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Location and Extent of Karnataka

Karnataka, a state in the southern region of India, is geographically significant due to its diverse terrain, strategic location, and historical importance. This article explores in detail the location, geographical boundaries, and the extent of Karnataka, emphasizing its natural and cultural significance.

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1. Geographical Location

Karnataka is located in the southwestern part of India, with geographical coordinates ranging approximately between **11°31'N and 18°45'N latitude** and **74°12'E and 78°40'E longitude**. The state covers a vast area characterized by its rich cultural heritage, natural resources, and economic vitality.

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2. Area and Extent

- **Total Area**: Karnataka spans **191,791 square kilometers**, making it the **sixth-largest state in India**.
- **Percentage of India's Area**: It accounts for **5.83%** of the total geographical area of the country.
- **Length and Breadth**: The state stretches **about 750 kilometers from north to south** and **about 400 kilometers from east to west**.

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3. Boundaries

Karnataka shares its borders with six Indian states and a long coastline along the Arabian Sea. These boundaries influence the state's cultural and economic interactions.

- **North**: **Maharashtra** and **Goa**.
- **East**: **Telangana** and **Andhra Pradesh**.
- **South**: **Tamil Nadu** and **Kerala**.
- **West**: The **Arabian Sea**, providing Karnataka with a coastline of approximately **320 kilometers**.

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4. Physiographic Features

4.1. Coastal Region (Karavali)

- Comprises the **Western Coastal Plains**.
- Fertile land supports paddy, coconut, and areca nut cultivation.
- Important ports include **Mangaluru**, **Karwar**, and **Udupi**, which are vital for trade and commerce.

4.2. The Western Ghats

- Forms the western boundary and is a part of the **Sahyadri Hills**.
- A UNESCO World Heritage Site, these hills are known for their biodiversity.
- Peaks such as **Mullayanagiri (1,930 m)** and **Kudremukh** dominate the region.

4.3. Deccan Plateau

- Covers most of the state and is part of the larger **Peninsular Plateau**.
- The plateau is rich in minerals and suitable for dry farming.
- Rivers such as the **Krishna**, **Kaveri**, and **Tungabhadra** crisscross this region.

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5. Climate and Topography

- **Climate Zones**: Karnataka experiences **tropical monsoon climate**, with variations ranging from humid in the coastal areas to semi-arid in the northern interior.
- **Topographical Diversity**: Includes coastal plains, rugged Western Ghats, and the plateau with varying elevations.

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6. Drainage System

Karnataka is the origin of several rivers that form the lifelines of its agriculture and hydropower sectors.

- **East-flowing Rivers**: The **Krishna**, **Kaveri**, and **Tungabhadra** drain into the Bay of Bengal.
- **West-flowing Rivers**: The **Sharavathi**, **Netravati**, and **Kali** rivers drain into the Arabian Sea.
- **River Basins**: The state's terrain is divided into **five major river basins**, with the Kaveri basin being the most prominent.

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7. Strategic Location

The location of Karnataka offers both economic and cultural advantages:

- **Proximity to Arabian Sea**: Facilitates trade and maritime activities.
- **Central to Southern India**: Acts as a cultural and economic bridge between northern and southern India.
- **IT Hub**: Cities like **Bengaluru**, located at the heart of the state, have become global centers for technology and innovation.

8. Natural Resources and Biodiversity

8.1. Forest Cover

- Karnataka has over **20% forest cover**, comprising evergreen, deciduous, and scrub forests.
- Major national parks include **Bandipur**, **Nagarhole**, and **Bannerghatta**.

8.2. Minerals

- The state is rich in minerals like **iron ore**, **gold**, and **manganese**, primarily found in the **Ballari** and **Kolar** regions.

8.3. Biodiversity Hotspot

- The Western Ghats region in Karnataka is among the **eight biodiversity hotspots in the world**, housing unique flora and fauna.

9. Demographic and Cultural Significance

- **Population (2023)**: Approximately **70 million**, making it the **eighth most populous state** in India.
- **Cultural Influence**: The state's location has allowed a blend of Dravidian and Deccan cultures, evident in its architecture, art, and traditions.

10. Economic Implications of Location

10.1. Agriculture

- The plateau supports dry crops like millet, while the coastal region favors rice and horticulture.
- Karnataka is a leading producer of **coffee**, **spices**, and **silk** in India.

10.2. Industry

- Bengaluru, known as the **Silicon Valley of India**, is strategically located in the southeastern part of the state.
- Proximity to ports enhances industrial exports.

10.3. Tourism

- Karnataka's location offers a mix of hill stations, beaches, and cultural sites such as **Hampi**, **Mysuru**, and **Coorg**.

11. Transport Connectivity

Karnataka's central location in southern India makes it a hub for transport and logistics:

- **Road**: National highways like **NH-48** connect major cities.
- **Rail**: The state is well-connected with the Indian Railways network.
- **Air**: Bengaluru's **Kempegowda International Airport** serves as a major aviation hub.
- **Sea**: Ports like **New Mangalore** facilitate international trade.

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12. Challenges Linked to Location and Extent

- **Regional Disparities**: Northern Karnataka faces economic and developmental challenges compared to the southern regions.
- **Climate Variability**: Rainfall variations due to geographical location affect agriculture in certain areas.
- **Urbanization Pressure**: Bengaluru's rapid urbanization poses infrastructural and environmental challenges.

Physiographic Divisions of Karnataka

Karnataka, a state in southwestern India, boasts a rich and varied landscape. This diversity is a result of complex geological processes and climatic variations that have shaped the land over millions of years. The state can be broadly divided into four major physiographic divisions:

1. The Northern Karnataka Plateau:

- **Location:** This region encompasses the districts of Belgaum, Bidar, Vijayapura, and Kalaburagi.
- **Characteristics:**
  - **Deccan Trap:** Predominantly composed of Deccan Trap basalt, resulting in fertile black soil.
  - **Elevation:** Ranges from 300 to 600 meters above sea level.
  - **Topography:** Mostly flat to gently undulating terrain with scattered hills.
  - **Drainage:** Drained by the Krishna River and its tributaries, including the Bhima, Ghataprabha, and Malaprabha rivers.
  - **Climate:** Semi-arid with low rainfall and high temperatures.
  - **Vegetation:** Dry deciduous forests and scrubland.
  - **Agriculture:** Important for agriculture, with crops like cotton, jowar, and pulses being cultivated.

2. The Central Karnataka Plateau:

- **Location:** Covers the central districts of the state, including Chitradurga, Davanagere, and Tumkur.
- **Characteristics:**
  - **Rock Types:** Composed of granites, gneisses, and schists.
  - **Elevation:** Higher than the northern plateau, ranging from 600 to 900 meters.
  - **Topography:** Characterized by rolling hills, valleys, and isolated peaks.
  - **Drainage:** Drained by the Tungabhadra and Vedavati rivers.