CHAPTER I GENERAL

Bidar district is relatively a small district of the State located in the northern most tip of Karnataka. It covers an expanse of 5,448 km lying between 17° 35' and 18° 25' North latitudes and 76° 42' and 77° 39' East latitudes. It is bounded by Nizamabad and Medak districts of Telangana (former Andhra Pradesh) State on the east and Latur Nanded and Osmanabad districts of Maharashtra State on the West and Kalaburagi (former Gulbarga) district of Karnataka on the south. It measures 93.4 km from east to west and 115.2 km from north to south.

The Bidar area had a great past. It was the nucleus of some important royal dynasties which held sway in the ancient and medieval periods and witnessed several upheavals. In the 12th century A.D., it was the immediate scene of the rise of the Sharana (Veerashaiva) movement led by Basaveshvara, Allama Prabhu and others, which brought about a new epoch with far-reaching consequences in social, religious, literary, cultural and economic fields.

Bidar district was a victim of political developments in which its geographical status was subjected to alterations particularly during the reorganization of the state in 1956. At present it represents a small fraction

of erstwhile state of Hyderabad. The development of the district was almost arrested during the period of Nizam's rule which, in addition to Bidar, also included Raichur and Kalaburagi (Gulbarga) districts and is referred to as **'Hyderabad Karnataka'** (Nizam Konda) in political parlance.

Origin of the Name: There is no unanimity among the scholars regarding the origin of the name Bidar. However, it is generally agreed that the name Bidar appears to be derived from 'bidaru', meaning bamboo in English, denoting that the district was once abound in bamboo clusters. Subsequently it came to be known as 'Bidarooru' and finally settled down to Bidare. Bidar, with reference to a place of this area occurs in 38th Sandhi (chapter) of Lakkanna Dandesha's 'Shivatattva Chintamani', which was composed in 15th Century A.D. Bidarur is repeatedly referred to in 'Veerasangaiahna Chowpada' written by Channamallesha of Umbalige of the neighbouring Kalaburagi area, about 1700 A.D. Veerasangaiah depicted as hero of the story is mentioned as the native of Bidarooru (vide Prabuddha) Karnataka, Vol.49, No.4(1968), pp 75-99\. Veerasangaiah's Samadhi is preserved even now in Bidar town with great reverence. This serves as a clear proof to the original name of the place `Bidarooru', while, the public often refers the town Bidar as Bidare. According to a traditional tale, the history of the place can be traced back to the days of Mahabharatha wherein, the name Bidar appears to be a shortened name of Vidhuranagara, Vidhura being associated with the great wisdom in the celebrated epic Mahabharata. The place is also associated with the legendary story of Nala Damayanthi. Yet another story associates this town to a prince named Vidhura. However, there are no literary evidences till now in support of these fables.

Area and Population: Bidar district is in the northernmost tip of Karnataka, covering a total geographical area of 5,448 Sq.km.with topographical variations defined by hills and low areas between 500 to 600 metres above the mean sea level.

a) Population: According to the 2001 Census, the total population of Bidar district is 15,02,373 comprising of 7,71,022 males and 7,31,351 females. The population of the district, forms 2.8 per cent of the state population and ranks at 19th place among the districts. Out of the total population of the district, 77.0 per cent lived in rural areas while 23.0 per cent lived in urban areas. Rural population of the district is distributed

among five taluk and urban population spread over in six towns. The total rural population of the district comes to 11,57,498 persons and is composed of 5,91,653 males and 5,65,845 females as per 2001 Census. This rural population is distributed in 599 inhabited villages and there are 22 uninhabited villages in the district.

The total population of the district as per 2011 Census is 17,03,300. Of the total population, 8,70,665 are males and 8,32,635 are females. The district's share to total Karnataka's population is 2.79 per cent and it ranks at 16th place among the districts. The population of the district is further distributed as 12,77,348 living in rural areas and 4,25,952 in urban areas, constituting 74.99 and 25.01 per cent of rural and urban population respectively.

The population in the age group 0-6 is reported as 2,24,442. This constitutes 75.21 per cent in rural areas and 24.79 per cent in urban areas. The proportion of child population is 13.18 per cent to the total district population. An interesting segment of India's population is its adolescents and youth. While the adolescents are classified as persons between 10-19 years of age, the youth are defined as persons between 15-24 years. The number of adolescents (10-19) in the district is 3,86,193 and the youth (15-24) is 3,56,772. Together the young age group between 10-24 years in the district constitutes 5,51,759 which is about 32.39 per cent of the total district population. The rural – urban distribution remains same.

b) Population Growth: There has been a net addition of 2,46,574 persons during 1991-2001. The decadal growth rate of the district comes to 19.6 per cent . The growth rate for the rural and urban areas of the district is 14.6 and 40.4 per cent respectively. Bidar district recorded 13.37 per cent growth rate during at 26th place among the districts in the State during the decade 2001-2011. The decadal growth rate decreased by 6.26 per cent compared to the previous growth rate between 1991-2001. The district has witnessed fluctuating growth trend since 1901. In terms of absolute number, population increased by 2,00,927 persons during the decade 2001-2011. The decadal growth rate in urban areas is more than double the rate registered in rural areas, which is 10.35 and 23.51 per cent for rural and urban areas respectively.

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Density: The density of population is defined as the number of persons per square kilometre. The population density of Bidar district is 276 persons per sq. km. against the state average of 276 persons. At taluk level, the density varies between 200 persons in Aurad taluk and 276 persons in Bidar taluk. In rural areas it comes to 218 persons per sq. km. while in urban areas it comes to 2,329 persons. In urban areas, the density of population varies between 879 persons in Chitguppa town and 3,416 persons in Basavakalyan town. As such, the density recorded as per 2011 Census is 313 persons per sq.km. From a density of 66 persons per sq.km. in 1901, it increased gradually to 313 in 2011 Census except 1921. At taluk level, the density ranges between as low as 226 in Aurad taluk to 518 in Bidar taluk.

Sex Ratio: The sex ratio is defined as number of females to 1,000 males. There are 949 females for every one thousand males in Bidar district. The sex-ratio figures for rural areas and urban areas of the district are 956 and 923 respectively. It is also observed that, the proportion of females in rural areas is higher than that of urban areas. Sex-ratio in the age-group 0-6 comes to 941 girls per 1,000 boys in the district. As a whole in rural areas, this proportion is 948, while in urban areas the sex-ratio of Child population works out to 921 girls per 1,000 boys. According to 2011 Census, the sex ratio of the district is 956. The ratio increased by 8 points compared to 2001 Census and ranks at 27th place among the districts in the State. The sex ratio by residence has increased both in rural and urban areas. The increase is substantial in urban areas wherein it increased by 19 points compared to an increase of 5 points in rural areas. The 0-6 child sex ratio increased by one point registering 942 female children to 1,000 male children in the district. This ratio increased in rural areas by one point and in urban areas by two points. In terms of 0-6 child sex ratio, the district ranks at 26th place among the districts in the State.

Literacy: In Census, a person aged 7 and above is considered literate, if he or she can read and write with understanding in any language. As per definition, the literacy rate for Bidar district is 70.51 per cent in 2011 as against 60.94 per cent in 2001, an increase of 9.57 per cent during the decade. The gap in male–female literacy rate narrowed down to 17.54 per cent in 2011 Census compared to 23.66 per cent in 2001. Though this gap

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has reduced both in rural and urban areas, the decline in rural areas is more than in urban areas.

Scheduled Castes and Scheduled Tribes: Total Scheduled Castes (SCs) population reported in the district is 3,99,785 persons, constituting about 23.47 per cent of total population of the district. The decadal growth rate of Scheduled Castes as per 2011 Census is 33.79 per cent. The proportion of Scheduled Castes in the district to total SCs in the State is 3.82 per cent. The growth rate of Scheduled Tribes (STs) during the decade 2001-2011 is 29.42 per cent and about 13.85 per cent of the district's total population are Scheduled Tribes. The share of district's STs to total Scheduled Tribes in the State is 5.55 per cent. The decadal change in the growth rate of SCs and STs in urban areas has reported to be very high compared to the growth rate in rural areas.

Status of population in Bidar district as per 2001 Census

		_		1			·		
	Taluk		raphical (sq.km.)		o. of ages	Rural	Urban		
Aurad		1	,224.4		152	2,29,490	15,804		
Basav	akalyan	1	,205.9		115	2,41,125	58,785		
Bhalki		1	,117.3		133	2,21,949	35,093		
Bidar			926.0		134	2,31,283	1,74,257		
Humn	abad		985.3		87	2,33,651	60,936		
	Total	5	,448.0		621	11,57,498	3,44,875		
S.No	Name of the	No. of	villages		o of wns	Rea	asons for Variations		
3.NO	Taluk	2011	2001	2011	2001				
1	Basavakalyan	115	115	1	1	changed to Census vide	civic status of Basavakalyan (TMC) nged to Basavakalyan(CMC) for 2011 sus vide notification No.UDD 96 MLR 6(9) dated 31.12.2006		
2	Bhalki	133	133	1	1				
3	Aurad	151	152	2	1	Kamalnagar for 2011 Cer	village treated as CT nsus.		
4	Bidar	134	134	1	1				
5	Humnabad	87	87	2	2				

District Highlights - 2011 Census

- Bidar with a total population of 17,03,300 stands in the 16th position in terms of population in the State.
- The district ranks 13th in terms of rural population and 15th in terms of urban population.
- Bidar district accounts for 2.8 per cent of the total population of the State.
- With the decadal growth rate of 13.4 per cent, it ranks 13th in the State in terms of decadal growth rate.
- The district with a Sex ratio of 956 holds 27th rank in the State.
- The district with a Sex ratio of 942 among the child population in the age group 0-6 holds 26th rank in the State.
- The proportion of child population, (0-6, age-group) is 13.2 per cent in the district and ranks 8th in the State.
- The district has a literacy rate of 70.5 per cent and is placed at 19th rank in the State.
- The male literacy rate in the district is 79.1 per cent and the female literacy rate is 61.6 per cent.
- The male female literacy gap in the district is 17.5 per cent age points, which is higher than the male - female literacy gap registered by the State (14.4 per cent age points).
- The Scheduled Caste population contributes 23.5 per cent to the total population of the district and the Scheduled Tribe population contributes 13.8 per cent.
- The district has registered the lowest work participation rate of 41.2 per cent in the State.
- The work participation rates for Male and Female population are 52.7 and 29.3 respectively in the district.
- Among the total workers in the district 78.5 per cent are main workers and 21.5 per cent are marginal workers.
- Major work force of 60 per cent is engaged in Agricultural sector i.e., Cultivators (20.1 per cent) and Agricultural Labourers (39.9 per cent).

per cent of the total workers in the district and the district 39.9

engaged in Household Industry

- at 17th position in the State in terms of Bidar district
- 1 Census Town in the district. 6 Statutory Towns and density There are 620 villages,

State.

the

Census 2011 **Bidar District Census Abstract**

Name		Area in	No. of House-	Total Pog Institut	Total Population including Institutional Population	luding	Populati	on in the ag 0-6 years	Population in the age group of 0-6 years
		bs bs	holds	Persons	Males	Females	Persons	Males	Females
	Total	5,448.00	3,19,937	3,19,937 17,03,300 8,70,665	8,70,665	8,32,635 2,24,442 1,15,550	2,24,442	1,15,550	1,08,892
Bidar - District	Rural	5,283.27		2,39,979 12,77,348 6,51,250	6,51,250	6,26,098 1,68,796	1,68,796	86,615	82,181
	Urban	164.73	79,958	4,25,952	4,25,952 2,19,415	2,06,537	55,646	28,935	26,711
	Total	1,189.23	51,676	2,75,530	2,75,530 1,40,107 1,35,423	1,35,423	36,191	18,528	17,663
Basavakalyan	Rural	1,189.23	51,676	2,75,530	2,75,530 1,40,107	1,35,423	36,191	18,528	17,663

	Total	1,086.60	46,537	2,37,017	1,20,862	1,16,155	29,297	15,204	14,093
Bhaiki	Rural	1,086.60	46,537	2,37,017	1,20,862	1,16,155	29,297	15,204	14,093
	Total	1,265.79	47,862	2,58,551	1,32,251	1,26,300	34,325	17,626	16,699
Aurad	Rural	1,249.12	45,934	2,48,299	1,26,924	1,21,375	32,970	16,901	16,069
	Urban	16.67	1,928	10,252	5,327	4,925	1,355	725	630
Kamalnagar (CT)	Urban	16.67	1,928	10,252	5,327	4,925	1,355	725	630
	Total	862.67	47,610	2,55,568	1,30,467	1,25,101	34,242	17,533	16,709
Bidar	Rural	862.67	47,311	2,53,921	1,29,625	1,24,296	34,007	17,421	16,586
	Urban	0.00	299	1,647	842	805	235	112	123
Bag - E - Karanja (OG) (Rural)	Urban	Ž Ž	∞	45	21	24	5	2	м
Aliabad (OG) WARD (Rural- Urban)	₹	291	1,602	821	781	230	110	120	
	Total	950.92	48,521	2,62,581	1,33,732	1,28,849	36,331	18,561	17,770
Humnabad	Rural	950.92	48,521	2,62,581	1,33,732	1,28,849	36,331	18,561	17,770

				URB	AN				
Basavakalyan (CMC)	Urban	17.21	12,379	69,717	36,116	33,601	9,949	5,294	4,655
Bhalki (TMC)	Urban	31.31	7,563	40,333	20,741	19,592	5,091	2,579	2,512
Aurad (TP)	Urban	7.06	3,810	19,849	10,058	9,791	2,769	1,399	1,370
Kamalnagar (CT)	Urban	16.67	1,928	10,252	5,327	4,925	1,355	725	630
Bidar (CMC+ OG)	Urban	58.09	41,861	2,16,020	1,11,470	1,04,550	27,071	14,097	12,974
Humnabad (TMC)	Urban	6.60	7,972	44,483	22,797	21,686	6,040	3,130	2,910
Chitguppa (TMC)	Urban	27.79	4,445	25,298	12,906	12,392	3,371	1,711	1,660

Source: Census of India 2011, District Census Handbook, Bidar District Part XII-B

Brief History of Bidar District

Bidar is a charming district with full of history every village and town being replete with monuments, legends, stories of valor, romance of beautiful princesses, long forgotten battles feuding military adventures and even of social reform movements that shook the very foundation and structure of medieval Hinduism.

The area comprised in Bidar district has an impressive history of more than a thousand years. Basavakalyan, a taluk headquarters town at present and Bidar city itself were seats of power in the past. From about the 6th Century A.D. this part of the country was ruled by the Chalukyas of Badami until they were subdued in the mid eighth century by the Rashtrakutas who established their capital at Malkhed located in the present Kalaburgi district. The Rashtrakutas were, however, displaced by the Chalukyas in 973 A.D. There after, the Chalukyas shifted their capital from Malkhed or Manyakheta, to Kalyani (i.e. Basavakalyan) and subsequently came to be known as the Chalukyas of Kalyani after the name of their capital. Among the Chalukyan rulers, the most famous Monarch is Vikramaditya VI, who introduced the Chalukya Vikrama Saka. He has the reputation of defeating the Cholas and plundering Kanchi, of helping the King of Malta in regaining his lost territories and of extending his conquests as far as Bengal and Assam. The supremacy of Chalukyas over this Bijjala of the Kalachurya family, himself the Prime Minister and Commander-in-chief of the period is also well known to historians because his reign marked the revival of Shaivism and the founding of Veerashaiva faith by his own Prime Minister, the great social reformer Basaveshwara. Basavakalyan became a noted centre of an intense socio religious movement. When the king himself became submerged under the all enveloping spiritual and moral power and influence of Basaveshwara, the forces of reaction too became quite vigorous.

Basaveshwara had to ultimately resign from his office and move out of the capital to his new abode at Kudalasangama. The socio-religious movement did not however subside and very soon a flash point was reached. To the dismay of the king two devout followers of Basaveshwara belonging to socially unequal communities, Madhuvayya and Haralayya, allowed their children to marry and thus transgressed the established custom. The reactionary forces ensured that these deviants were put to death by the King's decree. But immediately thereof the common people rose in an open rebellion in which the king himself got killed. Bijjala was succeeded by his son Sovideva who ruled till 1176 A.D. Thereafter his brothers Sankama and Abavamalla ruled for about 7 years and his youngest brother Singhana succeeded to the throne in the year 1183 A.D. assuming all the paramount titles of his predecessors. The same year he was overthrown and kingdom was restored to Someshwara IV of the Chalukyan dynasty by Dandanayaka Barmarasa. The historical importance of Basavakalyan began to decline gradually and the Chalukyan power crumbled under the pressure of Hoysalas on the one hand and Yadavas of Devagiri on the other.

Bidar and its neighbourhood which formed part of the Chalukyan kingdom appears to have been taken over by the Kakatiyas of Warangal in the later half of the 11th century A.D. itself. In 1322 A.D. Mohammed-Bin-Tughluq defeated the Raja of Warangal and annexed Bidar also. Mohammed-Bin-Tughluq conferred the Government of Bidar with its dependencies on Nusrat Khan. Being unable to meet the financial commitment to the King, in 1345 A.D., Nusrat Khan rebelled against Mohammed-Bin-Tughluq. But this rebelling was put down by Qutlugh Khan, the Governor of Daulatabad. In 1347 A.D., Ala-ud-din Hassan Shah Gangu Bahamani the founder of Bahamani dynasty captured Bidar and became the undisputed monarch of the entire Deccan region. He had his capital at Gulbarga and divided his vast kingdom into four provinces of which Bidar was one. During this period, Bidar flourished as prominent town and seat of power. In 1422,

A.D., Bidar was the venue of a conflict between the royalists supporting king Firoz who had suffered defeat at this period at the hands of Vijaynagar and Warangal kings around this period and the supporters of his brother Prince Ahmed Shah. Ahmed Shah emerged successful and ascended the throne. The new king, struck by the climate of Bidar, built a new capital city naming it after himself as Ahmedabad-Bidar. For himself he built a large palace known as Takhat Mahal and had the famous turquoise throne of the Bahamanis installed in its magnificent audience hall. The paintings executed on the ceilings and walls of the tomb of King Ahmed Shah are considered as quite unique in India for beauty and elegance. Ala-ud-din, the son of Ahmed Shah was in turn succeeded by Humayun, the Zalim. Having ruled as a king for about three years and incurred the displeasure of his subjects, Humayun appointed his eight-year-old son as his successor even during his own life time. He appointed a council of Regency consisting of the Queen Mother, the famous statesman Khwaja Mohammed Gawan and Khwaja Jahan Turk to administer the State.

During the later period of this regency for a brief spell, Bidar was captured and occupied by Mohammed Khilji of Malwa. Nizam, the son of Humayun, on his return to the capital restored the damaged and half destroyed buildings to their original grandeur. Khwaja Mohammed Gawan is remembered even to this day on account of the famous school he founded viz., the Madarasa at Bidar, the remnants of which are extant even to this day. He is also credited with introducing his tenure as the Prime Minister. During the later part of his career, however, owing to palace intrigues, he was charged with treason and put to death in 1481 A.D. The King was quick to realise his folly and he too died in 1482 A.D. From about 1490 A.D., Quasim Barid who became the Prime Minister held the king completely under his power and began to rule the kingdom and in 1492 he declared independence. But the king immediately made terms with him and confirmed him as the Prime Minister. Thereafter, the Bahamanis ceased to be a ruling dynasty. Quasim Barid and his descendants ruled over their kingdom entitled the Barid Shahi kingdom including Bidar till 1619 A.D. when Ibrahim Adil Shah II of Bijapur annexed this territory. Bidar remained as a part of Adil Shahi Kingdom till 1656 A.D. when Aurangzeb wrested it for the Mughal Empire. Bidar was then rechirstended as Zafarabad and Mughal coins were issued in that name. Bidar became a provincial headquarters.

In 1724 A.D., when Mir Kalan was Governor of Bidar, Asaf Jah the Subedar of Deccan declared independence. Thereafter Bidar formed part of the territory ruled by the seat of a Governor till about 1846 A.D. The system of Administration through military Governors was given up in 1846 A.D. and the Nizam's dominions were organized into districts. Bidar then became the headquarters of a district under the administrative control of a Commissioner. During the British period of the Indian history Bidar formed part of the Nizam's Dominions. After independence and the accession of the Nizam's territories to the Indian Union in 1948, Bidar district became part of the then Hyderabad State. Historically the district is thus seen to be much annexed and occupied territory by a host of dynasties, kings, military ad-ventures and rebellious generals. Even as late as the Nizam's Government under British suzerainty, it was subjected to extremes of feudal exploitation with a host of 'jagirs' and other private estates. Coupled with this, were the frequent droughts and famines that sapped the strength of its peasantry and chained it to the throes of poverty and backwardness.

Territorial changes

Bidar district has witnessed a sea change in its territory time and again. Prior to 1905, the Bidar district consisted of seven taluks namely Bidar, Kohir, Janawada, Aurad, Udgir, Ahmedpur and Nilanga. The Janawada and Ahmedpur taluks formed parts of the Sarf-e-Khas Estate (the crown lands). Their administration was supervised by the Government and the revenue was made over to the Nizam as his personal income. There were also Paihah and Jagir villages of Vikhar-ul-Umra, Asmanjahi, Khurshidjahi, and Kalyani and Devni Estates. Their hereditary chiefs administered them under the over-all control and supervision of the State Government. In 1901, the total extent of the district was 10,795 Sq. km. (4,168 sq. miles) with 1,457 villages including 831 Jagir villages. In 1905, when the Kalaburgi Division was formed, the Bidar district was included in it. In that year, the Kohir and Aurad taluks were abolished and their areas were merged in Bidar and Janawada taluks respectively. Consequently, the district comprises five instead of seven taluks. In 1922, the Gulbarga Division was abolished and seven years later, i.e., in 1929, it was restored, and continued until 1948, when it was again done away with.

Under the Hyderabad Jagir Abolition Act of 1950, the district was reconstituted with the nine taluks of Bidar, Bhalki, Humnabad, Aurad, Nilanga, Ahmedpur, Udgir, Zahirabad and Narayanakhed. As a result, the area of the Janawada taluk was merged in the adjoining taluks of Bidar, Aurad and Bhalki. The Bhalki, Aurad, Humnabad, Zahirabad and Narayanakhed taluks were newly formed out of the ex-Paigah and ex-Jagir villages of Vikar-ul-Umra, Asmanjahi, Khurshidjahi, Kalyani and Devni Estates. With the reorganization of States on the 1st November, 1956, the district was reduced to four taluks, namely Bidar, Bhalki, Humnabad and Aurad, as the Zahirabad and Narayanakhed taluks were transferred to Andhra Pradesh, and Udgir, Ahmedpur and Nilanga taluks were included in the then Bombay State. In 1956, the total extent of the district was 5,369.3 Sq.km. The Bidar district became a part of the Gulbarga Division again when on the 1st November 1956, a new Division with Gulbarga as its headquarters was formed including therein the entire area which came from the ex-Hyderabad State into the new Mysore State (which was later renamed Karnataka). There were only four taluks in the district upto 8th century (1965) when a new taluk was formed with Basavakalyan as its headquarters. At this time, several changes were made in the territorial jurisdiction of taluks except in the case of Aurad taluk. They were as follows:

1) Basavakalyan taluk: This taluk was formed by the transfer of 89 villages and Kalyana (now called Basavakalyan) town from Humnabad taluk and 25 villages from Bhalki taluk. 2) Bhalki taluk – From this taluk, 25 villages were transferred to the new Basavakalyan taluk, 12 villages were transferred to Humnabad taluk and one village by name Aliabad was included in this taluk by transfer from Bidar taluk. 3) Bidar taluk: Twenty two villages of this taluk were transferred to Humnabad taluk and village Aliabad was transfer to Bidar taluk. 4) Humnabad taluk: From this taluk, 89 villages and Kalyani (now called Basavakalyan) town were transferred to the new taluk of Basavakalyan. Further, 22 villages from Bidar taluk and 12 villages from Bhalki were transferred to this taluk.

Administrative Setup: The district belongs to the Gulbarga division of the State. The district is divided into five taluks which are grouped into two Revenue Sub-Divisions. Aurad and Bidar taluk comes under the Bidar sub divisions whereas Bhalki, Humnabad, Basavakalyan taluks belongs

to Basavakalyan sub-division. There are no jurisdictional changes in the district. Since 1965, there have been five taluks in Bidar district namely Aurad, Basavakalyan, Bhalki, Bidar and Humnabad. The reporting area for land utilization purposes (as worked out by the State Department of Survey & Settlement and Land Records and Local bodies) of the five taluks, the number of villages in each taluk and the population of each taluk as in 1971 are given in the following Table

SI No	Name of the taluk	Area in sq km	No of inhab- ited villages	Population as per 1971 Census
1	Aurad	1,228.6	147	1,43,681
2	Basavakalyan	1,202.1	111	1,74,700
3	Bhalki	1,113.8	121	1,56,443
4	Bidar	925.3	131	1,90,849
5	Humnabad	988.2	81	1,58,386
	Total	5,458.0	591	8,24,059

All the five taluks constitute a revenue sub division with an Assistant Commissioner in charge of it. The taluks are subdivided into revenue circles (hoblis) and there are 15 such circles till the formation of the Basavakalyan Taluk in 1965. Now there are 30 revenue circles, each taluk having six circles each.

SI.	Taluk	As in	1965 (before Changes)	As	in 1975
No.	laluk	No.of Circles	Names of Circles	No.of Circles	Names of Circles
		3	Aurad	7	Aurad
			Shambeli		Santhpur
1	Aurad		Torna		Chintaki
'	Aurad				Kamalnagar
					Kushnur
					Dabka
			(Taluk newly formed in 1965)	6	Basavakalyan
2	Basavakalyan				Rajeshwar
					Matala

					Mudbi
					Kohinoor
					Hulsoor
		4	Bhalki	6	Bhalki
			Halbarga		Halbarga
3	Bhalki		Hulsoor		Khatak Chincholli
3	Dilaiki		Kumarchincholli		Lakhangaon
					Nittur
					saigaon
		4	Bidar	6	Bidar North
	-		Janawada		Bidar South
4			Madaknalli		Bagdal
4	Bidar		Nirna		Janawada
					Kamthana
					Manhalli
		4	Humnabad	6	Humnabad
			Chitguppa		Bemalkheda
5	Humnabad		Kalyani		Chitguppa
Э	пиннарац		Ladwanti		Dubulgundi
					Hallikhed (B)
					Nirna
	Total	15		30	

To promote the development of institution and secure greater measure of participation by the people in the local and governmental affairs by decentralization of power and functions and for development planning and implementation of various programmes there of Zilla Panchayats have been constituted in the State. Bidar district also enjoys the same power like other districts of the State and jurisdiction of Zilla Panchayat is coterminous with that of corresponding district and covers the entire rural and semi urban area but excludes the statutory towns. Accordingly, Zilla Panchayat has

been constituted for Bidar district and its jurisdiction extends over the Taluk Panchayats of the district. The jurisdiction of each taluk Panchayat is coterminous with that of the taluk of the same name but excludes the area incorporated in the statutory towns or cities. In all, Bidar district has seven hoblies and 174 Grama Panchayats.

Hoblies and	Gram	Panchayats	of Bidar	district.
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SI.No.	Name of the Taluk	No. of Hoblies	No. of Gram Panchayats
1	Aurad	7	38
2	Bhalki	6	35
3	Basavakalyan	6	35
4	Bidar	6	33
5	Humnabad	7	33
	Total	31	174

Physiography

Bidar district is a part of the northern Karnataka plateau and is sub divided into following two sub micro region of the basis of geology soil and natural vegetation.

Manjra - Karanja basin

The region extends over northern parts of Bidar district extending the entire Aurad taluk larger part of Bhalki and some parts of Bidar, Humnabad and Basavakalyan taluks. The region makes its boundaries with State of Maharashtra in Northwest, Humnabad Kamthana lateritic tract in the south and State of Andhra Pradesh in the East. The general elevation of the region is 500 to 600 m., maximum height of 684 meters is observed on residual hillocks around Bidar town and the maximum height is 529 meters near Aurad taluk. Physiographically it represents the area of a river basis formed by Manjra river and its tributary Karanja. The land is generally plain with some eroded hillocks standing out prominently here and there. Area around Aurad has wide stretches of stony wastes.

Humnabad - Kamthana Lateritic Tract

The region extends over the parts of Basavakalyan, Bhalki, Humnabad and Bidar taluk covering the southern area of the district. It makes the boundaries with Manjra Karanja basin in the north, the State of Telangana, Kalaburgi district in the south and the State of Maharashtra in the West. The general elevation of the region is 550 to 650 meters from the mean sea level. The maximum height of 694 meters is noticed in Basavakalyan taluk. The entire region is an undulating lateritic plateau generally waved on by dry grasses and mottled by dry farming. It also acts as local divide for seasonal streams flowing towards north and south from this tract.

Drainage system

The Drainage system of the district falls under two distinct river basins. viz., The Godavari basin and the Krishna basin. The Godavari basin covering about 4,411 Sq. km. of area, of which the Manjra river basin covers 1,989 Sq.km. of area and the Karanja river basin 2,422 sq. km. and the Krishna basin covering about 585 Sq.km. of area of which the Mullamari river basin covers 249 sq.km. and the Gandori-nala basin 336 sq.km. The main river of the district is the Manjra which is a tributary of the Godavari. The Karanja, which is a tributary of the Manjra, is another important river of the district. The rivulets flowing in the district are the Mullamari, the Manik Nagar-nala, the Chulki-nala, the Madhura-nala, etc. None of them is large enough for navigation. The seasonal floods are not so intense as to cause any havoc.

The Manjra rises in the district of Maharashtra State at an altitude of 823 meters above mean sea level and flows in a south easterly direction up to Medak district formerly Sangareddi district of Telangana and thereafter runs in a northerly direction and joints Godavari. The total distance traversed by this river is about 700 km. of which a length of about 167 km. is in Bidar district. The river enters this district near Tugaon Halsi village of Bhalki taluk and leaves the district at Chillergi village of Bidar taluk. The Manjra is of vital importance to the arid region of Bidar district through which it runs forming a boundary for the Aurad taluk in the north and for Bhalki and Bidar taluks in the south.

The Karanja takes its birth near Kohir village of Zahirabad taluk of Medak district of Andhra Pradesh (At present Telangana state). It enters the district near Bhangoor village and joins the Manjra near Nardasangam village in Bhalki Taluk. The river flows from the south- east to the northwest through the taluks of Bidar, Humnabad and Bhalki. The distance covered

by this river in Bidar district is about 80 km. Across the Karanja river, a dam has been constructed near Byalhalli, a village about 29 km from Bidar town on the Bidar-Kalaburgi road.

Details of Karanja Dam near Bylahalli in Bhalki Taluk.

Catchment area	Length	Tank bund level	Full Reservoir level	Max. Water level	Gross Storage
2,026 sq.km.	3,480 m	589.15 m	584.15 m	587.00 m	7.69 TMC

Details of Canals of Karanja Dam

Left Bank Canal	Right Bank Canal	Fore- shore lift Canal	Rig	ght Bank Ca	nal	For	eshore lift c	anal
Length	Head dis- charge	Atchkat	Length	Head dis- charge	Achkat	Length	Head dis- charge	Achkat
31 km.	70 Cusec	3228 ha	131 km.	598Cusec	2832 ha	24 km.	62 Cusec	4047 ha

• Cost of construction: Rs. 480 crores Area to be irrigated, 36,000 hectares, Year of Completion 2006

The Mullamari rises near Matala village in Basavakalyan taluk in Bidar district and flows from north-west to south-east direction for a length of 46.50 m. in Bidar district. Thereafter, it flows in Kalaburgi district and then joins the Kagina river, a tributary of the Bhima which is a major tributary of Krishna River. In order to harness the waters of this river, a medium-sized irrigation dam is constructed (2001) at Kherda in Basavakalyan taluk for providing irrigation facilities in parts of Bidar and Kalaburgi districts.

Some facts about lower Mullamari dam

Year of completion	Catchment area (Th. ha)	Length of the dam	Max. height above foundation	Max. water level(m.)	Full reser- voir level	Gross stor- -age capacity
2001	73.068	1,546 m.	24.46 m.	495	491	49.13 mcm.

The Manik Nagar-nala is a tributary of the Karanga river in the Godavari basin. It has its origin near Gunatirthawadi in Basavakalyan taluk. It flows from west to east for a length of 40km from its origin, till it joins the Karanja River. A medium sized irrigation completed is proposed between Humnabad and Hudgi for providing irrigation facilities from this nala.

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The Chulki-nala is a tributary of the Karanja river in the Godavari basin. It has its origin near Ramatirthawadi village of Basavakalyan taluk. It flows for a distance of about 40 km from west to north till it joins the Karanja near Inchur village of Bhalki taluk.

The Mathura-nala is a tributary of the Karanja river in the Godavari basin. It has its origin near Khanapur village in Bhalki taluk. It flows in the south-east direction and joins the Karanja near Barur village. The total length of this nala within the confines of the district is about 40 km.

The Hallikhed-nala originates near Gorta village in Basavakalyan taluk. It flows for a length of about 32 km in eastward direction in Basavakalyan and Humnabad taluks and joins the Manik Nagarnala Markhal village of Humnabad taluk.

There are some natural springs near Bidar town, called Nanak-Jhira, Narasimha-Jhira and Papanash. All these three places are looked upon as sacred by the devote who believe that their waters cure some physical ailments also.

GEOLOGY

Deccan volcanism, towards the end of the cretaceous period of earth's history represents a large scale outpour of continental basalts covering more than 5,00,000 Sq.km in the states of Gujarat, Madhya Pradesh, Maharashtra, Andhra Pradesh. The northern parts of Karnataka including the districts of Belagavi, Vijayapura (Bijapur), Bidar and Kalburgi (Gulbarga) are covered over by extensive spreads of Deccan Traps. The large scale outpour of basaltic lava is generally linked with the distensional phase in the continental crust of India related to the fragmentation of Gondwana land.

The entire district forms a part of the Deccan Plateau and is made up mostly of solidified lava. The northern part of the district is characterized by expanses of level and treeless surface punctuated here and there by flat and undulating hillocks, black soils and basaltic rocks. The southern half of the district is a high plateau about 715 m above the mean sea level and is well drained. The average elevation of the district is between 580 and 610 m. above mean sea level. Alluvial deposit is normally found along the banks of the Manjra River and its main tributaries.

The district is entirely covered by the Deccan trap flows of the Tertiary period. The Deccan trap is composed of horizontal flows of basaltic lava. They generally form flat-topped hillocks and terrace-like features. The physical characteristics of individual flows show considerable variations. Some flows are hard and massive while others are weathered, soft and friable. This character has resulted in terraced landscape, suddenly ending in escarpments. The traps are seen generally 618 m above the mean sea level. These are jointed and show the characteristics of spherical weathering leaving massive hard cores. Columnar jointing is predominantly developed in these rocks, besides horizontal joints, which impart to the rocks bedded appearance. The top layers of the Deccan trap in parts of Bidar and Humnabad taluk are altered to reddish vesicular laterite, forming an extensive undulating plateau.

Mineral Resources

Bidar district, unlike other districts of the State is impoverished in major mineral deposits, which would have supported the mineral based industries of the district. However, some parts of the district have limited deposits of bauxite, kaolin and red ochre. Laterite being the predominant rock type, is extensively being used as building stone.

Laterite: Laterite, in Bidar, is generally seen 618.7 meters above the mean sea level. It overlies the Deccan traps with a thickness generally from 18 to 24 meters. It is highly porous, soft, and can be cut into blocks and dressed in the form of bricks. It is this property which has given it the name `Laterite' which denotes `brick' in Latin. Many of the buildings in Bidar, Humnabad and Basavakalyan taluks are built with laterite. The quarried rock darkens on exposure and develops a glaze of limonite. The hard-compact variety grades downwards into comparatively soft yellow brown laterite. The cavities in the horizon are filled with clay material ranging in colour from buff to grey. The soft yellow brown laterite grades downwards into variegated clays and lithomarge. Certain section in this zone contains streaks and pockets of white clay.

The laterite, because of its high porosity, functions as reservoir rock. A good per cent age of rain seeps underground and gets stored in the underlying clay horizons. Because of the highly porous nature of the rock, the ground-water level is deep and wells have to be sunk to depths of

21.34 to 24.38 meter to tap the water level and to obtain enough quantities. Natural springs too occur at the base of the laterite scrap.

Bauxite: A deposit of highly siliceous bauxite, containing about 35 to 40 per cent alumina, has been located about three km to the south of Basavakalyan. Similar occurrences are noticed to the south of Mankhed of Basavakalyan taluk, west of Chatnalli, south-west of Atwal and Kamthana villages of Bidar taluk. The deposit at Mankhed extends over a length of 400 meters and its thickness is about five meters. Occurrence of aluminous laterite is found near Sastapur, Atlapur, Talbhog, Nirgudi, Naryanapur and Tipranth. The deposits are found to occur in contours between 620 and 640 meters and occur in patches. The thickness of the individual patches does not exceed three meters.

Kaolin: A large deposit of kaolin is located near Kamthana village seven km to the west of Bidar town. The deposit occurs in narrow patches, beneath a laterite capping of 12 to 18 meters. The clay bed is about one meter in thickness and covers an area of fifty hectares. About 25,000 tonnes of good Kaolinic clay are estimated to be available from the area. The clay is white in colour, free from gritty material and exhibits good plasticity. The deposit is worked by the holder of a mining lease and the annual production is 800 to 1,000 tonnes of white clay. Similar clays are located near Rajeshwar, Rajola and Kankatta villages. Composition: SiO_2 44.84%. Al_2O_3 36.09%, Fe_2O_3 3.71%, CaO 0.75%, Loss on ignition 15.55%

Red ochre: Red ochre deposits are found near Sirsi and Aurad villages, situated about fifteen km to the west of Bidar town. The deposits occur in the form of beds and are found beneath a thick capping of laterite, ranging in thickness from eight to ten meters. The red ochre in both the localities is of good quality and the one near Aurad is better than that of Sirsi area. The ochre is worked by the local villagers for colour washing of floors and walls.

Seismicity: Though the district lies in an area of lower seismic intensity compared to the extra peninsular India, it is not completely free from earthquakes. An earth quake of magnitude 3.7 was recorded and experienced at Humnabad in 1934. Another shock of magnitude 3.7 was felt in October 1956 at Bhalki. During this period, rambling sounds were heard in these areas and no major loss of life or property is reported. A devastating earthquake of magnitude 6.4 occurred in the early morning of September

30, 1993 Killari village in the southern parts of neighbouring Latur district in Maharashtra. It is considered as one of the deadliest earthquakes to strike stable continental region. It was an intraplate earthquake with focus about 12 km. deep relatively shallow causing shock waves to cause more damage. It resulted in huge loss of life and property particularly in Latur district in Maharashtra. The shocks were felt in parts of Raichur, Kalaburgi and Bidar districts. Basavakalyan taluk of Bidar district suffered a heavy loss of property due to poor constructions of the houses.

Ground Water

Ground water if used judiciously can augment the Industrial and agricultural growth to a large extent. But, nevertheless, care has to be exercised regarding the quantity to be drawn taking into consideration the rate of recharge in any given area. Over-exploitation of ground water can do a greater damage and can lead to severe problems both in the field of agriculture and water supply to the public. Keeping this in view, a separate ground water cell was created in the department of Mines and Geology in the early 60's. Under this scheme, each district of the State has an office located in the headquarters and headed by a Senior Geologist, whose responsibility is to carry out systematic hydrological studies which include monitoring of wells, suggestion for drilling and advising conservation of ground water in critical areas.

In addition to Ground Water Cell of the state government, the Central Ground Water Board also carries out hydrogeological Survey to understand the nature of aquifer, fluctuation in ground water level, availability and suitability etc. on a regional scale. In pursuance of this objective, the Central Ground Water Board has established 45 hydrograph stations in Bidar district, from where the water level is monitored four times a year. It is well known that the Deccan traps represent a thick pile of nearly horizontal formation.

Hydrogeology

The porosity and permeability change within an individual flow and also from flow to flow and place to place. The weathered zones, joints and fractures in the massive and vesicular units of basalt form the water bearing horizons. Abundance of vesicles with interconnecting nature coupled with joints and horizontal partings in the vesicular basalt make

it a good aquifer. The red bole bed, occurring as top undulating layer of flow, inhabit movement of ground water as it is composed of mixture of fragmentary material and clay particles. It therefore acts like an aquiclude and its position in the lava sequence indicate presence of permeable water bearing zone underneath.

Occurrence of Groundwater

Basalt: In general, ground water occurs under water table conditions in shallow aquifer and semi confined to confined conditions in deeper aquifer. The fractured jointed vesicular basalt and massive basalt when overlain by red bole bed of considerable thickness develops semi confined to confined conditions. Hence the red bole bed acts as a confining layer. The red bole bed being of clay in nature also acts as a ground barrier for downward movement. The weathered and jointed zone of massive basaltic unit and vesicular basaltic unit constitute the unconfined aquifer, are being tapped by dug cum borewells and borewells. The presence of columnar joint in massive basalt also helps in the occurrence and movement of ground water.

Laterite: Laterite occupies a small area in southern parts of the district. Laterite mainly occurring above 610m contours generally varies in thickness from 10 to 30 m. On high ground 1 to 2 m of laterite is very hard, ferruginous, iron black in colour, grading downwards into soft grayish or reddish coloured laterite, more clayic and aluminous in character at some places. The maximum thickness of 45 m is noticed near Bidar fort. The laterites are a porous rock and acts as a recharge source to the underlying rocks. During monsoon the rock gets saturated quickly. However, desaturation is also equally quick, once the monsoon is over.

Pre-monsoon depth to water level: The depth to water level in the district during pre-monsoon varies from 2.81m to 17.90m below ground level. The studies have indicated that the shallow water level less than 5m below ground level occurs in small isolated patches around Kamalnagar, Sangam and Alandi of Aurad taluk and Lakangaon, Sivani, Kakinal, Batsangi, Melkunda and Helsi of Bhalki taluk. The shallow water level in these areas is due to low topography and nearer to river course of Karanja and Manjra rivers. These are areas where ground water development can be accelerated. Area with Depth to Water table in the range of 5-10m

2 m The depth to water level more than 10 meters and less than 20 m occurs in whole Bidar taluk, 50% area of Bhalki & Humnabad taluks and 25% and extreme southern part of the district. Area with Depth to depth to Water Level: The Post monsoon water level over the district varies from 0.40 Kakinal, Batsangi, Melkunda withdrawal of ground water. 5 m below the 2 and area of Aurad taluk. The deeper water level in pre-monsoon is due to the excessive four taluks except Bidar taluk. below ground level is found scattered over

Water Level in the range of 5-10 m below the ground level occurs as elongated patches in Bidar taluk from and one isolated pocket around Basavakalyan, Partapur, Morkhandi and Matala of Basavakalyan taluk has saigaon and Helsi of Bhalki taluk and Hulsoor and Mudebi of Basavakalyan taluk, where isolated pockets to 13.09 m below ground level. It is observed from the studies that the depth of water level is less than and Humnabad taluk in southern have been delineated. Area having Depth to Water level in the range between below the ground level around Sangam of Aurad taluk and Lakangaon, western part taluk in north to south and extending towards Bhalki level is found in northern part, central part been picked up during studies.

Talu	Taluk wise Ground Water Resources of Bidar district as on 31st March 2004	und Wate	r Resour	ces of Bi	dar distr	ict as on	31st Ma	rch 20	94
Taluks	-	2	က	4	2	9	7	8	6
	HAM	HAM	HAM	HAM	HAM	HAM	HAM	HAM HAM	HAM
Aurad	7748.45	7748.45 7361.03 1319.90 506.30 1826.20 78.14 5302.99 0.84 6345.25	1319.90	506.30	1826.20	78.14	5302.99	0.84	6345.25
Basavakalyan	8496.96	8496.96 8079.08 3266.91	3266.91		589.65 3856.56 819.61	819.61	4073.13 0.90 4521.13	06.0	4521.13
Bhalki	9162.91	9162.91 8704.76 3877.09	3877.09	555.85	555.85 4432.94 772.63		4110.61 0.87 4711.30	28.0	4711.30
Bidar	7161.56	7161.56 6803.43 5993.52 1117.08 7110.60 1975.16 1963.72 0.87 2250.69	5993.52	1117.08	7110.60	1975.16	1963.72	0.87	2250.69

ground water draft for domestic and industrial water supply; Existing ground Net $\dot{\circ}$ Existing ground water draft for irrigation; 4. ground 1.Total

4239.15

0.87

3680.31

655.30

5781.82

471.44

5310.39

9646.00

10149.28

Humnabad

Existing gross ground water draft for all users; 6. Allocation for domestic and industrial use for next 25 years; 7. Net ground water availability for future irrigation development; 8. Average crop water requirement; 9. Balance ground water irrigation potential available.

(Data: Central Ground Water Board, Bangalore Division)

FORESTS

Bidar Forest division is the northern most division of Karnataka encompassing the whole of Bidar district and 31 villages of the adjoining Kalaburgi district. Forest areas of Bidar division are classified as Reserve forest, Protected forest and un-classed forest.

Bidar Forest division is having 43,59,294 hectares of Forest area including Reserve Forest, Protected forest and Unclassified forest. This area is about 8.5% of total geographical extent of the district.

Forest Area of Bidar Division Range wise: 1) Aurad-5.25%, 2) Basavakalyan -19.11%, 3) Bhalki-6.54%, 4) Bidar-9.33% and 5) Humnabad - 49.76%

An abstract of forest areas Range-wise in each of the above categories are given in the following table

		_	_		
SI.No.	Name of the Range	Reserve forest in Hectare	Protected forests in Hectare	Un classed forests in Hectare	Total
1	Aurad	-	832.87	1,456.95	2,289.82
2	Basavakalyan	489.44	551.54	7,289.65	8,330.63
3	Bhalki	-	922.46	1,929.09	2,851.55
4	Bidar	1,966.65	3,225.06	3,235.85	8,427.56
5	Humnabad	2,488.45	7,695.86	11,509.09	21,693.40
	Total	4,944.54	13,227.79	25,420.63	43,592.96

The total forest area of the division is 43,592.96 hectares comprising of 4,944.54 hectares of reserve forests, 13,227.79 hectares of protected forests and 25,420.63 hectares of un-classed forests. Most of the Reserve Forests areas are in Bidar and Humnabad ranges. Originally, the forest in Bidar Division consisted of Dry deciduous and Scrub type vegetation. Over the years almost all the forest areas have been worked at one or more times resulting in large expanses of manmade forests comprising mostly

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of Eucalyptus, *Acacia auriculiformis*, *Glyricidia* and miscellaneous species like *Hardwickia*, *Albizzia*, *Azadirachta* and *Pterocarpus* etc. Majority of these plantations are successful. Due to the sustained efforts of the forest department the forest cover in the district has increased by about 4% as reported by the Hyderabad based National Remote Sensing Agency.

Forest management: Records are not available to show the extent and nature of forests that existed originally. Most existing forests of Bidar are man-made. The indications are available to show that land was very fertile centuries ago and there were good forests and big games. Ravages of wars and continuous trampling by men and animals, as also dumping of huge quantities of ammunition and other poisonous material on the ground depleted the Flora and the Fauna. In the past, forests were also gradually destroyed by the people in their persistent efforts clear the land for cultivation of food grains and grazing of their cattle. Even today the tendency to encroach upon remains. Wherever cultivation is possible it is not uncommon that the remaining forests are still being backed and destroyed. However, now the Forest Acts stringent and no liberty can be taken to exploit the forests and indiscriminate felling of trees. Forests in Bidar Division can be classified under two sub groups namely 1. Southern tropical dry deciduous forests and 2) Southern tropical thorn forests.

Southern Tropical Dry Deciduous Forest

The forests covered in this group will have uneven upper canopy and not very dense canopy cover. The species present in this group are deciduous during dry season. Many of them will remain leafless for long duration, usually for several months. The lower canopy is almost entirely deciduous. Although evergreen species are present, they are inconspicuous and mainly confined to the moist localities. Undergrowth of shrubs is present. Grass appears in the open spaces or where light falls on the ground. This type is met with throughout the Indian peninsula, except for the Western Ghats where the rainfall exceeds 1,900 mm. The annual mean maximum temperature lies between 29°C to 35°C and annual mean minimum temperature between 18°C and 23°C. The typical annual rainfall for the type is 1,000 to 1,300 mm The greater part of the area under dry deciduous forests is undulating and generally comprises of hills of low or medium height.

Dry Teak Bearing Forest: The canopy is complete and trees are large and well grown unless affected by human interference. It is met with widely in south India. Rainfall varies from 1,000 to 1,250 mm.

Very Dry Teak Forest: The rainfall of Bidar forest divisions varies from 484.73 mm to 1,305 mm. The average rainfall is less than 900 mm. The soil is lateritic, dry and infertile. Teak is found mixed with dry deciduous species. Ground cover is scanty and seedlings regeneration is practically absent. Grazing incidence is heavy. This type of forest is found in Changlair, Karpakpalli and Karakanalli forests.

Floristic composition: The following species occur naturally in these forests: *Tectona grandis*, *Chloroxylon swietenia*, *Buchanania lanzan*, *Terminalia to mentosa*, *Anogeissus latifolia*, *Albissuiz amara* etc.

Southern Tropical Dry Mixed Deciduous forests: Thorny plants occur and tend to increase in proportion with heavy grazing, etc., to which most of the area is subjected. Bamboos are absent. Grass is conspicuous till it is grazed down or burnt out. Climbers are few. Those forests are found in salebeeranalli, Tumakunta, Changlair, Akkampet, Karakanalli and Karpakpalli forests of Humnabad range and Bagdal, shahapur, Kamthana and Honnadi forests of Bidar range. Rainfall varies from 875 to 1,125 mm.

Floristic composition: The most characteristic tree is Anogeissus latifolia while *Terminalia tomentosa* is a very typical associate. *Chloroxylon swietenia*, *Hard- wickia binata*, *Boswellia serrata* and *soymida febrifuga* are very widespread and useful indicators. The other species found are *Buchnania lanzan*, *Madhuca indica*, *Buttea monosperma*, *Albizzia amara*, *Albizzia lebbek*, *Emblica officinalis*, *Acacia cat- echu*, *Terminalia bellerica*, *Ficus glomerata*, *Semicarpus anacardium*, *Pongamia pin- nata*, *Pterocarpus santalinus*, *Cassia fistula*, *Azadirachta indica*, *Tectona grandis* etc.

Undergrowth: Wrightia tinctoria, Lantana camara, Dodonia viscose (Bandar- ki), Baliospermum Montana(Danti), Diospyras melonoxyon(Tumri), Acacia latronum (Hottejali) etc.

Southern Tropical Dry Deciduous Scrub: This type is characterized by shrub growth, 3-6m high, including some tree species reduced to similar conditions, usually many-stemmed from the base due to heavy human and

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cattle interference. Many of the shrubs are unpalatable to cattle larrhena, Dodonaea) or thorny (Randia, Carrissa). Thin grass occurs throughout. The stunted growth of trees is directly attributed to maltreatment, felling, grazing, lopping and frequent fires. These forests are found in Ladwanthi, Kohinoor, Algood and Manhalli forests Basavakalyan range.

Floristic composition: Acacia catechu, Acacia leucophloca, wrightia tincto- ria, Zizyphus xylopyrus, cassia fistula, Annona species, Azadirachta indica, Butea monosperma, Chroloxylon switenia, Albizzia amara etc.

Southern Tropical Thorn Forests: *Acacia catechu* in one of its forms (*A catechu, A catechuoides, A chundra*) is invariably present, often as the pre-dominant species. With it are associated several other *Acacias* and allied thorny mimosas, and usually *Zizyphus*, while stunted specimens of the trees of the dry deciduous forests are scattered in varying numbers throughout, notable among these being *Anogeissus latifolia*, *soymida febrifuga* and the like.

This type is found in Dahnura, Khanapur, Kosam forests of Bhalki range and Shahapur Honnikery forest of Bidar range. The forest in Humnabad range, adjoining Chincholi taluk of Kalaburgi district, represents the southernmost edge of occurrence of central Indian forest types with Mohwa (Hippe) and Chloroxylon. The area around Changlair is also rich in medicinal plants. Foundation for Revitalization of Local Health Traditon (FRLHT) has established a Medical Plant Conservation Are (MPCA) in Karpakpalli village of Humnabad taluk.

The MPCA (Medical Plant Conservation Area) is named after the village Karpakpalli, located about 45 km south of Bidar. It is a part of Saidapur Reserve forest situation at an altitude of 600-700 meters, the MPCA is spread over about 150 hectares. The terrain is undulating and vegetation is dry deciduous scrub type. It is the northern most member of the Medicinal plants conservation network established by the Karnataka forest department and the FRLHT jointly. The uniqueness of the MPCA is characterized by representation of the medicinal flora of the driest regions of the southern India.

The vegetation is dry deciduous scrub type with most of it being stunted due to harsh climatic and edaphic factors. The terrain is crisscrossed by a few small seasonal streams, which go dry soon after the monsoon. The MPCA offers a tapestry of about 289 species of flowering plants. Common tree species in the drier parts are *Albizzia amara*, *Madhuca litifolia*, Buchnania *lanzan*, *Butea frondosa*, *Ficus bengalensis* and *wrightia* sp. Etc., Along the nallahs occur *Terminalia arjuna* and *syzigium* sp. Shrubs include *Gymnosporia*, *lxora*, *Nyctanthes* and *Nizyphus oenopia* etc.,

Overall, about 193 medicinal plant species area found in the MPCA (Medical Plant Conservation Are). Most important are *Gloriosa superba*, *pterocaprus santalinus*, *Hollorhina antidyssentrica*, *Santalum album* etc.; Presence of large number of medicinal plant species has helped the locals to take the advice of Nati vaidyas in the surrounding villages in case of any health problem.

The MPCA also harbors several RET species viz. Buchnania, santalam album, Andrographs panicaulata, Celastrus paniculatus, etc. It is home to highly endangered species *Pterocarpus santalinus* the Rakta chandana and *Gloriosa superba*. The area being highly valuable to the locals for medicinal plants a local initiative to protect the highly valuable plant species in Karpakpally MPCA with active participation of the local villagers is also underway.

The southern and eastern parts of Bidar district support the growth of Red sanders (*Pterocarpus santalinus*) which is highly valued and sought after. Owing to its dark red, to almost black wood it is largely used for carving and ornamental work. The wood is in much demand for carved house posts. It is used in making musical instruments in Japan. The sap was formerly used as dye and Red Sanders timber is a very good foreign exchange earner.

Red Sanders has a very restricted natural range extending over an area of only 15,540 Sq.km in south eastern portion of the Indian Peninsula. Its principal home is in Sheshachalam hills to Cuddapah district of Andhra Pradesh and North Arcot district of Tamil Nadu besides southern and eastern parts of Bidar district.

Right of way over Forest roads, cart tracks and foot paths, rights of worship at the shrines situated in forest areas, right to use the water in jungle streams are admitted as per notifications. Rights to forest produce

are admitted as detailed in notifications. Out of the total forest area of 435 Sq.km in the division more than 50 per cent of the area is concentrated in Humnabad range, followed by Bidar range (20%) and Basavakalyan range. Aurad range is having the smallest area under the forest. Viewed from the point of area under forests, the outturn of forest produce and the revenue from forests Bidar division is not endowed with quality forest wealth.

Medicinal Plants of Bidar District

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Kalmath S V et al in their article Existancy and Survey of Medicinal Plants of Bidar District published in World Research Journal of Medicinal and Aromatic Plants has listed the following Medicinal Plants in Bidar District. They recorded that "The Bidar district have several medicinal plants, it helped to develop the traditional knowledge and folk medicine to cure various diseases. This knowledge is used by pharmaceutical agents, suppliers and Phytochemistry researchers to exploit the rich source in the form of raw drugs. An ethno botanical survey of Bidar District was made to collect the information from traditional practitioners with the use of medicinal plants of Bidar district of Karnataka. About 41 plants largely used by the traditional practitioners and local peoples of Bidar district have been enumerated in this paper. These plants contain important phytochemicals and are employed in the various ailments. The main aim of this work is to survey, document the existence of medicinal plants of Bidar district for the benefit of mankind and further investigation.

Since Early times, man has used many plants for medicine, timber, food and fuel., Due to this rich Plant Biodiversity, the traditional knowledge on the use of plants as medicine is well documented. The interest in the ethnobotanical research has increased considerably for the last few decades. Many Investigators, Research Scholars directed towards valorization of ethno botany because of belief that traditional medicines remedies may be useful sources for the new therapeutic products. About 1/3 population of Bidar district depends on the traditional medicine as it is commonly available and does not cause any side effect. Since there is no so far study reported in the district, the present report is communicated.

General 31

Enumerated Species

1. Abutilon indicum

Family:	Malvaceae
Binomial name:	Abutilan indicum L
Kannada local:	Vibhuti Gida
Marathi:	Pili buti
Hindi:	Pili buti
Local uses:	Roots used as tonic. Roots powdered and mixed with ghee and sugar
Local Ecological Status:	Threatened
Causes of threat:	Destruction of Habitat.

2. Abrus precatorius

Kannada:	Gulgunji
Marathi:	Ratti
Hindi:	Rati
Sanskrit:	Gunja
Ecological Status:	Threatened - Vulnerable Status
Causes of Threat:	Habitat destruction
Local distribution:	Forest Area, Chitta, Shahapur, Deva Deva Vana, Khanapur, Karaknalli, Field Hedges.
Local uses:	The leaves are chewed to get relief from throat trouble and voice. Musicians eat the dried leaves to clear and tone up their voice.

3. Acanthospermum hispidum D.C.

Family:	Asteraceae
Kannada:	Hallu novina gida
Local distribution:	Field, uncultivated waste lands
Local ecological status:	Vulnerable
Causes of threat:	Habitat destructions
Local uses:	Leaves are chewed to get relief from tooth ache. Leaves taste like betel leave

4. Achyranthes aspera

Binomial name:	Achyranthes aspera
Marathi:	Aghada
Hindi:	Aghada
Sanskrit:	Apamarga
Kannada local:	Uttarani
Ecological Status:	Threatened
Causes of:	Habital destruction and use Road, House and Other Threat residential activities.

Habital and distribution:	Waste land, Road side, Field, Fence in Bidar Dist.
Local uses:	For cuts and wounds the leaf juice applied externally and eaten raw. The dried stem sticks are used to burn as a holy after to Ishta Ling on the occasion of Shivaratri by Lingayat community. The sticks tips are wraped with cotton and wet with cooking oil.

5. Acacia nilotica

Family:	Mimosaceae
Hindi:	Babul
Kannada:	Babbuli
Marathi:	Babhul
Ecological status:	Abundant and Low risk
Distribution:	Acacia nilotica is native from Egypt, across the Maghreb and Sahel, south to Mozambique and Natal, and east through Arabian Peninsula to Pakistan, India and Burma
Local use:	Acacia nilotica is used as a demulcent or for conditions such as gonorrhoea, leucorrhoea, diarrhea, dysentery or diabetes. It is styptic and astringent. In Siddha medicine, the gum is used to consolidate otherwise watery semen. Local Distribution and Habitat: Throughout Bidar District, Waste land, Uncultivated land and Forest.

6. Acacia catechu

Family:	Mimosaceae
Hindi:	Khair
Kannada:	Kaggali Kachin gida
Sanskrit:	Khadira
Ecological status:	Rare and Threatened due to habitat loss.
Distribution:	The Acacia catechu is found in Asia, China, India and the Indian Ocean area.
Local use:	More specifically, the extract, called catechu is used to treat sore throats and diarrhea. Useful in passive diarrhoea either alone, or in combination with cinnamon or apium; the concentrated aqueous extract, known as khayer gum or cutch is astringent. It is used by the nativaidya in bidar for treatment in menstrual disorder. The decoction of bark mixed with milk is taken to cure cold and cough.
Local Distribution and Habitat:	In Karpak Palli Forest and Wadagaon Forest

7. Adathoda vascica

Family:	Asclepiadaceae
Marathi:	Adsog
Kannada:	Adasoge / Adu Muttada Gida.
Local Distribution:	Throughout Bidar Dist. Waste field, forest and uncultivated land.
Local use:	Leaf decoction for could and cough.
Ecological status:	Threatened due to Habitat loss

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8. Andrographis paniculata

Family:	Acanthaceae
Kannada local:	Nelabeu
Marathi:	Oli-kiryata
Hindi:	Kirayat
Sanskrit:	Kalamegh, Bhunimbcu
Ecological Status:	Threatened
Causes of:	Habitat destruction of due to expansion of Residential Threat Habitual and cultivation.
Local Habitat:	Throughout Bidar District waste land Chitta & Shahapur Forest area.
Local use:	Local Nati Vaidya's use whole plant treats joint pain, viral fevers.

9. Aegle mormelos

•	
Family:	Rutaceae
Kannada local:	Bilwa Patri
Marathi:	Bael
Hindi:	Bael
Sanskrit:	Bilwa
Ecological Status:	Threatened
Causes of:	Over utilization
Threat:	Habitat destruction.
Local Habitat & Distribution:	Throughout Bidar District Field and Forest, Temples, Basava Tirth.
Local medicinal use:	Tender leaves chewed as tonic pulp & leaf juice dysentery & tuberculosis.

10.Aloe vera

Family:	Liliaceae
Kannada:	Navras, lolerasa
Hindi:	Ghritkamani
Sanskrit:	Ghritkumari
Local distribution:	Waste uncultivated land with Rocky land, Hillocks in Bidar District.
Local uses:	Leaf juice used to remove face skin patches. Juice with turmeric powder applied a swellings, tumors and get relief from sprain oral consumption against digestive ailments. Local Habitat and Distribution: Forest and uncultivated land Now a days cultivated in garden. Deva-Deva Van Bidar.
Local Ecological Status:	Under threat in wild, due to habitat destruction

11. Argemone maxicana

Family:	Papavaraceae
Hindi:	Shialkanta

Sanskrit:	Brahmadandi
Ecological status:	Abundant Low risk.
Local use:	Local Nativaidyas use the yellow latex to apply on the soar mouth and tounge to get immediate relief.
Local Distribution and Habitat:	Through Bidar District Waste Land, Field ,Road Side

12. Asparagus racemosus wild

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Family:	Liliaceae
Kannada local:	Satavari
Sanskrit:	Satavari
Marathi:	Satavari
Hindi:	Satavari
Ecological Status:	Threatened in wild habitat
Local use:	Local Nativaidyas use roots as tonic.
Causes of:	Habitat destruction of due to extensive use of land for Threat: cultivation & house construction.
Local Distribution:	Bidar district forest area and field, common in garden

13. Azadirachta indica

Family:	Meliaceae
Hindi:	Neem
Kannada:	Bevu
Distribution:	It is native to India and Pakistan growing in tropical and semi-tropical regions.
Local use:	All parts of the tree are said to have medicinal properties (seeds, leaves, flowers and bark) and are used for preparing many different medical preparations

14. Baliospermum montanum

Family:	Euphorbiaceae	
Kannada:	Damti	
Hindi:	Danti	
Sanskrit:	Hasti Danti	
Ecological Status:	Vulnerable / Regional	
Cause of threat:	Habitat destruction.	
Common uses:	Ayurveda, Folk, Tibetian, Unani and Sidha	
Local habitat:	Throughout Bidar Dist. Field Forest and Uncultivated Land	
Local Uses:	Roots, leaves and seeds are used to cure jaundice and roots for piles. For piles.	

15. Biophytum sensitivum (L.) DC.

Family:	Oxalidaceae, Genus Biophytum
Kannada:	Hora Muchagi
Hindi:	Lajwanti

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Marathi:	Lajwanti
Sanskrit:	Vipareetiajjalu
Local use:	It is also a reputed medicine for tuberculosis and asthma.
Habitat and Local Distribution:	Agricultural waste land jowar field in Bidar Distt.
Local Ecological Status:	Threatened due to Habitat destruction

16. Butea monosperma

Family:	Fabaceae
Kannada local:	Muttal gida
Hindi:	Palash
Marathi:	Palas
Sanskrit:	Kinshuk
Local Ecological Status:	Threatened
Causes of Threat:	Habitat destruction of unprotected forest & Over utilization of leaves
Habitat & Distribution:	Bidar district, waste land unprotected forest area. Butea monosperma (Sanskrit: Kishanku, Hindi: Palash) is a species of Butea native to tropical southern Asia, from Pakistan, India, Bangladesh, Nepal, Sri Lanka, Myanmar, Thailand, Laos, (Cambodia, Vietnam, Malaysia, and western Indonesia. Common names include Palash, Dhak, Palah, Flame of the Forest, Basard Teak, Parrot Tree, Keshu (Punjabi) and Kesudo (Gujurati).

17. Buchanania latifolia

Family:	Anacardiaceae
Kannada:	Mallikai gida
Hindi:	Chiranji
Ecological status:	Threatened due habitat destruction.
Distribution:	Asia-temperate China: China - Hainan, Yunnan, Asia-tropical, Indian. Subcontinet India, Nepal, Indo-China, Laos, Myanmar, Thailand, Vietnam.
Local Distribution and Habitat:	Forest in Bidar Chitta Changler Karpak Palli Khanapur
Local use:	Seeds used as a sweetmeat, rich in oil. Tha bark contain tannin and the gum have medicinal properties, The wood is used as firewood. The ripe fruits are eaten . Lambani community and the local women collect the fruits and sold in the village and city market Bidar

18. Calotropis procera

Family:	Asclepiadaceae
Common name:	Milkweed, Rui (madar)
Kannada:	Yekki gida
Distribution:	Throughout India on plains on wastelands
Special characteristics:	Its typical leaves and flowers, which are quite unique in structure
Local Habitat:	Common Weed Throughout Bidar District Waste land uncultivated land and in residential habitat.
Local uses:	Latex applied on the fresh dog bite is quite effective. Dried flowers are used against asthma. Latex is applied for Joint pain and removes the thorn penetrated in to the foot. Tender leaves with neem oil paste is applied to cure Leucoderma.
Local Ecological Status:	Abundant low risk least concerned

19. Caesalpinia bunducella

Family:	Caesalpinaceae
Kannada:	Gajaga
Hindi:	Karthkaranj
Marathi:	Gajaga
Sanskrit:	Kakachika, Karanja and Latakaranja
Local Habitat:	Throughout Bidar District Waste land, Forest, Uncultivated land, Field border.
Local Ecological status:	Vulnerable due to Habitat destruction
Ayurvedic Description:	Properties: Rasa-katu, tikta; Guna-laghu, rooksha, teekshna; Veerya-ushna; Vipak-katu. Action and Uses:Kapha, vat samak, sotha har, badana sthapan, dipan, anuloman, krimighan, rakt sodhak, swashar, mutral, jwaraghan.
Local use:	Leaf juice is administered in fever, Leucorrhea, Grown as thick and prickly fence around field for protection. Seeds are offered to goddess Tulsi on the occasion of Tulsi pooja.

20. Cocculus hirsutus

Family:	Menispermaceae
Kannada:	Byangida balli
Hindi:	Patal garudl
Cause of threat:	Habitat destruction
Local Ecological status	Threatened plant

21. Centella asiatica

Family:	Apiaceae
Kannada:	Ondelga,
Hindi:	Brahmi
Sanskrit:	Mandukapami
Local Habitat & Distribution :	Throughout Bidar Distt. In the field alongwith water canal.
Local Use :	The leaves are used to increase memory power.5 leaves with 1 spoon honey given for 3 days.
Local Ecological Status :	Threatened (Vulnerable)
Causes of Threat :	Habitat loss due to agricultural operation.

22. Cassia fistula

Family:	Caesalpinaceae	
Kannada local:	Kakkigida	
Marathi:	Bahava	
Hindi:	Amaltas	
Sanskrit:	Aragvadha, Chaturangula, Savarnaka.	
Habitat and Distribution:	Bidar Forest Area and uncultivated agriculture land	
Local Ecological Status:	Threatened	
Causes of Threat:	Habitat destruction and over utilization	
Local uses:	Local Nativaidyas use the bark with zira to treat Leucorhea-Excessive bleeding in menstrual cycles.	

23.Capparis spinosa

Family:	Capparidaceae	
Kannada:	Tottul Balli	
Local habitat:	Waste land and uncultivated field. Old buildings.	
Ecological status:	Threatened due to loss of habitat.	
Medicinal uses:	In folk medicine, leaves used as cataplasm for boils, swelling and hemorrhoids. Decoction of root bark used for vomiting	

General

24.Corallocarpus epigaeus

Family:	Cucurbitaceae
Kannada:	Akashagarudagadde
Sanskrit:	Sukanasa
Local Distribution and Habitat:	Udumnalli Field along the border and fencing in Humnabad Tq.
Local Use:	Nativaidya Narayan Chowki uses the root tubers to treat the cancer
Ecological Status:	Threatened due to the destruction of the habitat
Distribution:	India, Pakistan (Punjab, Sind and Baluchistan), Tropical East Africa and Sudan. Dry districts of Karnataka

25. Datura metal

Kannada:	Datturigida
Hindi:	Kala Datura
Local use:	Leaves in Asthma by Local Nativaidyas
Ecological status:	Threatened. Cause of threat –Habitat destruction due to residential expansion of land in rural and urban.
Habitat and distribution:	Throughout Bidar District in waste land Datura metal is a shrub-like perennial herb, commonly known as angel's trumpet, devil's trumpet and metal. Datura metal grows in the wild in all the warmer parts of the world and is cultivated worldwide for its chemical and ornamental properties. It was first described by Linnaeus in 1753, but no botanically correct illustrations or descriptions were made until after the New World was settled. It is not possible to be sure about its original home.

26. Gymnema sylvestre

Family:	Asclepiadaceae
Kannada:	Kad patri
Sanskrit:	Madhunasini
Marathi:	Vakhandi
Hindi:	Kavali
Local Habitat and Distribution:	Uncultivated land Wadgaon in Aurad
Local uses:	Nati vaidyas treat diabetes in general, jaundice and fever by leaf tablets.
Local Ecological Status:	Threatened Due to destruction of Habitat.

27. Gloriosa superba

Family:	Liliace
Kannada:	Gowri Huva
Local Status:	Endangered
Local Distribution:	In Khanapur Reserved Forest and Karpakpalli Forest in Bidar District.
Local Uses:	Medicinal uses of Gloriosa superba: The roots and leaves used in snakebite, leaves given to cattle as antiworm treatment. Colchicines, an alkaloid obtained from the tubers and seeds fetches high price in the market and used in scientific research.
Causes of Threat:	Habitat Destruction and Over utilization and slow growth

28. Gardenia latifolia

20. Garacita tati	,	
Family:	Rubiaceae (Coffee family)	
Common name:	Indian Boxwood	
Hindi:	Papda, papura, paphar	
Marathi:	Ghogar, papda, dikemaali, gogavli	
Kannada:	Kambi, kalkambi, adavibikke	
Sanskrit:	Parpataki	
Locally:	Kyrengengida	
Botanical name:	Gardina latifolia	
Ecological status:	Threatened	
Causes of threat:	Habitat Destruction	
Local Distribution and Habitat:	Forest and uncultivated land. In Karpakpalli. Reserved Forest in Bidar District.	
Local use:	The resin exuded from the tip of the stem is used against the dysentery locally.	

29. Hemidesmus indicus

Family:	Asclepiadaceae
Kannada:	Haliberin gida
Hindi:	Ananthamul
Sanskrit:	Ananthmul
Local Distribution and Habitat:	Common everywhere. Forest land, uncultivated land, Field hedges in all the places in Bidar district.
Local Ecological Status:	Threatened due to destruction of habitat.
Causes of threat:	Use of land for construction of house and road etc

30. Ipomea paniculata

Family:	Convolvulaceae
Kannada:	Gollagiddiballi
Hindi:	Bhilayakand
Sanskrit:	Ksheeravidari

Ecological status:	Threatened due to habitat destruction.
Local use:	It is used as astimulant as well as depressant for different organ systems
Local Distribution and Habitat:	Throughout Bidar District in waste land all along the fencing of the crop field in Udumnalli and in reserve forest.

General

31. Mimosa pudica

Family:	Mimosaceae	
Hindi:	chui-mui	
Kannada:	muttidare muni	
Marathi:	Lazalu	
Ecological status:	Threatened due to habitat destruction	
Distribution	The species is native to South America and Central America, but is now a pantropical weed.	

32. Phylanthus Niruri

Family name:	Euphorbiaceae
Kannada:	Nala nelli
Hindi:	Bhumi amla
Part used:	Whole Plant
Local name:	Nela Nelli
Product offered:	Whole plant
Local Ecological Status:	Threatened
Cause of Threat:	Destruction of Habitat.
Habitat:	Common in central and southern India extending to Srilanka.
Local distribution:	Whole of Bidar District waste land, uncultivated agriculture land, Seasonal, Annual herb.
Local use:	Whole plant is used against in jaundice by local Nati vaidyas.

33. Plumbago zeylanica

Family name:	Plumbaginaceae	
Botanical name:	Plumbago Zeylanica	
Kannada name:	Bili chitra mula	
Part Used:	Flowers	
Product offered:	Roots	
Local Ecological Status:	Rare Vulnerable.	
Causes of Threat:	Habitat Destruction	
Local distribution:	Waste land, Field Border Habit, Uncultivated land, Throughout Bidar District.	
Local use:	Root paste applied on tumors to cure and get relief.	
Habitat:	Throughout India but abundantly found in north India upto 1600 m	

34. Psoralea corylifolia

Family name:	Fabaceae
Kannada:	Bavanchi
Hindi:	Bavacha
Causes of Threat:	Habitat destruction
Local Ecological Status:	Threatened due to habitat destruction.
Uses:	General uses are diuretic antianthelmentic and antifungal.
Local distribution & Habitat:	Waste land, uncultivated land field alongwith border in karpakpalli and other area.
Local uses:	Product offered Seeds and Oil .Fertility and as tonic Root.

35.Sarcostemma acidum

Family:	Asclepiadaceae	
Kannada local:	Khandiki Kalli	
Hindi:	Soma	
Sanskrit:	Somalata	
Ecological status:	Threatened vulnerable	
Causes of threat:	Habitat destruction	
Local use:	Applied latex on wounds and cuts.	
Distribution:	Found in the reserved forest Karpakpalli not found everywhere.	

36. Semacarpus anacardium

Family:	Anacardiaceae
Hindi:	Bhilawa
Sanskrit:	Agnimukh
Kannada:	Ker beeja
Marathi:	Bibba
Ecological status:	Threatened due to over utilization and habitat destruction.
Distribution:	It is native of India, found in the outer Himalayas to Coromandel Coast.
Local Distribution and Habitat:	Forest area in Bidar Chitta Changler and Wadgaon and Khanapur

37. Securinega leucopyrus Muell

Family:	Euphorbiaceae
Kannada:	Bili Huli
Sanskrit:	Brahmadandi
Hindi:	Shialkanta
Ecological status:	Threatened
Causes of Threat:	Habitat destruction.
Local Destribution and Habitat:	Changler,Karpakpalli,Forest and uncultivated land.

Local use:	The tender leaves are used by the local Nati Vaidya in treatment of Endometres along with the tender leaves of Mayatenus
Local use.	senegalensis and Lawnia coromandaliana

General

38. Tinospora cordifolia

Family:	Menispermaceae
Kannada:	Amrut balli
Hindi:	Gulvel
Sanskriti:	Guduchi
Local Ecological Status:	Threatened (Vulnerable) in wild
Causes of Threat:	Habitat destruction and over utilization.
Distribution:	Through out tropical India, Mynamar and Sri Lanka ascending to an altitude of 1000 ft .
Local Habitat:	Field, uncultivated waste land. Now a day's cultivated all house gardens.

$39. Tridax\ procumbens$

Family:	Asteraceae
Kannada:	Gejje Tikke
Hindi:	Bishalya
Marathi:	Gaddi chamanthi
Sanskrit:	Ghamra
Ecological status:	Threated
Causes of threat:	Habitat destruction
Local Habitat:	Waste land, Field and Forest Locality through out the destrict.

40. Vitex negundo

Family:	Verbenaceae
Kannada:	Bile-nekki
Marathi:	Nirgunda
Sanskrit:	Nirgundi, Sephalika, Sindhuvara, Vrikshaha
Hindi:	Mewri; Nirgundi; Nisinda; Sambhalu; Sawbhalu
Ecological Status:	Abundant and Low risk due to fast growth.
Local Distribution and Habitat:	Waste land, uncultivated land, field, near water bodies and forest all types of soil. Distributed throughout in Bidar district.
Local Uses:	Use of lakky locally called is known to the rural people. The tender leaves and flowers are put in to the nose to get rid the coldness. The matured leaves bed are used to get relief from the cold and body pain. Lakky decoction is used to cure BP heart diseases, paralysis, dieabetes and other diseases by Nati Vaidyas in Bidar District. Lakky is a holy plant offered to Lord Shiva on the occasion of Mahashiva ratri by Hindus.

41. Withania somnifera

Family:	Solaceae
Kannada:	Ashwagandha
Sanskrit:	Ashwagandha
Hindi:	Ajagandha, Kanaje
Local Ecological Status:	Vulnerable
Causes of Threat:	Habitat destruction
Local uses:	The roots are used as tonic to strength to the body and to make sexually strong

In the article, they concluded "This Study revealed a considerable medicinal plant diversity of Bidar district. Data were compared with the available literature of different regions of Karnataka on medicinal plants and was found that many of these are not recorded earlier. In Karnataka ethnobotanical studies on medicinal plants were conducted earlier in Uttar Kannada districts. However, in Bidar district, No detailed studies on ethno medicine have been conducted. The formulation and standardization of these effective phytomedicines should be encouraged for their sustainable uses and preservation of endangered species of this area. The data accrued is expected to useful for the development of the herbal drug industries to improve tribal and rural economy of Bidar district. The plants which are accrued are to be used single or combination with others. Some information pertaining to particular remedy from different localities or groups of informants reflects the accuracy and authenticity of the medicines on the phytochemistry. The Data from the Traditional practitioners will helpful further for the Scientific assessment of these medicines on phytochemistry, Biological activity and clinical studies are, however necessary. This may provide a lead in the development of drugs to be used in modern system of medicine".

Wild Life: There is not much diversity in the wildlife found in the division. There are no wildlife sanctuaries and National Parks in the division. The forests do not sustain varieties of animal. However, leopards may be seen occasionally far from human habitations. Wolves, spotted deer, wild boar, hares, wild cats and jackals are also reported from this division. The existing natural water holes must be developed by de-silting. Herds of spotted deer and peafowl are found in Kamathana, Chitta, Shahapur and Gode- palli forest areas. Poaching of deer in these areas is common. Hence,

protection should be given to these animals. Salt licks should be provided in the above areas to increase their population. Creation of wild life sanctuary may be contemplated in future when the number of wildlife increases. Some of the bigger sized trees act as a roosting place for peacocks, which is the national bird of India. Such trees should be protected. The following forests support considerable wildlife.

- 1. Narayanapur reserved forest in Basavakalyan range.
- 2. Dubalgundi and Bendhincholi forest blocks in Humnabad range
- 3. Kosam, Khanapur and Dahanura forests in Bhalki range.

Establishment: There are two subdivisions headquartered at Bidar and Basavakalyan headed by the respective Assistant Conservators of Forests and five territorial Ranges viz. Bidar, Humnabad, Aurad, Basavakalyan and Bhalki headed by the respective Range Forest Officers.

CLIMATE

The climate of the district is generally dry throughout the year except during the south-west monsoon season. Summer season starts from the middle of February and last up to the first week of June followed by the southwest monsoon season which continues up to the end of September. The months of October and November constitute the post monsoon retreating monsoon season. The cold season starts from December to the middle of February.

Temperature

Temperature begins to decrease from about the end of November. December is the coldest month with the mean daily maximum temperature at 27.3° C and the mean daily minimum at 16.4° C during the cold season temperature may sometimes go down to about 3° C from about the middle of February, both day and night temperature begins to increase rapidly. May is the hottest month with the mean daily maximum temperature at 38.8° C. During the summer on some days the day temperature rises above 40° C. The heat is some time very tiring. Thunder showers occur in the afternoon on some days which will be a welcoming relief. With the withdrawal of the southwest monsoon, there is a slight rise in the day temperature. Relative humidity is high during the south-west monsoon season, which varies between 65 and 75 per cent during the summer, the

relative humidity in the afternoons are between 30 and 40 per cent. Sky is generally moderate to heavily clouded during the south-west Monsoon season. Cloudiness decreases during the post monsoon seasons.

Humidity: Relative humidities are high during the south-west monsoon season being between 65 and 75 per cent . The summer is the driest part of the year, when the relative humidities in the afternoons are between 30 and 40 per cent.

Cloudiness: During the south-west monsoon season, skies are generally moderate to heavily clouded and overcast on some days. Cloudiness decreases during post-monsoon period. During the rest of the year the skies are mostly clear or lightly clouded.

Winds: Winds blow mostly from directions between south west and north-west in the south west monsoon season. In the post monsoon season, winds blow predominantly from directions between north and east. During the cold season, winds are variable on directions. Wind between north and west directions being rare. Cyclonic storms seldom pass through the district and some of the post monsoon storms form the caps of Bengal becomes defuse after crossing the coast. Thunder storms occur frequently during the summer season and some of them are accompanied with hail.

Special Weather Phenomena: While cyclonic storms seldom pass through the district, some of the post-monsoon storms from the Bay of Bengal become diffuse after crossing the coast and in their passage westwards affect the district and its neighbourhood causing heavy rain. Thunderstorms occur frequently during the summer season and some of them are accompanied with hail. Rain at the period of the onset and with drawal of southwest monsoon is often accompanied with thunder.

Rainfall: The details of the rainfall are given in tables I. II. and III. The average annual rainfall at Bidar is 907.5 mm (35.73"). About 81 per cent of the annual rainfall is received during the period from June to September, September being the rainiest month. Considering the general rainfall pattern in the region, it is seen that rainfall in the district generally increases from the south-west towards the north east. The variation in the rainfall from year to year is large, and the district is liable to droughts.

During the period from 1901 to 1950, the highest annual rainfall which was 177 per cent of the normal occurred in 1949, while the lowest which was only 48 per cent occurred in 1929. Annual rainfall less than 80 per cent of the normal occurred in twelve years out of 45 years for which data are available during the period (1901-1950). During the same period, two and three consecutive years of such low rainfall occurred once each at Bidar. It will be seen from table II that the annual rainfall at Bidar was between 700 and 1200 mm (27.56" and 7.24") in 18 years out of 45. On an average, there were 52 rainy days (i.e., days with rainfall of 2.5 mm 10 cents or more) in a year at Bidar during the period. The heaviest rainfall in 24 hours recorded at Bidar was 245. 9 mm (9.68") on 31st July 1955.

General

Station	No of years of data		Jan	Feb	Mar	Apr	May	June	July
		а	5.6	9.4	11.9	25.4	25.1	126.5	206.3
		b	0.5	0.8	1.1	2.1	2.4	7.4	11.6
Bidar	46		Aug	Sep	Oct	Nov	Dec	Annual	
		а	166.6	238.8	59.4	26.7	5.8	907.5	
		b	10.1	10.7	3.6	1.6	0.4	52.3	

Annual rainfal	l as % of normal and year**	Heaviest rainfall* in 24 ho	urs
Highest	Lowest	Highest	Lowest
177 (1949)	48 (1929)	245.9	July 31 1955

(a)Normal rainfall in mm.(b) Average number of rainy days (days with rain of 2.5 mm. more). * Based on all available data upto 1958. ** Years are given in brackets. Source: The Deputy Director General of Observatories (Climatology and Geophysics), Poona.

Frequency of Annual Rainfall in Bidar District (Data 1901-1950)

Range in mm	No. of years	Range in mm.	No. of years
401-500	1	1101-1200	3
501-600	3	1201-1300	5
601-700	6	1301-1400	1
701-800	6	1401-1500	0
801-900	7	1501-1600	0
901-1000	9	1601-1700	1
1001-1100	3		

Month	Mean Daily Maximum Temperature	Mean Daily Minimum Temperature	Highest	Highest Maxi mum ever recorded	Lowe	Lowest Minimum ever recorded	Relative Humid-ity	Normals of Temperature and Relative Humidity
	ပံ	ŷ	ပု	Date	ပု	Date	830%	1730*%
January	28.6	16.8	33.9	1925 Jan.30	3.9	1901 Jan .5	62	39
February	31.2	18.6	37.2	1926 Feb.27	9.4	1950 Feb.11	53	34
March	34.9	22.2	41.7	1910 Mar.19	12.8	1925 Mar.2	45	31
April	37.1	24.6	42.2	1946 Apr.30	12.2	1918 Apr.30	48	36
May	38.8	25.8	43.3	1931 May 8	6.7	1918 May 12	51	36
June	33.6	22.7	42.8	1953 June 7	10.0	1918 June 2	73	58
July	29.2	21.3	36.1	1924 July 1	1.1	1900 July 31	84	89
August	29.0	21.1	36.1	1924 Aug.16	9.4	1900 Aug.15	84	29
September	28.8	21.1	36.7	1924 Sep-23	8.9	1918 Sep-24	83	69
October	29.8	20.8	36.7	1901 Oct.26	8.3	1900 Oct. 24	69	51
November	28.1	18.2	36.1	1918 Nov. 6	6.1	1900 Nov. 9	62	46
December	27.3	16.4	32.8	1923 Dec.2	2.8	1918 Dec.16	62	40
Annual	31.4	20.8	:	:	·	:	65	48

1	Working	Annual	Annual Actual rainfall (in mm) from the year 2000-2010	infall (in	mm) fron	the year	r 2000-20	10				
laiuks	R.Gs	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Aurad	9	1114	750	992	1058	701	1209	1025	741	823	644	953.9
Basavakalyan	9	816	703	707	757	832	692	644	598	784	619	1326.0
Bhalki	6	1050	884	602	803	715	927	986	892	930	678	1210.3
Bidar	7	1039	1128	838	1059	821	1090	880	793	1011	916	1135.9
Humnabad	6	806	582	823	662	899	913	006	689	830	901	1140.9
Total	37	965	809	692	898	774	982	887	743	881	752	1153.4
		0,00					;					

Source: Karnataka at a Glance, 2010-11, Directorate of Economics and Statistics

Taluk wise Rainfall pattern, Bidar district

	Taluks (No. of years of r	No. of years of rainfall data available)	le)		
Taluks	Statistical parameter	Pre monsoon	South West Monsoon	North-East Monsoon	Annual Rainfall
Aurad (39)	Average Rainfall(mm)	62	639	108	808
Bidar(93)	Average rainfall(mm)	98	989	119	068
Bhalki(43)	Average rainfall(mm)	78	699	134	875
Basavakalyan(36)	Average rainfall(mm)	09	518	113	691
Humnabad(32)	Average rainfall(mm)	79	563	118	760

- The District falls under north eastern transition agro-climatic zones of the state. The taluks of the district are Aurad, Bidar, Bhalki, Basavakalyan and Humnabad. Ļ.
- The average Rainfall in the district ranges from 691 mm in Basavakalyan taluk to 890 mm in Bidar taluk. The rainfall decreases from south eastern part of the district towards western part. The west- ern part of Basavakalyan taluk receives the lowest rainfall. 5.

3. Among the taluks in the district the pre-monsoon rainfall contributes 8 to 10% of the annual rainfall, southwest monsoon contributes 74 to 79% and northeast monsoon contributes 13 to 16% of the annual rainfall.

Talukwise Rainfall data of Bidar District for the year 2015 is given here.

Raingauge Stationwise Monthly Rainydays and Rainfall (mm) - 2015

٠.		L	Jan	uary			Febru	uary			N	March	
SI. No.	Name Of The Raingauge Sta- tion		ainy- days	Rair	ıfall		iny- ıys	Rai	nfall		ainy- ays	Ra	infall
		N	Α	N	Α	N	Α	N	Α	N	Α	N	Α
TA	LUK : 1 AURAD												
1	AURAD B SRRG	-	1	4	8	-	0	8	-	-	5	9	45
2	KAMALNAGAR	-	1	-	3	-	0	-	-	-	4	ı	21
3	CHINTAKI	-	0	-	0	-	0	-	-	-	2	-	23
4	SANTAPUR	-	1	-	6	-	0	-	-	-	4	-	31
5	T.KUSHNOOR	-	2	-	15	-	0	-	-	-	3	-	33
6	DABKA	-	0	-	0	-	0	-	-	-	2	-	26
TA	ALUK : 2 BASA- VAKALYAN												
1	B KALYAN SRRG	-	1	7	6	-	0	6	-	1	2	15	28
2	HULSOOR	-	0	-	0	-	0	-	-	-	1	-	7
3	KOHINOOR	-	0	-	2	-	0	-	-	-	0	-	0
4	MATHALA	-	0	-	0	-	0	-	-	-	3	-	43
5	MUDABI	-	0	-	0	-	0	-	-	-	2	-	16
6	RAJESHWAR SRRG	-	1	-	3	-	0	_	-	_	3	-	75
TA	LUK : 3 BHALKI												
1	BHALKI TQ OFF HMS	-	1	6	8	-	0	4	-	1	2	10	33
2	HALBARGA	-	0	-	0	-	0	-	-	-	0	-	0
3	KHUDVAND- PUR-BHATMBR	-	1	-	15	-	0	-	-	-	0	-	0
4	K.CHINCHOLLI	-	0	-	0	-	0	-	_	-	6	-	63
5	LAKHANAGAON	-	1	-	11	-	0	-	-	-	0	-	0
6	NITTUR	-	0	-	0	-	0	-	-	-	0	-	0
7	SAIGAON	-	1	-	13	-	0	-	-	-	1	-	7
8	WARWATTI K	-	0	-	0	-	0	-	-	-	0	-	0
9	HALHALLI HMS	-	1	-	3	-	0	-	_	-	0	-	0

		1											1
TA	LUK : 4 BIDAR												
1	ANDOOR	-	0	-	2	-	0	-	-	-	3	-	66
2	BHANGUR	-	0	-	0	-	0	-	-	-	0	-	0
3	BAGDAL	-	1	-	5	-	0	-	-	-	2	-	45
4	JANAWADA	-	0	-	1	-	0	-	-	-	3	-	56
5	KADWAD	-	1	-	7	-	0	-	-	-	3	-	36
6	MANHALLY	-	1	-	17	-	0	-	-	-	3	-	50
7	KAMATHANA	-	1	-	10	-	0	-	-	-	3	-	43
TALU	IK : 5 HUMNABAD												
1	BEMALKHEDA	-	0	-	0	-	0	-	-	-	0	-	0
2	CHITGUPPA	-	0	-	0	-	0	-	-	-	0	-	0
3	DUBLAGUNDI	-	0	-	0	-	1	-	12	-	0	-	0
4	HALLIKHED	-	0	-	0	-	0	-	-	-	5	-	80
5	HUMNABAD SRRG	_	0	6	0	1	0	7	-	1	3	8	52
6	NIRNA	-	0	-	0	-	0	-	-	-	5	-	112
7	MANNAKHELLI	-	0	-	0	-	0	-	-	-	0	-	0

General

Raingauge Stationwise Monthly Rainydays and Rainfall (mm) - 2015

	Name Of The		-	April			I	May			J	une	
SL. NO.	Raingauge Station		iny- ays	Rai	infall		ainy- ays	Rain	ıfall	Rain	days	Ra	infall
		N	Α	N	Α	N	Α	N	Α	N	Α	N	Α
TAL	UK : 1 AURAD												
1	AURAD B SRRG	1	6	14	116	2	1	27	23	7	7	139	94
2	KAMAL- NAGAR	-	5	-	81	-	2	-	12	-	9	-	150
3	CHINTAKI	-	3	-	64	-	2	-	37	-	6	-	144
4	SANTAPUR	-	5	-	64	-	2	-	36	-	7	-	153
5	T.KUSHNOOR	-	6	-	58	-	3	-	89	-	5	-	124
6	DABKA	-	5	-	49	-	3	-	32	-	6	-	84
	.UK : 2 BASA- /AKALYAN												
1	B KALYAN SRRG	2	6	15	86	1	4	28	59	8	7	87	102
2	HULSOOR	-	7	-	65	-	5	-	51	-	5	-	106
3	KOHINOOR	-	2	-	14	-	4	-	73	-	5	-	64
4	MATHALA	-	4	-	40	-	1	-	42	-	4	-	61
5	MUDABI	-	5	-	62	-	2	-	45	-	7	-	89
6	RAJESHWAR SRRG	-	4	-	54	-	1	-	12	-	4	-	74

TALUK: 3 BHALKI BHALKI TQ

> OFF HMS HALBARGA

KHUDVAND-PUR-BHATM-

K.CHINCHOL-

LAKHANAGA-

BR

ON

NITTUR

SAIGAON

HALHALLI

HMS

TALUK: 4 BIDAR

ANDOOR

BHANGUR

JANAWADA

KADWAD

MANHALLY

KAMATHANA

CHITGUPPA

HALLIKHED

HUMNABAD

SRRG

NIRNA

MANNA-

KHELLI

DUBLAGUNDI

TALUK: 5 HUM-NABAD BHEMALK-HEDA

BAGDAL

WARWATTI K

Raingauge	Stationwise	Monthly	Rainvdave	And Ra	infall (mm	-2015	(cont'd

General

32	94	8	7	129	146
-	14	-	6	-	83
-	77	_	7	-	184
-	29	-	4	-	38
_	36		6	_	157
		-		-	
-	51	-	6	-	91
-	35	-	9	-	166
_	79	_	4	_	62
	"				
-	19	-	8	-	92
-	3	-	8	-	88
_	20	_	6	_	92
	11		10	_	69
	11	_	10	-	09
-	20	-	11	-	131
_	7	_	5	_	165
_	'	_	J	-	100
-	22	-	9	-	121
_	19	_	10	_	92
	.0		.0		
					465
-	3	-	8	-	102
-	3	-	6	-	107
-	4	-	4	-	51
-	6	-	7	-	62
35	15	8	7	132	95
-	0	-	11	-	189
-	27	-	5	-	221

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	1							1					
3	BAGDAL	-	3	-	35	-	7	-	78	-	9	-	158
4	JANAWADA	-	7	-	90	-	6	-	103	-	12	-	184
5	KADWAD	-	5	-	86	-	9	-	231	-	9	-	315
6	MANHALLY	-	7	-	90	-	7	-	83	-	11	-	188
7	KAMATHANA	-	7	-	56	-	10	-	118	-	12	-	193
TA	LUK : 5 HUM- NABAD												
	BHEMALKHE-												
1	DA	-	2	-	49	-	9	-	88	-	7	-	95
2	CHITGUPPA	-	1	-	18	-	7	-	86	-	8	-	245
3	DUBLAGUNDI	-	2	-	33	-	6	-	36	-	4	-	67
4	HALLIKHED	-	2	-	11	-	5	-	51	-	8	-	132
5	HUMNABAD SRRG	11	3	167	41	10	8	175	82	9	10	168	219
6	NIRNA	-	2	-	50	-	11	-	125	-	12	-	206
7	MANNAKHELLI	-	2	-	64	-	4	-	51	-	9	-	237

Raingauge Stationwise Monthly Rainydays and Rainfall (mm) – 2015 (cont'd)

			C	Octobe	•		Nov	ember	•		Dec	cember	
SI. No.	Name of The Raingauge Station	Rainy- days Rainfall		infall	Rainy- days Rainfall					Rain- Iays	Rain	fall	
	Otation	N	Α	N	Α	N	Α	N	Α	N	Α	N	Α
TAL	UK : 1 AURAD												
1	AURAD B SRRG	4	3	87	33	1	0	20	0	1	0	8	0
2	KAMAL- NAGAR	-	0	-	0	_	0	-	0	-	0	-	0
3	CHINTAKI	-	0	-	0	-	0	-	0	-	0	-	0
4	SANTAPUR	-	0	-	0	-	0	-	0	-	0	-	0
5	T.KUSHNOOR	-	0	-	0	-	0	-	0	1	0	-	0
6	DABKA	-	8	-	127	-	0	-	0	-	0	-	0
	LUK : 2 BASA- VAKALYAN												
1	B KALYAN SRRG	6	2	77	30	1	0	13	0	1	0	6	0
2	HULSOOR	-	-	-	-	-	0	-	0	-	0	-	0
3	KOHINOOR	-	-	-	-	-	0	-	0	-	0	-	0
4	MATHALA	-	-	-	-	-	0	-	0	-	0	-	0
5	MUDABI	-	-	-	-	-	0	-	0	-	0	-	0
6	RAJESHWAR SRRG	-	-	-	-	-	0	-	0	-	0	-	0

TAL	.UK : 3 BHALKI												
1	BHALKI TQ OFF HMS	4	1	95	14	1	0	19	0	1	0	6	0
2	HALBARGA	-	0	-	0	-	0	-	0	-	0	-	0
3	KHUDVAND- PUR-BHATM- BR	-	0	-	0	_	0	-	0	-	0	-	0
4	K.CHINCHOLI	-	0	-	0	-	0	-	0	-	0	-	0
5	LAKHANAGA- ON	-	0	-	0	_	0	-	0	_	0	-	0
6	NITTUR	-	0	-	0	-	0	-	0	-	0	-	0
7	SAIGAON	-	0	-	0	-	0	-	0	-	0	-	0
8	WARWATTI K	-	0	-	0	-	0	-	0	-	0	-	0
9	HALHALLI HMS	-	0	-	0	-	0	-	0	_	0	-	0
TAI	LUK : 4 BIDAR												
1	ANDOOR	-	0	-	0	-	0	-	0	-	0	-	0
2	BHANGUR	-	0	-	0	-	0	-	0	-	0	-	0
3	BAGDAL	-	0	-	0	-	0	-	0	-	0	-	0
4	JANAWADA	-	0	-	0	-	0	-	0	-	0	-	0
5	KADWAD	-	0	-	0	-	0	-	0	-	0	-	0
6	MANHALLY	-	0	-	0	-	0	-	0	-	0	-	0
7	KAMATHANA	-	0	-	0	-	0	-	0	-	0	-	0
TA	LUK : 5 HUM- NABAD												
1	BHEMALKHE- DA	-	0	-	0	-	0	-	0	_	0	-	0
2	CHITGUPPA	-	0	-	0	-	0	-	0	-	0	-	0
3	DUBLAGUNDI	-	0	-	0	-	0	-	0	-	0	-	0
4	HALLIKHED	-	0	-	0	-	0	-	0	-	0	-	0
5	HUMNABAD SRRG	5	1	91	17	1	0	18	0	1	0	5	0
6	NIRNA	-	0	-	0	-	0	-	0	-	0	-	0
7	MANNA- KHELLI	_	0	-	0	-	0	-	0	_	0	-	0

NOTE: N=NORMAL, A=ACTUAL: Indicates data not available. Rainyday=Rainyday = 2.5 mm in a day is considered as one rainy day.

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Raingauge Stationwise Monthly Rainydays and Rainfall (mm) - 2015

SI. Name of The		Cold Weather Period (January - February)			(March - May)				South-West Monsoon (June-September				
No	Raingauge Station		Rainy- days	Rain	ıfall		iny- ays	Rai	nfall	Rain	ydays	Rair	ıfall
		N	Α	N	Α	N	Α	N	Α	N	Α	N	Α
TAL	UK : 1 AURAD												
1	AURAD B SRRG	-	1	12	8	3	12	50	184	37	29	701	359
2	KAMAL- NAGAR	-	1	-	3	-	11	-	114	-	35	-	509
3	CHINTAKI	-	0	-	0	-	7	-	124	-	17	-	424
4	SANTAPUR	-	1	-	6	-	11	-	131	-	31	-	592
5	T.KUSH- NOOR	_	2	-	15	_	12	_	180	-	33	-	496
6	DABKA	-	0	-	0		10	-	107	-	17	-	210
	UK : 2 BASA- VAKALYAN												
1	B KALYAN SRRG	_	1	13	6	4	12	59	173	38	27	653	436
2	HULSOOR	-	0	-	0	-	13	-	123	-	28	-	379
3	KOHINOOOR	-	0	-	2	-	6	-	87	-	16	-	358
4	MATHALA	-	0	-	0	-	8	-	125	-	20	-	345
5	MUDABI	-	0	-	0	-	9	-	123	-	21	-	457
6	RAJESHWAR SRRG	_	1	-	3	-	8	-	141	-	22	-	335
TAL	UK : 3 BHAL- KI												
1	BHALKI TQ OFF HMS	_	1	10	8	5	11	67	235	38	26	683	387
2	HALBARGA	-	0	-	0	-	7	-	62	-	28	-	528
3	KHUDVAND- PUR-BHATM- BR	-	1	-	15	-	9	-	203	-	29	-	499
4	K.CHIN- CHOLLI	_	0	-	0	-	10	-	92	-	24	-	234
5	LAKHANGA- ON	-	1	-	11	-	9	-	105	-	24	-	435
6	NITTUR	-	0	-	0	-	8	-	112	-	33	-	424
7	SAIGAON	-	1	-	13	-	13	-	165	-	30	-	490
8	WARWATTI K	-	0	-	0	-	10	-	170	-	23	-	444
9	HALHALLI HMS	-	1	-	3	-	3	-	19	-	30	-	410

TAL	.UK : 4 BIDAR												
1	ANDOOR	-	0	-	2	-	5	-	114	-	30	-	411
2	BHANGUR	-	0	1	0	ı	3	-	20	-	19	1	359
3	BAGDAL	-	1	1	5	ı	8	-	102	-	29	1	340
4	JANAWADA	-	0	ı	1	ı	6	-	104	-	36	ı	508
5	KADWAD	-	1	-	7	-	8	-	215	-	28	-	787
6	MANHALLY	-	1	ı	17	ı	9	-	163	-	34	ı	482
7	KAMATHANA	-	1	-	10	-	9	-	144	-	39	-	459
TA	LUK : 5 HUM- NABAD												
1	BHEMALK- HEDA	1	0	-	0	-	6	-	118	_	26	-	334
2	CHITGUPPA	-	0	-	0	-	4	-	84	-	22	-	456
3	DUBLAGUN- DI	-	1	-	12	-	4	-	80	-	16	-	186
4	HALLIKHED	-	0	-	0	-	6	-	86	-	22	-	256
5	HUMNABAD SRRG	-	0	13	0	6	11	64	136	38	28	642	437
6	NIRNA	-	0	-	0	-	5	-	112	-	36	-	570
7	MANNA- KHELLI	-	0	-	0	-	8	-	165	-	20	-	573

General

Raingauge Stationwise Monthly Rainydays and Rainfall (mm) – 2015 (cont'd)

SI.	Name of The Rain-		North-Wes (October -			Annual (January-December)				
No	gauge Station	Ra	Rainydays		Rainfall		ainydays	Rainfall		
		N	Α	N	Α	N	Α	N	Α	
Т	ALUK : 1 AURAD									
1	AURAD B SRRG	6	3	115	33	46	45	878	584	
2	KAMALNAGAR	-	0	-	-	-	47	-	626	
3	CHINTAKI	-	0	-	-	-	24	-	548	
4	SANTAPUR	-	0	-	-	-	43	-	729	
5	T.KUSHNOOR	-	0	-	-	-	47	-	691	
6	DABKA	-	8	-	127	-	35	-	444	
TAL	JK : 2 BASAVAKALY- AN									
1	B KALYAN SRRG	7	2	96	30	49	42	821	645	
2	HULSOOR	-	0		-	-	41	-	502	
3	KOHINOOOR	-	0	-	-	-	22	-	447	
4	MATHALA	-	0	-	-	-	28	-	470	

5	MUDABI	-	0	-	-	-	30	-	580
6	RAJESHWAR SRRG	-	0	-	-	-	31	-	479
T.	ALUK : 3 BHALKI								
1	BHALKI TQ OFF HMS	6	1	120	14	49	39	880	644
2	HALBARGA	-	0	-	-	-	35	-	590
3	KHUDVAND- PUR-BHATMBR	1	0	-	-	-	39	-	717
4	K.CHINCHOLLI	-	0	-	-	-	34	-	326
5	LAKHANGAON	-	0	-	-	-	34	-	551
6	NITTUR	1	0	-	-	-	41	-	536
7	SAIGAON	1	0	-	-	-	44	_	668
8	WARWATTI K	1	0	-	-	-	33	_	614
9	HALHALLI HMS	1	0	-	-	-	34	_	432
1	TALUK : 4 BIDAR								
1	ANDOOR	-	0	-	-	-	35	-	527
2	BHANGUR	-	0	-	-	-	22	-	379
3	BAGDAL	-	0	-	-	-	38	-	447
4	JANAWADA	-	0	-	-	-	42	-	613
5	KADWAD	-	0	-	-	-	37	-	1019
6	MANHALLY	-	0	-	-	-	44	-	662
7	KAMATHANA	1	0	-	-	-	49	_	613
TAL	.UK : 5 HUMNABAD								
1	BHEMALKHEDA	1	0	-	-	-	32	_	452
2	CHITGUPPA	1	0	-	-	-	26	_	540
3	DUBLAGUNDI	-	0	-	-	-	21	-	278
4	HALLIKHED	-	0	-	-	-	28	-	342
5	HUMNABAD SRRG	7	1	114	17	52	40	833	590
6	NIRNA	-	0	-	-	-	41	-	682
7	MANNAKHELLI	-	0	-	-	-	28	-	738

NOTE: N=NORMAL, A=ACTUAL: Indicates data not available. Rainyday=Rainyday = 2.5 mm in a day is considered as one rainy day.

Taluk Wise Average Monthly Rainfall (mm) - 2015

SI. No	Taluk	No.of Rgs	Jan	Feb	Mar	Apr	Мау	Jun	Jul
DISTR	ICT : BIDAR								
1	AURAD	6	5	0	30	72	38	125	63
2	BASAVAKALYAN	6	2	0	28	54	47	83	41

3	BHALKI	9	6	0	11	70	48	113	51
4	BIDAR	7	6	0	42	66	15	108	54
5	HUMNABAD	7	0	2	35	68	8	118	38
	TOTAL RAIN- GAUGES	35							
	AVERAGE RAIN- FALL		4	0	28	66	32	110	49

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Taluk Wise Average Monthly Rainfall (mm) - 2015

SI.No	Taluk	No.of Rgs	Aug	Sep	Oct	Nov	Dec
DISTRICT	BIDAR						
1	AURAD	6	130	114	27	0	0
2	BASAVAKALYAN	6	111	151	5	0	0
3	BHALKI	9	118	146	2	0	0
4	BIDAR	7	114	203	0	0	0
5	HUMNABAD	7	74	172	2	0	0
	TOTAL RAINGAUGES	35					
	AVERAGE RAINFALL		109	158	6	0	0

Taluk Wise Seasonal Average Rainfall (mm) - 2015

SI. No	Taluk	Cold Weather Period (January-February)	Hot Weather Period (March-May)	South-West Period (June-September)
DI	IVISION - BIDAR			
1	AURAD	5	140	432
2	BASAVAKALYAN	2	129	385
3	BHALKI	6	129	428
4	BIDAR	6	123	479
5	HUMNABAD	2	112	402
AVE	RAGE RAINFALL	4	126	426

Taluk Wise Seasonal Average Rainfall (mm) - 2015

SI. No	Taluk	North-East Monsoon (October-December)	Annual (January-December)
DI	VISION - BIDAR		
1	AURAD	27	604
2	BASAVAKALYAN	5	521
3	BHALKI	2	565
4	BIDAR	0	608
5	HUMNABAD	2	518
AVE	RAGE RAINFALL	6	562

Source: Annual Rainfall, 2016, Directorate of Economics and Statistics, Bengaluru.

Hulsoor Taluk Notification: RD 115 BHUDAPU 2017, DATED: 26-12-2017 Schedule I

The Villages Specified in column (3) of the table below within the Circles specified in column (2) thereof shall be excluded from the limits of Hulsoor Circle of **Basavakalyan Taluk** within the Bidar District and constitute a new Taluk within the circle specified in column (4) thereof called as **Hulsoor Taluk** in Bidar District.

Hulsoor Taluk

SI. No	Name of Circle from Which village specified in column (3) are excluded	Name of village	Name of Circle in Which village specified in column (3) are included
1	2	3	4
1	Hulsoor	1) Hulsoor	Hulsoor
		2) Mirkal	
		3) Toglur	
		4) Gortha (b)	
		5) Gadigondgaon	
		6) Muchlamb	
		7) Belur	
		8) Soldhabaka	
		9) Devnal	
		10) Kadarabad	
		11) Halhalli	
		12) Gutti	
		13) Mustapur	
		14) Limbapur	
		15) Gadiraipalli	
		16) Kotmal	
		17) Machnal	
		18) Kadepur	

The new Taluk called as ${\bf Hulsoor}$ so constituted shall have boundaries as specified below Namely

Boundaries of the new Taluk Hulsoor

East: Boundaries of Bhalki and Basavakalyan Taluk	West : Boundary of Maharashtra State	
North: Boundary of Bhalki Taluk	South: Boundary of Basavakalyan Taluk	

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Schedule II

After formation of new Taluk as specified in Schedule-1, the remaining Circles specified in column (2) of the table below shall consist of Villages specified in column (3) thereof shall and continue to remain in **Basavakalyan Taluk** in Bidar District.

Basavakalyan

SI. No	Name of Circle	Name of village
1	2	3
1	Basavakalyan	1) Basavakalyan
		2) Yadlapur
		3) Shivpur
		4) Tripuranth
		5) Talbhogh
		6) Pratapur
		7) Morkhandi
		8) Gour
		9) Janapur
		10) Gokul
		11) Kitta
		12) Dhanur (K)
		13) Khandal
		14) Khanapur (K)
		15) Nilkhanth
		16) Laheshwar
		17) Narayanpur
		18) Betbalkunda

20) Illiyal 21) Gundur 22) Algood 23) Waddarga 24) Hiparga Ghat 25) Honalli 26) Chitakal Dev	
22) Algood 23) Waddarga 24) Hiparga Ghat 25) Honalli	
23) Waddarga 24) Hiparga Ghat 25) Honalli	
24) Hiparga Ghat 25) Honalli	
25) Honalli	
26) Chitakal Dev	
27) Urki	
28) Manalli	
29) Kambale Wadi	
30) Atalapur	
31) Sastapur	
32) Hadral (R)	
33) Jajanmugali	
34) Ghotal	
35) Ramthirth (K)	
36) Umapur	
37) Halli	
38) Chandkapur	
39) Mirzapur	

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3	Rajeshawar	40) Rajeshawar
		41) Rajola
		42) Islampur
		43) Handral (K)
		44) Lingdahalli
		45) Nirguddi
		46) Kodiyal (S)
		47) Rolla
		48) Kodiyal (R)
		49) Kherda (B)
		50) Sadlapur
		51) Dhanur (R)
		52) Pandargera
		53) Yarandi
		54) Manglore
		55) Yarbhag
		56) Tadola
		57) Ghogha

4	Mudbi	58) Mudabi
		59) Khanpur (B)
		60) Bagduri
		61) Hatyal
		62) Harkud
		63) Sarjolaga
		64) Janwada
		65)Hiparga Bhag
		66) Maislaga
		67) Kalkora
		68) Hirnagou
		69) Suthan
		70) Ekalur
		71) Gadlegou (B)
		72) Yalvanthi
		73) Kherda (K)
		74) Chikanagou
		75) Sirgapur
		76) Kinni
		77) Yaladguddi
		78) Saidapur
		79) Hamunagar

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5	Kohinoor	80) Kohinoor
		81) Ladwanti
		82) Ekamba
		83) Dhamuri
		84) Ujalamb
		85) Chitkota (B)
		86) Bhakanal
		87) Batgera
		88) Gadlegou (K)
		89) Sirgur
		90) Ramtirth (D)
		91) Giligili
		92) Hatrga (S)
		93) Bhosga
		94) Mankhed
		95) Atur
		96) Siruri
		97) Chitkota (K)

Boundaries of the remaining Basavakalyan Taluk

East : Boundary of Humnabad Taluk	West : Boundary of Humnabad Taluk
North : Boundaries of Maharashtra State and Proposed Hulsoor Taluk	South: Boundaries of Aland and Kalburgi Taluk

Chitguppa Taluk Notification: RD 135 BHUDAPU 2017, Bengaluru Dated: 19.01.2018 Schedule I

The Villages Specified in column (3) of the table below within the circles specified in column (2) there of shall be excluded from the limits of Chitguppa, Nirna and Bemalkheda Circles of Humnabad Taluk within the Bidar District and Constitute a new Taluk within the circle specified in column (4) thereof called as Chitguppa Taluk in Bidar District.

Chitguppa Taluk

SI.No	Name of Circle from which vil- leges specified in column (3) are excluded	Name of village	Name of Circle in Which villages Specified Co specified in column (3) ere included
1	2	3	4
	Chitguppa	1) Chitguppa	Chitguppa
		2) Belikera	
		3) Kodambal	
		4) Mustri	
		5) Talmandagi	
		6) Itaga	
		7) Mudnal	
1		8) Walakhindi	
		9) Rampur	
		10) Kandgol	
		11) Shamatabad	
		12) Wadankera	
		13) Hipparaga	
		14) Madgol	
		15) Gurudal	
		16) Bhaskar nagar	
2	Nirna	17) Nirna	Nirna
		18) Muttangi	
		19) Udbal	
		20) Madragi	
		21) Bhadarapur	
		22) Nagankera	
		23) Basirapur	
		24) Devgiri	
		25) Allipur	
		26) Manglagi	
		27) Banalli	
		27) Banalli	

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3	Bemalkheda	28) Bemalkheda	Bemalkheda
		29) Karapakapalli	
		30) Polakapalli	
		31) Meenkera	
		32) Udamanalli	
		33) Changalera	
		34) Many Ekhelli	
		35) Boral	
		36) Karakanalli	
		37) Saidapur	

The new Taluk called as Chitguppa So Constituted shall have boundaries as specified below Namely

Boundaries of the new taluk Chitguppa

East : Boundaries of Telangana State and Bidar Taluk	West : Boundaries of Gulbaraga Taluk and Humnabad Taluk
North : Boundary of Humnabad Taluk and Bidar District	South : Boundary of Chinchooli Taluk Kalburgi District

Schedule II

After formation of new Taluk as specified in Schedule-1, the remaining Circles specified in column (2) of the table below shall consist of Villages specified in column (3) thereof shall and continue remain in Humnabad Taluk in Bidar District.

Humnabad

SI.No	Name of Circle	Name of village
1	2	3
1	Humnabad	1) Humnabad
		2) Hudgi
		3) Dhumansor
		4) Nandagoan
		5) Sindhankera
		6) Kapparagoan
		7) Hanakuni
		8) Borampalli
		9) Kallur
		10) Kathalli
		11) Mustapur
		12) Chitkota
		13) Maniknagar
		14) Molkera
		15) Gadwanti
		16) Hallikhed (K)

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2	Hallikhed (b)	1) Hallikhed (b)
		2) Betbalkunda
		3) Atiwal
		4) Nibor
		5) Dakolgi
		6) Ameerabad
		7) Markhal
		8) Shankarganj
		9) Hilalpur
		10) Madargoan
		11) Malakapur Wadi
		12) Allur
		13) Botgi
		14) Benchincholli
		15) Kaberabad wadi
		16) Namadapur
		17) Sitalgera
3	Dubalgundi	1) Dubalgundi
		2) Sultanbad
		3) Otagi
		4) Muganoor
		5) Kankatta
		6) Ghodawadi
		7) Chinkera
		8) Sedol
		9) Hunsgera
		10) Kumar Chincholli
		11) Hunsnal
		12) Jalasingi
		13) Handikera
		14) Waravati (K)
		14) Waravati (K) 15) Ghatboral
		14) Waravati (K)

East: Boundary of Bidar Taluk	West : Boundary of Basavakalyan Taluk
North: Boundary of Bhalki Taluk	South: Boundary of Chinchooli Taluk Kalburgi District

Kamalnagar Taluk Notification: RD 134 BHUDAPU 2017, Bengaluru Dated: 30.11.2017 Schedule I

The Village Specified in column (3) of the table below within the circles specified in column (2) there of shall be excluded from the limits of Kamalnagar, Dabka & Thanakushnoor Circles of Aurad (B) Taluk Within the Bidar District and constitute a new taluk within the circle specified in column (4) thereof called as Kamalnagar Taluk Bidar District.

Kamalnagar

SI. No	Name of Circle from which villages specified in column (3) are excluded	Name of village	Name of Circle in Which villages Specified in column (3) are included
1	2	3	4
1	Kamalanagar	1) Kamalanagar	Kamalanagar
		2) Torna	
		3) Dongaon (M)	
		4) Bhavanibijalgaon	
		5) Savali	
		6) Belkoni (bho)	
		7) Sonal	
		8) Horandi	
		9) Baloor (K)	
		10) Madnoor	
		11) Murg (K)	
		12)Chandeshwar	
		13) Khed	
		14) Khatgaon	
		15) Randyal	
		16) Kalgapur	
		17) Hulsoor (khed)	
		18) Diggi	
		19) Kotgyal	
		20) Rampur	
		21) Tapshyal	
		22) Basnal	
		23) Koriyal	
		24) Hakyal	
		25) Holsamudr	

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2	Dabka	26) Dabka	Dabka
		27) Wagangera	
		28) Aknapur	
		29) Bonti	
		30) Hangarga (B)	
		31) Hokrana	
		32) Kherda ((B)	
		33) Karkyal	
		34) Dongargaon	
		35) Malegaon	
		36) Mutkhed	
		37) Chondimukhed	
		38) Nandibijalgaon	
		39) Bhandarkumata	
		40) Chimmegaon	
		41) Handikera	
		42) Chikli (U)	
		43) Ganeshpur (U)	
		44) Bawalgaon	
		45) Sawargaon	
		46) Sangnal	
		47) Daregaon	
		48) Murki	
		49) Lingi	
		50) Ganganbeed	

3	Thanakushnoor	51) ThanaKushnoor	Thanakushnoor
		52) Raksyal (K)	
		53) Maskal	
		54) Nagur (B)	
		55) Belkoni (cho)	
		56) Rakshyal (B)	
		57) Balat (B)	
		58) Balat (K)	
		59) Chandori	
		60) Dhupatmahagaon	
		61) Manigempur	
		62) Bedkunda	
		63) Hippalgaon	
		64) Ladha	
		65) Bachepalli	
		66) Babali	
		67) Hedgapur	
		68) Nittur (K)	
		69) Nidoda	
		70) Halhalli	
		71) Korekal	
		72) Bembra	
		73) Lingdalli (U)	
		74) Mudhol (B)	
		75) Mudhol (K)	
		76) Sangum	

The new taluk called kamalnagar so constituted shall have boundaries as specified below Namely

Boundaries of the new taluk Kamalnagar

East: Boundary of Aurad (B) Taluk	West : Boundary of Maharashtra State
North: Boundary of Maharashtra State	South: Boundary of Bhalki Taluk

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Schedule II

After formation of new taluk as specified in Schedule – 1 the remaining circle specified in column (2) of the table below shall consist of Villages specified in column (3) there of shall and continue to remain in **Aurad (B) Taluk** in Bidar District.

Aurad

SI.No	Name of Circle	Name of village
1	2	3
1	Aurad (B	1) Aurad (B)
		2) Mamdapur
		3) Narayanpur
		4) Ganeshpur (A)
		5) Allapur
		6) Narsimpur
		7) Ekalar
		8) Tuljapur
		9) Boral
		10) Badalgaon
		11) Dudkanal
		12) Wanmarpalli
		13) Mungnal
		14) Kappikeri
		15) Khandikeri
		16) Hassikhera.
		17) Hulyal
		18) Ekamba
		19) Jamalpur
		20) Kollur
		21) Jonnikeri
		22) Mahadongaon
		23) Tegampur
		24) Goundaon

2	Santpur	25) Santpur
		26) Jeerga (B)
		27) Jeerga (K)
		28) Jambagi
		29) Maharajwadi
		30) Shembelli
		31) Chatnal
		32) Gadikushnoor
		33) Pashapur
		34) Ballur (J)
		35) Koutha (B)
		36) Koutha (K)
		37) Beloor (N)
		38) Wallepur
		39) Aloor (K)
		40) Sorhalli
		41) Koudgaon
		42) Aloor (B)
		43) Mustapur
		44) Borgi (J)
		45) Khasempur
		46) Kandgul
		47) Khanapur
		48) Wadgaon (D)

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3	Chintaki	49) Chintaki
		50) Beldal
		51) Jojana
		52) Nagur (N)
		53) Lingdalli (K)
		54) Karanji (B)
		55) Karanji (K)
		56)Manoor (K)
		57) Raypalli
		58) Naganpalli
		59) Lingdalli (J)
		60)Sundhal
		61) Khasempur (A)
		62) Ujani
		63) Sunkanal
		64) Gudpalli
		65) Nagmarpalli
		66) Nandyal
		67) Jaknal
		68) Itgyal
		69) Yangunda
		70)Medpalli
		71) Nagur (M)
		72) Chikli (J)
i.		73) Bardapur

Boundaries of the remaining Aurad (B) Taluk

East: Boundary of Andrapradesh State	West : Boundary of Bidar Taluk
North: Boundary of Maharashtra State	South: Boundary of Proposed Kamalnagar Taluk

		New expectment rigate by the system of the s	ge Accountant Circle s,	Hoblies, Grama Pan	chayath & Taluka	As on 31-3-2016
છે. એંડ. SI.No.	కాల్యాల్లు Taluk	ಸಾಡ ಕಥೇರಿಗಳು. Nada Offices,	ಗ್ರಾಮ ಲ್ಕ್ಕಿಗರ ವ್ಯತಗಳು Village Accountant Circles	कील्ह्याचनोड्य, Hobles,	ಗ್ರಾಮ ಪಂಚಾಯುತಿಗಳು Gram Pachayath	ತಾಲುವಾರಗಳ ಸಂಖ್ಯೆ No. of Taluka
L	2	ī	2	3	4	ıs.
0220	ಜಿರಾದ Aurad	9	76	9	38	1
οĭ	ಐ.ಕಲ್ಯಾಣ B'Kalyan	9	79	9	36	1
oj.	ಛಾಲ್ಲ Bhalki	9	72	9	35	1
4.	ಜೀದರ Bidar	9	69	9	33	Ţ
53	ಹುಮನಾಖಾದ Humnabad	9	61	9	33	1
	ELEN TOTAL	30	357	30	175	5