

UPSC Preparation

Mekedatu Project

Mekedatu Balancing Reservoir and Drinking Water Project has both financial and social benefits as it proposes a plan to provide drinking water for nearly 100 lakh people with an additional benefit of generating 400 MW power.

Therefore, this project is proposed with an aim to conserve water, prevent energy shortage and provide drinking water facilities to Bangalore cities and surrounding areas in Cauvery basin.

Facts about Mekedatu Project for UPSC

Brief Facts about Mekedatu Project - UPSC Prelims	
What is the full name of the project?	Mekedatu Balancing Reservoir and Drinking Water Project
What will be the total developmental period of the entire proposed project?	4 years (i.e., 48 months)
Among which two states, Mekedatu project has caused disputes?	Karnataka and Tamil Nadu
What is the total cost estimated for the proposed project?	Rs 9,000 crores

Background

- The possibility of developing power from Mekedatu project has been under examination since 1948, when Kollegal territory was a part of Madras Presidency.
- However, this project wasn't examined till the reorganization of the States in the year 1956.
- After 1956, initially this project was investigated by the Hydro-Electric Project Investigation Department of GoM and then on by the Karnataka Power Corporation Limited (KPCL) from the year 1986 onwards.
- KPCL prepared a report titled "Mekedatu Hydroelectric Project – Project Report" in July 1996.
- However, the further consideration of the same got delayed at that time, directing Government of Karnataka to wait for the Award of the Hon'ble Cauvery Water Disputes Tribunal (CWDT).

- The subject of sharing of the waters was adjudicated by the Hon'ble Cauvery Water Disputes Tribunal (CWDT).



Source - The Hindu

Objectives

The objectives of Mekedatu Balancing Reservoir and Drinking Water Project are:

- To provide drinking water facility to Bengaluru Metropolitan Region, and its adjoining area by way of proposing a scheme to tap water from the foreshore of the intended Mekedatu project by utilising the additional 4.75 TMC (thousand million cubic feet) of water.
- To harness nearly 400 MW of renewable energy (hydro-electric power) annually by Cauvery Neeravari Nigam Limited (CNNL).
- To regulate the required quantum of water to Tamil Nadu on a monthly basis to store the flood waters and prevent it from escaping to sea as it happened in the monsoon of 2018.

Location

- Mekedatu project is located in Muguru and Mekedatu villages, Kanakapura and Kollegal taluks of Ramanagara and Chamarajanagar Districts of Karnataka.
- The dam site is located about 3.0 Km downstream of the confluence of Arkavathy with Cauvery river called 'Sangama'.
- The left flank of the dam falls under Ramanagara District, the right flank falls under Chamarajanagar District.

- The centreline of the Cauvery river forms the administrative boundary between the two districts.

Facts of Cauvery River:

- The river Cauvery originates in the Brahmagiri range Western Ghats in Talakaveri of Coorg district.
- Length - about 800 km.
- The total catchment area - 81,155 Sq. km.
- Main tributaries in the State of Karnataka
 - Harangi,
 - Hemavathi,
 - Shimsha,
 - Arkavavathi,
 - Lakshmanathirta,
 - Kabini and
 - Suvarnavatti
- Main tributaries in the State of Tamil Nadu
 - Bhavani,
 - Noyyal and
 - Amaravathy
- The western side of the catchment receives south-west monsoon rainfall between June and September.
- The eastern catchment receives north-east monsoon rainfall between October and December of each year.
- The non-monsoon period rainfall is not significant.
- Cauvery river is an interstate river, which originates in Karnataka State, traversing through Tamil Nadu before draining into Bay of Bengal.
- The catchment area lies in the States of Karnataka, Kerala, Tamil Nadu and Puducherry.
- Cauvery is the only perennial source of water available, and any project or proposal to provide drinking water can only be from this source.

Components

The major components of Mokedatu Balancing Reservoir and Drinking Water Project as planned would include the construction of:

- A balancing reservoir,
- Bridge,
- Power house
- Tail race tunnel.

The project requires a total of 5252.40 Ha of land for the construction of project components and submergence of forest, wildlife and revenue land. Sangama, Kongedoddi, Madavala, Muthathi and Bommasandra are the villages involved under submergence. The land will be acquired as per the **Right to Fair Compensation and Transparency in Land Acquisition Act, 2013**.

The project components also fall within Cauvery Wildlife Sanctuary (near Mekedatu) and interstate boundary of Tamil Nadu at a distance of 3.90 Km. Hence, the proposed project is considered as **Category 'A'** as per Environmental Impact Assessment (EIA). Therefore, the project requires Environmental Clearance from Ministry of Environment, Forests and Climate Change (MoEFCC).

Environmental Concerns

- The proposed project falls within the Cauvery Wildlife Sanctuary involving Arkavathy River, Cauvery River, a few Wildlife Sanctuaries and Fishing Camps.
- The riparian forest of the Cauvery Wildlife Sanctuary is the only habitat in the State of Karnataka for near threatened (International Union for Conservation of Nature) species of **grizzled giant squirrel** which is endemic to southern India and Sri Lanka and **Honey badgeror/ Ratel**.
- Likewise, the Sanctuary is the home for many endangered flora and fauna species.
- **Environment Management Plan**
 - Catchment area treatment plan will be prepared by using Remote sensing and GIS methodology.
 - Biodiversity and Wild Life Conservation & Management Plan for conservation and preservation of endemic, rare and endangered species of flora and fauna will be prepared.
 - Water and Air Quality and Noise Management Plans to be implemented during construction and post construction periods.
 - Groundwater management plan.

Interstate Aspects

- River Cauvery after originating traverses in Karnataka for a length of 320 km before entering Tamil Nadu.
- It passes through Tamil Nadu for a length of 357 km before draining in to the Bay of Bengal.

- The Tamil Nadu Government has urged the Union government to cancel the permission given to the Karnataka government to prepare a detailed project report (DPR) on construction of the dam at Mekedatu.
- The Tamil Nadu government feels that the upper riparian State (Karnataka) has adequate infrastructure already to address the water needs of the metropolitan city, Bengaluru, and there is no necessity for the Mekedatu project.
- Tamil Nadu's petitions against the project are pending with the Supreme Court.
- The project is yet to get environmental clearance from the Centre.

FAQ about Mekedatu project

What is the role of Cauvery Neeravari Nigam Limited (CNNL) in the Mekedatu project?

Cauvery Neeravari Nigam Limited (CNNL) is planning to build a balancing reservoir across River Cauvery near Mekedatu. CNNL is a wholly owned company under Government of Karnataka as per the provisions of The Companies Act, 1956 with effect from 04 June 2003.

What is the current stand of Cauvery Water Disputes Tribunal (CWDT) and the Supreme Court?

According to the 2007 order by CWDT, it made allocations to all the riparian States — Karnataka, Kerala and Tamil Nadu, apart from the Union Territory of Puducherry. It also stipulated “tentative monthly deliveries during a normal year” to be made available by Karnataka to Tamil Nadu. But, after further appeal, the Supreme Court in 2018 has revised the water allocation and increased the share of Karnataka at the cost of Tamil Nadu.