; the second comprising the taluks of Chincholi and Gulbarga, under a third taluqdar; and the third comprising the taluks of Andola, Shahapur and Shorapur, under the headquarters second taluqdar. There was a tahsildar in each taluk.

In 1921, Gulbarga district had five Diwani taluks and three Sarf-e-khas, and the rest were jagirs. The area, number of towns and villages in the district in 1921 were as under:—

Taluk	*Area in square miles*	*Number of towns*	*Number of villages*
SERAM DIVISION			
Seram ..	440	..	97
Gulbarga ..	807	1	246
Kodangal ..	622	2	178
Chincholi ..	823	..	135
SHORAPUR DIVISION			
Shorapur (Sarf-e-khas) ..	527	1	175
Shahapur (do) ..	546	..	156
Andola (do) ..	709	..	162
Yadgir ..	507	1	133

* Aland is also pronounced and written as Alland.

JAGIR TALUKS

Taluk		*Area in square miles*	*Number of towns*	*Number of villages*
Kalyani (Jagir)	..	272	1	71
Chittapur (Jagir)	..	360	1	50
Tandur (Jagir)	..	211	1	75
Shahabad (Paigah)	..	256	1	26
Aland (Paigah)	..	402	1	68
Bashirabad (Paigah)	..	121	..	42
Afzalpur (Paigah)	..	372	..	56
Total	..	6,975	10	1,670

There were certain changes in the superstructure of the State administration now and then. At first, the Prime Minister bore the entire responsibility of Government, but this was slightly modified and other ministers were appointed to help him. These were subsequently replaced by Assistant Ministers and much later by a Council of Ministers with the Prime Minister as President of the Council. All the ministers derived their authority from the ruler. But the administrative set-up of the districts remained unchanged.

After the attainment of independence by India in 1947, rulers of Indian States acceded to the Indian Union, but the Nizam did not do so and tried to remain independent, with the result that a chaotic condition prevailed in the State and thousands of people were either driven out of their homes or left themselves through fear. The Indian troops marched into Hyderabad in September 1948. The Nizam dismissed his Council of Ministers and handed over the administration to the Military Governor. Thereafter, the State became a part of the Indian Union. The Military Governor and the Chief Civil Administrator replaced the old Council of Ministers and a Civil Administrator was appointed for each district. He had under him a Deputy Civil Administrator and an Assistant Civil Administrator on the one side and a first taluqdar, two or more second taluqdars and a number of tahsildars on the other. The State became a Part 'B' State of the Indian Union with the Nizam as the Rajpramukh.

After a year, the Military Governor and his assistants were replaced by a new Council of Ministers consisting of a Chief Minister assisted by seven ministers, four of whom were non-officials nominated by the principal political party in the State. Later, the Revenue Board was reconstituted to exercise supervision over the revenue and general administration side of district work.

In September 1949, one thousand and five hundred jagirs in Hyderabad comprising 6,500 villages covering about one-third of the area of the State were abolished. In Gulbarga district, four more taluks—Aland, Chittapur, Afzalpur and Tandur—created out of the adjoining jagir areas were added to the district. The Nizam was granted a compensation of Rs. 50 lakhs per annum for all the Sarf-e-khas areas surrendered to the State which then became Government lands. The district before the reorganisation of the States in 1956, consisted of 12 taluks, namely, Gulbarga, Chincholi, Seram, Kodangal, Shorapur, Shahapur, Andola, Yadgir, Aland, Chittapur, Afzalpur and Tandur, with three administrative sub-divisions at Gulbarga, Tandur and Yadgir.

Public opinion was critical of the classification of the States constituting the Union of India into three categories known as Part 'A', Part 'B', and Part 'C' States. It was argued that it offended the principles of equal rights and opportunities for the people of India. There was also agitation in the country for formation of States on a linguistic basis. The Government of India therefore considered it desirable to reorganise the States on a rational basis and to do away with the distinctions existing among the States, and the Prime Minister announced in the Parliament on 22nd December 1953 that a commission would be appointed to examine the question of the reorganisation of the States. Accordingly, the States Reorganisation Commission with Shri Fazl Ali as Chairman and Shri Hriday Nath Kunzru and Shri Kavalam Madhava Panikkar as members was appointed.

The Commission submitted its report on the 30th September 1955. Among other things, the Commission recommended that a Karnataka State comprising the Kannada-speaking areas of the former Bombay, Hyderabad and Madras States, the whole of Mysore State and Coorg should be formed. So far as Gulbarga district was concerned, the recommendation of the Commission was that the whole district may be included in the new State. But the States' Reorganisation Act of 1956 provided that the two taluks of Kodangal and Tandur should be added to the new State of Andhra Pradesh and that only the rest of the district should go to the new Mysore State. Accordingly, with effect from 1st November 1956, *i.e.*, the date on which the Act came into force, the reduced Gulbarga district consisting of the taluks of Gulbarga, Chincholi, Seram, Shorapur, Shahapur, Andola, Yadgir, Aland,

Chittapur and Afzalpur became part of the new Mysore State, and the taluks of Kodangal and Tandur formed part of Andhra Pradesh.

After the formation of the new Mysore State in 1956, Government decided to divide the State into four administrative divisions, each under a Divisional Commissioner; Gulbarga, which was a Suba (Diwani) in the ex-Hyderabad State, was continued as a Division with the three districts of Bidar, Gulbarga and Raichur, since Osmanabad, which was part of Gulbarga Suba in the ex-Hyderabad State, was transferred to the new Bombay State, now Maharashtra State.

With effect from the 1st February 1966, Bellary district which had been included in the Bangalore Division, was transferred to Gulbarga Division, which now comprises the four districts of Gulbarga, Bidar, Raichur and Bellary.

Sub-Divisions and Taluks

Gulbarga district consists of two Revenue Sub-Divisions and ten taluks, as given below :—

Taluk	*Area in Sq. miles*	*Area in Sq. Km.*	*Number of inhabited villages*	*Number of towns*
1. Gulbarga Sub-Division.—				
Gulbarga ..	663.7	1,719.0	137	1
Chittapur ..	691.2	1,790.2	116	2
Afzalpur ..	513.9	1,331.0	88	..
Aland ..	678.4	1,757.1	127	1
Seram ..	365.4	946.4	104	1
Total ..	2,912.6	7,543.7	572	5
2. Yadgir Sub-Division.—				
Yadgir ..	665.6	1,723.9	129	2
Chincholi ..	608.6	1,576.2	133	1
Jevargi (Andola) ..	746.2	1,932.6	147	..
Shahapur ..	627.2	1,624.5	145	1
Shorapur ..	711.0	1,841.5	172	1
Total ..	3,358.6	8,698.7	726	5
Grand Total..	*6,271.2	*16,242.4	1,298	10

The taluks are sub-divided into revenue circles (corresponding to hoblies in former Mysore State) and there were 32 such circles till recently; but with effect from 1st June 1966, these 32 circles were reorganised into 48 circles.

* See footnote on page 2 and also Appendix-Table I.

The following statement gives the number and names of the previous and present revenue circles under each taluk :—

Taluk	Previous		Present	
	No. of circles	Names of circles	No. of circles	Names of circles
1	2	3	4	5
1. Gulbarga	3	(1) Gulbarga ..	6	(1) Gulbarga
		(2) Kamalapur ..		(2) Awarad
		(3) Farhatabad		(3) Kamalapur
				(4) Mahagaon
				(5) Farhatabad
				(6) Pattan
2. Chittapur	3	(1) Chittapur ..	5	(1) Chittapur
		(2) Nalwar ..		(2) Kalgi
		(3) Kalgi ..		(3) Shahabad
				(4) Nalwar
				(5) Gundgurthi
3. Aland	3	(1) Aland ..	5	(1) Aland
		(2) Narona ..		(2) Khajuri
		(3) Nimbarga ..		(3) Nimbarga
				(4) Madanhiperga
				(5) Narona
4. Seram	3	(1) Seram ..	4	(1) Seram
		(2) Mudhol ..		(2) Adki
		(3) Kodla ..		(3) Mudhol
				(4) Kodla
5. Afzalpur	2	(1) Afzalpur ..	3	(1) Afzalpur
		(2) Atnoor ..		(2) Atnoor
				(3) Karajgi
6. Yadgir	4	(1) Yadgir ..	6	(1) Yadgir
		(2) Balchakkar ..		(2) Balchakkar
		(3) Saidapur ..		(3) Hattikuni
		(4) Gurmatkal ..		(4) Saidapur
				(5) Konkal
				(6) Gurmatkal

1	2	3	4	5
7. Shahapur ..	4	(1) Hattigudur ..	5	(1) Shahapur
		(2) Doranhalli ..		(2) Gogi
		(3) Gogi ..		(3) Doranhalli
		(4) Wadgera ..		(4) Hayyal—B
				(5) Wadgera
8. Jevargi ..	3	(1) Jevargi ..	5	(1) Jevargi
		(2) Nelogi ..		(2) Ijeri
		(3) Yadrami ..		(3) Nelogi
				(4) Yadrami
				(5) Andola
9. Chincholi ..	3	(1) Chincholi ..	4	(1) Chincholi
		(2) Chimanchod		(2) Ainapur
		(3) Sulepet ..		(3) Kodli
				(4) Sulepet
10. Shorapur ..	4	(1) Shorapur ..	5	(1) Shorapur
		(2) Hunasgi ..		(2) Hunasagi
		(3) Kembhavi ..		(3) Kakkera
		(4) Kodekal ..		(4) Kodekal
				(5) Kembhavi
Total ..	32	..	48	

The Divisional Commissioner with his headquarters at Gulbarga is the administrative head of the four districts comprising the division. The Deputy Commissioner is the head of the district. Each revenue sub-division is administered by an Assistant Commissioner and each taluk is administered by a Tahsildar.

Natural Divisions

Gulbarga district consists of Deccan traps and sedimentary rock formations. The characteristic rock types found in Gulbarga district are hard, compact black rocks called basalts which present a scenery of undulating plains and groups of flat-topped hills and step-like terraces.

The general elevation ranges from 1,000 ft. to 2,000 ft. M.S.L. and is somewhat higher than 2,000 ft. in parts of Yadgir and Seram taluks. In Chincholi and Yadgir taluks there is some forest area while in other taluks, one does not come across much of forest area. In taluks like Aland and Yadgir, the land is undulating and uneven.

Hills

The entire district is situated in what is known as the Deccan plateau. A range of hills enters the north of Gulbarga district on the west and continues in the direction of south-east for about sixty miles. The remaining part of this district is flat. The slope of the country is from north to south and south to east. In Shahapur taluk, there is a small range called Muhammadapur Hills and Shahapur town is situated at the foot of these hills. A third range takes its name from Shorapur and is eight miles in length. Yet another range of hills in Yadgir taluk takes off from west to east for a length of twenty miles and enters Seram taluk.

Rivers

The main rivers of the district are the Krishna and the Bhima and the other rivers flowing in the district are the tributaries of the river Bhima. The Bhima itself is a tributary of the Krishna, which runs in the south of the district, forming a natural boundary between Gulbarga and Raichur districts. Therefore, the entire river system in the district is that of the Krishna.

Krishna

The river Krishna is venerated by the Hindus and a bath in the river is considered purificatory. In the *puranas,* the river goes by the name of Krishnavenya or Krishnavena, having its source in the Sahyadris (Western Ghats). The river enters the Mysore State near Ainapur village in the Belgaum district, after flowing for about 300 miles through the Maharashtra State. It flows for about 182 miles in the Mysore State before entering Andhra Pradesh near Deosugur village in Raichur district. The length of the river in Gulbarga district is about a hundred miles. The river cascades down a fall of about 200 feet, about one and a half to two miles down-stream of Narayanapur village in Shorapur taluk and this fall is known as the Jaldurg Falls. There is an old temple and also a fort at the Jaldurg Falls.

Its Mythical Association

There have been ample references to the Krishna in the *puranas*. According to the *Skanda Purana,* which contains a section called '*Krishna Mahatmya*' devoted to the glorification of the Krishna, this river was brought to the earth from the heavens. A legend has it that in the early part of the *Kaliyuga,* the sages were greatly depressed by the decrease of righteousness and increase of evil deeds among the people. They approached Narada for a remedy to help the good and the saintly. Narada, in his turn, conveyed their grievances to his father, Brahma. The latter, while creating a number of *teerthas* suggested to Vishnu to go to the assistance of the sages. Then, Vishnu created the Krishna out of his own body and invested it with 'marvellous' powers. Since Vishnu, *i.e.,* Lord Krishna, created the river, it came to be known as the Krishna after its creator.

The rainfall at the source of the river in the Western Ghats varies from 250 inches to 150 inches and dwindles down to less than 20 inches in the Bijapur, Gulbarga and Raichur districts.

Bhima

The river Bhima rises in the Western Ghats near Bhimashankar and flows south-east through Maharashtra and Mysore States for a length of 535 miles before joining the river Krishna near Sangam village. The river enters the Mysore State near the northern border of Bijapur district close to Sesgeri village in Gulbarga district and flows south-eastwards for a length of about 50 miles along the Bijapur district boundary and then enters the Gulbarga district. It then flows for about 136 miles entirely in Gulbarga district, till its confluence with the river Krishna. The Bhima river has a drainage area of 27,264 square miles. There is an important religious shrine at Ghangapur where the river Amerja joins the Bhima, wherein is situated the famous Dattatraya temple attracting a large number of pilgrims every year.

The Bhima has figured in the *Matsya, Brahma* and *Vamana Puranas* and also in the *Mahabharata.* It is considered a sacred river and is spoken of as a Maha Nadi, a great river. Near the source of this river in the Western Ghats, there is the *jyotirlinga* of Bhimashankar, one of the twelve *jyotirlingas* highly venerated by the Hindus.

Its mythological origin

One of the legends says that Lord Shiva after defeating Tripurasura came down to the Sahyadri mountain for taking rest. At that time, a legendary king of Ayodhya called Bhimaka went there to perform penance and propitiate Lord Shiva, for the sin of killing two sages who had assumed the form of deer. Shiva was pleased with his penance and told him to ask for some boon. King Bhimaka saw that Shiva was full of fatigue and there were drops of perspiration on his forehead. He therefore requested Shiva to turn the drops of perspiration on his forehead into a river. This is the explanation given for the rise of the river which is called Bhima after the king Bhimaka.

There are two bridges across this river, one on the Gulbarga-Jevargi road near Ferozabad and the other on the Yadgir-Shorapur road very near to Yadgir town. One bridge was under construction across this river, on the Gulbarga-Bijapur road, near Sonna village in Afzalpur taluk. No dams or anicuts have been constructed so far across this river in Gulbarga district.

Most of the areas on either banks of the river in this district consist of black cotton soil with patches of murram and sandy soils at the ridge points.

Several streams and rivers like the Bori, Amerja and Kagna join this river through its course in the district.

Amerja

The Amerja river rises near Alur village in Maharashtra State and flows south to join the river Bhima just upstream of the holy town of Ghangapur. The river enters Gulbarga district near

Nirgundi village of Aland taluk. The total length of this river in Gulbarga district is about 55 miles. The river flows through the Aland and Afzalpur taluks and crosses the Bombay–Madras section of the Central Railway near Ghangapur Railway Station.

There is a bridge across this river on Aland-Hiroli road near Shakapur village in Aland taluk. The soil in this area is mainly of the black type.

Bennithora

The Bennithora river rises on the ridges near the village of Malegaon in Maharashtra State and enters Gulbarga district near Hipperga village in Aland taluk. It forms the boundary between Gulbarga and Bidar districts for about four or five miles and flows generally in the north-easterly direction to join the Kagna river on its right bank near Malkhed. The total length of the river in Gulbarga district is about sixty miles. The river flows in Aland, Gulbarga and Chittapur taluks.

There is a bridge across this river on the Gulbarga-Humnabad road near Kurikotta village in Gulbarga taluk. Another bridge across this river on the Mahagaon-Kadaganchi road, near Kamalnagar village in Aland taluk, was under construction.

Mullamari

The river Mullamari rises near the village of Matala in Humnabad taluk of Bidar district. After flowing in a south-eastern direction for about thirty miles, it enters the Gulbarga district near the village of Kinni, forming the boundary between Gulbarga and Bidar districts up to Gobarwadi village. After running for about eight miles in Gulbarga district it again forms the boundary of the above two districts up to Kotgi village and continues to run completely in Gulbarga district in the same direction up to Chincholi town. The total length of the river from where it enters Gulbarga district up to Chincholi town is about 40 miles. From Chincholi onwards it runs south and flows for about 15 miles before joining the Kagna river on the right flank near the village of Jattur. Chincholi, the headquarters of Chincholi taluk, is situated on the left bank of Mullamari river. The river brings a lot of water during the monsoon.

The lands along the river mainly consist of black cotton soil. Many streams like Sarnalla and Karinalla join this river at various places during its course in this district.

Kagna

The river Kagna rises near Kohir in Andhra Pradesh and enters Gulbarga district near Habal village in Seram taluk. The river has a serpentine course, almost parallel to the Hyderabad-Wadi Railway line. The length of the river from where it enters the Gulbarga district to its confluence with the Bhima river near Hungunta village in Chittapur taluk, is about 40 miles. The main tributaries to this river are the Mullamari, Bennithora and

Kamalavathi streams. The river passes through Seram and Chittapur taluks. This river is not harnessed so far in this State for irrigation purposes. The Madras-Bombay section of the Central Railway crosses the river near Shahabad Railway Station. Seram, Malkhed and Chittapur are some of the important towns on the river bank. Malkhed is famous as a holy place, where the mortal remains of Shri Tikacharya are interred. To obviate difficulties in the lines of communication, the State Public Works Department decided to have a road bridge across the river Kagna to open up a road from Gulbarga town to Shahabad and then on to Wadi. This new bridge was opened for traffic in December 1965. Before the construction of this bridge vehicles had to take a detour to reach Shahabad.

Bori

Rising from the confluence of two big streams in Sholapur district of Maharashtra State, the Bori river, after flowing for a major portion in Maharashtra, enters the Gulbarga district near Jodki Khurd village in Afzalpur taluk and traverses in a zig-zag manner for about 15 miles before joining the Bhima river to the west of Afzalpur. The river brings in a lot of water during the monsoon and dwindles down considerably during summer.

Geology

The geology of Gulbarga has been recorded by Bruce Foote and is to be found forming part of the monograph published as Memoir XII of the Geological Survey of India. More recently the district has been surveyed in closer detail by Sri C. Mahadevan of the Hyderabad Survey whose observations are recorded in Volume V, Part I, of the Journal of the Hyderabad Geological Survey.

The southern portion of the district is covered entirely by the Deccan trap, while spreads of limestone and shale belonging to the Bhima series are seen in the middle of the district. The Bhimas represent a younger formation, younger to the Kaladgi rocks (Cuddapah) and are stated to show affinities to the younger Kurnool formation of the Cuddapah basin. The archaen rocks, composed of the Peninsular gneisses with lenses and patches of still older Dharwar rocks, are confined to the southern and eastern parts of the district.

The main geological formations met with in this area are :—

(1) Pleistocene and Recent : consisting of soil and laterite, alluvium and recent conglomerates ;

(2) Tertiary : composed of Deccan traps and inter-trappeans and infra-trappeans ;

(3) Puranas (Precambrian) : composed of Upper Bhima shales and sandstones, Middle Bhima limestones and Lower Bhima shales and sandstones ; and

(4) Archaen : comprising Peninsular gneiss with associated younger granites and Dharwar schists.

Dharwars

The Dharwars occur merely as small patches amidst the gneiss and are of negligible size. Among these, the Kellur-Gogi and the Mangalur bands are of some importance.

The Kellur-Gogi patch of Dharwars consists of schists outcropping on the Krishna near Kellur and runs with intervals *via* Sharadalli, north of Sagar and extends up to Gogi. These schists are presumably a continuation of the prominent schist band traced as a continuous belt for a distance of over 30 miles in the Raichur Doab. In Gulbarga district, the band has been broken up and only remnant patches occur. They are free from auriferous quartz veins and are economically unimportant.

The Mangalur band forms a belt of hornblende schists extending from Bonal to Naganur for a length of about 16 miles having an average width of about three miles. The Mangalur gold mines, partly developed by the Hyderabad Deccan Mining Company, are situated in this belt. The schists of this band are similar to the epidiorites of Wandalli and Topaldoddi of the Maski band of schists. Typical hornblende schists occur to the north and north-east of Parsanhalli and are well exposed over the Kembhavi-Naganur track. Outliers of Dharwar rocks have been noted at Gogira and west and north of Malgatti.

There are numerous old workings for gold along the eastern margin of the belt from Mavinmatti to the north of Kardhalli along the zone of blue quartz reefs. The Hyderabad Deccan Company carried out prospecting in detail south of Mangalur and at a place called 'Makan-gavi'. Other prominent old workings are seen to the south of Mavinmatti, to the north-east of Janapur and to the west of the road to Kardhalli from Naganur.

Peninsular Gneissic Complex

The major portion of the area in Shahapur, Shorapur and Yadgir taluks is covered by Peninsular gneisses which bear an intrusive relationship with the Dharwars. Two types, a grey and a pink series with their own respective pegmatites have been recognised. The grey gneiss is conspicuously banded and developed in force on the hilly tracts north of Shorapur and Shahapur. Pink, fine-grained gneisses occur extensively to the north of Sagar and Rastapur.

The granites and gneisses of the complex are traversed by a number of dolerite dykes.

Purana formations

Overlying the steeply dipping granites and gneisses are seen horizontal beds of sandstone, shale and limestone in the valleys of the rivers Bhima and Kagna, which are designated as the Bhimas. These resemble the Kurnools, though they are nowhere seen in contact. There is little doubt, however, that they are

one and the same. The Bhimas attain their greatest development in Gulbarga district and occupy an area of nearly 2,000 sq. miles. The rock types, characteristic of this series, are a series of shales and limestones.

Bruce Foote divided the Bhima series into two stages, a lower consisting of conglomerates, sandstones and shales and an upper of limestone, sandstone and shales. More detailed work on these formations has been carried out by Mahadevan who has recognised three distinct stages, a lower of sandstone passing upwards into shales, a middle of limestone and an upper of shales and local sandstones.

The Bhimas are covered by the Deccan traps to the west, north and north-east and therefore, the exact limits of these sedimentary rocks cannot be determined or surmised. The rocks of the Bhima series do not show any metamorphism. They are for the most part horizontal. Though conditions were favourable for the preservation of organic remains, the whole formation is devoid of any recognisable fossils.

The lower Bhima series consists of several basal conglomerates and grits and are succeeded by sandstones, and green and purple shales of a good thickness. They are best seen in the Kagna basin and in Shorapur, Shahapur and Yadgir taluks of the district.

The middle Bhima series consists almost exclusively of limestone and occupies an area of nearly 1,500 square miles in the district. The limestones consist of horizontal beds varying from six inches to two or three feet in thickness with intercalated layers of limestone flags. The limestones analyse 80 to 95 per cent $Caco_3$ and contain magnesium carbonate varying from one to three per cent. The Shahabad Cement Company uses the limestones from near Bankur for the manufacture of cement at Shahabad. The flaggy limestones near Chittapur, Tandur and Wadi are extensively quarried. Shahabad stone is famous for its light blue colour and the polish it takes, and finds a wide market.

The limestones of the top-most stage are overlain by purple shales which are calcareous immediately above the limestone, but grade upwards to ordinary mud shales. These shales which form the upper Bhima series are well developed in the Jevargi taluk.

The upper Bhima shales are covered over by Deccan traps and almost invariably, the shales immediately below the Deccan traps are coloured by iron oxide.

Infra-Trappeans

Layers of unconsolidated mud and grit, reddish or whitish in colour, are described as occurring as beds varying in thickness from

two to nine feet underlying the upper Bhimas and below the Deccan trap.

Deccan Traps

The Deccan traps cover an area of nearly 1,500 square miles in the northern portion of the Gulbarga district. The taluks of Aland, Afzalpur and part of Chincholi are covered by trap flows.

These rocks are composed of soft and hard lava flows whose weathering has produced flat-topped hills and terrace-like features. The traps, being the youngest formation in this area, cover all the earlier formations. Towards the west of the district, they cover the shales or limestones of the upper and middle Bhima series and in the north, the limestones of the middle Bhima series and towards north-east, they overlie the granites.

Except for some minor baking effects, the traps do not show any major contact phenomena with the underlying formations. The traps are found confined between 1,400 feet and 2,500 feet contours and attain maximum development in Bidar and the western parts of Gulbarga district. The rocks are highly jointed and exfoliate, leaving massive hard cores. The softer layers in the traps consist of two varieties—(1) an amygdaloidal variety with abundant zeolites and (2) a friable marram-like layer which is derived from the disintegration and decomposition of the traps. These softer layers are found to be water-bearing on account of their porous nature. Kankar is of common occurrence along the joints and exfoliation planes of the trap. Cryptocrystalline silica in the form of agate, chalcedony, opal and jasperoid chert is commonly seen in association with the traps.

Large blocks of chert are occasionally strewn over the traps. They are usually a foot in thickness but are very irregular and nodular in shape. They weather yellow brown, but when broken, are pale grey, sometimes appearing mottled, as if they were recemented breccia but are always dense.

Such chert accumulations are found at three levels of 1,900 feet, 1,500 and 1,570 feet. Between Chincholi and Sulepet there is a great deal of chert in large blocks. It does not form a regular bed but occurs as a series of nodular lenticles about a foot thick, lying close together.

Inter-Trappeans

During the period of volcanic activity in which a large tract of the area was flooded with Deccan lava flows, there were times in which the volcanic activity was interrupted by a period of quietude. These periods were long enough for shallow lakes to form on the unequal surface of the trap and for life to appear in them before they were covered by the subsequent lava flows. Consolidated sediments formed in these lakes in between layers of trap

are known as inter-trappeans and they carry impressions of organic remains.

In the neighbourhood of Chincholi, chert beds with a top layer of clay are found lying between the flows. Best examples are seen near Kudhalli, Korvi, Sulepet, Dastapur and Chima Idlai. The clayey material in these horizons has properties of Fuller's earth.

North of Gurmatkal in Yadgir taluk, inter-trappean cherts with associated marls are well seen. Both the cherts and marls contain fossil remains of lacustrine origin, whose age ranges from upper Cretaceous to lower Tertiary.

Laterite

Deccan trap hills to the west of Chincholi are frequently capped by laterite. In these are found local pockets of limonite and hematite which have been used in the past as ores for smelting iron. At Somalingadhalli, there are slag heaps testifying to the work of the ancients.

Soil

Overlying the Deccan traps and the Bhimas, there are thick spreads of black soil, some of which are as much as 30 feet thick as seen at Akandhalli, Yetnal, Kachapur and Wadi. In the area occupied by granites, the soil varies from loamy to sandy. Frequently pebbles of chert, limestone, shale and granites are embedded in the soils. The soil in the area between Allapur, Tandur and Kodangal is coarse gravelly with spreads of quartz and felspar.

Mineral Wealth-Gold

Numerous old workings for gold scattered in the western parts of Shorapur taluk near Mangalur indicate that this area was systematically explored, prospected and mined for gold by ancient miners who were skilled in mining and metallurgy. In 1905, a gold mining company known as Hyderabad Deccan Company came into existence to examine all the old workings left untouched by the previous prospecting operations.

This company prospected in detail many old working sites in Shorapur area. One is to the south of Mangalur and the other at a place called 'Makan-gavi'. No encouraging report is known of the pit they sunk south of Mangalur, but 'Makan-gavi' appears to have been proved to be a promising field. Due to outbreak of war in 1914, mining was suspended. This was the only mine after Hutti on which hope had been entertained.

Besides the two explored by the Hyderabad Deccan Company, there are other sites of old workings of which the following may be mentioned :—(1) to the south of Mavinmatti, (2) to the north of Janapur and (3) to the west of the road to Kardhalli

from Naganur. Gold quartz fragments from these areas show traces of gold on panning.

A run of old workings was noted just north of the Acharyara Bhavi (a well) south of Mangalur road and this was prospected by pits and trenches. The ore recovered from these working is stated to have given encouraging results. A shaft had been sunk in the well itself to a depth of 220 feet.

In the Makan-gavi area, two shafts were sunk, one known as the " Mandik Shaft " on the eastern old workings and the other, the " Holman Shaft ", further south. It appears from the prospecting work that a promising lode had been discovered in this field. A survey conducted by the Hyderabad Geological Survey has disclosed a few more old workings on the eastern flank of Mangalur hill and some of the quartz obtained from these showed indications of gold after panning.

Copper

The debris lying around Tintini village contains chalcopyrite and other copper minerals. The trappoid schists and the greyish quartz veins cutting through them show copper mineralisation.

Quartz

Large quantities of pure quartz are available in the Yadgir taluk. There are indications in some places that there were indigenous glass smelting centres in the area. In Shorapur taluk, at a place called Jamalpur, furnaces and glass slags are still in evidence though at present glass is not smelted here. The quartz available in the locality is free from iron and forms an excellent raw material for the glass industry. Some of the areas are under mining leases and the material is being made use of in the manufacture of glass by some of the reputed glass works of Bombay. Important localities are (1) between Arkera and Ramasamudram villages along Yadgir-Narayanapet road, (2) between Toldini and Rajankollur, (3) about four furlongs west and north-west of Siddapur and (4) in the Krishna river, south-east of Gadalmari in an island called Burchigudda.

The sandstones of Kodekal plateau which are traceable for a distance of nearly ten miles have been found to be white and pure inside, though stained at the surface with iron oxides . This material is likely to be of use in the glass industry.

Sand useful for moulding and stowing purposes is found all along the *nala* courses near Yadgir town. The sand is white in colour and occurs as a thin covering varying from two to eight inches in thickness in *nala* beds.

Agates

Agates of grey colour with fine banding are found to the north of Yanegundi and at Burgapally in Yadgir taluk in the form of a

thin bed of about two to three feet thickness below the Deccan trap. They are capable of being cut and polished into ornamental wares.

Cherts of variegated colour occur at Maralbhavi and Hagaratgi of Shorapur taluk, sometimes as massive beds. They are very useful for inlay work on account of their pleasing shades.

Good crystals of tourmaline occur associated with pegmatite veins running in north-south direction on the eastern margin of the Mangalur schist patch in Shorapur taluk. Loose crystals detached from the main mass are found strewn all over the field. The crystals range in size from half an inch to six inches in length.

Gypsum

Gypsum useful for the cement industry is found to the south of Gungurthi, 16 miles east of Gulbarga along the Gulbarga-Seram road. The mineral occurs in black cotton soil in the form of small crystals and nodules. The nodules contain a thin layer of kankar showing a kernel of glistering plates of gypsum. Small crystals are found distributed in black soil near Kembhavi in the Shorapur taluk.

Calcareous powder rich in lime occurs between Hebbal Buzurg and Wajjal, in Shorapur taluk. The deposit occurs at the junction between the Peninsular gneisses and the limestones of the Bhima series. The calcareous spread is about a mile and a half in length with an average width of 400 feet and is about five feet in thickness.

Deposits of Fuller's earth occur at Korvi, Sulepet, Chima Idlai, Dastapur, Navandgi, Kodli, Gunhalli and other villages in Chincholi taluk and at Sugoor in the Chittapur taluk. This earth has the unique property of bleaching vegetable and mineral oils. The main use of this material is in the petroleum-refining industry for filtering and clarifying lubricants. It is also used in water purification and in removing odours from oily waste material. Trials on bleaching of raw lubricating oil have shown that Korvi earth is similar to imported earth, at present being used in the country for the bleaching of lubricating oils. It has been found to be the best in the sense that it can be used for various purposes in the natural condition unlike other earths which require processing.

The greenish shales which cap sandstones near Tirth in Shorapur taluk are used locally by the potters for the preparation of artistic pottery and the clay is in great demand on account of its excellent quality.

Limestone

Extensive deposits of limestone suitable for the manufacture of cement are found in Gulbarga district, notably at the following

places: Chittapur, Jevargi, Chincholi, Shahapur, Shorapur, Nalwar, Wadi, Shahabad, Seram and Malkhed, covering an area of 1,500 sq. miles. At present, the Associated Cement Company which has established a big cement plant at Shahabad is exploiting, on a large scale, the limestone occurrences near Bankur; 2,500 tons of limestone are quarried per day and utilised in the manufacture of cement.

Soapstone

A small outcrop of soapstone extending about half a mile in length and 200 yards in width is found about two miles to the north of Malkapalli in Yadgir taluk. The rock forms a suitable material for soapstone utensils, and the broken and half-made pieces strewn here point to the former existence of such an industry.

A large number of salt pans are found scattered in different parts of the district. Both edible and tanning salt can be produced by lixiviation process. The important site is Bichabal village in Shorapur taluk.

Building Stone

The limestones, the Deccan traps and granites and sandstones in the area form excellent building material. Old temples, *dargahs*, forts and other edifices testify to their excellence and durability. In the limestone areas, even the poorest dwellings are built with dressed massive limestones and roofed with limestone slabs in an attractive and neat manner.

There is a large number of quarries all over the limestone area. Polished limestone slabs of various sizes are in great demand for flooring, roofing and other constructional purposes.

Flora

The situation of Gulbarga district within the Deccan Plateau with its moderate elevation gives it a dry climate. Its almost complete absence of lofty mountain ranges is a special feature which contributes to the formation of two types of forests, deciduous in the north-east zone with a fairly dense tree growth and the scrub type fit for firewood only in the south-east. The forests of the district, which yield some revenue are situated in the Chincholi taluk where timber of appreciable girth is got from well-grown trees. The north-east zone has a large tree growth in patches on the hill slopes. The chief trees grown are Teak (Tectona grandis), Rosewood (Dalbergia latifolia), Nallamaddi (Terminalia tomentosa) and Satin (Chloroxylon sweitenia). The forest area of Gulbarga district is 267.20 square miles which is about 4 per cent of the geographical area of the district.

The distribution of forest area taluk-wise was as under in 1964-1965 :—

Taluk		*Acres*
Gulbarga	..	12,256
Chittapur	..	6,623
Yadgir	..	57,549
Shahapur	..	4,799
Shorapur	..	13,430
Jevargi	..	..
Afzalpur	..	..
Aland	..	4,326
Chincholi	..	70,087
Seram	..	1,936
	Total	1,71,006

From the above, it will be seen that Chincholi taluk has nearly half the entire forest area of the district, with Yadgir taluk coming next.

The forests in the area are being exploited according to the prescriptions of a working plan. In the areas which are devoid of vegetation, attempts to take up contour trenching followed by afforestation are being made. The policy of the Government is to carefully preserve the forests as far as possible and to add to the total acreage by taking up fresh areas for afforestation. There are no evergreen forests in the district.

During the First and Second Five-Year Plan periods, advance trenching, sowing, establishment and maintenance of nurseries were carried out under the Soil Conservation and Afforestation Scheme, quarters were constructed for the staff, agave hedges were planted, a dry teak nursery consisting of 100 beds and one unit nursery were established, and a teak plantation was raised over 110 acres. Two thousand eight hundred and nineteen acres of plantations were raised during the Second Five-Year Plan.

During the Third Five-Year Plan, schemes were taken up for providing housing facilities to the departmental subordinates living in the interior parts of the forests, improving grazing areas, raising cashew plantations, securing excess gairana areas (gomal areas) from the Revenue Department and also the old jagir areas and bringing them under proper management to protect and rehabilitate them wherever necessary. The schemes include raising of plants along road sides, railway sides and canal sides, raising of village wood lots under Farm Forestry, to create fuel reserves with a view to helping the agricultural population from shortage of fuel,

meeting the requirements of agricultural implements, and providing fodder and grazing grounds for the village cattle. A scheme under soil conservation and afforestation has also been taken up covering approximately 1,000 acres annually.

The main items of revenue are from timber, firewood, Gule Rosa (Cymbopogan martini), beedi leaves, tanning bark and seetaphal.

The species found in the north-east zone are Teak, Rosewood, Bijasal (Pterocarpus marsupium), Satin, Tirman (Anogiessus latifolia), Siris (Albizzia lebbak), Narlinga (Albizzia amara), Amaltas (Cassia fistula), Chanangi (Lagerstroemia parviflora), Gumpana (Lennia grandis), Anduk (Boswellia serrata), Nallamaddi, Ermaddi (Terminalia arjuna), Ebony (Diospyros melanoxylon), Mohwa (Bassia latifolia), Tada (Grewia taliaefolia), Bhilawa (Semecarpus anacardium), Halda (Terminalia chebula), Tari (Terminalia belerica), Sundra (Acacia sundra), Billphal (Aegle marmelos), Gumartek (Gmelina arborea), Sandal (Santalum album), Chironji (Buchanania latifolia) and Somi (Soymida febrifuga).

In the south-east zone, consisting of the dry mixed deciduous type, Narlinga, Siris, Eppa (Hardwickia binata), Babul, Satin, Tirman, Neem (Melia indica), Palekodsha (Wrightia tinctoria), Palas (Butea frondosa), Bhilawa, Jamoon (Eugenia jambolana), Gumpana, Bamboo (Dendrocalamus striatus), Tarwad (Acacia auriculata), Mango (Mangifera indica), Peddaman (Ailantus excelsa), Junble-anar (Dodonaea viscosa), Sharifa (Anona squamosa), Karanj (Pongamia glabra), Danti (Celastrus semgolensis), Challe (Zizyphus xylopyrus), Chanangi, Ritha (Sapindus emerginatus), Nakkera (Ximenia americana) and Lantana (Lantana camara) are found. Most of these species have a stunted growth

The minor forest produce consists of honey and wax, barks, fruits, resins and gums, tanning barks (bark of Cassia fistula and Cassia auriculata), Myrobalans and Rosa (flowers of Cymbologon martini), Tamarind (fruit of Tamarindus indica), Sharifa (fruit of Anona squamosa), Soapnut (fruit of Sapindus emarginatus) and Chironji (fruit and seeds of Buchanania latifolia).

The flora of the district is on the whole not of the rich type Nevertheless, there is some timber wealth. The teak grown in the district is well-known for its strength and durability. This is due to the resinous matter in the pores which resist the action of water. Nallamaddi is a wood which has a dark brown colour, and is hard and durable. This is a good fuel tree. Babul is used for poles and spokes and wheels of carts. Honne (Pterocarpus marsupium) is occasionally grown for use in making furniture. The wood is

widely used for cart wheels, window frames, agricultural implements and the like. Anduk is an interior wood and is used as firewood or for preparation of charcoal. The gum resin is used for medicinal purposes. Acacia sundra has branches of dark brown colour and the wood is heavier and more durable. Some of the more important wood species have been described as of economic value. The chief tree growths are Tectona grandis, Dalbergia latifolia, Terminalia tomentosa, Pterocarpus marsupium, Chloroxylon sweitenia, Lagerstroemia parviflora, Acacia sundra, Anogeisus latifolia, Boswellia seratta, Melia indica, Eugenia jambolana, Dendrocalamus striatus, Buchanania latifolia, Bassia latifolia and Phoenix sylvestris.

In the past, the deciduous forests were fully exploited, with the result that forests of old have become barren. The Forest Department has a number of plans to regenerate the lost forests and work in this connection has been in progress for some time.

The forest flora is scattered in small bits except in Chincholi taluk where trees grow to pole size. The other taluks have patches of forests mostly of the scrub type, yielding no timber at all. Sandal is strictly preserved.

Fauna

In the absence of thick evergreen forests in the district, wild life, as such, is not abundant. Some portions situated in the north-east (Chincholi taluk) have deciduous forests. The rest are only scrub forests merging into thorny species providing little cover to animals. From the reports received from the Divisional Forest Officer, one can easily assess that the fauna of the region is not rich. The deciduous forests have a few varieties of langoors and monkeys. Beasts of prey belonging to the carnivora class are seen only very occasionally. A few panthers (Felis parduus) are found in the semi-jungle areas and they come to villages to lift cattle, dogs and donkeys. The tiger is almost extinct and the few that may have been seen in recent years most probably came from the neighbouring areas in search of prey. Bears are found in some areas in the Chincholi forest range. They do much harm to the cultivated fields. The hyena is common in all forest areas and can be seen prowling round the village homesteads at night. It takes off goats and sheep. Generally, this animal lives on carrion. Wolves are found in the open scrub jungles. Wild dogs are also seen in packs, attacking cattle and spotted deer and even challenging the bigger carnivora to a fight.

Among the harmless types, the spotted deer and sambhar live in the semi-forest regions. The black buck is common in the open scrub jungles. The Indian fox is commonly seen all over in the open country. Jackals are also seen prowling about trying to lift goats and sheep.

Birds

The district has the usual varieties of birds like the parrot, starling, swallow, doves, wood-peckers, peacock, owls, eagle and some humming birds. Pigeons are getting extinct owing to large-scale poaching.

Reptiles

The reptiles found in the district are the cobra, viper, pangolin and the ghodphod. Occasionally, pythons are found in the deciduous regions. Chameleons are also to be found. Scorpions are common in summer.

Game Laws

Under the Hyderabad Game Rules, shooting without a licence is prohibited in reserved forests. There are no shooting blocks in the district. The shooting of the black buck is permitted from 1st December to the end of May. The permit for shooting is valid for one month and shall in no case exceed three months. Fees are charged for big and small game, with a deposit amount. The Wild Life Preservation Act, 1953, has not yet been made applicable in the district. Hence, the Hyderabad Game Rules are in operation throughout the area.

Climate

The climate of the district is generally dry and healthy, and the seasons are on the pattern of those generally in the Deccan. The summer season starts by about the middle of February and continues to about the first week of June. The south-west monsoon season follows thereafter and extends upto the end of September. October and November constitute the post-monsoon season. The period from December to the middle of February is the cold season.

Rainfall

Records of rainfall in the district are available for four raingauge stations for periods ranging from 22 to 77 years. The statement of the rainfall at these stations and for the district as a whole are given in Tables 1 and 2. The average annual rainfall in the district is 715.5 mm (28.17″). The rainfall in the district was 869.7, 1,031.1, 940.3 and 937.5 mms. in 1961, 1962, 1963 and 1964, respectively. The rainfall increases from the south-west towards the north-east. The rainfall in the south-west monsoon season constitutes about 80 per cent of the annual rainfall. September is the rainiest month. The district gets some rain during the latter part of the summer and post-monsoon months mostly as thunder showers. The variation in the rainfall from year to year is large. In the fifty-year period from 1901 to 1950, the highest annual rainfall amounting to 200 per cent of the normal was received in 1903 ; 1920 was the year with the lowest rainfall which was 51 per cent of the normal. In eleven years out of the fifty, the district received rainfall less than 80 per cent of the normal, two consecutive years of such low rainfall occurring twice. Rainfall less than 80 per cent of the normal in two consecutive years has occurred once or twice at all the stations. Even three consecutive years

of such low rainfall occurred once at Gulbarga. The large variations in the rainfall from year to year, both in its amount and in its distribution through the seasons, render the district liable to drought. It will be seen from Table 2 that the rainfall in the district was between 500 and 1,000 mm. (19.69″ and 39.37″) in 41 years out of 50.

On an average, there are 47 rainy days (*i.e.*, days with rainfall of 2.5 mm. or more) in a year in the district.

Temperature

The only meteorological observatory in the district is at Gulbarga. The data of this station may be taken as representative of the condition in the district as a whole. December is the coldest month with the mean daily maximum temperature at 29.7°C (85.5°F) and the mean daily minimum at 14.8°C (58.6°F). From the middle of February, temperature rises rather rapidly till May, which is the hottest month. The mean daily maximum temperature during this month is 40.6°C (105.1°F) and the mean daily minimum temperature is 25.9°C (78.6°F). The day temperatures sometimes go up to 45°C (113.0°F) in the hot season. The dry heat is sometimes very trying. When the south-west monsoon advances into the district by about the first week of June, temperatures decrease appreciably and the weather becomes milder. The day temperatures increase a little with the withdrawal of the monsoon by about the end of September, but night temperatures decrease. After October, both day and night temperatures decrease gradually, the drop in the night temperatures being more rapid.

The highest maximum temperature recorded at Gulbarga was 45.0°C (113.0°F) on 18th May 1912 and on 1st June 1923. The lowest minimum temperature was 5.6°C (42.1°F) on 18th December 1945.

Humidity

The period from December to May is the driest part of the year when the relative humidity in the mornings is between 40 and 60 per cent, and in the afternoons about 20 to 30 per cent. Humidity increases by about 20 to 30 per cent during the south-west monsoon months.

Cloudiness

Skies are moderately to heavily clouded in the south-west monsoon period. Cloudiness decreases during the post-monsoon season. During the rest of the year, the skies are generally clear or lightly clouded.

Winds

Winds are generally light to moderate with some increase in force in the latter half of summer and the monsoon season. Winds are from directions between south-west and north-west in the monsoon season. In the post-monsoon season, they are north-easterly or easterly. In the cold seasons, winds blow mainly from

directions between north-east and south-east. In the summer season, winds are variable in direction, but by May, winds from directions between west and north predominate.

Special weather phenomena

The district is seldom affected by full-fledged cyclonic storms. But in the post-monsoon months, some of the depressions from the Bay of Bengal become diffused on crossing the east coast of India. In their passage westwards across the peninsula, these diffused depressions affect the district and its neighbourhood causing wide-spread heavy rain. Thunder-storms occur in April, May and early June and at the close of the monsoon season.

Tables 3, 4 and 5 give the temperature and humidity, mean wind speed and frequency of special weather phenomena, respectively, for Gulbarga.

TABLE—1

Normals and extremes of rainfall

Gulbarga District

Station	No. of years of data		January	February	March	April	May	June	July	August	September	October	November	December	Annual	Highest annual rainfall as % of normal & year*	Lowest annual rainfall as % of normal & year*	Heaviest rainfall in 24 Hrs**	
																		Amount (mm)	Date
1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Gulbarga	46	a	6.1	7.1	9.1	19.1	27.9	106.4	136.1	131.6	185.4	64.3	32.5	4.1	729.7	196	49	147.3	16th Sept. 1928
		b	0.3	0.5	0.8	1.8	2.5	6.8	9.0	7.7	9.5	4.2	1.8	0.3	45.2	(1903)	(1920)		17th Oct. 1893
Yadgir	28	a	4.1	7.9	7.6	21.8	22.6	96.8	132.8	110.7	165.3	70.6	31.0	3.6	674.8	146	53	151.9	3rd July 1932
		b	0.3	0.5	0.6	1.9	2.2	8.0	11.5	8.2	9.6	4.4	1.9	0.2	49.3	(1932)	(1937)		
Navandgi	20	a	0.8	4.1	5.6	17.5	14.7	102.9	151.4	150.1	180.9	57.7	15.0	1.8	702.5	164	47	114.3	26th Aug. 1942
		b	0.1	0.3	0.5	1.1	1.3	5.9	9.5	8.6	8.5	2.7	0.9	0.2	39.6	(1938)	(1931)		
Gulbarga District		a	3.1	6.3	7.2	20.3	23.3	104.5	148.1	134.8	181.8	60.2	23.3	2.6	715.5	200	51		
		b	0.2	0.5	0.7	1.7	2.2	7.3	10.5	8.7	9.7	3.8	1.4	0.2	46.9	(1903)	(1920)		

(*a*) Normal rainfall in mm.
(*b*) Average number of rainy days (days with rain of 2.5 mm. or more).
* Years given in brackets.
**Based on all available data up to 1957.

TABLE—2

Frequency of Annual Rainfall in the Gulbarga District

(Data 1901—1950)

Range in mm	*No. of years*	*Range in mm*	*No. of years*
301—400	1	901—1,000	3
401—500	1	1,001—1,100	4
501—600	13	1,101—1,200	2
601—700	10	1,201—1,300	0
701—800	9	1,301—1,400	0
801—900	6	1,401—1,700	1

TABLE—3

Normals of Temperature and Relative Humidity

Gulbarga

Month	*Mean Daily Maximum Temperature*	*Mean Daily Minimum Temperature*	*Highest Maximum ever recorded*		*Lowest Minimum ever recorded*		*Relative Humidity*	
	.C	.C	.C	*Date*	.C	*Date*	0830	1730*
January ..	30.7	15.7	36.1	31st Jan. 1897	6.7	1st Jan. 1937	57	31
February ..	33.4	18.0	38.3	28th Feb. 1903	11.1	3rd Feb. 1911	48	27
March ..	37.3	21.5	42.8	28th March 1892	12.8	5th March 1910	41	23
April ..	39.6	24.7	43.9	30th April 1923	13.3	1st April 1902	45	25
May ..	40.6	25.9	45.0	18th May 1912	18.3	2nd May 1892	51	25
June ..	35.4	23.6	45.0	1st June 1923	16.1	22nd June 1895	71	50
July ..	31.9	22.3	37.2	2nd July 1920	17.2	11th July 1920	79	62
August ..	31.6	22.0	37.8	5th August 1899	18.3	1st August 1920	78	59
September ..	31.4	21.9	37.2	5th Sept. 1926	17.8	30th Sept. 1954	78	61
October ..	32.5	20.6	37.8	16th Oct. 1899	10.0	27th Oct. 1905	66	45
November ..	30.7	17.3	35.6	3rd Nov. 1940	7.8	26th Nov. 1945	61	36
December ..	29.7	14.8	34.4	5th Dec. 1920	5.6	18th Dec. 1945	58	32
Annual ..	33.7	20.7					61	40

* Hours I. S. T.

TABLE—4

Mean Wind Speed in Km/hr.

Gulbarga

Jan.	*Feb.*	*March*	*April*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Annual*
7.7	8.9	9.5	10.6	13.7	16.7	17.7	15.1	11.1	9.3	9.8	8.2	17.5

TABLE—5

Special Weather Phenomena

Gulbarga

Mean No. of days with	*Jan.*	*Feb.*	*Mar*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Annual*
Thunder ..	0.0	0.8	1.7	3.4	3.7	2.5	0.5	1.4	3.6	1.7	0.0	0.0	19.3
Hail ..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dust-Storm ..	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Squall ..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fog ..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0