# MULTI PURPOSE PROJECTS /DAM ACROSS THE CAUVERY RIVER IN SOUTH INDIA **UNDER BRITISH RULE**

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## **ABSTRACT**

Water Resources Projects are anticipated different purposes like water system, Hydro Power Generation, Water Supply for Drinking and modern purposes, Flood control, route and so on. Projects which fill an overabundance are called Multipurpose undertakings. A multipurpose task is a huge venture which fills an assortment of needs like-flood control, fish rearing, water system, age of power, soil protection, and so on..

- Water storage capacity and supply is maintained
- Strong irrigation system can be made which flourish water to the arid desert regions
- Electricity is produced through the hydroelectric power plants
- The wasted rainwater can be saved through its effective implementation
- Flood like situation which mostly affects the small villages can be avoided through this as it has higher capacity to store rainwater

Moreover, by developing agriculture, industry and infrastructural services, these projects can generate adequate volume of employment opportunities in the farm and non-farm sector. All these would help to raise the standard of living of the people of those adjoining regions reaping benefits from such projects. Multi-purpose projects can also facilitate the development of recreation facilities in the form of picnic resorts, holiday resorts etc. which are having much commercial viability nowadays.

**Keywords:** Development, Generate, Scheme, Objective

#### 1. INTRODUCTION

Multi-reason projects are especially helpful for monetary advancement of the country.

It is favorable to every who are in and around the wellspring of the area. Extension of water system offices is one of the significant targets and benefits of multipurpose ventures. These tasks can animate horticultural efficiency for meeting the developing necessity of food and unrefined substances expected for expanding non-ranch activities. Another significant target of such undertakings is to control the event of floods making destruction on the economy .Multi-reason projects help to produce hydro-power for an enormous scope premise, which is particularly significant for the advancement of industry. Such ventures can make route offices in the nation by creating shipping administrations for transportation, raise armada limit and consequently diminish the traffic load on rail and street transport. These ventures can assist with raising ranger service on the banks of the trenches. In addition, it can likewise energize the advancement of fisheries in the reservoirs. Such projects work with the improvement of safe drinking water projects for the connecting areas. Such tasks can establish a positive environment for the advancement of industry by offering the offices like less expensive power, better water transport, accessibility of unrefined components at less expensive rates for agro-based businesses etc. This research holds such ventures in its review

### 2. SHIVANASAMUDRA DAM (1902)

It is situated on the Kaveri River and was the first hydropower project in Quite a while as well as Asia. It was inherent Karnataka during the British time and was planned by Diwan Sheshadri Iyer, where the waterway Kaveri overflows down in two pleasant cascades, is a treat to watch. Tumbling down 75 Mts. into a profound rough chasm, these falls are at their best during the Monsoon months (July to November). Asia's first hydro-electric undertaking was set up here in 1905. Power was emptied from this power venture to Kolar Gold Fields close to Bangalore for running the Gold mines.

Shivanasamudra Hydro Power Project was authorized in 1902. It has an absolute introduced limit of 42 Megawatt. The kind of task is Major as it has a limit of more prominent than 25 Megawatt. The Status of force plant is functional. The wellspring of water is Cauvery and its bowl is likewise Cauvery. The hydroelectric bowl of the Shivanasamudra Hydro Power Project is East Flowing Rivers. The power project was built in the Southern Hydroelectric Region and it was finished in 1938. The power station is claimed by the Karnataka Government and its working organization is KPCL (Karnataka Power Corporation Limited).

The recipient conditions of this power project are South Indian States, for the most part Karnataka. The complete number of turbines in the power plant are 10. The Capacity per every Turbine is 6 units of 3 MW and 4 units of 6 MW. The sort of Turbine is Francis. The Turbine is made by Boving UK (Unit 1-Unit 6) and Escher Wyss Switzerland (Unit 7-Unit 10). The Generator is made by GEC (General Electric Company) UK. There are 10 units in activity and these ten units are authorized. The Unit Sizes of the power plant is 6 units of 3 Megawatt and 4 units of 6 Megawatt. The principal unit was charged in 1902 and second to 6th units were authorized in 1925 and continuously the seventh to 10th units are dispatched in normal stretches.

### 3. THE KRISHNA RAJA SAGARA DAM

The Krishna Raja Sagara Dam (KRS Dam) was worked across waterway Kaveri, the nurturing stream for the Mysore and Mandya regions, in 1924.Krishna Raja Wadiyar IV Maharaj of Mysore developed the dam during the starvation notwithstanding the basic monetary condition in State. It was after him that the dam was named. One of the draftsmen of the dam was Chief Engineer of Mysore M. Visvesvaraya. There is a fancy nursery, Brindavan Gardens, appended to the dam. The gravity dam made of surki mortar is underneath the juncture of stream Kaveri with its feeders Hemavati and Lakshmana Tirtha, in the locale of Mandya, Apart from being the principal wellspring of water for water system in the most rich Mysore and Mandya, the repository is the primary wellspring of drinking water for all of Mysore city and practically the entire of Bangalore city, the capital of the province of Karnataka, holding the Total limit 1,368,847,000 m3.

The scene of the region addresses an intricacy of agrarian land, rustic home, sparingly spread trees and fixes of unique vegetation at the nearby Ranganathittu Wildlife Sanctuary, which draws in wide assortments of neighborhood and transient birds. Almost 220 types of birds have been kept here en masse.

#### 4. KALLANAI DAM 150 AD.

Kallanai Dam, otherwise called the Grand Anicut, is one of the most established water-controller structures on the planet which is still in use. Built something like a long time back across the Cauvery River in Tiruchirapalli District of Tamil Nadu, the Kallanai Dam is still in superb condition and utilized as a significant water system dam even at this point. The dam has been a motivation to numerous current dams excessively because of astounding designing. Peruse more to be familiar with this interesting illustration of the astounding design and designing of antiquated India.

The exceptional design of the Kallanai dam includes huge stones soaked in the Cauvery stream to redirect the water stream to the fruitful delta. The primary capacity of the dam was to hold the water supply in the Cauvery and stream the excess into Coleroon through the Ullar waterway. The dam was re-displayed by the British during the nineteenth hundred years.

In 1804, Captain Caldwell, a tactical architect was designated to advance the water system in the delta area. After some review he figured out that main a modest quantity of water was left for water system as the greatest water went to Kollidam. Caldwell proposed an answer by raising the dam. Subsequently, the dam stones were raised to a level of 0.69 meter, which expanded the limit of the dam.

It is trusted that floods to a degree of around 5260 cumecs (1,86,000 cusecs) have been released through this anicut with insignificant or no damage. The special design of the Kallanai dam includes huge stones soaked in the Cauvery waterway to redirect the water stream to the fruitful delta. The primary capacity of the dam was to hold the water supply in the Cauvery and stream the excess into Coleroon through the Ullar waterway.

#### 5. THE METTUR DAM

The Mettur Dam is perhaps the biggest dam in India and furthermore the biggest in Tamil Nadu, situated across the waterway Kaveri where it enters the fields. Worked in 1934, it required 9 years to complete. Maximum level and width of the dam are 214 and 171 feet, respectively.[2] The dam gets inflows from its own catchment region, Kabini Dam and Krishna Raja Sagara Dams situated in Karnataka. There is a recreation area at the foundation of the dam called Ellis Park kept up with by the Tamil Nadu Public Works Department. It gives water system and drinking water offices for in excess of 12 locale of Tamilnadu and henceforth is adored as the life and occupation giving resource of Tamil Nadu. This is the essential wellspring of water system for the delta in the State of Tamil Nadu in India. It is likewise verifiable as it was underlying 1934 by the British. It is as yet called Stanley Reservoir after its engineer.

The Mettur Dam has gotten public consideration since the last 50% of the twentieth hundred years, and particularly during the 1990s, because of the Kaveri River water debate between the States of Tamil Nadu and Karnataka. Because of ensuing dams developed across the Cauvery and its feeders in Karnataka, specifically Harangi Dam, Hemavathi Dam, Kabini Dam, following the KRS Dam; Mettur Dam doesn't get a lot of water during lean seasons. Thus, the dam almost goes dry during specific times of the year, frequently when water is most required by the ranchers and the overall population of Tamil Nadu. This has made genuine debate and pressure between the adjoining territories of Karnataka and Tamil Nadu. Legislatures of the particular expresses, the Supreme Court, and the Cauvery Tribunal have up to this point not been fruitful in settling the question. The council has determined a yearly arrival of 192 tmcft by Karnataka to Tamilnadu. In the long periods of shortfall in acknowledgment the question exasperates in both the states. The significant purposes behind the deficiency are lacking acknowledgment of Southwest storm in the essential catchment region of the waterway viz., Kodagu and Wayanad and the over dependence of the stream water for water system and drinking water plans in both the states.

#### 6. THE UPPER ANAICUT 1838

The Upper Anaicut otherwise called Mukkombu is a dam based on the Kaveri River in the territory of Tamil Nadu in southern India. The controller dam was developed somewhere in the range of 1836 and 1838 by Sir Arthur Cotton, a British water system engineer who was enlivened by the structural magnificence of the Grand Anaicut trench worked by Karikala Chola in Kallanai of Thanjavur locale in the second century. Across the head, where it branches from the Kaveri, stands the Upper Anicut, the dam built to forestall the Kollidam which runs in a lower bed than the Kaveri, from abstracting a lot of the water, thus harming the water system in Thanjavur subject to the standard. Mukkombu fills in as an ideal spot for fishing as the water level isn't really profound and furthermore on account of the accessibility of assortments of a bountiful number of fishes. Assuming that you are an inhabitant of Trichy, one can likewise purchase new fish to bring back home and have an astounding supper.

### 7. CONCLUSIONS

The Cauvery basin is a region characterized by a highly complex range of hydrological, political, socio-economic, historical, and cultural variables that all have an impact on present and future developments of water resources. Water management in the Cauvery basin has not succeeded in meeting existing demands so far and is not likely to do so in the future either in its present condition, especially with regard to the forecasts concerning the impacts of climate change. This article has pointed out that water policy and management in the Cauvery region lack multi-level, intersectoral, and participative approaches. The constitutional framework, weak policies, implementation gaps, and a water administration

that clings to its own competencies and a techno-economic approach to water management are responsible for the unsatisfactory hydro-political situation in the basin.

#### CONFLICT OF INTERESTS

None.

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None.

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