CHAPTER II  GEOMORPHOLOGY OF KARNATAKA

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References
2.1 Introduction

The present state of Karnataka, earlier known as Mysore State came into existence on 1st November 1956 with the merger together of the Kannada speaking districts of the then existing state of Hyderabad, presidencies of Bombay and Madras and Coorg state along with the princely state of Mysore. It was renamed Karnataka on 1st November 1973.

Karnataka State occupies the western part of the Deccan Plateau of the Indian Union. It extends from 11° 5 N to 19° N latitude and from 74° E to 78° 6 E longitudes. The state is bounded by the Arabian Sea on the west and has common borders with Andhra Pradesh on the east, Tamilnadu and Kerala on the southeast and the south, Goa on the northwest and Maharashtra on the north. Thus it is bounded by land on three sides and by a sea coast on one side. It extends for about 400kms from east to west and about 770 kms from south to north, covering an area of 1,91,773sq.kms.

Karnataka is a land of rich heritage inspiring its people to create a bright future. With its special geographical location, and variety in its physiography, valleys, rivers, forests and resources- the state is known for its industrial and tourist potential. A large part of the state is a part of the peninsular plateau of India. Bordered by the Western Ghats with tall peaks and lush greenery, the tableland is fertile because of its black soil and with river and tank irrigation facilities. The coastal strip to the west of the Ghats is renowned for its silvery beaches and rich green paddy fields.

Karnataka has rich religious and artistic traditions. The Agraharas and Mathas spread all over vouch to the scholarly pursuits of the people. The hero stones strewing the
land speak of the heroic traits of the warrior race of antiquity. Long traditions of growing cotton are clear evidence to once flourishing rich textile industry. The ports along the coast remind one of the rich overseas trades that flourished through them. The Black soil plains speak of its agricultural potential. The state's human resources with racial and religious diversities and professional skills promise to make it a hub of industries.

2.2 Government and Administration

Karnataka, like other Indian states, has a parliamentary system of government with two democratically elected houses, the Legislative Assembly and the Legislative Council. The Legislative Assembly consists of 224 members who are elected for five-year terms. The Legislative Council is a permanent body of 75 members with one-third (25 members) retiring every two years.

The Government of Karnataka is headed by the Chief Minister who is chosen by the ruling party members of the Legislative Assembly. The Chief Minister, along with the council of ministers, drives the legislative agenda and exercises most of the executive powers. However, the constitutional and formal head of the state is the Governor who is appointed for a five-year term by the President of India on the advice of the Union government. The citizens of Karnataka also elect 28 members to the Lok Sabha, the lower house of the Indian Parliament. The members of the state Legislative Assembly elect 12 members to the Rajya Sabha, the upper house of the Indian Parliament.

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
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district. The Deputy Conservator of Forests, an officer belonging to the Indian Forest Service, also serves the government. Sectoral development in the districts is looked after by the district head of each development department such as Public Works Department, Health, Education, Agriculture, Animal Husbandry, etc. The judiciary in the state consists of the Karnataka High Court (Attara Kacheri) in Bangalore, district and session courts in each district and lower courts and judges at the taluk level.

Politics in Karnataka has been dominated by three political parties, the Indian National Congress, the Janata Dal (Secular) and the Bharatiya Janata Party. Politicians from Karnataka have played prominent roles in the federal government of India with some of them having held the high positions of Prime Minister and Vice President. Border disputes involving Karnataka's claim on the Kasaragod and Sholapur districts and Maharashtra's claim on Belgaum are ongoing since the states reorganization. The official emblem of Karnataka has a Ganda Berunda in the centre. Surmounting this are four lions facing the four directions, taken from the Lion Capital of Asoka at Sarnath. The emblem also carries two Sharabhas with the head of an elephant and the body of a lion.

2.3 Area and Population

For administrative purposes, Karnataka has been divided into divisions, districts and taluks. It comprises 175 taluks grouped into 27 districts (w.e.f 1st November, 1997), which are in turn grouped into 4 divisions.

The particulars of area and population of the administrative regions are presented in Table - 1.
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#### Table 1

Area and Population of Karnataka - 2001 Census

<table>
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<tr>
<th>Sl. No.</th>
<th>District</th>
<th>Area (in Sq. Kms)</th>
<th>Population Census 2001 Total</th>
<th>Sex Ratio</th>
<th>Literacy Rate</th>
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Source: Census of India 2001, Series-30 Karnataka provisional population totals, director of census operations, Karnataka

Karnataka with an area of 1,91,791 sq. kms, and total population of 5,27,33,958 (as per 2001 Census) accounts for 5.83 per cent of the total geographical area and 5.13
per cent of the total population of the country respectively. Among various states of India, Karnataka occupies the 8th rank both in respect of area and population. Out of a total geographical area of the state, south Karnataka comprising Bangalore and Mysore revenue divisions accounts for 48.58 per cent, whereas north Karnataka comprising Belgaum and Gulburga revenue divisions accounts for 51.42 per cent. In area, Bangalore urban district is the smallest district sharing 1.14 per cent of the state's area succeeded by the district of Kodagu (2.14 %) and Dharwad (251%). Gulburga district is the biggest district sharing 8.46 per cent of the total area of the state followed by districts of Belgaum (6.99%) and Tumkur (5.53%).

Out of the total population of the state, south Karnataka and north Karnataka account for 57.28 per cent and 42.72 per cent respectively. Bangalore urban district which is the smallest in area is the biggest district in population, sharing 12.37 per cent of the total population of the state, followed by districts of Belgaum (7.98%) and Gulburga (5.93%). Kodagu is the smallest district sharing 1.03 per cent of state's population followed by districts of Chamrajnagar (1.83%) and Gadag (1.83%). Each of these districts namely Gadag, Chamrajnagar and Kodagu has recorded each less than 10 Lakh population.

2.4 Density and Growth of Population

Population density in the state has risen from 235 in 1991 to 275 in 2001. The corresponding figures for the country are 267 and 324 respectively. Among the districts of the state, the highest density of the population is found in Bangalore district, i.e., 2210 per sq.km. It is due to the high density of Bangalore urban agglomeration area, which comprises 85.16 per cent of the population of Bangalore district. The other districts which have higher density next to Bangalore are Dakshina Kannada (416), Mysore (383) and
Dharwad (376). Uttara Kannada has the lowest density of 132, followed by the districts of Kodagu (133), Chikmagalur (158) and Koppal (166).

During 1991 - 2001, among regions, North Karnataka (2139%) registered higher growth compared to South Karnataka (16.45%) as against 17.25 per cent for the state. Among divisions, Gulburga division (21.65%) and Bangalore division (20.8%) registered higher growth rate as compared to state average. Bangalore district which comprises capital city of the state registered the highest growth rate (34.8%) whereas Udupi district registered the lowest growth rate (6.9%). All districts of Gulburga division, Bagalkot, Belgaum and Bijapur districts of Belgaum division and Bangalore district of Bangalore division registered growth rates higher than that of the state.

2.4.1 Sex Ratio

In 2001, the sex ratio of Karnataka (964) is much better than that of all India's (933). Among regions South Karnataka has the sex ratio of 965, as against 962 in North Karnataka. Among divisions, Mysore division has the highest sex ratio of 1001 and Bangalore division has the lowest ratio of 942. The sex ratio of 967 in Gulbarga division is higher than that of the state, whereas Belgaum division has lower sex ratio of 958 than the state's average. Only three districts -namely Dakshina Kannada, Udupi, and Hassan have a favourable sex ratio. The districts of Belgaum, Bijapur, Bidar, Dharwad, Haveri, Chitradurga, Davangere, Bangalore urban and Bangalore rural have sex ratio lower than that of the states.

2.4.2 Literacy Rate

In 2001, the literacy rate of Karnataka is 67.04 per cent, much better than that of all India (65.38%). Among regions South Karnataka has the literacy rate of 69.71 per cent as against 61.48 per cent in North Karnataka. Among divisions, Mysore division has the
highest literacy rate and Gulburga division has the lowest literacy rate in the state. Among the districts, the highest literacy rate is found in Bangalore urban district, i.e., 83.91 per cent. The other districts which have higher literacy rate next to Bangalore urban are Dakshina Kannada (83.47%), Udupi (79.87%), Kodagu (78.17%) and Uttara Kannada (76.59%). Raichur has the lowest literacy rate of 49.54 per cent followed by the districts of Gulburga (50.65%), Chamrajnagar (51.26%), Koppal (55.02%), Bijapur (57.46%), Bagalkot (57.81%) and Bellary (58.04%).

2.5 Language and Literature

The Kannada language, which is the official language of the state, the native language of approximately 65% of its population is one of the classical languages of India. Kannada played a crucial role in the creation of Karnataka since linguistic demographics was a major criterion chosen to create the state in 1956. Tulu, Kodava, Takk and Konkani are other major native languages that share a long history in the state. Urdu is spoken widely by the Muslim population. Less widely spoken languages include Beary bashe and certain dialects such as Sankethi. Kannada features a rich and ancient body of literature covering topics as diverse as Jainism, Vachanas, Haridasasahitya and modern literature. Evidence from edicts during the time of Ashoka the Great suggest that the Kannada script and its literature were influenced by Buddhist literature. The Halmidi inscription, the earliest attested full-length inscription in the Kannada language and script, is dated 450 AD, while the earliest available literary work, “Kavirajamarga,” has been dated 850 AD. References made in the “Kavirajamarga,” however, prove that Kannada literature flourished in the Chattana, Beddande and Melvadu metres during earlier centuries. Kannada literature has been the corpus of written forms of the kannada language, which is usually divided into three phases i.e Old (850 AD to 1200 AD), Middle (1200 AD to 1700 AD) and Modern (1700 AD to present) and its literary
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characteristics are categorised as Jain, Veerashaiva and Vaishnava, recognising the prominence of these three faiths in giving form to, and fostering, classical expression of the language, until the advent of modern era. Although much of the literature prior to the 18th century was religious, some secular works were also committed to writing. However, Modern Kannada Literature, is now widely known and recognized, during the second half of the 20th Century, Kannada writers have received seven Jnanapith awards and fifty one of them have been crowned with Sahitya Akademy awards in India.

2.6 Education

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.

As of March 2006, Karnataka had 54,529 primary schools with 252,875 teachers and 8.495 million students, and 9498 secondary schools with 92,287 teachers and 1.384 million students. There are three kinds of schools in the state, viz., government-run, private-aided (financial aid is provided by the government) and private-unaided (no financial aid is provided). The primary languages of instruction in most schools are Kannada and English. The syllabus taught in the schools is either of the CBSE, the ICSE or the state syllabus (SSLC) defined by the Department of Public Instruction of the Government of Karnataka. In order to maximize attendance in schools, the Karnataka Government has launched a mid-day meal scheme in government and aided schools in which free lunch is provided to the students. Statewide board examinations are conducted at the end of the period of secondary education, and students who qualify are allowed to
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pursue a two-year pre-university course; after which students become eligible to pursue
under-graduate degrees.

There are 481 degree colleges affiliated to 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 123 engineering, 35 medical
and 40 dental colleges in the state. Udupi, Sringeri, Gokarna and Melkote are well-known
places of Sanskrit and Vedic learning.

2.7 Economic Condition

The five year development plans of the new state of Karnataka beginning with the
Second Five Year Plan had to develop resources and strategies for optimizing the welfare
of its entire population ensuring regional development that would sustain the unified state
and march ahead of the other states of India. Under the various five year plans and annual
plans development effort was stepped up enormously, and this is reflected in the growing
per capita investment and incomes and various facilities for improved living.

The reorganized state's average per capita income in 1956 was less than Rs.200
and this rose to Rs.13,621 by 1998 and to Rs.17,482 in 2001. The per capita incomes of the
various districts increased correspondingly. By 1997-98 the state per capita income reached
Rs.13,621 but the range of variation in the income of the of the districts was of a matter
somewhat of deep concern, as it varied from Rs.7861 for Bidar to Rs.25,740 for Bangalore
urban district. The State registered a GSDP (Gross State Domestic Product) growth rate

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of 7% for the year 2007-2008. Karnataka’s contribution to India’s GDP in the year 2004-2005 was 5.2%, it was the fastest growing State over the decade in terms of GDP (Gross Domestic Product) and per capita GDP. With GDP growth of 56.2% and per capita GDP growth of 43.9%, Karnataka now has the sixth highest per capita GDP of all States. Till September 2006 Karnataka received a Foreign Direct Investment (FDI) of Rs 78.097 billion ($1.7255 billion) for fiscal year 2006-2007, placing it third among states of India. At the end of 2004 the unemployment rate in Karnataka was 4.94% compared to national rate of 5.99%. For the fiscal year 2006-2007, the inflation rate in Karnataka was 4.4% compared to national average of 4.7%. As of 2004-2005 Karnataka had an estimated poverty rate of 17% less than the national ratio of 27.5%. Nearly 56% of the workforce in Karnataka is engaged in agriculture and its related activities. A total of 12.31 million hectares of land, or 64.6% of the state’s total area, is cultivated. Much of the agricultural output is based on south west monsoon as only 26.55% of the sown area is irrigated.

Karnataka is the manufacturing hub of some of the largest public sectors industries in India, including Hindustan Aeronautics Limited, National Aerospace Laboratories, Bharat Heavy Electrical Limited, Indian Telephone Industries Limited, Bharat Heavy Earth Movers Limited, Hindustan Machine Tools, which are based in Bangalore. Many of India’s premier Science and Technology Research Centers such as Indian Space Research Center (ISRO), Centre Power Research Institute (CPRI), Bharat Electronics Limited (BEL) and Central Food Technological Research Center (CFTRI) are also headquartered in Karnataka. Mangalore Refinery and Petrochemicals is an Oil refinery located in Mangalore.

Since the 1980’s, Karnataka has emerged as the pan-Indian leader in the field of IT (Information Technology). As of 2007, there were nearly 2000 firms operating out of
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Karnataka. Many of them, including two of India’s biggest software firms, INFOSYS and WIPRO, are also headquartered in the state. Exports from these firms exceeded Rs 50,000 crores ($ 12.5 billion) in 2006-07, accounting for nearly 38% of all IT exports from India. All this has earned the state capital, Bangalore, the sobriquet Silicon Valley of India. Karnataka also leads in biotechnology. It is home to India’s largest biocluster, with 158 of the country’s 320 biotechnology firms being based here. The state also accounts for 75% of India’s floriculture, an upcoming industry which supplies flowers and ornamental plants world wide. Seven of India’s leading banks Canara Bank, Syndicate Bank, Corporation Bank, Vijya Bank, Vysya Bank, Karnataka Bank and the State Bank of Mysore have originated from this state. As of March 2002, Karnataka had 4767 branches of different banks with each branch serving 11,000 persons, which is lower than the national average of 16000.

2.8 Transport

Air transport in Karnataka, as in the rest of the country, is still a fledgling but any way a fast expanding sector. Karnataka has airports at Bangalore, Mangalore, Hubli, Belgaum, Hampi and Bellary with international operations from Bangalore and Mangalore airports. Airports at Mysore, Gulbarga, Bijapur, Hassan and Shimoga are expected to be operational by the end of 2007. Major airlines such as Kingfisher Airlines and Air Deccan are based in Bangalore.

Karnataka has a railway network with a total length of approximately 3,089 kilometres (1,919 mi). Until the creation of the South Western Zone headquartered at Hubli in 2003, the railway network in the state was in the Southern and Western railway zones. Several parts of the state now come under the South Western Zone, with the remainder under the Southern Railways. Coastal Karnataka is covered under the
Konkan Railway Network which was considered India's biggest railway project of the century. Bangalore is extensively connected with inter-state destinations, while other important cities and towns in the state are not so well-connected.

Karnataka has 11 ports, including the New Mangalore Port, a major port and ten other minor ports. The New Mangalore port was incorporated as the ninth major port in India on May 4, 1974. This port handled 32.04 million tonnes of traffic in the fiscal year 2006-07 with 17.92 million tonnes of imports and 14.12 million tonnes of exports. The port also handled 1015 vessels including 18 cruise vessels during the year 2006-07. However the inland water transport within the state is not well developed.

The total lengths of National Highways and state highways in Karnataka are 3,973 kilometres (2,469 ml) and 9,829 kilometres (6,107 ml) respectively. The KSRTC, the state public transport corporation, transports an average of 2.2 million passengers daily and employs about 25,000 people. In the late nineties, KSRTC was split into three corporations, viz., The Bangalore Metropolitan Transport Corporation, The North-West Karnataka Road Transport Corporation and The North-East Karnataka Road Transport Corporation with their headquarters in Bangalore, Hubli and Gulbarga respectively.

2.9 Summing Up

In no aspect of planned economy Karnataka can be over looked. The state has a progressive industrial policy in place that actively supports public-private partnership. Karnataka is endowed with rich natural wealth. The State is home to every sector of Industry such as Information Technology, Biotechnology, Electronics, Telecom, Aerospace, Processed Foods, Automobiles, Banking & Finance, Mining, Steel, Cement, etc. The State has made a tremendous headway in IT sector and other knowledge based Industries with an investor friendly policy. The State also enjoys a prominent position on
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the map of agricultural productivity. It contributes about 5.59 percent in national food
grains production. The phenomenon of globalization has opened new vistas for the State.
With the help of modern infrastructure, immense natural wealth and power potential,
Karnataka is emerging as one of the leading States in the country, with multifaceted
development, overall progress and a great promise for the future.
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References


