

CHAPTER - 12

WATER RESOURCES OF KARNATAKA



We learn about the following in this chapter,

- Important rivers of Karnataka.
- Different types of irrigation in Karnataka.
- Importance of hydro-electric power stations.
- Major dams of Karnataka.

RIVERS OF KARNATAKA: Rivers are the main source of water. The rivers of Karnataka can be divided into two groups : east flowing rivers and west flowing rivers.

1) The East Flowing Rivers

Rivers : The Krishna, the Cauvery, the Pennar and Palar rivers flows eastwards and join the Bay of Bengal.

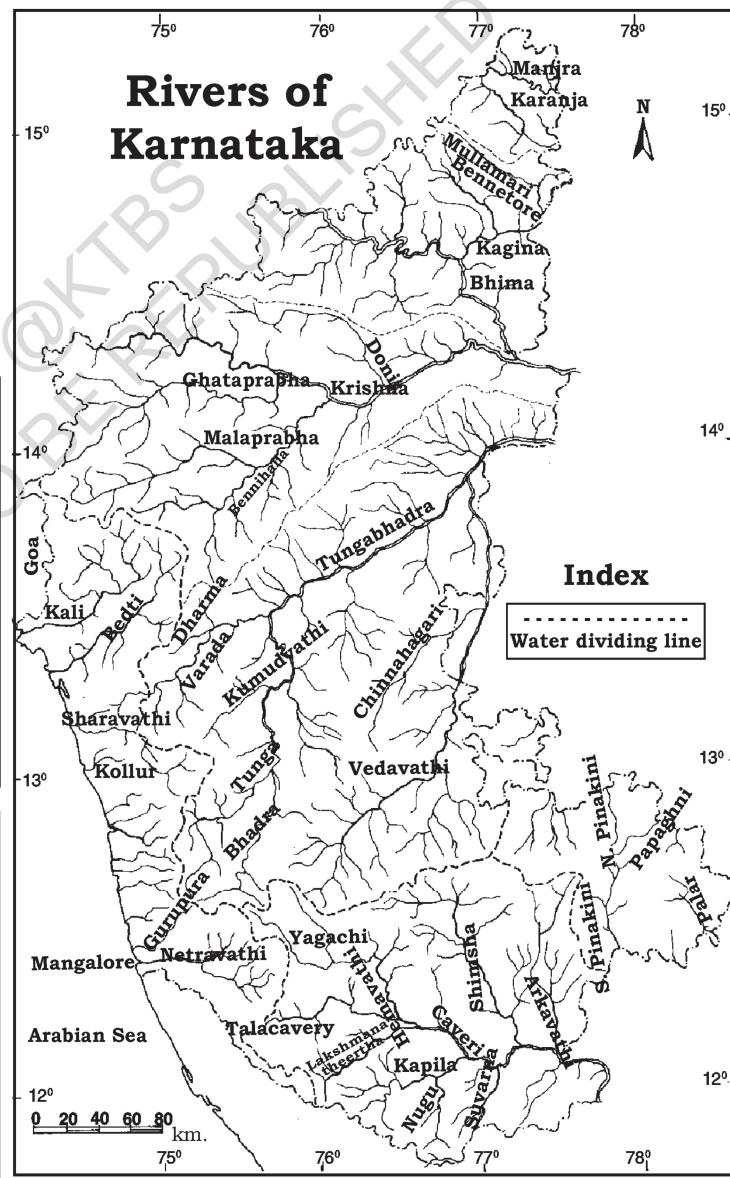
The Krishna is the second important river of

Let us know this :

River Cauvery has three waterfalls along its course namely-Chunchunkatte, Shivasamudra and Hogenakal, and three islands-Shrirangapattana, Sivasamudra and Shriranga

Do you know this?

- River Malaprabha joins the Krishna at Kudalasangama.
- Kudli is the confluence of Tunga and Bhadra rivers.
- Hemavathi river joins the cauvery near K.R. Sagar.



South India. It takes birth at Mahabaleshwar and flows 1,392 kms eastwards to join the Bay of Bengal. But it flows for only 480 km. through Karnataka. The Bhima, Koyna, Tungabhadra, Ghataprabha and Malaprabha are its tributaries. Irrigation and hydro-electric power generation from the Krishna river system have benefited in Northern Karnataka.

The Cauvery is the most important river of Karnataka. It is known as 'Dakshina Ganga'. It originates at Talacauvery in Kodagu district and flows 804 kms through Karnataka and Tamil Nadu eastwards and join the Bay of Bengal. It flows for only 380 kms in Karnataka. Many tributaries join this river, for example, the Hemavathi, Harangi, Lokapavani, Arkavathi, Shimsha, Lakshmanatirtha, Kapila, Suvarnavati and Bhavani. This river is most useful for agriculture, power generation and drinking water supply.

The Pennar and Palar rivers flow through the districts of Kolar, Tumakuru and Bengaluru, and then enter Andhra Pradesh and Tamil Nadu. North Pennar and South Pennar are two separate rivers.

2. The west flowing Rivers : Many rivers rise in Malnad, flow westwards and join the Arabian Sea, for example : the Sharavathi, Kali, Gangavali (Bedti), Netravathi, Varahi, Aghanashini etc. They flow down steep slopes and create waterfalls. They also helps to produced hydro-electric power. Jog Falls on Sharavati river is world-famous. It is the highest waterfall in India (293 mtrs).

The other important waterfalls are: Gokak (on Ghataprabha), Bandaje (on Netravathi), Unchalli (on Aghanashini), Chaya Bhagavati (on Don river), Chunchunkatte, Shimsha, Gaganachukki, Bharachukki (on Cauvery), Magodu waterfall (on Bedthi) etc.

IRRIGATION IN KARNATAKA

The artificial supply of water for agriculture is called irrigation. It is essential for the development of agriculture in places where the distribution of rainfall is uneven and irregular. It has been

Do you know this?

River Pennar is also known as pinakini.

Southern Pennar is known as Ponnaiyar in Tamil Nadu.

Do you know this

Large tanks in Karnataka

Mudagadakere (near Kadur), Ton-nur kere (near Pandavapura), Hy-ridge (Hunsur), Ramasamudra kere (Chikkaballapura), Byrasagara kere (Gudibande), Kallambella kere (Sira), Byramanala kere (Bidadi)

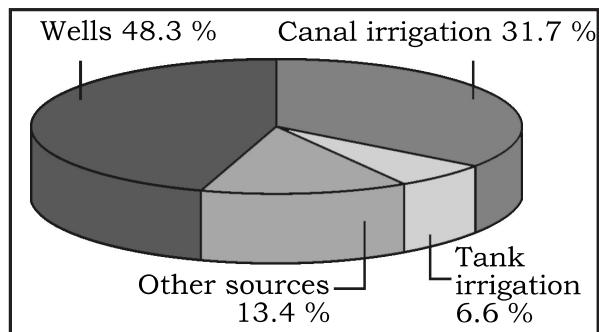
an ancient practice in Karnataka to carry on farming through the different sources of irrigation. The main sources of irrigation are wells, canals and tanks. In early days wells were dug in villages for the purpose of irrigation. Later, the practice of constructing canals to supply water from rivers for farming was started. Big tanks can be seen even now. For example : Shantisagar (Sulekere) in Davanagere district. The wells dug in Kalaburagi district during the 11th century, the Tungabhadra canals of the time of Vijayanagar empire, Vanivilasagar and the Krishnarajasagar dam constructed by the Mysuru kings are milestones in the development of the irrigation in Karnataka. At present, both river water and underground water are used for irrigation. Nearly 26.2 % of the cultivable land is under irrigation facility in Karnataka. Karnataka has occupies the 9th position in India with regard to irrigation.

Raichur district has the largest area under canal irrigation in the state. Tank irrigation is maximum in Shivamogga district, whereas Belagavi district has the maximum well irrigation facilities. In recent times, the number of tube wells has increased. When the land under irrigation is taken into consideration, Belagavi district occupies the first position. In contrast Kodagu district occupies the last position.

The main canal irrigation projects of the state are: Krishnarajasagar, Tungabhadra, Hemavati, Kabini, Harangi, Vanivilas Sagar (Marikanive), Upper Krishna, Almatti, Narayanapura, Malaprabha, Karanja, Bennetore, Hipparagi Barrage, Bhadra projects etc.

Hydro-electric power :

The credit for successful generation of hydro-electric power for the first time in India goes to Karnataka. Coal or petroleum are not available in our state. But there is a great opportunity for the generation of



Irrigation area in percentage

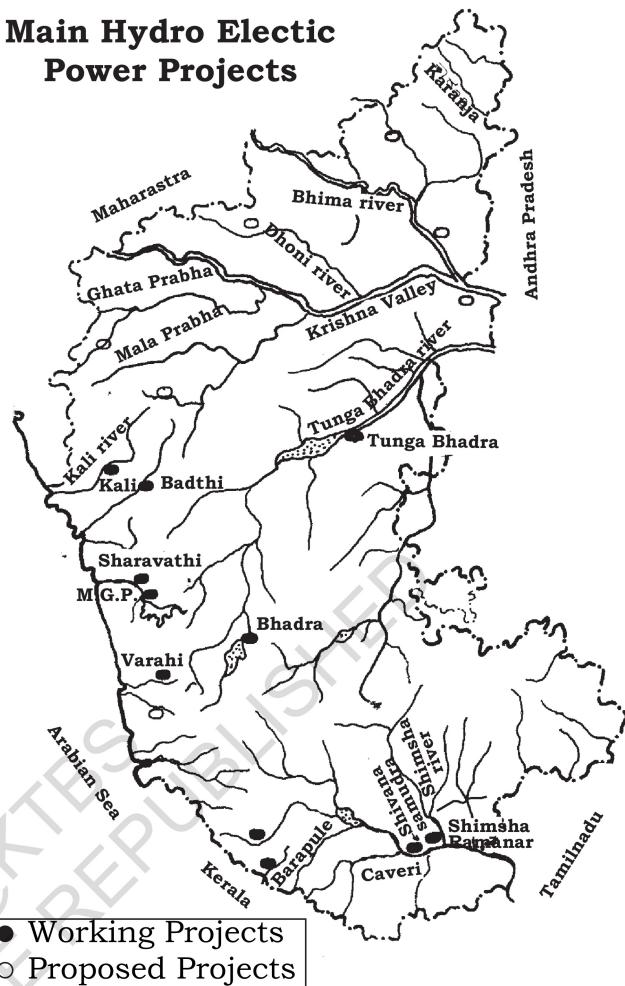
Do you know this?

The first large dam in Karnataka was constructed at Vanivilas Sagar near Hiriyuru in 1907. This was as Marikanive plan.

hydel power. There are rivers which can provide sufficient power for the whole state. Rivers flowing towards the west are most suitable for power generation than the rivers flowing towards the east.

The hydro-electric power station at Shivanasamudra was established in 1902 to supply power to the Kolar gold mines. This project was constructed across river Cauvery. At a short distance away from it the second hydro power station was established on Shimsha river in 1940. The Mahatma Gandhi hydro-electric power station was established in 1947 near Jog Falls on Sharavathi river to fulfil the increased demand for hydro electric power. Later, many more hydel projects were developed under the Five Year Plans. As a result of these developments, Karnataka ranks first in the generation of hydro-electric power in India.

Main Hydro Electric Power Projects



The main hydro-electric power projects of Karnataka :
 Shivanasamudra, Shimsha (on Cauvery river), Sharavathi, Linganamakki, Gerusoppa and Mahatma Gandhi hydro power station (on Sharavathi river), Supa, Nagajhari, Kadra and Kodasalli (on Kali river), Varahi and MariKanive (on Varahi river), Bhadra, Tungabhadra, Ghataprabha and Alamatti (on Krishna river).

EXERCISES

I. Fill in the blanks with suitable words

1. The Cauvery river takes its birth at _____ of Kodagu district.

2. The famous Jog Falls is produced by the _____ river.
3. The Krishnarajasagar dam is in _____ district.
4. The first hydro-electric power generating station in Karnataka is _____.
5. The Almatti dam has been constructed across _____ river.

II. Discuss in groups and answer the following questions.

1. Name the important rivers of Karnataka.
2. Write a short note on river Krishna.
3. What are the tributaries of Cauvery river.
4. Name the different sources of irrigation in Karnataka.
5. Mention the main hydro-electric power stations of our state.

III. Match the following :

A

1. Linganamakki dam
2. Gaganachukki, Bharachukki
3. Vani Vilas Sagar
4. Nagajhari
5. Pennar

B

- a. Hydro-electric project
- b. River
- c. Kali river
- d. Cauvery river
- e. Sharavathi
- f. Marikanive

IV. Activities :

1. Make a list of the rivers in Karnataka and their tributaries.
2. Make a list of the important hydro-electric power stations of Karnataka.

V. Project :

1. Mark the dams of Karnataka on a map and name them.
2. Visit any tank, canal, stream or river, coast which are near your dwelling and write about their important features.

ಉತ್ಸವ