

Cauvery basin

By IAS Toppers | 2023-12-13 15:40:00

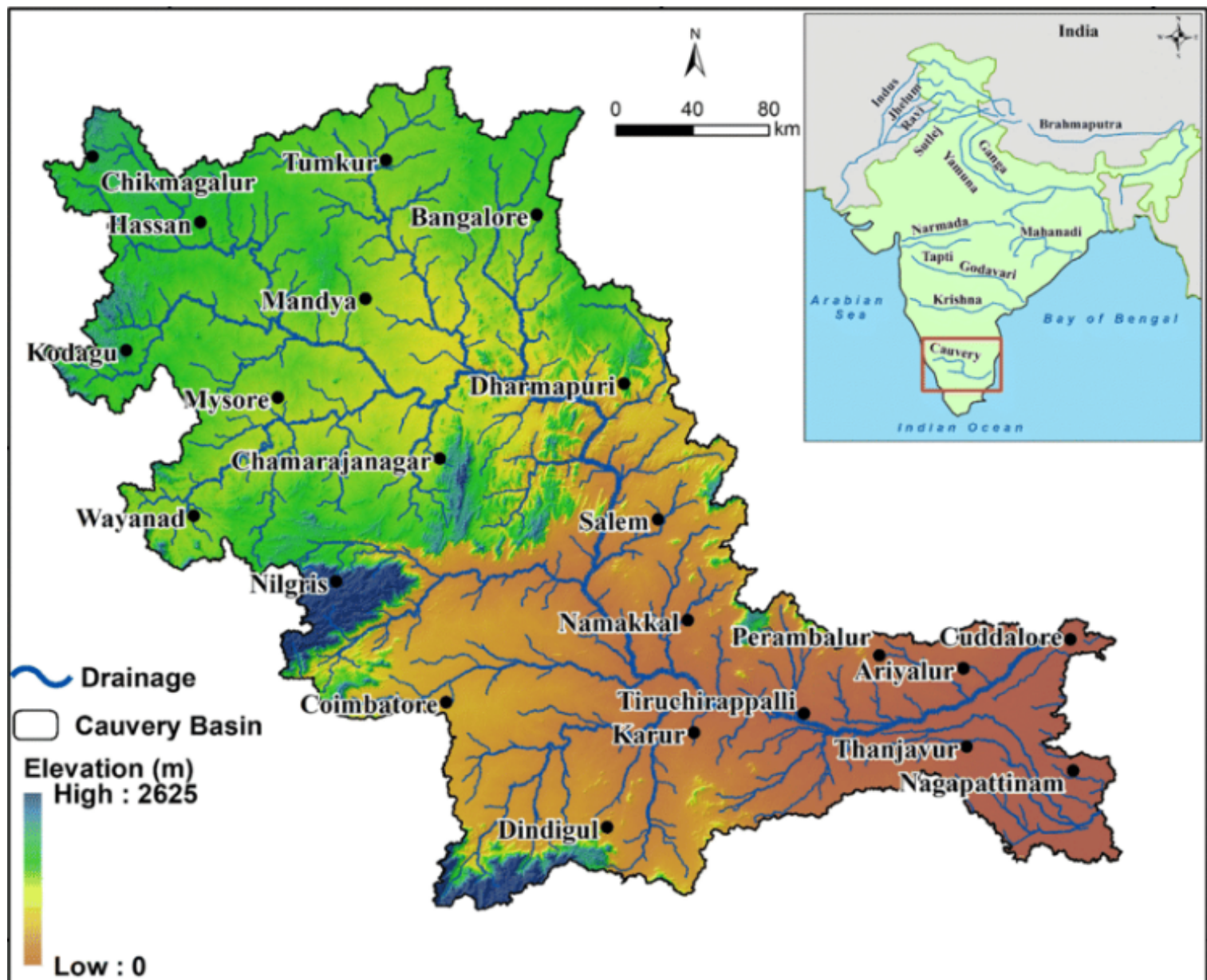


Cauvery basin

Scientists and researchers at the Indian Institute of Science (IISc), Bengaluru, revealed in a recent paper that nearly 12,850 sq. km of natural vegetation in the Cauvery basin was lost between 1965 and 2016.

[ref-britannica]

About Cauvery basin:



[ref-researchgate]

- The Cauvery basin spans across the states of **Tamil Nadu, Karnataka, Kerala**, and the **Union Territory of Puducherry**, covering an area of 81,155 sq. km, which constitutes approximately **2.7% of the total geographical area of the country**.
- It has a maximum **length and width** of about 560 km and 245 km, respectively.
- The Cauvery basin is **fan-shaped in Karnataka** and **leaf-shaped in Tamil Nadu**.
 - Its unique shape **prevents fast-raising floods**, and rainfall mainly occurs during the **southwest monsoon** in Karnataka and from the **northeast monsoon** in Tamil Nadu.

Boundary:

- The Cauvery basin is bordered by the **Tungabhadra sub-basin of the Krishna basin on the north** and the **Palar basin on the south**.
- It is bounded by the **Western Ghats** on the west, by the **Eastern Ghats** on the east and south and by the ridges separating it from Krishna basin and Pennar basin on the north.

- The Nilgiris, an **offshore of Western ghats**, extend Eastwards to the Eastern ghats and divide the basin into **two natural and political regions** i.e., Karnataka plateau in the North and the Tamilnadu plateau in the South.

Division and unification:

- At **Shivanasamudram**, the river branches into two parts, cascading through a height of 91 m, utilized for power generation since 1902.
- The branches reunite at **Mekedatu** and serve as the boundary between **Karnataka and Tamil Nadu**.
- The river passes through **Hogennekkal Falls**, enters the Mettur Reservoir, and takes an easterly **course through Tamil Nadu**.
- Following **Tiruchirapalli district**, the Cauvery River bifurcates, with the northern branch known as "**The Coleroon**" and the southern branch continuing as the Cauvery, marking the beginning of the Cauvery Delta.
 - The two branches reunite to create "**Srirangam Island**".
- Along the Cauvery branch lies the "**Grand Anicut**," believed to have been constructed by a Chola King in the 1st Century A.D. Below the Grand Anicut, the Cauvery branch further splits into two, known as **Cauvery and Vennar**.
 - These branches, along with their subsequent divisions, create an **intricate network throughout the delta**.

About Cauvery river:

- The Kaveri River originates at **Talakaveri in the Brahmagiri range** of the Western Ghats, Kodagu district, Karnataka, at an elevation of 1,341 m above mean sea level.
- It travels approximately 800 km before reaching its outfall into the **Bay of Bengal**.
 - It reaches the sea in Poompuhar, in Mayiladuthurai district.
- The Kaveri River is the **third-largest river in southern India**, following Godavari and Krishna.
- It holds the distinction of being the **largest river in the state of Tamil Nadu**, and as it courses through, it effectively bisects the state into north and south.
- In ancient Tamil literature, the Kaveri River was also referred to as **Ponni**, signifying "the golden mother" due to the **fine silt it deposits**.

Tributaries:

- Key **left-bank tributaries** of the Kaveri include the Harangi, Hemavati, Shimsha, and Arkavati, while **right-bank tributaries** include Lakshmantirtha, Kabbani, Suvarnavati, Bhavani, Noyil, and Amaravati.
- After **Noyil and Amaravathi** join on the **right bank** and here the river widens with sandy bed and flows as "**Akhanda Cauvery**".

Religious significance:

- The Cauvery is revered as a **sacred river** by the people of southern India, worshipped as the **Goddess Kaveriamma** (Mother Cauvery).
- It holds a significant place among the **seven holy rivers of India**.

