

GEOGRAPHY OF KARNATAKA

India is a land of diversities in the planet earth. Geography of India is an essential subject to be studied by every citizen of the country. As a nation, India occupies a significant position in the world. It is a country known for its unique culture, history, heritage, natural resources and human capital. India is a union of states. Each part of India is unique in its geography, culture, language and socio-economic conditions.

Karnataka is one of the prominent states in India. The main objective of learning this lesson is to know about its geographic setting, people, governance and contributions in the country. In this module the following aspects highlighting the Indian state Karnataka are discussed in detail,

The physiographic setting

The climate, rainfall, land cover and religions

The administrative divisions, population and education

Geology, Economic resources and contributors

Culture, history, tourism and unique features of the state as a whole.

The physiographic setting:

The Indian State of Karnataka is located within 11°30' North and 18°30' North latitudes and 74°00' East and 78°30' East longitude. Physiographically, Karnataka State forms part of two well defined macro regions of Indian Union; the Deccan Plateau and the Coastal plains and Islands. The State has four physiographic regions:

a) **Northern Karnataka Plateau:** Northern Karnataka Plateau comprises of the districts of Belgaum, Bidar, Bijapur and Gulbarga and is largely composed of the Deccan Trap. It represents a monotonous, treeless extensive plateau landscape with a general elevation of 300 to 600 meters from the mean sea level. However the river plains of the Krishna, the Bhima, the Ghataprabha and the Malaprabha with the intervening watersheds, the step like landscapes, lateritic scarpments, residual hills and ridges break the monotony of this extensive plateau. The general slope is towards the east. This region is largely covered with rich black cotton soils.

b) **Central Karnataka Plateau:** Central Karnataka Plateau covers the districts of Bellary, Chikmagalur, Chitradurga, Dharwad, Raichur and Shimoga. The region represents the transitional surface between the Northern Karnataka Plateau of Deccan Trap and southern Karnataka Plateau with relatively higher surface. By and large, this region represents the area of Tungabhadra basin. The general elevation varies between 450 and 700 meters. The general slope of this region is towards the east.

c) **Southern Karnataka Plateau:** The Southern Karnataka Plateau covers the districts of Bangalore, Bangalore Rural, Hassan, Kodagu, Kolar, Mandya, Mysore and Tumkur. This region largely covers the area of the Cauvery river basin lying in Karnataka. It is bounded by 600 meters contour and is characterised by a higher degree of slope. In the west and south, it is enclosed by the ranges of Western Ghats and the northern part is an interrupted but clearly identifiable high plateau. In the east the valleys of the Cauvery and its tributaries open out to form undulating plains. The general elevation of the region varies from 600 to 900 meters. However, residual heights of 1,500 to 1,750 meters are found in the Biligirirangan hills of Mysore district and the Brahmagiri range of Kodagu district.

d) **Karnataka Coastal Region:** The Karnataka Coastal Region, which extends between the Western Ghats, edge of the Karnataka Plateau in the east and the Arabian Sea in the West, covers Dakshina Kannada, Udupi and Uttara Kannada districts. This region is traversed by several ridges and spurs of Western Ghats. It has difficult terrain full of rivers, creeks, water falls, peaks and ranges of hills. The coastal region consists of two broad physical units, the plains and the Western Ghats. The Coastal plains represent a narrow stretch of estuarine and marine plains. The abrupt rise at the eastern flanks forms the Western Ghats. The northern parts of the ghats are of lower elevation (450-600 meters) as compared to Southern parts (900 to 1,500 meters). The Coastal belt with an average width of 50 to 80 km covers a distance of about 267 km. from north to south.

Languages spoken in Karnataka are Kannada (67.23%), Urdu (9.72%), Telugu (8.34%), Marathi (3.95%), Tamil (3.82%), Malayalam (1.69%), Tulu (3.38%), Hindi (1.87%), Konkani, Kodava and Byari.

The climate, rainfall, land cover and religions:

Climate in Karnataka is equable. The winter season is from January to February, summer season from March to May, monsoon season from June to September and post-monsoon season from October to December. Average temperature is 34 degrees Celsius with 75% humidity. During winter temperatures range from 32 degrees Celsius to below 20 degrees Celsius.

The southwest monsoon accounts for almost 80% of the rainfall that the state receives. The annual rainfall across the state ranges from low 50 cm to copious 350 cm. The average rainfall in the coastal region is 762 cm, while in the Ghats it is 254cm.

The geographic area of the state is about 191,791 km² (5.8% of country), of which the forest cover is about 43,084 km² (22.46 % of the state and 5.56 % of country). By area its position in the country is 8th rank.

Religion in Karnataka has played a very important role in shaping modern Indian religions and philosophy. Religions in Karnataka are - Hinduism- 83%, Muslims -11%, Christians -4%, Jains- 0.78% and Buddhist - 0.73%.

administrative divisions, population and education:

The administrative divisions of the state includes 30 districts such as Belgaum, Bagalkot, Bijapur, Bidar, Raichur, Koppal, Gadag, Dharwad, Uttara Kannada, Haveri, Bellary, Chitradurga, Davanagere, Shimoga, Udupi, Chikmagalur, Tumkur, Bangalore, Mandya, Hassan, Dakshina Kannada, Kodagu, Mysore, Chamarajanagar, Gulbarga, Yadgir, Kolar, Chikkaballapura, Bangalore Rural and Ramanagara. The capital city of the Karnataka state is Bangalore. The administration in each district is headed by a Deputy Commissioner who belongs to the Indian Administrative Service and is assisted by a number of officers belonging to Karnataka state services. The Deputy Commissioner of Police, an officer belonging to the Indian Police Service and assisted by the officers of the Karnataka Police Service, is entrusted with the responsibility of maintaining law and order and related issues in each district. People of Karnataka are represented at the Union Government by 12 MPs in the Rajya Sabha and 28 MPs in the Lok Sabha.

The population of Karnataka is 61,130,704. The State has population density of 319 persons per sq. km. The sex ratio of Karnataka at 968 females to 1000 males is higher than the national average of 940. The

state has a birth rate of 19.5 per 1000 people per year and a death rate of 7.2. The State's literacy rate increased from 66.64 % in 2001 to 75.60 % in 2011, with male literacy at 82.8% and female at 68.1%.

The state is home to some of the premier educational and research institutions of India such as the Indian Institute of Science, the Indian Institute of Management, the National Institute of Technology Karnataka and the National Law School of India University. There are 481 degree colleges affiliated with one of the universities in the state, viz. Bangalore University, Gulbarga University, Karnataka University, Kuvempu University, Mangalore University and Mysore University. In 1998, the engineering colleges in the state were brought under the newly formed Visvesvaraya Technological University headquartered at Belgaum, whereas the medical colleges are run under the jurisdiction of the Rajiv Gandhi University of Health Sciences. Some of these baccalaureate colleges are accredited with the status of a deemed university. There are 186 engineering, 39 medical and 41 dental colleges in the state. Udupi, Sringeri, Gokarna and Melkote are well-known places of Sanskrit and Vedic learning. An Indian Institute of Technology Muddenahalli has been approved by the central government as part of the 11th 5 year plan. This will be the first IIT in Karnataka State. In addition, a 600 crore Visvesvaraya Institute of Advanced Technology (VIAT) is being constructed in Muddenahalli-Kanivenarayanapura. Tulu language is taught as an optional subject in the twin districts of South Canara and Udupi.

Geology, Economic resources and contributors:

There are four main types of geological formations in Karnataka:

a) The Archean complex made up of Dharwad schists and granitic gneisses: These cover around 60% of the area of the state and consist of gneisses, granites and charnockite rocks. Some of the minerals found in this region are dolomite, limestone, gabbro, quartzite, Pyroxenite, manganese and iron ores and metabasalt.

b) The Proterozoic non-fossiliferous sedimentary formations of the Kaladgi and Bhima series: The Kaladgi series has horizontal rocks that run for 160 km in the districts of Belgaum, Raichur, Dharwad and Bijapur districts. The Bhima series that is present on either side of the Bhima River consists of rocks containing sandstone, limestone and shale and this is present in the Gulbarga and Bijapur districts.

c) The Deccan trappean and intertrappean deposits: This is a part of the Deccan traps which were formed by the accumulation of basaltic lava. This is made up of greyish to black augite-basalt.

d) The tertiary and recent laterites and alluvial deposits: Laterite cappings are found over the Deccan Traps and were formed after the cessation of volcanic activity in the early tertiary period. These are found in many districts in the Deccan plateau and also in the coast.

Karnataka is rich in its mineral wealth which is distributed fairly evenly across the state. Rich deposits of asbestos, bauxite, chromite, dolomite, gold, iron ore, kaolin, limestone, magnesite, Manganese, ochre, quartz and silica sand are found in the state. Karnataka is also a major producer of felsite. Karnataka has two major centers of gold mining in the state at Kolar and Raichur. These mines produce about 3000 kg of gold per annum which accounts for almost 84% of the country's production. Karnataka has very rich deposits of high grade iron and manganese ores to the tune of 1,000 million tonnes. Most of the iron ores are concentrated around the Bellary-Hospet region. Karnataka with a granite rock spread of over 4200 sq km is also famous for its Ornamental Granites with different hues.

Karnataka is one of the leading states in the field of industrial development both in the private and public sectors and in the area of computer software, which has attracted national and international firms to the city of Bangalore. The state capital was long ago chosen by the central government for the location of a number of industries like Bharat Electronics Ltd, Bharat Earth movers, Hindustan Machine Tools (HMT), Bharat Heavy Electricals (BHEL) etc. Bangalore has become one of the major centers of electronic industry apart from computer software. The state has a number of traditional cottage and small industries like handlooms, silk weaving etc. Karnataka has been the leading state for silk rearing and production of Khadi and village industries. Apart from the numerous factories in engineering, chemicals, electrical, and electronic goods, there are food processing and processing of plantation products like tea, coffee, rubber, cashew etc. About 70% of the people live in the villages and 71% of the total work force is engaged in agriculture. The main crops are rice, Ragi, jowar, maize, and pulses besides oilseeds and number of cash crops. Coffee is the principal plantation crop. Cashew, coconut, arecanut, cardamom, chilies, cotton, sugarcane and tobacco are among the other crops.

Culture, history, literature, tourism and unique features of the state:

Culture -The culture of Karnataka has rich heritage. The lineage of Indian rulers like Mauryas, Chalukyas, the Hoysalas have left behind their embossments in various elements of culture of Karnataka. Diverse religion and languages of the indigenes had contributed in its ethnic grandness. The famous rock edicts of King Asoka, epitomizing regal artistry and aestheticism, are landmarks, thus making the region familiar to the people of the entire world. Karnataka is a home of various tribes like Kodavas, Konkkanis, and Tuluvas. Besides Tibetan, Buddhists and Siddhi folks live there. Karnataka's art forms encompass huge ambit of majestic festivals, music, drama, and royal cuisine.

In Karnataka, as in the rest of India, a very thin line divides 'art' and 'craft'. And this is manifest in every home in the state where even the mundane articles of daily use, including an earthen pot, resemble a work of art. Karnataka has come to occupy the pride of place in the country in the field of woodcarving. The state's relatively good forest cover provides enough raw materials for its craftsmen who continue to employ age-old techniques to carve, inlay, veneer, paint and lacquer articles in wood. 'Mysore silk' is famous and Karnataka has contributed a great deal to the progress of India's silk industry. It has also helped the country to overtake Japan, after China, in the production of mulberry silk.

History - Legend has it that the history of Karnataka dates back to the happenings in the Epic, Ramayana. Moreover, the history of Karnataka also has a bearing to the period when people from the western countries came here in search of a market. But the ancient history of Karnataka apparently starts with the Mauryas. After the Mauryas, the history of Karnataka witnessed the rule of Satavahanas who ruled Karnataka for nearly 300 years. The Satavahanas, in their turn, were replaced by Kadambas and the Pallavas, the Gangadikaras, the Chalukyas of Badami, the Rashtrakutas, the Kalacharis, the Hoysalas, the Yadavas, the Kakatiyas and so on.

Moreover, with the rise of the Malik Kafur, the history of Karnataka saw the emergence of the Muslim rulers. Yet in 1336, a Hindu kingdom was established at Vijaynagar by the Harihara (Hakka) and Bukka. This period of wealth and property and the economy of Karnataka shot up vigorously, under these rulers. But all good things come to an end and so did this kingdom; it was replaced by the Bahamanis in 1337. The Bahamanis gave way to the Vijayanagar Empire, which in its turn, lost to the Sultans of the Deccan at the famous battle of Talikota in 1565.

Subsequently, with the emergence of the British in the political scenario of India, the local administrators of India had to yield to the expansionist policy of the Britishers. Karnataka went under the charge of the Britishers in 1799 and it remained a princely state with a presiding puppet king as its head till 1947 when India got its independence. Ultimately, in 1973 Karnataka became an independent state of the Indian Union.

Tourism and unique features of the state - By virtue of its varied geography and long history, Karnataka hosts numerous spots of interest for tourists. There is an array of ancient sculptured temples, modern cities, scenic hill ranges, unexplored forests and endless beaches. Karnataka has been ranked as the fourth most popular destination for tourism among the states of India. Karnataka has the second highest number of nationally protected monuments in India, second only to Uttar Pradesh, in addition to 752 monuments protected by the State Directorate of Archaeology and Museums. Another 25,000 monuments are yet to receive protection.

The districts of the Western Ghats have popular eco-tourism locations including Kudremukh, Madikeri and Agumbe. Karnataka has 25 wildlife sanctuaries and five national parks. Popular among them are Bandipur National Park, Bannerghatta National Park and Nagarhole National Park. The ruins of the Vijayanagara Empire at Hampi and the monuments of Pattadakal are on the list of UNESCO's World Heritage Sites. The cave temples at Badami and the rock-cut temples at Aihole representing the Badami Chalukyan style of architecture are also popular tourist destinations. The Hoysala temples at Belur and Halebidu. The Gol Gumbaz and Ibrahim Rauza are the famous examples of the Deccan Sultanate style of architecture. The monolith of Gomateshwara Bahubali at Shravanabelagola is the tallest sculpted monolith in the world, attracting tens of thousands of pilgrims during the Mahamastakabhisheka festival.

The waterfalls of Karnataka and Kudremukh are listed as must-see places and among the "1001 Natural Wonders of the World".Jog Falls is India's tallest single-tiered waterfall with Gokak Falls, Unchalli Falls, Magod Falls, Abbey Falls and Shivanasamudra Falls among other popular waterfalls.

Several popular beaches dot the coastline, including Murudeshwara, Gokarna and Karwar, Malpe, Someshwara, St. Mary's Island. In addition, Karnataka is home to several places of religious importance. Several Hindu temples including the famous Udupi Sri Krishna Matha, the Marikamba Temple at Sirsi, the Sri Manjunatha Temple at Dharmasthala, Kukke Subramanya Temple and Sharadamba Temple at Shringeri attract pilgrims from all over India. Most of the holy sites of Lingayatism, like Kudalasangama and Basavana Bagewadi, are found in northern parts of the state. Shravanabelagola, Mudabidri and Karkala are famous for Jain history and monuments. Jainism had a stronghold in Karnataka in the early medieval period with Shravanabelagola as its most important center.

It is a land of peace loving people with all kinds of natural resources. Karnataka is a state contributing much to the growth of Indian economy. It is a jewel in the crown of India.