

COORG DISTRICT

CHAPTER I

GENERAL

COORG is unlike most of the other districts of Mysore State, in that it is not named after its headquarters town. It is popularly known as Kodagu, derived from Kodimalenad, which means dense forest land on steep hills. Lt. Connor, in his Memoir of the Coorg Survey, is of the view that it may mean "country of millions of hills" to indicate the hilly nature of the country. According to other sources, the word "Kodagu" means situated to the west and the area came to be called by that name because it lies on the western portion. Coorg is the anglicized form of the word "Kodagu", but even now it is called and written in Kannada by its original name. **Origin of the name.**

Coorg district lies on the summits and the eastern and western slopes of the Western Ghats. It is situated on the south-west of Mysore State and lies between North Latitude $11^{\circ} 56'$ and $12^{\circ} 50'$ and East Longitude $75^{\circ} 22'$ and $76^{\circ} 11'$. Its greatest length from the Hemavathi river in the north to the Brahmagiri range in the south is about 60 miles and its greatest breadth from Sampaje in the west to Kushalnagar in the east is about 40 miles. **Location.**

It is bounded on the north by the Hassan district, on the east by the Mysore district, on the west by the South Kanara district, all of Mysore State, and on the south by the Cannanore district of Kerala State. The shape of the district on the map has been compared to that of an infant's knitted sock, the heel pointing north-west and the toe south-east. A narrow arm about 12 miles long and about six miles wide projects northwards into Hassan district on the north-east. **General boundaries.**

Coorg is the smallest district in Mysore State and in population also it is the lowest. The area of the district is 1,590 square miles. **Area and Population.**

miles or 4,118.1* square kilometres. The population of the district according to the 1961 Census is 322,829. In density, with a population of 203 persons, per square mile, it ranks far below the State average of 319.

**Administra-
tive
history of the
district.**

No particulars in detail of the administration of Coorg in the early period of the Coorg Rajas are available. Muddu Raja, who ruled over Coorg between 1633 and 1687, at first had his capital at Haleri and later shifted the seat of government to Mercara, which town he founded and named after himself as Mudduraja Keri, later corrupted to Madikeri or Mercara. At this period, the limits of the principality seem to have been confined to Coorg proper. In later years, more territories were added to it. Sulya was acquired by purchase, Amara was the gift of the Bednur Raja to one of the Kodagu chiefs; Panje and Bellare were acquired from Haidar, partly because he desired to have peace with the mountaineers and partly as compensation for certain agreements violated by him, and Yelusaviraseeme was added by conquest. In 1804, the British, in consideration of the singular services rendered by the Chief of Coorg, ceded to him the taluk of Puttur which had formed a portion of the Canara Collectorate. Thus, during the reign of Vira Rajendra, Coorg consisted of two distinct parts, one above the ghats occupying an area of 1,585 square miles and the other below the ghats occupying an area of 580 square miles. The total area of Coorg then was 2,165 square miles and it was divided into five taluks as follows :—

<i>Taluks.</i>	<i>Area in square miles</i>
1. Yelusaviraseeme	.. 92
2. Kiggatnad	.. 313
3. Coorg proper	.. 1,180
4. Sulya including Amara	.. 277
5. Puttur	.. 303
Total ..	<u>2,165</u>

A taluk consisted of a number of smaller divisions known as nads or hoblies which were further sub-divided into gramas or villages which, in Coorg proper, were made up of a number of vargas or farms, since the Coorgs generally live on detached farms instead of in villages with a number of houses joined into one community.

* According to the figures furnished by the Survey of India, the area of the district is 1,586.78 square miles or 4,109.73 square kilometres. See also Appendix—Table I.

The British accused Vira Raja, last of the Coorg Rajas, of maladministration, put an end to his power, and assumed the administration of Coorg in May 1834. Lt. Col. J. S. Fraser, representative of the Governor-General of India, informed all the chief men of Coorg whom he had assembled, of the deposition of the Raja and called upon them "to express their wishes without apprehension or reserve, in regard to the form of Government which they desired to be established for the future government of the country". The headmen unanimously expressed that Coorg be ruled in future by the same laws and regulations which were in force in the East India Company's dominions. Thereupon, Fraser issued a proclamation in 1834 which declared that Coorg was annexed, because it was the wish of the people to be ruled by the British Government.

At the same time, the two taluks of Amara-Sulya and Puttur below the ghats comprising an area of 580 square miles were, for administrative convenience, separated from Coorg and once again added to the Collectorate of South Kanara. The remaining territory, which included the whole of Coorg proper together with Kiggatnad on the south and Yelusaviraseeme on the north, comprising an area of 1,585 square miles, was formed into the separate province of Coorg and placed under the Government of India.

After the annexation of Coorg by the British Government, it was divided into six taluks and twenty-four nads comprising 508 villages, besides the towns of Mercara, Virajpet, Fraserpet, Somwarpet, Kodlipet and Ponnampet. The names of taluks, nads, their area and the number of villages as they existed at that time are given below :—

<i>Name of Taluk</i>	<i>Nad or Hobli</i>	<i>Area in sq. miles</i>	<i>Number of villages</i>
1. Mercara	Mercara-Haleri-nad	.. 49	15
	Kagodlu-nad	.. 40	6
	Horur-Nurokkal-nad	.. 39	11
	Hudikeri-Kanta-Murnad	.. 49	14
	Ulugule-Mudigeri-nad	.. 32	11
	<hr/> 5	<hr/> 209	<hr/> 57
2. Padinalknad	Padinalknad	.. 142	12
	Kadiadnad	.. 51	12
	Tavunad	.. 139	9
	Benganad	.. 42	11
	Kuinkeri	.. 39	13
	<hr/> 5	<hr/> 413	<hr/> 57

<i>Name of Taluk</i>	<i>Nad or Hobli</i>	<i>Area in sq. miles</i>	<i>Number of villages</i>
3. Yedenalknad	Yedenalknad	.. 92	22
	Beppunad	.. 41	8
	Ammatnad	.. 77	19
	<hr/> 3	<hr/> 210	<hr/> 49
4. Kiggatnad ..	Anjikerinad	.. 89	15
	Thavalakerinad	.. 110	15
	Hattugatnad	.. 112	13
	Betiednad	.. 89	20
	<hr/> 4	<hr/> 400	<hr/> 63
5. Nanjarajpatna.	Surlabi-Gadinad	.. 113	21
	Yedavanad	.. 94	37
	Nanjarajpatna	.. 55	26
	Ramaswami-kanave }	30
	<hr/> 4	<hr/> 262	<hr/> 114
6. Yelusavira-seeme.	Kodli	.. 27	55
	Bilhada	.. 18	40
	Nidtha	.. 46	73
	<hr/> 3	<hr/> 91	<hr/> 168
Grand Total 6	24	<hr/> 1,585	<hr/> 508

The total area of Coorg has remained the same since 1834, though there have been several changes from time to time in the internal divisions to suit administrative convenience. But even in respect of the total area, there have been slight variations now and then by a few square miles; this is not because any area has been lost or gained but because of some mathematical calculations adopted. This accounts for different figures appearing about the areas of taluks and even of the district as a whole in different sections. The people of Coorg live in isolated homesteads and the Coorg village is merely a revenue expression denoting the area lying within certain boundaries and therefore certain variations in their number also occur.

The number of taluks remained the same as it was at the time when Coorg was annexed and brought under the control of

the Government of India, *i.e.*, six, but there was some re-adjustment in the boundaries of taluks. The names of taluks and their area in square miles as they existed in 1891 are given below :—

<i>Taluk</i>	<i>Area in square miles</i>	
1. Mercara	..	216.30
2. Padinalknad	..	399.90
3. Yedenalknad	..	201.45
4. Kiggatnad	..	410.45
5. Nanjarajpatna	..	263.89
6. Yelusaviraseeme	..	90.82

There were 492 villages and five towns.

Each taluk was directly administered by a local officer called Subedar and, as mentioned earlier, each taluk was subdivided into nads or hoblies, the head of which was styled Parpathigar.

With a view to reducing expenditure, the taluk of Yelusaviraseeme, comprising the three hoblies of Bilhada, Kodli and Nidtha, was abolished in 1894 and was amalgamated with Nanjarajpatna taluk, thus reducing the number of taluks from six to five. The area of the reconstituted taluks and the number of villages at the time of the Census of 1911 were as follows :—

<i>Taluk</i>	<i>Square Miles</i>	<i>Villages</i>
1. Mercara	.. 227	57
2. Padinalknad	.. 399	60
3. Yedenalknad	.. 218	56
4. Kiggatnad	.. 421	68
5. Nanjarajpatna	.. 317	254

There was another re-adjustment in the boundaries of the four taluks of Nanjarajpatna, Mercara, Padinalknad and Yedenalknad in 1916, when certain revenue circles were abolished for administrative reasons and there was also a reduction in the number of villages due to grouping together of certain villages.

The variations in the areas and number of villages after the re-adjustment in 1916 are given below :—

<i>Taluk</i>	<i>Area</i>	<i>No. of villages</i>
1. Mercara	.. 310	68
2. Padinalknad	.. 395	64
3. Yedenalknad	.. 221	57
4. Kiggatnad	.. 421	68
5. Nanjarajpatna	.. 235	121

There was no change in the boundary of Coorg and yet the area of the province was put down in 1932 as 1,593 square miles showing an increase of 11 square miles over the previous figures. The difference in area was due to the increase noticed in respect of South Coorg from the 1921 survey.

The five taluks were, for administrative purposes, reduced to four in 1921 by combining the two taluks of Padi-Yedenalk Nad and Yedenalknad into one, giving the name Padi-Yedenalk Nad to the new taluk. The names of the four taluks after this change in 1921 were: (1) Mercara, (2) Padi-Yedenalk Nad, (3) Kiggat Nad and (4) Nanjarajpatna.

There was yet another change in the very next year i.e., 1922, when the two taluks of Padi-Yedenalk Nad and Kiggat Nad were combined into one to form the new South Coorg taluk with effect from 1st September 1922. The new South Coorg taluk comprised an area of 822.19 square miles and consisted of five nads, viz., (1) Virajpet Nad, (2) Napoklunad, (3) Ammathi Nad, (4) Ponnampet Nad and (5) Srimangala Nad. The names of the three taluks in existence in September 1922 were (1) Mercara, (2) Nanjarajpatna and (3) South Coorg.

In 1926, the two taluks of Mercara and Nanjarajpatna were also amalgamated into one taluk under the name of North Coorg, comprising an area of 759.47 square miles. After this change, there were only two taluks consisting of 11 Nads, as follows:—

<i>Taluk</i>	<i>Nads</i>	<i>Area in sq. miles</i>
1. North Coorg ..	1. Mercara Nad	759.47
	2. Bhagamandala Nad	
	3. Suntikoppa Nad	
	4. Somwarpet Nad	
	5. Sanivarasanthe Hobli	
	6. Fraserpet Hobli	
2. South Coorg ..	1. Virajpet Nad	822.19
	2. Napoklu Nad	
	3. Ammathi Nad	
	4. Ponnampet Nad	
	5. Srimangala Nad	

The river Cauvery formed the dividing line between the two taluks. Simultaneously with the reduction in the number of the taluks to two, several villages were amalgamated for administrative reasons, reducing the number of villages from 378 to 298. The area of the two taluks has also varied from time to time

and their area at the time of the Censuses of 1931 and 1941 is given below :—

<i>Taluk</i>	<i>Area in square miles</i>	
	1931	1941
1. South Coorg ..	833	980
2. North Coorg ..	760	613
Total ..	1,593	1,593

The decrease in the area of the North taluk and increase in the area of the South taluk during the decade 1931-41 was due to the abolition of two nads in 1938 as a measure of retrenchment and the redistribution of their villages among the remaining nads in the two taluks. During the year 1938, Suntikoppa and Bhagamandala Nads of North Coorg were abolished and the villages of these two Nads were distributed amongst Fraserpet and Mercara Nads. But these two Nads were revived with effect from 1st October 1952 and the number of taluks and Nads remained the same as it was in 1926.

With effect from 15th December 1953, the internal divisions of Coorg State were regrouped to facilitate efficient administration and a third taluk known as Mercara taluk comprising Mercara Nad and Bhagamandala Nad of the North Coorg taluk and Napoklu Nad of the South Coorg taluk was formed and the names of the remaining portions of the North and South Coorg taluks were changed to Somwarpet and Virajpet. With effect from the same date, the villages of Abbiatmangala and Nellia-Hudikeri were transferred from Ammathi Nad to Fraserpet Hobli.

The original name of Kushalnagar, which had been changed to Fraserpet in honour of Lt. Col. Fraser, was restored and the place is now once again called Kushalnagar.

The district is divided into three taluks which are again sub-divided into eleven nads or hoblies consisting of 277 villages. The present administrative divisions of Coorg are as follows :—

**Sub-divisions—
Taluks and
Nads.**

COORG DISTRICT

	<i>Area in sq. miles</i>	<i>Sq. Kilo- metres</i>	<i>Population (1961)</i>	<i>Nad or Hobli</i>
1. Somwarpet Taluk—				
	386.0	999.8	109,417	Sanivarasanthe Hobli. Somwarpet Nad. Kushalnagar Hobli. Suntikoppa Nad.

2. Mercara Taluk—				
	566.0	1,465.9	79,540	Mercara Nad. Bhagamandala Nad. Napoklu Nad.
3. Virajpet Taluk—				
	638.0	1,652.4	133,872	Virajpet Nad. Ammathi Nad. Ponnampet Nad. Srimangala Nad.
Total 3	<u>1,590.0</u>	<u>4,118.1</u>	<u>322,829</u>	<u>11</u>

Natural Divisions.

Coorg is a picturesque highland occupying the eastern and western slopes of the western ghats, clothed with primeval forests or grassy glades and broken by a few cultivated valleys. The physical features of the district are varied. The southern, western and north-western portions are intersected by a network of hills and forests subject to heavy rainfall. The north-eastern and most of the eastern portions are different and resemble the adjoining Mysore district. The drainage of the country is all to the east except on the western ghats where it flows west. The old fort at Mercara stands about 3,800 feet above sea level, and this elevation is maintained for a considerable distance towards the north. Towards the east, the country slopes down towards the Cauvery, the elevation of Kushalnagar being some 1,100 feet lower than that of Mercara.

The general appearance of the country varies considerably in the different parts. In the vicinity of Somwarpet, in the north of Coorg, the hills are generally rounded, alternating with sloping glades interspersed with clumps of forest trees, resembling the finest park scenery in Europe. Near Mercara, the hills are closer together and more abrupt and the ravines deeper and more wild. Towards Kushalnagar, the country assumes the character of the Mysore plateau with scattered solitary hills. South of Mercara in the direction of Virajpet, the country is open, the woods are neither dense nor high and beautiful grassy downs rise from extensive rice valleys. The eastern frontier between the Cauvery and the Lakshmanathirtha rivers exhibits an almost uninterrupted jungle, deciduous in character. West of this, the forest is evergreen, largely intermixed with bamboos, forming what is known as the Bamboo district.

Viewed from an eminence, the whole of the southern portion of the country presents the appearance of one great forest interspersed by valleys which after August appear green with paddy crop. In the north, the country becomes open towards the east while to the west and north, the country rises to high peaks

measuring from 3,800 feet to 5,724 feet. Wherever possible, the valleys in Coorg are formed into flats and terraces for rice cultivation and high-lying lands are cultivated with coffee, orange, cardamom and pepper.

Coorg is a land-locked hilly country and the nearest coast according to the Survey of India maps is 21 miles from the western border of the district. The visitor will be delighted as much with the variety as with the beauty of the country. Nature displays her magnificence in all her variety. Standing on a bright November morning on the summit of the Brahmagiri near Talakaveri, one is filled with delight and admiration of the grand view that opens out. As far as the eye can reach to the north-west and south-east, it beholds ridge after ridge of grassy or forest-clad hills, now sloping down in gentle wavy lines, now bold and abrupt, raising their steep summits into the clear, blue air. Kuduremukhabetta, the far-seen landmark of the mariner, bursts into view from Kanara; the Bettadapur and Chamundi Hill in Mysore, the Wynad mountains of Malabar and Dodda-betta of the distant Nilgiris are clearly visible, and in the west at a distance of about 30 miles below the steep precipices of the Ghats, the coast-line of Cannanore and South Kanara, intersected by broad, bright, serpentine rivers and the dark blue sea beyond with its sailing craft fascinate the spectator.

Coorg is mostly covered by forest with, here and there, the clearing of a coffee plantation, a paddy field or the park-like open glades (Bane) with their beautiful green sward and varied foliage, lending a charming variety to the landscape.

The district has a mountainous configuration which presents a **Hills.** grand panorama of verdant valleys, ravines, fast-flowing streams, lofty peaks and awe-inspiring spurs. From the table-land of old Mysore, the approach to Coorg is through the eastern spur where the headquarters town of Mercara is situated. Towards the west, the summits of the Western Ghats attain great heights with precipitous drops. Many are the travellers and chroniclers who have sung in fervour of the grandeur of the ghats. The principal range from a point in the north of Coorg to a point in the south is described as the "western barrier". Viewed from any point from the Malabar coast, the spectacle of the great mountain barrier and the varied configuration of the ghats reaching great heights is enchanting. The main range of the Western Ghats extends to nearly sixty miles from Subramanya in the north-west to the Brahmagiris in the south. This range is the backbone of the western chain of hills. From this, several long and elevated ridges run from west to east, comprising the entire district of Coorg. There are also sub-divisions of the ghats towards the south. The lofty barrier range of the Western Ghats forms a continuous western frontier and the

Brahmagiri range affords a natural barrier between Coorg and the Malabar hill ranges of Wynad. From the eastern spur, the ascent towards the west is gradual.

The most conspicuous sub-divisions of the ghats in the south are the Brahmagiris or the Marenad ranges which form the southern boundary of the district separating it from Wynad. Their height averages some 4,500 feet above the sea level. In Coorg, the name Brahmagiri, is applied to the whole range separating Coorg from Wynad and there is also another peak near Bhagamandala known as Brahmagiri which is the source of the Cauvery. To the west of the Brahmagiri range, are the Hanuman betta, the Kadangamale and Perumal-male. The whole of Virajpet, popularly known as the lower ghat area, contains many spurs branching off in different directions. The eastern basin of the Cauvery river has on its sides any number of ridges in the confines of which are the Ambate-betta near Virajpet, the Bittangala, the Hattur Hill also called Kundada-betta, the Siddeshwara Hill and the Mankal betta. The valleys down the spurs, which subside into the undulating slopes of the eastern elevation, enclose the richest paddy fields in the district.

Between the Periambadi Pass, near the Kerala frontier, and the Todikana pass, close to the source of the Cauvery, the main chain of the Western Ghats extends in a north-westerly direction as a straight line having a length of 30 miles. The ghats here fall suddenly towards the west in a precipice. The ascent from the foot is steep and tortuous. It is in this range and behind the Nalknad Palace that the highest peak of the district, Tadiandamol (5,724 feet), is situated. The Tadiandamol is not altogether inaccessible; two-thirds of it can be negotiated on horse-back. The topmost portion is rather difficult of ascent. But if one perseveres and climbs to the top, his exertions are amply rewarded and there from the giddy top of this peak he can look all around towards west and east and feast his eyes on the majestic grandeur of the slopes.

About six miles to the south-east of Tadiandamol rises the Somamale, the highest mountain in Kadiadnad hobli in the former Padinalknad taluk. It is sacred to Maletambiran (Tambiran, a Malayalam deity) and overlooks the Kodantora pass. Two miles to the north-east of Tadiandamol, there is another mountain giant, the Iggudappa-kundu (Iggu, a Malayalam god; appa, father; kundu, hill) near the Paditora (Pade, name of a village; tora, pass) and three miles further on, the Perur point and four miles still further, the Srimangala point. The last notable mountain in the same range is the Brahmagiri in Tavunad hobli in the former Padinalknad taluk with the source of the River Cauvery.

At an acute angle from this line, the main chain of the ghats continues in an easterly direction as the Bengunad range

till, nearing Mercara, it makes a sudden turn to the north-west and forms the Sampaje valley which leads by a gradual slope into the low country of Kanara. At the head of the valley and supported by a high ridge with steep abutments on its southern front, the Mercara table-land is situated. This ridge branches off in two directions, one towards the south-eastern elbow of the Cauvery, culminating in the peak of Nurokal-betta, and the other, the Horur-branch, due east in a zigzag line towards Kushalnagar with several rugged hills, the most remarkable of which is Kallurubetta clothed with teak forest. The Nurokal and Bengunad ranges are the lateral formations or spurs extending from the Western Ghats. Also, the confines of the hilly tract form the water-shed of the upper basin of the River Cauvery. This basin which lies between Mercara and Nalknad is 15 miles broad.

From the main chain of the ghats and the Bengunad range, innumerable ridges jut out on either side. These are diminutive when compared with the parent stock; and they decrease in height as they recede, but have almost everywhere narrow summits and steep declivities.

The table-land of Mercara maintains throughout an average altitude of 3,500 feet above the sea, and may be said to extend as far as Somwarpet, a distance of 20 miles, but on the east it slopes down to the Cauvery which near Kushalnagar is at an elevation of 2,720 feet above the sea. This plateau, crossed in all directions by minor hills and ridges, is bounded on the west by the continuation of the ghats which culminate near the Bisle pass in the Subrahmanya or Pushpagiri hill, which according to Rev. G. Richter (Manual of Coorg), is 5,548 feet above the sea level. But Lewis Rice puts the height of this hill at 5,626 feet. According to the Survey of India, the height is 5,620 feet. This is a remarkable two-pointed hill of precipitous height and peculiar shape, and resembles, as seen from Mercara, a gigantic bullock hump. The ascent, which on account of the precipices of the southern and western face of the hill, can only be effected by a circuitous route, is more difficult than that of Tadiandamol. Starting from Bhagati, at the base of the Pushpagiri, it is about six miles walking, the ascent taking a good walker two hours and 40 minutes and the descent to Hiridigadde of the village, Bidehalli, two hours. A dense jungle, dear to wild elephants, has to be penetrated, and the ascent is severe; but the summit commands an extensive prospect over Coorg, Kanara and Mysore. There are on this hill numerous Hindu memorials in the shape of stone mounds. Within an enclosure, there are two rude stone structures, with the customary imprint of two feet (*pada*) of celestial origin.

Amongst the many ridges that branch off from the Subrahmanya range of the ghats, the most remarkable is that

which attains its greatest height in Kotebetta, about nine miles north of Mercara. Its elevation is over 5,000 feet, and its base covers a very large extent of country. Its summit is divided into two peaks, one rather pointed and the other flat, while its sides are clothed with forest, and innumerable cultivated valleys occupy the recesses. Close to the apex, there are two reservoirs of water. Near the summit on a spacious platform is a small temple of rough granite slabs dedicated to Shiva. This hill, as well as the Nurokal-betta, offer, on account of their height and central position, the finest general view of Coorg.

The Shanthalli Hill running parallel to Kotebetta has near it a bluff-like ridge with a precipitous declivity on its western side. This is the Mukri-betta. There is another range extending from the northern boundary of Coorg down to the Cauvery river which is called the Yelusavira hills having the Malambi and Kamangala peaks. The Malambi has a conical shape and reaches a height of 4,488 feet. In general, the chain is unequal in its elevation and irregular in its direction with a curvature at the head of the Todikana Ghat.

The whole of the western portion of Coorg is an unbroken chain, presenting itself as a wall, ever protecting this little district. From the foothills in Kerala, the Coorg mountain system appears as a formidable wall, with lofty peaks here and there.

Rivers.

The configuration of the district is such that the main drainage is in an easterly direction towards the Bay of Bengal, but there are a few mountain torrents of the western declivities of the ghats which flow westward. The Coorg rivers are not noted either for their width or depth but the water supply is everywhere abundant throughout the year. As the sources of the rivers are high up in the mountains and their courses are over steep declivities, they flow with great rapidity, generally over rocky beds. The height of their banks, the rocky beds and the unevenness of the country render them wholly unsuited for navigation of any kind though a few of them allow artificial irrigation.

The largest river is the Cauvery, which with its principal tributaries, the Hemavathi, Lakshmanathirtha, Kakkabe and Harangi or Suvarnavathi, flows in an easterly direction and the Barapole is the only river worthy of the name, which flows towards the west. Besides these, there are many minor streams whose general characteristics are the same and vary only in size depending upon the length of their course. They swell during the rainy season in the early part of June and flow with violent and boisterous rapidity till October, when, after the rains, they gradually subside to their normal dimensions.

The chief river in Coorg, both in size and in importance, is the Cauvery which rises on the Brahmagiri at a place called Talakaveri, where the Western Ghats form a sharp angle with the Bengunad range. The original name of the river 'Kaveri' has been anglicised into 'Cauvery'. The Kannike, another stream, rises nearby and after a short run joins the Cauvery at the foot of the hill near the village of Bhagamandala. The Cauvery is reputed to be one of the seven sacred rivers or *Saptha Sindus* of the Hindu scriptures and the devout believe that a bath in it would help wash off their sins. Though the entire length of the river, from its source in Coorg to its mouth in Thanjavur District in Madras State where it falls into the Bay of Bengal, is considered holy, a bath at its source at Talakaveri or at its confluence with Kannike near Bhagamandala is considered very sacred. It is said that there is another invisible river, Sujoyothi, which joins the Cauvery at Bhagamandala. This may, perhaps, be the southern version of the belief held in North India that at Prayag (Allahabad), where the Yamuna joins the Ganges, there is another river, Saraswathi, which also joins them unseen. It is believed that even the river Ganga (Ganges) resorts underground to the Cauvery once a year in Tulamasa, *i.e.*, October-November, to wash herself free of the pollution contracted by her from the crowds of sinners who bathe in her waters. There are temples both on the top and at the foot of the hill which are visited every year by thousands of pilgrims from the adjoining areas.

As is the case of every holy place or river in India, there are several legends connected with the origin of the river Cauvery. Chapters 11 to 14 of the Skanda or Kartikeya purana known as the Kaveri purana describe the sacred river from its source to its union with the sea and enumerate the many holy bathing places and temples on its banks.

It is said that a certain prince, Chandra Varma, in the course of his pilgrimage, came to Brahmagiri and finding the place picturesque and very calm, decided to stay there and devote himself to the worship of the Goddess Parvathi. Pleased with his worship, the Goddess appeared before him and gave him a sword, which would give him victory, a white horse which would carry him at high speed and also an army with which he could conquer the country. She also promised to appear in due course in the form of a river and to make the country fertile.

As the result of the churning of the ocean by the Devas (Gods) and Asuras (Rakshasas), Amrita or the nectar of immortality was obtained from the sea but the Asuras seized it from the Devas. Fearing the consequences, Lord Vishnu created Mohini and sent her to restore the Amrita to the Devas and Goddess Lakshmi also at the same time sent forth Lopamudre (a form of Parvathi) to assist Mohini. After the Amrita was

restored to the Devas, Mohini retired to Brahmagiri and was changed into a rocky cave and Lopamudre was given to Brahma who brought her up as his daughter.

Kavera Muni, a great sage, selected Brahmagiri in Coorg as a place suitable for meditation and there prayed to Lord Brahma for children. Brahma gave him Lopamudre for a daughter and thereafter she came to be known as Kaveri after the name of her new father, Kavera Muni. She wanted to obtain heavenly happiness for her father and from the heights of Brahmagiri prayed to Brahma to give her the miraculous power, when she turned into a river, of absolving all those who bathed in her holy waters of the sins committed by them and this boon was readily granted to her by Brahma.

Another sage, Agastya, who happened to see her while she was absorbed in her devotions, asked her to become his wife. She could not refuse his request though she was more bent upon fulfilling her desire of becoming a river and pouring her blessings on the people and agreed to live with him on condition that if at any time she should be left alone without him, she would be at liberty to forsake him. Agastya agreed to this condition and married her. One day, he left her near his own holy tank guarded by his disciples for taking his bath in a nearby river. Thus deserted by Agastya against his promise, she plunged into the holy tank and flowed from it as a river. When the disciples tried to stay her course, she went underground and appeared again at Bhaganda Kshetra and flowed on towards Valambari.

Regarding the origin of the river Cauvery, an account which differs slightly from the above is published in Volume IV of "Immortal India" by Shri J. H. Dave and it is reproduced here with the kind permission of Bharatiya Vidya Bhavan, Bombay :—

"Several legends are current about Kaveri. They are mainly recorded in the Agneya and Skanda Puranas. Agneya Purana records that in ancient times there was a king by name Kavera who performed severe penance. He propitiated Brahma, who told him that as King Kavera had to wait for some time to get liberated, he should better look after and keep as his ward Vishnu-Maya, the daughter of Brahma. The King did so. Vishnu Maya grew up at the house of the King and being a part incarnation of Vishnu, she also went to the Himalayas to perform penance. In the meantime, King Kavera was liberated as promised by Brahma. Vishnu-Maya propitiated Vishnu who asked her to assume two forms for the benefit of the people. In one form she was to become a river starting from the Sahya mountain. As she was the daughter of King Kavera, the river was called Kaveri. In her other form, this Vishnu-Maya was to become Lopamudra, the wife of Sage Agastya. At this time,

Agastya also was performing penance on the Himalayas. He was asked by Brahma to contact and get married to Lopamudra. Agastya came down to Vishnu-Maya who had assumed the form of Lopamudra and married her. After some time, Agastya came to know that there was scarcity of water in the south. So he asked Lopamudra to enter into his *kamandalu*, which she did, and he carried her to the south on the Sahyadri. On this portion of the mount, even Brahma used to perform penance; therefore the hill was known as Brahmagiri. At this place Vishnu had assumed the form of an *Amalaka* tree and Brahma had brought in his Shankha water from Kailasa from the Vraja river to worship Vishnu in his form of the *Amalaka* tree. This pure water from Kailasa was poured out by Brahma. At this time Agastya had placed his *kamandalu* on a big slab of stone and had gone for his bath. As God would have it, there were stormy winds, the *kamandalu* was overturned, and Vishnu-Maya, Lopamudra or Kaveri came out of it. Her waters mixed with the waters of Vraja brought by Brahma in his Shankha from Kailasa, and Kaveri thus became extremely holy. According to the version of Skanda purana, the Vindhya mount was competing with the sun. He grew taller and taller and thereby blocked the light and stood in the way of the sun and the stars. Ultimately Sage Agastya was requested to control Vindhya. Agastya agreed to do this and propitiated God Sankara. As desired by Agastya, God Sankara gave him the necessary power and also a continuous stream of water so that Agastya could perform his penance at any place. It is said that originally river Kaveri was flowing on the Kailasa mount but as ordered by God Siva, she entered the *kamandalu* of Agastya. Agastya came south from the Himalayas. On the way, Vindhya lay prostrated before this celebrated sage. The sage told him that as he wanted to go to the South with ease, Vindhya should not get up till Agastya came back. Vindhya obeyed and it is said that he is still lying low expecting Agastya to come back. Agastya came to the Sahya mountain and started performing penance. At that time one Asura named Surapadma had stopped all rains by his powers. Indra was worried and he requested Lord Ganesha to somehow see that there was plenty of water in the South. Ganesha assumed the form of a crow and over-turned the *kamandalu* of Agastya on the Sahya mountain and thus Kaveri started flowing.

On account of these legends, the source of Kaveri is also called *Amalakatirtha* or *Sankhatirtha*, because the waters of Kaveri mixed with those of Vraja coming out of the Shankha of Brahma when Brahma poured out water to worship Vishnu in the form of the *Amalaka* tree".

There are quite a few other legends about this very sacred river of the south, but suffice it to say that most of them are apocryphal, as is to be expected.

Its course.

The course of this river through Coorg is very tortuous, but below Bhagamandala, its current, with the exception of a few localities where it traverses beds of granite rock, is generally tranquil. Its banks which are high and steep are usually formed of rich clay or mud and covered with luxuriant tropical vegetation. The bed over which it flows differs in various places, being alternately sandy, pebbly or rocky, but the latter feature is predominant. In the dry season, it is fordable at almost all points, but there is always a good flow of water, in view of the vicinity of its source. During the monsoon, it rises to an impetuous torrent whose mud-stained waters roll with thundering velocity through its wide channel, floating down shrubs and trees from its crumbling banks and over-flowing for a few days the adjoining country. During these freshes, the level of the river rises steeply near Kushalnagar, where it is spanned by a good bridge, 315 feet in length.

The river takes a sudden turn to the north near Siddapur and flows for 25 miles along the eastern frontier of the district, being swollen in its course by several large tributaries. From the eminence of Tadiandamol, it receives the Kakkabe river. In Virajpetnad, it is joined by the Kadanur river; and in Yedenalknad by the Kummahole. The length of the river from its source to the point where it leaves the district is about fifty miles.

Hemavathi.

The other important rivers of the district which fall into the Cauvery beyond the district are the Hemavathi and the Lakshmanathirtha. The former rises near the Bhadra river in Chikmagalur district and after passing Manjarabad, it forms for a few miles the northern boundary of Coorg and joins the Cauvery in the Krishnarajanagar taluk of Mysore District near the village of Tippur.

Lakshmanathirtha.

The Lakshmanathirtha with its tributaries, the Ramathirtha and Kerehole, drains nearly the whole of the south-eastern part of Virajpet taluk. It rises in the Munikadu forest on the plateau of Devasibetta in the Brahmagiris, and in its descent over an almost perpendicular mountain wall forms a celebrated cataract, which has been invested with sin-cleansing virtue, and is consequently visited at the Irpu jatire by thousands of devotees. The banks of this river, like those of the Cauvery, are of clay or mud, steep, with a sandy bottom and shaded by dense forest or bamboo clumps.

Streams.

The Muttaremutta collects the waters of the southern slope of the Mercara ridge, and the Chikka-hole those of the valley near Suntikoppa and Chettalli villages. The Harangi or Suvarnavathi, with the Kakke-hole from Somwarpet, the Choran-hole from Shanthalli, the Mattapur and Hatti-hole from Kote-betta, drain the northern plateau of Coorg, and add an immense

bulk of water to the Cauvery. Almost every one of these mountain streams forms, in its descent over rocky beds, cascades of great beauty. One near Mercara, the Abbi Fall, is much admired and frequently visited by picnic parties.

The most important of the rivers that flow to the west is the **Barapole.** It rises with the Lakshmanathirtha and Papanashini on the same plateau of the Brahmagiri hills and flows for several miles in almost a straight line, through a deep mountain gorge, where it is joined by a tributary that falls over a perpendicular rock of great height, and forms a beautiful cascade. Near the Kerala frontier, the Barapole leaps into a deep chasm, and forms a water-fall that, with the wild forest scenery around, is remarkably picturesque. Then, for two miles, this river runs along the Coorg frontier, up to the point where the Kalla-hole, descending through the Heggala pass, unites with it, and the combined stream enters Malabar and empties near Chirakal into the sea. The Barapole receives the rainfall of about 192 square miles, and is navigable from the sea to within 16 miles of the foot of the ghats. On the road to Cannanore, it is spanned by several bridges.

The next stream of importance that flows west is the **Najikal,** which drains the Sampaje valley, and follows the main road as far as Sulya, when it turns to the west, receives a tributary that originates on the western slopes of the Todikana pass and Talakaveri, and falls under the name of Basavani river into the sea near Kasargod.

The **Kumaradhari** rises near the Subrahmanya Hill and carries off but little of the Coorg waters. For some distance it forms the northern boundary along the Bisle pass. A number of tributaries from north and south swell its waters, the largest of them being the Netravati which joins it near the village of Uppinangadi and thenceforth gives its own name to the rest of its course and meets the sea near Mangalore. The Netravati is of considerable commercial value. Boats of large size are safely carried from Mangalore as far as Bantwal and Panemangalore and smaller craft can proceed even beyond Uppinangadi.

Throughout Coorg, there is not a lake or tank of any size worth mentioning. Only in Virajpet taluk are there a few natural **Lakes, Tanks, Wells.** reservoirs, called Kolli, enclosed by belts of small trees and containing water all the year round. A tank, three miles north of Somwarpet, is notable for its picturesque scenery. The stone inscription on the western outlet of the tank reads: "The King Andany has ordered this tank to be built on Tuesday, the tenth day of the month of Phalguna in the year Parthiva. This was written by Venkadasya Mallia Bomarasia at the time of Basawalinga Deva Raja Vodea". There is also a legend connected with

this tank. A merchant, Malla Shetti of Yelusaviraseeme, built this tank. But no water was forthcoming. Animal sacrifices were offered at the suggestion of the tank-diggers, but still there was no water. Goddess Ganga appeared in his dream and demanded his little finger. He was not willing to make this sacrifice and instead offered the life of his daughter-in-law, Akkony, whose husband was away at that time. As she stepped into the tank, Goddess Ganga made her appearance in the rushing water and Akkony disappeared in the rising water. She appeared in a dream to her husband and told him what had happened. He returned home, killed his parents and threw himself into the tank with his child in his arms.

Besides the small public tanks, there are only private wells that everywhere yield, if dug deep enough, sweet and clear water. There are a number of springs in all valleys which irrigate a considerable acreage in Coorg. However, the flow will be almost negligible from November to June.

Geology.

Systematic geological mapping and mineral survey of the district as a unit have not so far been conducted and no account of the geology has been published so far. But selected portions of the area have been mapped during recent years and there are a few unpublished reports by the officers of the Geological Survey of India. The information in respect of the recent surveys conducted in the district has been incorporated suitably in this section.

Sequence of rock formations.

The various rock formations excepting soils, alluvium and laterite, coming under Recent and Sub-recent deposits, occurring in the area, belong to the most ancient Archaean system. The sequence of the geological formations occurring in the district is as follows:—

Recent and Sub-recent.	{	Soils, alluvium and laterite
Intrusives	{	Dolerite dykes Quartz Veins and Pegmatites Charnockites Granites and granitic gneisses
Dharwars	{	Garnetiferous biotite Sillimanite gneisses Garnetiferous kyanite gneisses Schists and amphibolites, etc.

Dharwars.

These consist of the older metamorphic rocks and they are represented by thinly foliated garnetiferous kyanite-mica schists,

bands and lenticles of amphibolites, hornblende schists and quartz haematite schists. The strike varies from N.W.—S.E. to N.N.W.—S.S.E. with dip S.W.

Garnetiferous-biotite-sillimanite gneisses and garnetiferous kyanite gneisses form the major rock formations in the area. They are coarse to medium-grained and light in colour. The strike of the rock formations is N.W.-S.E. (almost parallel to the direction of the Western Ghats) and the dip ranges from 60° to 70° south-west. The gneisses are composed of quartz, feldspar, biotite, hornblende and kyanite or sillimanite with some other accessory minerals, such as apatite, magnetite, sphene and garnet.

The granites and granitic gneisses occur over extensive areas striking in a N.W.—S.E. direction with 50° to 60° dip south-west. The granites are exposed as massive and rounded boulders. They are coarse to medium-grained, grey to pink, and consist chiefly of quartz, feldspar and biotite with accessory minerals. The granitic gneisses occur intermixed with granites and show at places needles of sillimanite in the biotite-rich zones.

**Granites and
Granitic
Gneisses.**

Charnockites occur flanking the Dharwars on both sides trending in N.N.W.-S.S.E. to N.W.-S.E. directions with dip varying from 50° to 80° south-west. They are exposed prominently to the S.S.W. of Virajpet, S.W. of Napoklu, around Votekolli and in the Harangi and Cauvery river basins. They are mostly dark-coloured, coarse-grained and compact; acidic to basic in composition with variations to intermediate types. They show rough banding on the weathered surfaces. They are almost entirely made up of feldspar, hypersthene, hornblende, and often diopside with accessory minerals like apatite, garnet and magnetite.

Charnockites.

The granitic area is traversed by numerous thin veins of quartz and pegmatites, particularly along the eastern and southern margins of Coorg district. The pegmatite veins are composed essentially of quartz and feldspar with poor concentrations of mica and other accessories.

**Quartz Veins
and
Pegmatites.**

Dolerite dykes occur as detached boulders intruding the granites at places. They are hard and compact and show typical ophitic texture under the microscope with plates of augite, twinned feldspar laths and other minor accessories.

**Dolerite
dykes.**

The flat portions of the district are covered by a thick mantle of soil, while the elevated portions are capped with laterite. The river sections contain varying proportion of sand, silt and gravel of all sizes and varieties.

**Recent and
Sub-recent
Deposits.**

Mineral deposits.

Coorg district should be considered as poor in economic mineral deposits, though there are some occurrences of mica, kyanite, iron ore and clay of minor importance. However, the information on the occurrence of minerals in the district is furnished below.

Mica.

The mica, though limited in extent and distribution, occurs at (1) about half a mile south-east of Kushalnagar, (2) about two miles west of Mercara, and (3) near Marenad and Parakata-geri in Srimangalanad. Mica occurs sporadically in pegmatitic veins in small books of four by two inches to two by one inch. It is heavily stained and cracked.

Kyanite.

Kyanite, in the form of small knots, lenticles and concentrations occurs in the gneiss, (1) on the eastern slopes and western flanks of the mound near Katakari village, about three miles S.S.W. of Mercara, (2) along the ridges and hill tops about a mile west of the Mercara-Siddapur Road, (3) on the tops of the hillocks to the S.E. of Siddapur, and (4) on the eastern flanks of the hill about two miles N.W. of Siddapur.

Building and Road Materials.

The granites, gneisses and charnockites form excellent material for building purposes and for use as road ballast. The pink porphyritic granites are good for building and decorative purposes, after polishing.

Forests.

The area of Reserve forests in Coorg district is 3,30,240 acres. This does not include the area under Paisaries, Devarakadus, Uruduves and privately owned lands under the unredeemed and redeemed tenures.

Reserved forests are those directly under the management of the Forest Department.

Paisaries are the village forests managed by the Revenue Department. In old Mysore, these are called district forests.

Devarakadus are forests under the dual management of the Forest and Revenue Departments. They are sacred forests usually assigned to some particular deity or temple. The right to take firewood for temple worship, materials for constructing pandals and (with special permission) timber for repairing the temple, are allowed to the temple authorities and servants, while the villagers generally have the rights of way and water, of grazing and of hunting, especially during the Keil Muhurta and Huttari festivals.

Uruduves are Government lands under the management of the Revenue Department. In the north-eastern part of Coorg, where no *banes* were allotted, the raiyats are allowed to graze their

cattle in and take firewood and timber for agricultural purposes from communal lands which are known as Uruduves or village forests.

Redeemed lands are those in the possession of private individuals who have paid to Government both land value and timber value at the time of assignment.

Unredeemed lands are also those in the possession of private individuals but who have not paid to Government the value for timber in the lands and the Government has the right to the timber growth in the land.

The flora of Coorg is similar to that of other areas in **Flora.** Southern India. Looking upon Coorg with the eye of the forester, rather than that of the general botanist, the most superficial survey will not fail to discover invaluable treasures of timber trees and their produce, scattered all over the district. There are two distinct tracts in the district with trees peculiar to them. The forests in Coorg are called by the people as Male-kadu or hill forests and Kanive-kadu or hillock jungles. Botanically, they can be called as evergreen and deciduous forests, the former clothing the high ghats and the latter the eastern hill tracts.

The principal timber species found in the evergreen forests of Coorg are the Agil (*Dysoxylum malabaricum*), Aini, Heb-halsu (*Artocarpus hirsuta*), Krupu, Kiral boghi (*Hopea parviflora*), Kalpaini (*Dipterocarpus indicus*), Chonapaini, Yenne-mara (*Hardwickia pinnata*), Velthapaini, Dupa (*Vateria indica*), Pali (*Palaquium ellipticum*), Poon, Kuve (*Calophyllum tomentosum*), Ebony (*Diospyros ebenum*), Noga, Gandagarige (*Cedrela toona*), Irulu (*Xylia xylocarpa*), Nandi (*Lagerstroemia lanceolata*), Honne (*Pterocarpus marsupium*), Teak (*Tectona grandis*), Biti (*Dalbergia latifolia*), Jack (*Artocarpus integrifolia*), Atha, Naga Sampage (*Mesua ferrea*), Mango (*Mangifera indica*), Belangi (*Acrocarpus fraxinifolius*), Pandapaini, Halmaddi (*Canarium strictum*), Mathi (*Terminalia tomentosa*), Uluve, Huluve (*Terminalia paniculata*), Nerale (*Eugenia jambolana*), Buruga (*Bombax malabaricum*), Pale, Jantala (*Alstonia scholaris*), Neerventeak, Challa (*Lagerstroemia Flos-Reginæ*), Arsinatega (*Adina cordifolia*), Chattuvamara (*Evodia roxburghiana*) and Sampige (*Michelia champaca*).

Species of secondary importance found in this region are the Perumara, Kat-Kumbala (*Trewia nudiflora*), Palmani (*Lophopetalum wightianum*), Karpamara, Lavangapattemara (*Cinnamomum zeylanicum*), Gerumara (*Holigarna species*), Cheeni (*Tetrameles nudiflora*), Kadapara (*Ficus nervosa*), Maleambatte, Amate (*Spondias mangifera*), Kotta (*Sterculia alata*), Choremara (*Hyristica species*), Bage (*Albizzia species*), Kunhiwage (*Albizzia*

species), Kariagil (*Veperia bilocularia*), Kakechapaya (*Polythia fragrans*), Mullilam, Jimmi-mara (Chunde), (*Zanthoxylon Rhetsa*), Kalbenteak, Tottila (*Aglaia Roxburghiana*), Aranji, Jajhugri (*Antiaris toxicaria*), Thari (*Terminalia belerica*), Bollurupu (*Eugenia gardneri*), Neeli (*Bischofia javanica*), Bangana (*Caralia integerrima*), Palapannumara (*Chrysophyllum roxburghii*), IbrahimDunne (*Dillenia pentagyna*), Kungepannumara (*Elæocarpus tuberculatus*), Panapuli (*Garcina gambogii*), Karthachoote (*Diospyres nilagirica*), Yeeyamara (*Strombosia ceylanica*), Kulumavu (*Machilus macrantha*), Adakapaini (*Vatica roxburghiana*), Kankarakaimara (*Strychnas nuxvicia*), Nai irupu (*Hopea wightiana*) and Koomathi (*Nephelium longana*).

The species commonly found in the eastern forests are the Adale (*Olea dieica*), Alale (*Terminalia chebula*), Ambatte (*Spondias acuminata*), Aralimara (*Ficus religiosa*), Arasinatega (*Adina cordifolia*), Asargane (*Dalbergia paniculata*), Bage (*Albizza lebbek*), Basri (*Ficus species*), Basavanapada (*Bauhinia species*), Bende (*Kyadia calycina*), Bilwara (*Alizzin odoratissima*), Biti (*Dalbergia latifolia*), Burga (*Bombax malabaricum*), Chennangi (*Lagerstroemia parviflora*), Dindiga (*Anogeissus latifolia*), Doddi (*Hymenodictyon excelsum*), Sri-gandha (*Santalum album*), Gantemara (*Scheebora swietenoides*), Garukulu (*Ciltis australis*), Geru (*Semecarpus Anacardium*), Udi, Godda (*Odina wodier*), Gojimara (*Bridelia retusa*), Hale-mara (*Wrightia tinctoria*), Hebbevu (*Milia dubia*), Honne (*Pterocarpus marsupium*), Hulichellu (*Mallotus philippinensis*), Ippe (*Bassia longifolia*), Irupu, Kiral bhogi (*Hopea parviflora*), Jagalaganti (*Diospyros montana*), Jala (*Shorea laccifera*), Kadiala (*Stephegyne parvifolia*), Kadutega (*Dillenia pentagyna*), Kakke (*Cassia fistula*), Karadi, Dal-mara (*Chickrassia tabularis*), Kilungi (*Casearia tomentosa*), Tigdu (*Oroxylum indicum*), Kuli (*Gmelina arborea*), Kulumavu, Chittutandrimara (*Machilus macarantha*), Malali, Padri (*Stereospermum chelonoides*), Matti (*Terminalia tomentosa*), Mavu (*Mangifera indica*), Mukurthi (*Elæodendron giaucum*), Murkalu (*Buchanania latifolia*), Nandi (*Lagerstroemia lanceolata*), Nasremara (*Saccopetalum tomentosum*), Navladi (*Vitex altissima*), Neeli, Gobranairul (*Bischofia javanica*), Neernokki, Niranji (*Salix tetrasperma*), Nelli (*Phyllanthus emblica*), Nelagodda (*Garuga pinnata*), Nerale (*Eugenia jambolana*), Noga (*Cedrela toona*), Padri (*Stereospermum suaveolens*), Sagade (*Scheleichera trijuga*), Sampige (*Michelia champaca*), Sollemara (*Cordia myxa*), Tega (*Tectona grandis*), Thaedrali (*Linociera malabarica*), Thadasalu (*Grewia tiliaefolia*), Tari (*Terminalia belerica*), Thupru (*Disphrose tomentosa*), Udi, Konanakombu-mara (*Stereospermum xylocarpum*), and Huluve (*Terminalia paniculata*).

There are large clumps of bamboos in the eastern part of Coorg. Minor forest produce of the district consists of tamarind,

myrobalam, soapnut, tanning barks, horns, bees wax, honey, gums, honge seeds, lichens and nux-vomica.

The picturesque scenery which the dense forests and the bamboo clusters once presented have somewhat been marred on account of the indiscriminate felling of the trees and bamboos. The Coorg Forest Department which was organised about the year 1865 and designated as the "Forest Conservancy Department" took up the extraction of all saleable trees of superior species in accessible localities so as to make as much revenue as possible. However, the most interior portions of the forests of the Nalkeri Reserve were preserved. The work of forest preservation was started in the district in 1871 and the Forest Rules were introduced. The issue of licences to exploit timber which was in vogue from the time of the Coorg Rajas was stopped. In order to prevent indiscriminate felling of timber in the forests, a working plan of selection-*cum*-improvement fellings was first prepared in 1886. Only good saleable timbers were cut but no attention was paid for the future crop. Dissatisfied with this system and its injurious results, Mr. Tireman prepared a new working plan in 1912, later modified by Mr. Brand in 1925, according to which felling was followed by artificial regeneration with teak. Another working plan which was a fifteen-year plan drawn up by Mr. Rangaswamy was introduced in 1940. The main object of all these plans was to preserve the forest wealth and to prevent indiscriminate felling and to raise plantations with valuable species in rotation in the area cleared by the felling of the trees. After the introduction of the working plan, the economic position of the district improved and the forest revenue of the district has been improving steadily. The forest revenue during the period 1958 to 1961 is given below :—

<i>Year</i>	<i>Revenue from timber.</i>	<i>Total Revenue</i>
	<i>Rs.</i>	<i>Rs.</i>
1958-59	62,11,795	76,74,713
1959-60	67,15,097	78,02,005
1960-61	77,42,932	94,80,122

Rosewood of a fine quality is being exported from this district to Italy and other European countries, while soft wood is sent to the plywood factories at Hunsur, Cochin and Calicut and to the match factory at Madras.

Among the gifts of nature, fauna occupies a unique position. **Fauna.** The beasts and the birds of the jungle were once looked upon by many as a mere source of food. With the progress of civilization and the development of finer instincts, man began to look upon the grandeur of nature as a source of inspiration and pleasure.

He did not look upon the wild animals merely as a source of meat but as something having an æsthetic value. Every species in nature has its own role to play, which may not be quite obvious to the casual observer. The fauna differs from region to region depending upon location and climatic condition. The fauna of Coorg district is not very different from that of the adjoining districts but, on account of the shelter the hills and thick jungles of Coorg offer and the availability of plenty of drinking water, their number in the district is larger.

The whole of Coorg is rich in fauna because of the dense forests and evergreen valleys. It is rather peculiar that in Coorg beasts of prey wander away to adjoining tracts during heavy monsoons. Except small animals, the bigger type do not stay in the forests from June to September. The big game-hunter looks to the day when the south-west monsoon gets terminated and then he has a spectacle of variegated faunistic grandeur in all the forest regions. The bigger beasts of prey are found in the regions where there are streams, and the topography is not too steep or precipitous as in the case of the extreme west. The northern, eastern and southern regions are full of all kinds of animals.

There are three kinds of monkeys in the district, the black, the grey and the brown. The black monkey is of small size and has greyish whiskers, chest and belly. It is found in the ghat forests. The grey or Hanuman monkey is found in open country as well as in the neighbourhood of dwellings. It is larger than the black monkey in size with a long tail and its face is bare and rather reddish. The brown monkey, also found in the ghat forests, has a long tail and a light grey face and chest. When fully grown, it is about two feet high in a sitting posture.

Among the canine family in Coorg, the wild dog, locally called Kennai, is prominent. Outwardly, there is not much difference between this and the wolf. Those who are particularly interested in big game consider the wild dog as possessing remarkable strength. It is reddish brown in colour and when it barks it closely imitates the pariah dog. The wild dog does not go about singly. Packs of ten to twenty roam about the forest and are a terror to all beasts in the forests including the tiger. Their mode of attack is at once ferocious and final. They seize the prey from behind or in front and gouge the eyes of the enemy. Afterwards they suck the blood till the enemy is annihilated.

The mongoose (*Viverra Mung*) lives mostly in agricultural fields, running from one plot to another. This is a slender, elongated species, a friend of the poultry in the homesteads of agriculturists. The mongoose is known to destroy snakes.

Being a wild forest region, mice and rats are plentiful in Coorg. Besides the domestic rodents, there are many field rodents of which the musk rat is familiar. This rodent gives a piercing shriek when it meets adversaries. The bamboo rat is a nuisance to coffee plantations. When it wants food, the bamboo rat attacks the coffee shrub, eating the tender shoots. The field rat of a brownish colour is a pest to the paddy fields. It searches after granaries and carries away what it can get.

The bandicoot (Heggana) is known for its burrowing habits and lives near houses where it causes destruction.

Among squirrels, there are some well-known species. The *Tamias Striatus* is quite common in the warmer regions in the east of Coorg. This is a pretty, tiny creature with a fine tail. The grey squirrel is larger than the *Tamias Striatus* and lives on trees. The red squirrel is a lively creature known for its wild habitation. The Kurubas catch these creatures in plenty. The grey flying squirrel or flying cat is yet another species. Its home is in the holes of trees and it lives entirely on fruit. Though it cannot actually fly, it takes leaps. The common hare (Mola) is found all over. Some classes eat its flesh with relish.

There are tortoises belonging to the reptile class found mostly in paddy fields and small tanks. The shell is long and broad but of a bony nature. The common lizards, blood-suckers and chameleons are found all over. Crocodiles (Mosale) are sometimes seen in the river Cauvery, when it forms itself into pools.

It is natural to expect that in a district like Coorg, full of forests and hills, mortality from reptiles and wild animals would be heavy but it is surprisingly low. According to police reports, deaths due to wild beasts were only two in 1959, none in 1960 one in 1961, three in 1962 and two in 1963 and no case of snake-bite was reported in any of these years, though wild animals and poisonous snakes are found in large numbers in the Coorg forests. Perhaps, this is due to the precautionary measures taken by the people when frequenting forests.

Of the bigger beasts of prey, the tiger is found in all the jungles of Coorg. The number of these animals is not known but forest experts say that there are many in the spurs of the Western Ghats and in the vicinity of villages. It is a balance of nature that where there is a conglomeration of spotted deer, there the tigers have an assured habitation. When they do not find the spotted deer, they migrate to villages where they can kill cattle. The shooting of tigers is not commonly allowed, except when they become dangerous to human beings, or if they ravage the countryside. Special licences are issued in such cases to shoot tigers. In the old days when the area was under the sway of the

Rajas, tiger hunts were an annual event. Linga Raja, it is told, killed in one hunt as many tigers as the number of days in the year. It may be surmised from this that tigers were numerous in the old days. But their number was depleted as years went by because of the growth of towns and villages. The animals have migrated to denser jungle areas. The height of a tiger in Coorg varies from three to four feet and its length from six to nine feet. The lesser beast of prey coming under the tiger class is the panther (Kiruba) which is found all over Coorg. The panther is a wily animal, and attacks only at night. It is two and a half to three feet in height and has a length of four feet. The panther belongs to the leopard species but is smaller in size.

The tiger-cat (Huli-bekku) is yet another animal found in the vicinity of villages. This animal is bigger than the ordinary cat and because of the similarity of spots, it is often mistaken for tiger.

Wild boars (Kadu-handi) are found in all the jungles of Coorg and go about damaging paddy fields. They are driven out by buck shots or through shouted sounds.

The black bears (Karadi) are not many in number but are noticed in the vicinity of the Pushpagiri hills. The hyena (Katte-Kiruba) is not found in the district. There are porcupines (Mullu-handi) in the jungles.

The civet cat (Punugu-bekku) is also found in Coorg.

Among the varieties of bats, the flying bat (Bavutiga) and the wild bat are common all over.

Of the non-carnivorous type, the elephant is found in Nagarhole and Tithimathi forest ranges and on the borders of Wynad. In the North Coorg area, the elephants are found near about the Kushalnagar forest range and also near Somwarpet. The elephants in Coorg roam about the area only in summer and, with the advent of the monsoon, they go away to the Kakankote and Biligirirangan ranges. They live in a wild state and roam about in bamboo jungles. According to the Elephant Shooting Rules in force, no elephant should be shot except with a special licence obtained from Government. Preservation of wild elephants is also in vogue in the district as per the Elephant Preservation Act, 1879.

The bison, called familiarly Kati in the Kannada language, is common in reserve forests throughout the year. It is also found in the denser jungles. The bison is a ferocious animal when alarmed or when attacked.

Sambur, spotted deer and barking deer are very common in the forests of Coorg. The barking deer has small spots all over the body. The mouse-deer are also found and these look like dogs.

In the reptile class, the most common is the cobra. In the dense jungles, the king cobra is also found. The krait and the python exist all over the forest area.

In the field of ornithology, Coorg is unsurpassed. After the monsoon, the birds dressed in fine plumage arrive in their thousands. Among the birds of prey are the soaring vultures and the eagles which are found in the jungles. The kite is a common bird in Coorg. The perchers prey upon insects. The Malabar trogon with its splendid plumage is lovely to look at. It is commonly seen near about coffee estates. The king-fishers are another variety seen all over. Parrots are numerous, especially in the bamboo jungles. They are remarkable for their beautiful colours. The wood-peckers are also common. The cuckoo family is represented by the black cuckoo and the red-winged crested cuckoo. The Niligiri black-bird is called in Coorg as Bhima-raja or the Coorg nightingale. The bulbul is found throughout the year. The common crow is not so common in Coorg as in other parts. Mynahs are to be found all over the area as also any number of larks. Peacocks are found in the bamboo jungles.

With the close of the rainy season, the insect world dominates the sunny period. The beetles are in variety everywhere. These beetles appear in swarms but they are not migratory. The honey-bee is a welcome asset in Coorg as it gives honey and a thriving industry has been started. Wasps and hornets are a menace in forests. The butter-flies and moths present a splendid spectacle all over Coorg. Spiders are common in the jungles. Scorpions of the greenish black variety are met with in damp areas. There are several kinds of crabs. The leeches, called jigini, are active during the monsoon months and those who frequent the forests know their nuisance value.

The forests in Coorg are, for purposes of shooting, divided into nine blocks; they are (1) Malambi Reserved Forest Block, including the Reserved forest of Katteपुरa and Gangawara, (2) Yadavanad Reserved Forest Block including the Reserved forests of Nidtha and Jainkalbetta, (3) Anekad Reserved Forest Block including the Reserved forest of Atthur, (4) Dubare Reserved Forest Block, (5) Brahmagiri Ghat Reserved Forest Block, (6) Kerti Reserved Forest Block including the Reserved Forest of Urti Block, (7) Padinalknad Reserved Forest Block, (8) Pattighat Reserved Forest Block and (9) Kadamakal Reserved Forest Block. Licences are issued only for one shooting block at a time. There is also one more block known as the Devamachi

**Shooting
Blocks.**

Reserved Forest block including the Reserved Forest of Murkal. It comes under the Nagarhole Game Sanctuary where shooting is strictly prohibited.

Game Laws.

A set of rules for the control of hunting, shooting and fishing in the reserved forests, except in the areas declared as Game Sanctuary, were framed and issued in July 1955 by the Chief Commissioner of Coorg when it was a Part 'C' State. There is, however, a proviso in the rules that shooting of tigers may be allowed in the areas comprising the Game Sanctuary under a special licence. These rules give an idea of the various kinds of animals, birds, etc., that are to be found in the district and the steps taken to protect them from indiscriminate shooting. According to these rules, the poisoning or dynamiting of rivers or other waters is absolutely prohibited. No person can claim a shooting licence as a matter of right. The fee for a block is Rs. 30 for fifteen days which shall be from 1st to 15th or from 16th to the end of the month. In addition to the fee, the applicant has to deposit with the Conservator of Forests, a sum of Rs. 100 which should be claimed within three months from the date of surrender of the shooting licence, failing which it will lapse to Government. The licence is issued to a person for only one shooting block at a time and it is valid for fifteen days. Normally, not more than one licence is issued to any individual during the year. No person who has been given a shooting licence for any block is given a licence for the same block again, if there are persons who have applied previously and are on the waiting list. The licence is not transferable and the licensee will not be allowed to take with him more than one attendant who should not carry any gun or shoot. In order to help the licensee and also to watch the Government interests, a forest guard is deputed to accompany every licensee. The pay and travelling allowances for the period for which the forest guard is deputed, will have to be met by the licensee and will be deducted from his security deposit. The licence should be shown on demand.

Whenever any animal is shot, the licensee should report the fact to the Conservator of Forests within three days and to the Territorial Ranger within twenty-four hours giving information as to when and where the animal was shot. Trophies should be produced for inspection whenever required by the Territorial Ranger. On the expiry of the currency of the licence or when the licensee finally leaves the shooting block, it should be surrendered immediately to the Conservator either in person or by registered post with a statement of what has been shot.

**Close
Seasons.**

Certain periods in the year have been declared as close seasons during which no bird or animal should be shot. There are different close seasons for different species and they are given below :—

*Species**Close Season*

All birds except green pigeon	..	1st March to 31st August
Green Pigeon	..	1st March to 31st July
Duck, Teal and other migratory birds		1st May to 30th September
Mouse-deer	..	15th June to 15th October
All Big Game	..	15th June to 15th October

There is no close season for carnivora (tiger, panther and bear) and vermin.

There is a limit as regards the number of animals that can be shot in any one calendar year by a licensee, irrespective of the number of licences taken by him. **Restrictions**

There is no limit in the case of jungle-fowl, spurfowl, partridge, quail, pigeon, duck, teal, snipe, plover, and wild-dog.

The shooting of parrots, birds of song and bright plumage, Malabar squirrel, the female and immature males of bison, chital (spotted-deer), sambur, antelope and barking deer, and female tiger followed by young cubs unless it is declared as a cattle lifter, is totally prohibited.

The shooting of animals defined as big game as well as shooting of tigers, panthers and bears with shot of slug is prohibited. Only high velocity rifle should be used for shooting bison.

Removal of birds' eggs, setting of sets, snares, traps or spring guns, the use of poison and explosive or the digging of pits to entrap or kill game, shooting of any game other than tiger, panther, bear, wild pig and porcupine at any water hole, salt lick, from a machan or shelter, or by the aid of artificial light or from any motor vehicle or after 6 P.M. and before clear dawn are prohibited. Capturing of birds of song or of bright plumage or any living animal is prohibited. Selling of meat obtained from any game and also export or import of meat obtained from any game from or to places outside Coorg is also prohibited. Beating for any game except with the written permission of the Conservator of Forests is also prohibited.

In order to enlist the co-operation of the people in the preservation of wild life and to afford facilities to the people to see and study wild life in their natural surroundings, a game sanctuary known as the Nagarhole Game Sanctuary was established in July 1955. It is 38 miles from Virajpet and comprises about 111 sq. miles of reserved forests in the south-eastern region of Coorg district, out of which an area of five square miles constitutes the sanctum sanctorum. The game sanctuary extends over three forest ranges, namely, Nagarhole, Kalhalla and Tithimathi ranges. It adjoins the State forests of Mysore district **Game Sanctuary.**

along its eastern and south-eastern boundaries and a portion of Wynad forests of Kerala State in the south.

The entire area of the sanctuary is more or less a plateau with a general elevation of 2,500 feet above mean sea level. This region has magnificent forests wherein most of the important South Indian timber species occur. There is also a large area, nearly 14,000 acres in extent, of teak plantations in this region, the oldest being the 1868 teak plantation at Karmad. A characteristic plant of these jungles is bamboo.

The sanctuary exhibits varied fauna consisting of elephants, bisons, tigers, panthers, bears, spotted-deer, barking-deer, wild pigs and porcupines. Spotted deer and sambar are particularly abundant and bucks with large horns are frequently met with. The elephant camp of the Forest Department, particularly the Hebbala elephant camp on the banks of the Lakshmanathirtha river, is another attraction to the visitors.

The sanctuary has motorable roads and rest houses at frequent intervals, which enable the tourists to visit every corner of the sanctuary without difficulty. There are convenient rest houses at Nagarthole, Kalhalli, Murkal and Tithimathi.

The climate of this district, a good portion of which lies on the Western Ghats and the rest in the plateau region to the east of the Western Ghats, is characterised by high humidity, heavy rainfall, particularly on the ghats and neighbourhood and a cool, equable and pleasant climate. The year may be divided into four seasons. The summer season from March to May is followed by the south-west monsoon season from June to September. October and November constitute the post-monsoon season. The period from December to February is the season of generally clear bright weather.

The district has a network of 22 rain-gauge stations with records ranging from 26 to 80 years. A statement of the rainfall at these stations and another for the district as a whole are given in tables 1 and 2 appended at the end of this Chapter. The average annual rainfall in the district is 2725.5 mm. (107.30"), excluding the rainfall at Mercara and Ammathi which are hill stations. The rainfall in the district decreases from the west towards the east. On account of the nature of the terrain which consists of hills and valleys, the variation in the rainfall within the district is considerable. The annual rainfall at Bhagamandala in the Western Ghats region is 6032.3 mm. (237.50") while at Kushalnagar on the eastern border of the district it is only 1120.0 mm. (44.10"). June, July and August are the months with heavy rainfall and rainfall in July is the heaviest. The rainfall during the south-west monsoon period is about 80 per cent of the annual rain-

Rainfall.

Climate.

fall. Some rainfall, mostly in the form of thundershowers, occurs during April, May and October. The variation in the annual rainfall from year to year is not large. During the fifty-year period, 1901 to 1950, the highest rainfall amounting to 142 per cent of the normal occurred in 1924 while the lowest rainfall which was only 62 per cent of the normal occurred in 1905. Rainfall, less than 80 per cent of the normal, occurred in five years, out of which three years were consecutive. Considering the rainfall at the individual stations, at twelve out of the 22 stations, annual rainfall of less than 80 per cent of the normal in two consecutive years occurred once or twice. It will be seen from table 2 that in 40 years out of fifty, the annual rainfall in the district was between 2200 and 3200 mm. (86.61" and 125.98").

On an average, there are 118 rainy days (*i.e.*, days with rain of 2.5 mm. - 10 cents - or more) in a year in the district. This number varies from 85 at Kushalnagar to 153 at Pullingoth.

The heaviest rainfall in 24 hours recorded at any station in the district was 842.0 mm. (33.15") at Bhagamandala on 25th July 1924.

The only meteorological observatory in the district is at Mercara. The records of this observatory can be taken as representative of the meteorological conditions in the district in general. But at lower elevations in the eastern part of the district, temperatures may be a little higher than those at Mercara. Temperatures begin to increase from March till April which is the hottest month with the mean daily maximum temperature at 28.6°C (83.5°F) and a mean daily minimum at 17.8°C (64.0°F). On individual days, the day temperatures may go up to 34 or 35°C (93.2 or 95.0°F) during April and May. With the commencement of the south-west monsoon in June, there is an appreciable drop in day temperatures, but the drop in night temperatures is only slight. With the close of the monsoon season towards the end of September, there is a slight increase in day temperatures. While the day temperatures in the next four months are nearly the same as in October, the nights become progressively cooler. The mean daily minimum temperature is the least in January when it is 14.0°C (57.2°F). But during the period, December to February, the minimum temperature may go down to about 9°C (48.2°F) on some days.

The highest maximum temperature recorded at Mercara was 35.0°C (95.0°F) on 11th May 1902, and the lowest minimum temperature was 8.9°C (48.0°F) on 20th February 1936.

In general, the air is highly humid all through the year and particularly so during the monsoon months. The period from

January to March is the driest part of the year when the afternoon relative humidities are on the average of about 55 per cent.

Cloudiness

Skies are heavily clouded or overcast in the monsoon season. During the rest of the year, skies are lightly to moderately clouded.

Winds.

The winds are light to moderate with some strengthening during the south-west monsoon months. Winds blow mainly from directions between the south-west and north-west during the south-west monsoon season. In the post-monsoon season, winds are mainly north-easterly or easterly but on some days north-westerly winds blow in the afternoons. During the rest of the year, winds blow from directions between north and east in the mornings and between south-west and north-west in the afternoons.

**Special
Weather
Phenomena.**

During the post-monsoon months of October and November, some of the storms and depressions which originate in the Bay of Bengal cross the east coast of the peninsula and move westwards emerging later into the Arabian Sea. These affect the district and its neighbourhood causing widespread heavy rain and high winds. Thunderstorms occur on about six or seven days during April, May and October, and on about two or three days in March and November.

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

CHAPTER I—TABLES.

TABLE 1.
Normals and Extremes of Rainfall.

Station	No. of years of data	January	February	March	April	May	June	July	August	September	October	November	December	Annual	Highest annual rainfall as percent of normal and year**	Lowest annual rain- fall as percent of normal and year**	Heaviest rainfall in 24 hours* Amount (mm) Date
Virajpet	.. 50 a	4.6	7.1	17.5	67.8	154.4	572.8	892.6	435.6	203.2	212.3	84.8	19.1	2671.8	161 (1923)	73 366.5 (1928)	1926 Jul. 7
Kushalnagar	.. 50 b	0.5	0.5	1.5	4.9	8.6	21.5	26.4	22.3	15.4	12.8	5.8	1.4	121.6	140 (1946)	63 160.5 (1938)	1948 Jul. 9
Somwarpet	.. 50 a	5.8	5.6	14.7	67.3	139.9	143.5	248.7	142.2	89.4	165.9	78.2	18.8	1120.0	145 (1923)	69 237.4 (1918)	1924 Jul. 18
Napoklu	.. 50 b	0.4	0.5	1.1	5.1	8.6	12.5	19.1	13.2	8.3	9.9	5.1	1.1	84.9	156 (1923)	72 323.3 (1918)	1924 Jul. 17
	.. 50 a	5.6	5.6	12.9	62.0	110.7	323.9	774.9	436.1	170.9	168.4	83.1	21.1	2175.2	156 (1923)	72 323.3 (1918)	1924 Jul. 17
	.. 50 b	0.6	0.4	1.0	4.9	7.6	18.3	24.9	21.7	12.6	11.0	5.5	1.4	109.9	142 (1923)	76 264.4 (1918)	1924 Jul. 15
Sanivarasanthe	.. 50 a	10.7	10.9	47.7	135.4	168.7	561.6	1058.4	386.1	147.8	166.4	76.5	18.3	1883.7	151 (1924)	72 303.5 (1918)	1924 Jul. 25
	.. 50 b	0.8	0.8	3.2	8.4	10.0	21.7	26.6	21.8	12.1	10.2	5.2	1.0	105.2	163 (1924)	72 842.0 (1944)	1924 Jul. 25
Ponnampet	.. 44 a	4.3	4.6	15.7	55.4	107.4	271.8	629.4	412.7	195.1	170.9	74.9	14.7	2421.8	132 (1946)	70 222.5 (1944)	1924 Jul. 16
	.. 44 b	0.4	0.4	1.0	4.1	6.9	16.8	25.3	28.3	21.4	17.0	7.7	1.6	151.6	130 (1936)	74 272.0 (1945)	1941 Jun. 9
Bhagamandala	.. 44 a	4.1	3.1	15.0	72.1	138.7	497.8	822.7	633.5	217.7	134.4	82.5	15.5	2878.8	126 (1943)	79 299.7 (1939)	1953 Jul. 6
	.. 44 b	0.4	0.3	1.2	5.3	8.3	20.3	25.4	21.7	15.3	11.1	5.5	1.1	115.9	130 (1936)	74 272.0 (1945)	1941 Jun. 9
	.. 44 a	6.3	6.1	26.7	94.7	241.5	1287.0	2140.5	1237.2	497.3	339.3	135.4	20.3	6032.3	132 (1946)	70 222.5 (1944)	1924 Jul. 16
Suntikoppa	.. 44 b	0.7	0.3	1.7	6.7	10.8	26.1	29.3	21.9	12.9	11.0	5.6	1.1	111.6	130 (1936)	74 272.0 (1945)	1941 Jun. 9
	.. 44 a	5.6	6.1	18.5	64.8	118.4	293.1	542.8	321.6	144.8	160.3	74.9	12.9	1763.8	126 (1943)	79 299.7 (1939)	1953 Jul. 6
Srimangala	16 b	0.6	0.5	1.1	5.1	8.4	18.6	24.8	21.9	12.9	11.0	5.6	1.1	111.6	130 (1936)	74 272.0 (1945)	1941 Jun. 9
	16 a	3.8	4.8	12.9	82.3	100.6	498.9	1091.9	633.5	217.7	134.4	82.5	15.5	2878.8	126 (1943)	79 299.7 (1939)	1953 Jul. 6
Karike	.. 18 b	0.3	0.3	0.9	5.7	8.1	20.7	27.3	22.2	14.6	9.3	6.1	1.3	117.1	126 (1943)	79 299.7 (1939)	1953 Jul. 6
	.. 18 a	7.4	3.8	21.6	97.0	180.9	1015.2	1586.2	991.9	481.3	322.3	124.7	23.6	4855.9	126 (1943)	79 299.7 (1939)	1953 Jul. 6
	.. 18 b	0.6	0.3	1.5	5.4	9.3	26.0	30.0	27.6	20.9	16.1	8.1	1.7	147.5	126 (1943)	79 299.7 (1939)	1953 Jul. 6

Pulingoth	..	18	a	13.5	3.6	32.8	172.5	248.4	1277.9	1905.0	1125.0	502.9	453.1	178.6	27.4	5940.7	119 (1938)	74 330.2 1943 (1944) Jul. 13
			b	0.6	0.2	1.6	8.2	10.5	26.7	29.9	27.9	19.3	17.9	8.7	1.6	153.1		
Makut	..	18	a	5.3	2.8	20.6	93.2	192.5	1094.7	1699.8	1028.5	476.5	279.4	129.0	32.0	5054.3	120 (1946)	80 304.5 1956 (1934) Aug. 16
			b	0.4	0.3	1.1	5.9	10.1	26.0	29.7	26.6	20.4	14.3	6.8	1.6	143.2		
Belekove	..	18	a	5.8	4.1	21.3	94.5	123.9	284.0	585.5	347.0	155.2	153.9	79.5	13.7	1868.4	135 (1946)	75 265.2 1953 (1934) Jul. 6
			b	0.4	0.4	1.1	6.4	8.6	17.7	25.6	20.2	12.5	11.3	5.7	1.4	111.3		
Nagarhole	..	18	a	6.9	3.8	20.3	95.3	123.4	242.1	471.4	274.8	122.9	155.5	79.3	14.7	1610.4	128 (1940)	72 307.3 1953 (1934) Jul. 6
			b	0.5	0.2	1.3	6.4	9.2	17.3	24.6	19.4	11.0	10.9	6.0	1.4	108.3		
Karmad	..	18	a	6.8	4.3	24.1	75.7	104.4	256.0	526.3	282.2	153.2	148.3	70.4	16.3	1667.5	143 (1946)	77 291.1 1953 (1934) Jul. 6
			b	0.5	0.4	1.4	5.6	8.3	17.2	24.1	19.7	13.4	10.9	4.8	1.6	107.9		
Murkal	..	18	a	6.3	9.1	20.6	97.8	138.7	190.7	348.2	220.2	126.0	174.2	77.0	18.5	1427.3	153 (1940)	68 175.3 1933 (1934) Aug. 19
			b	0.5	0.8	1.2	6.2	9.2	14.8	21.9	17.5	10.6	9.9	5.0	1.4	99.0		
Tithimathi	..	18	a	6.9	5.3	23.9	80.3	117.6	229.4	320.8	177.3	121.4	161.3	63.0	13.7	1320.9	126 (1943)	78 190.5 1943 (1945) Jul. 11
			b	0.5	0.6	1.5	6.0	8.4	16.3	22.2	15.4	11.2	11.4	4.6	1.3	99.4		
Dubari	..	18	a	4.3	8.1	23.4	98.3	117.6	182.4	325.1	184.1	102.1	155.2	70.1	16.5	1287.2	128 (1940)	74 147.3 1948 (1938) Jul. 9
			b	0.6	0.5	1.5	6.2	8.4	15.3	22.2	16.0	9.6	10.6	4.4	1.3	96.6		
Hudugor	..	18	a	6.9	7.4	18.3	74.9	92.2	135.9	302.0	198.4	92.5	151.6	57.7	16.3	1154.1	145 (1946)	65 102.4 1953 (1938) Jul. 6
			b	0.5	0.5	1.1	5.5	7.9	13.2	23.2	17.9	9.5	11.0	4.3	1.1	95.7		
Sampaje	..	18	a	7.1	6.3	28.7	120.4	196.3	692.7	1291.3	936.0	467.9	341.4	156.5	23.6	4268.2	129 (1946)	80 247.9 1948 (1939) Jul. 10
			b	0.4	0.5	2.0	6.8	10.2	25.4	29.3	27.1	21.7	18.3	8.5	1.8	152.0		
Coorg (District)			a	6.4	5.6	21.9	90.1	145.8	502.6	878.2	515.8	233.9	212.6	93.7	18.9	2725.5	142 (1924)	62 (1905)
			b	0.5	0.4	1.4	5.9	8.9	19.6	25.6	21.5	14.4	12.4	6.0	1.4	118.0		
HILL STATIONS.																		
Mercara	..	50	a	6.1	7.6	18.8	67.8	135.9	606.3	1129.3	682.7	307.6	199.9	81.3	22.1	3265.4	127 (1923)	66 364.5 1924 (1918) Jul. 17
			b	0.6	0.6	1.4	5.0	8.3	23.0	28.4	26.6	18.9	12.7	5.5	1.4	132.4		
Ammathi	..	44	a	5.3	6.3	22.3	76.5	141.5	402.1	722.1	389.1	178.1	194.8	86.4	15.7	2240.2	237 (1924)	68 410.7 1924 (1918) Jul. 25
			b	0.4	0.5	1.7	6.2	8.9	19.7	25.1	21.0	13.9	12.0	5.7	1.0	116.1		

COORG DISTRICT

35

22
*

(a) Normal rainfall in mm. (b) Average number of rainy days (days with rain of 2.5 mm or more).

*Based on all available data up to 1956.

**Years given in brackets.

TABLE - 2.
FREQUENCY OF ANNUAL RAINFALL IN THE DISTRICT.
(Data 1901 - 1950).

Range in mm.	No. of years	Range in mm.	No. of years
1601—1800	.. 1	2801—3000	.. 5
1801—2000	.. 0	3001—3200	.. 7
2001—2200	.. 5	3201—3400	.. 2
2201—2400	.. 9	3401—3600	.. 1
2401—2600	.. 8	3601—3800	.. 0
2601—2800	.. 11	3801—4000	.. 1

TABLE - 3.
NORMALS OF TEMPERATURE AND RELATIVE HUMIDITY.
(MERCARA).

Month	Mean Daily Maximum Temperature	Mean Daily Minimum Temperature	Highest Maximum ever recorded		Lowest Minimum ever recorded		Relative Humidity	
			°C	Date	°C	Date	0830	1730*
							%	%
January	.. 24.9	14.00	31.7	1954 January, 4	9.4	1946 January, 16	78	56
February	.. 27.0	14.9	31.7	1911 February, 22	8.9	1936 February, 20	74	55
March	.. 28.9	16.4	33.3	1921 March, 30	10.6	1955 March, 21	70	56
April	.. 28.6	17.8	33.9	1896 April, 26	10.6	1955 April, 16	78	70
May	.. 26.7	18.2	35.0	1902 May, 11	9.4	1955 May, 21	85	78
June	.. 22.2	17.4	30.0	1939 June, 2	10.0	1955 June, 29	93	95
July	.. 20.3	16.8	28.9	1955 July, 6	11.2	1958 July, 1	95	98
August	.. 20.7	16.8	26.7	1951 August, 16	12.2	1920 August, 1	95	97
September	.. 22.0	16.6	27.2	1951 September, 23	12.2	1935 September, 24	92	92
October	.. 24.0	16.9	28.3	1899 October, 7	10.6	1948 October, 30	87	84
November	.. 23.9	15.8	27.8	1918 November, 14	10.6	1947 November, 3	83	73
December	.. 23.8	14.3	28.9	1903 December, 23	9.4	1937 December, 8	82	80
Annual	.. 24.4	16.3	84	76

*Hours I.S.T.

TABLE - 4.
MEAN WIND SPEED IN Km/Hr.
(MERCARA).

<i>January</i>	<i>February</i>	<i>March</i>	<i>April</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>August</i>	<i>September</i>	<i>October</i>	<i>November</i>	<i>December</i>	<i>Annual</i>
6.9	5.8	5.3	5.6	6.8	9.8	12.4	11.1	8.9	5.8	7.1	7.9	7.8

TABLE - 5.
SPECIAL WEATHER PHENOMENA.
(MERCARA).

<i>Mean No. of days with</i>	<i>Jan.</i>	<i>Feb.</i>	<i>Mar.</i>	<i>Apr.</i>	<i>May</i>	<i>Jun.</i>	<i>Jul.</i>	<i>Aug.</i>	<i>Sep.</i>	<i>Oct.</i>	<i>Nov.</i>	<i>Dec.</i>	<i>Annual</i>	
Thunder	..	0.1	0.1	2.5	6.5	6.1	0.7	0.1	0.1	1.6	5.9	2.4	0.2	26.3
Hail	..	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Dust-Storm	..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Squall	..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fog	..	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3