

# Re-Negotiating the Cauvery River Water Dispute in Changing Geopolitics and Ecological Era

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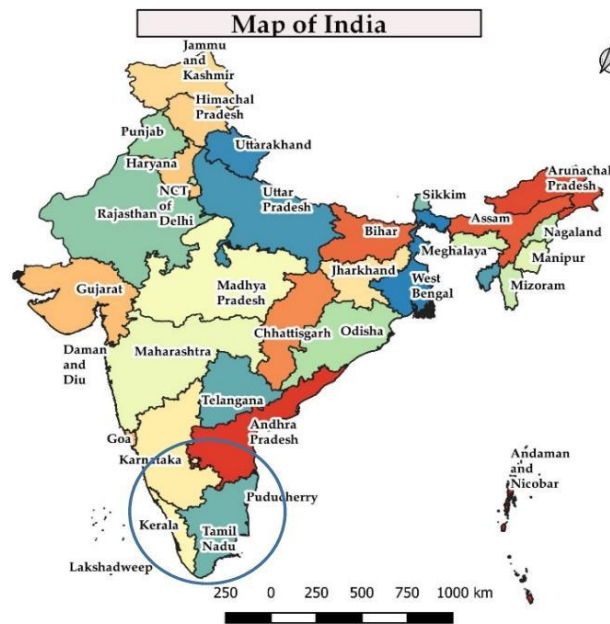
## **Abstract:**

For hundreds of years, conflicts in water sharing have existed all around the globe. Cauvery River, in the southern part of India, has been in the midst of such conflict for the last 130 years. The Cauvery conflict between Tamil Nadu and Karnataka resurfaces whenever there's a shortfall in the Southwest Monsoon in the region. Historically, the conflict has been about the right to use water and the states/provinces in conflict have used the water from the river for agricultural purposes. Due to industrialization in the late 1980s and increasing population, water availability in the region has become stressed. The paper is an attempt to analyse the history and recent issue of Cauvery river water dispute. The paper also highlight the climate change that exacerbated the region's water availability issues. Faltering rainfall has caused unrest in the region, and the traditional methods of water sharing are dwindling under political pressure. The purpose of this paper is to suggest the solution to Cauvery river dispute lies in effective water conservation strategy. Without a climate change strategy, the governments of these states will never be able to solve this complex issue at hand. Here's an in-depth study of historical, political and ecological aspects of this dispute.

**Keywords:** Water Sharing, Disputes, Climate Change, Water Conservation,

## **Introduction**

There are several cases of river basins being shared by two or more countries. Some of these nations have had troubles, like India and Pakistan over the Indus River; Sudan, Egypt, and Ethiopia over the Nile; and Israel, Palestine, and Syria over the Jordan River.<sup>1</sup> Similarly, in the southern part of India, the Cauvery River has been in the midst of one such kind of dispute for more than a hundred years. Cauvery is the fourth largest river in southern India, with a length of 802 km (kilometers) which flows through the southern Indian states of Kerala, Karnataka, Tamil Nadu, and the Union territory of Puducherry, has been a source of persistent and intricate water conflict.<sup>2</sup> It originates in the Indian state of Karnataka and discharges into the Bay of Bengal, while flowing east through the state of Tamil Nadu, providing hydropower to significant regions of both states.<sup>3</sup> The Cauvery River basin's location is circled in the map of India shown in Figure 1.



**Figure 1. Map of India with the Cauvery Basin encircled.**

The Cauvery water dispute has a long and bitter history.<sup>4</sup> The origin of the dispute traces back to the late 1800s, when agreements were reached between the princely state of Mysore (now part of Karnataka) and the Madras Presidency (now Tamil Nadu) contended for control over the river's waters.<sup>5</sup> Even after independence, the issue has persisted, revolving around the judicious sharing and utilisation of water resources, and has resulted in numerous legal battles, protests, and political maneuvering. The deep analysis of the historical background the this conflict is given below.

### Historical Background

The conflict goes back to the early 19th century when the parties to the dispute were the Madras Presidency and the princely state of Mysore. Before India became independent in 1947, the British tried to resolve the issue, and after, the government of India continued as well. After independence, the state lines were re-drawn. More specifically, Madras Presidency was roughly divided into the states of Tamil Nadu, Kerala, Andhra Pradesh, and Pondicherry (which is a union territory and currently known as Puducherry). The princely state of Mysore was roughly divided into the state of Karnataka.<sup>6</sup>

At the end of the 19th century, Mysore planned to revive various irrigation projects, but the Madras Presidency resisted any movement in that direction. However, the state of Mysore proposed to build a dam upstream, but the state of Madras did not agree, as it wanted to build a storage dam downstream. Mysore state approached the then British government, requesting them to intervene. As a result, a conference was held in 1890 with the objective of reaching an agreement. The potential arrangement allowed Mysore to deal with irrigation works and gave Madras practical security against any mishaps. The agreement was signed on 18 February 1892.<sup>7</sup>

After the government's intervention in 1892, it was decided that the state of Mysore would build the dam under reduced storage. However, during construction, the foundation was laid for a dam with a capacity of 41.5 TMC (thousand million cubic feet), which irked Mysore state. The issue, as per the rules of the agreement of 1892, was sent for arbitration.<sup>8</sup> The arbitration started in 1913 and gave its verdict in favor of Mysore in 1914. However, Madras did not agree with the ruling and a new pact was

signed in 1924.<sup>9</sup> This pact was to stay in place for 50 years. After Indian independence in 1947, the state boundaries changed, which brought Kerala and Pondicherry (Puducherry) into this dispute. Nonetheless, Tamil Nadu and Karnataka remain the biggest parties in the dispute. The timeline of the pre-independence era conflict is presented in **Table 1**.

YEAR	MAJOR EVENTS
1890	Mysore plans to revive various irrigation projects. Madras is against these plans, as the scale of the construction is unknown
1892– 1905	Mysore tries to build a dam; however, Madras intervenes. The Central Government directs Mysore to reduce the capacity of the dam. Mysore, ignoring the directive, laid the foundation for handling the original capacity. Madras approaches the central government again.
1905– 1913	The Central Government offers that the issue should be solved by arbitration.
1913	Arbitration begins.
1914	Arbitration results in Mysore’s favor; Madras refuses to accept.
1914– 1924	Negotiations delayed due to the 1st World War.
1924	A pact is signed between Madras and Mysore regarding water sharing, which shall remain active for the next 50 years.

**Table 1. Pre-Independence era conflict timeline regarding the Cauvery River.**

As the pact of 1924 was about to expire, a Cauvery Fact-Finding Committee (CFFC) was constituted in 1970. A series of inter-state meetings based on CFFC’s reports was held during 1973 and 1974. At the final meetings of this sequence held on November 1974 and February 1975, a draft agreement that would act as a replacement for the 1924 agreement was discussed, but not adopted. In August 1976, however, a draft agreement prepared by the Union was accepted by all the states, and this fact was announced in the Parliament by the Minister for Agriculture. However, in the next meeting of the Chief Ministers, Tamil Nadu backed out of the agreement and Karnataka followed suit.

The timeline of the post-independence era conflict is presented in **Table 2**. Many inter-state meetings were called to amicably resolve the issue. However, these meetings, many being under the auspices of the Union Government, went on in vain. Farmer groups were one of the most affected strata of society. Due to non-agreement between the states, the farmers from both the states suffered heavily.

YEAR	MAJOR EVENTS
1970	Cauvery Fact-Finding Committee (CFFC) is established.
1974	CFFC under the Prime Minister of India proposes a new pact.

YEAR	MAJOR EVENTS
	Tamil Nadu accepts but backs out later.
1976	Tamil Nadu backs out of the pact.
1976–1986	Continuous meetings between state representatives bear no results.
1986	A farmer’s organization files an appeal to the court (in Tanjavur).
1991	The Cauvery Water Disputes Tribunal (CWDT) is established and an agreement is passed. Karnataka passes an ordinance nullifying the CWDT agreement.
1995	Tamil Nadu appeals to the Supreme Court, as Karnataka did not release the stipulated quantities of water. Karnataka receives an Interim Order by the Prime Minister to release 6 TMC water.
1997	The Cauvery River Authority (CRA) is established to enforce the Interim Order.
2000	CRA is divided into the CRA and Cauvery Monitoring Committee (CMC).
2007	CWDT in consultation with CRA and CMC gives the verdict.
2007–2013	Negotiations between the states. (Karnataka approached CWDT as Tamil Nadu’s share was larger.)
2013	The 2007 CWDT verdict is changed, and Karnataka’s share is increased.
2017	The Supreme Court of India upholds its previous ruling.
2019	A permanent committee is constituted called the Cauvery Management Board

**Table 2. Post-Independence conflict timeline regarding the Cauvery River.**

**Key problems:**

Primarily, the dispute pertains to the allocation of water resources during periods of water scarcity, the distribution of water during regular years, and the establishment of reservoirs and dams along the river's course. Both states are vying for a greater portion of the river's water to cater to the needs of their expanding populations and agricultural activities.<sup>10</sup> Over time, the Cauvery dispute has witnessed a series of agreements, disagreements, and legal battles. The Cauvery Water Disputes Tribunal (CWDT) was formed in 1990 and was aimed at addressing water disputes involving Tamil Nadu, Karnataka, Kerala, and Puducherry. The CWDT took 17 years to arrive at a conclusive ruling in 2007, outlining the distribution of Cauvery water among the four riparian states. During periods of water scarcity, water would be apportioned on a pro-rata basis. In February 2007, the CWDT issued its final award, detailing water allocations among the four states in the Cauvery basin based on an overall availability of 740 TMC in a typical year. The ultimate decision, delineating the annual water allocation between Karnataka and Tamil Nadu, has been difficult to implement, with both states expressing discontent with the tribunal's judgement on various occasions. In 2018, the Supreme Court declared the Cauvery River a national resource and upheld the water-sharing arrangements determined by the CWDT. Additionally, the Central Government was directed to formalise the Cauvery Management Scheme.<sup>11</sup>

**Recent Issues:**

The most recent controversy emerged as Karnataka refused to adhere to previously agreed-upon water release quantities. Tamil Nadu demanded a release of 10,000 cusecs of water over a 15-day period, while Karnataka has proposed a lower water release of 8,000 cusecs for the same 15-day span. Karnataka cites insufficient inflow due to decreased rainfall in the Cauvery catchment, which includes the origin point of Kodagu. The state government said that from June to August, Kodagu saw a 44% rainfall deficit. To press its demand, Tamil Nadu petitioned the Supreme Court for help in guaranteeing that Karnataka releases 24,000 cubic feet per second (cusecs) of water from its reservoir. In reply, Karnataka argued before the Supreme Court that Tamil Nadu has failed to recognise that 2023 is a "distressed water year" rather than a "normal water year." Karnataka's Deputy Chief Minister, DK Shivakumar, then requested a reconsideration of this decision due to water scarcity issues in the Cauvery basin area since the start of this year's monsoon season. Consequently, the state has formally written to the Cauvery Water Management Authority (CWMA), urging them to review the order to release 10,000 cusecs to Tamil Nadu. The Cauvery Water Regulation Committee, based on the deliberations of a meeting held on Tuesday, recommended Karnataka to release 3000 cusecs at Biligundlu starting from September 28th up to October 15<sup>th</sup> 2023.<sup>12</sup>

**Political Tug of War**

BJP leaders and former Karnataka Chief Ministers, HD Kumaraswamy and Basavaraj Bommai, have criticised the state government, accusing it of prioritising politics over the people's welfare. The BJP alleges that the Congress government is releasing Cauvery water to support their ally DMK, a part of the newly formed opposition block in India, in preparation for the upcoming Lok Sabha elections. Union Minister of State for Agriculture and Farmer Welfare, Shobha Karandlaje, expressed concern that releasing Cauvery water for political reasons could lead to drinking water shortages for farmers in Mandya and Mysuru, as well as residents of Bengaluru. Former Chief Minister Kumaraswamy questioned the Karnataka government's stance on the issue, emphasising the critical water shortage faced by farmers. The politicisation of water resources has made it a recurring dispute between Tamil Nadu and Karnataka. Shifting the focus from water sharing to water conservation will help both sides arrive at an acceptable water-sharing formula.

**Suggestions: Effective Water Conservation Strategy**

The tussle between the lower riparian state of Tamil Nadu, with a share of 404.25 tmc (thousand million cubic feet) annually, and the upper riparian state of Karnataka, which has a share of 284.75 tmc, has aggravated today due to the failure of southwest monsoons in Karnataka this season. Judicial and quasi-judicial bodies formed to resolve the issues over the years have failed. Despite these efforts, a lasting resolution still needs to be achieved, with both states continually vying for their rightful share of the river's water. This paper focuses on the key findings that must guide the dispute resolution mechanisms. It is high time to advocate not for the rightful share of water for each state but the reasonable share in water conservation mechanisms by both states given the climate crises.<sup>13</sup>

In transboundary water disputes, upstream states typically apply the Harmon doctrine (source-based water rights). In contrast, downstream states adhere to historical principles (prioritising primary water rights for historical users) as per a study by the Observer Research Foundation (2018).<sup>15</sup> International

guidelines can advocate for equitable and reasonable utilisation of transboundary waters and offer valuable insights into the resolution process.

The Supreme Court judgement in 2018 on Karnataka's appeal discusses the water-sharing formula in the Cauvery basin and references the Helsinki, Berlin, and Compoine rules. Water allocation to each party state is based on the total available yield generated in the Cauvery basin. According to the judgement, the full yield figure of the Cauvery basin areas within the states of Karnataka, Kerala, Tamil Nadu, and the Union territory of Pondicherry was estimated at 740 tmc, assuming 50% dependability. Of the 740 tmc, 14 tmc is apportioned for environmental protection and inevitable flows to the sea, leaving around 726 tmc of water shared among the four riparians. The judgment mentions that the Cauvery basin's rainfall, flows, and crop pattern will determine water release during a year of distress.<sup>16</sup>

While the water-sharing formula is essential, it should integrate a water conservation strategy, reflecting the shared responsibility of the states towards Cauvery as a property. Investments in irrigation efficiency, diversion of the cropping pattern, water conservation, or any measures to regulate the demand for water from both states need emphasis during water sharing. These factors become relevant when the water supply is constrained, and shortages are recurrent over the years.

Firstly, the actual cost of irrigation water becomes inconsequential, making agricultural water almost a free resource in the basin. The free resource has resulted in inefficient demand-side management of irrigation water as farmers in other irrigation command areas habitually utilise large amounts of water from the river for a longer time with low end-use efficiency. Conserving scarce resources must take precedence over subsidising agriculture for redistributive justice during crises.

Secondly, diversifying crop patterns in the Cauvery Delta, in both states, forms a solution for managing demand for irrigation. A sudden shift from high-value crops to other crops may be challenging, but promoting crop diversification through a minimum support price regime favoring drier crops, millets, horticulture, and oilseeds (which are suited to both States geographical conditions) to nudge farmers promotes less water-intensive crops in both States.

Thirdly, water conservation is neglected by the states because, Bengaluru, which depends on Cauvery for its water needs, ranks second among Indian metros in water wastage as per an article in *The Wire*.<sup>17</sup> In addition, it is ironic to note that Tamil Nadu received a \$100 million loan from the Asian Development Bank<sup>18</sup> to reduce water stress in the Cauvery Delta in 2016 and the projected completion in 2020, yet the water demand persists.

Finally, water pollution in the Cauvery Basin is an overlooked dimension. As per a study by IIT Madras, the Cauvery water is plagued by pharmaceutical contaminants. Adding to it, the industrial effluents, untreated sewage, and agricultural runoff have severely compromised the quality of the Cauvery's waters.

Hence, water demand management and conservation are pivotal in resolving the Cauvery dispute. Prioritising the preservation of catchment areas and river basins to ensure a sustainable water supply for both states. The politicisation of water resources has exacerbated the Cauvery dispute, and shifting the focus from water sharing to water conservation is imperative for the water-sharing formula, given the long-time and recurrent battle between the states.

California, for instance, implemented a 15-year plan to reduce its reliance on Colorado River water, emphasising water conservation, recycling, and storage as part of its separation from an overreliance on the river.<sup>19</sup> Currently, the seven states involved in Colorado River water sharing are

considering how to cut the demand for water. Hence, the Cauvery water dispute is far more intricate considering the water conservation than a mere dispute between the states.<sup>20</sup>

### Conclusion:

To move forward, stakeholders must recognise the urgent need for a new narrative that prioritises the sustainable use of water resources, minimises ecological harm, and embraces the challenges posed by climate change. Legal requirements advocating for water conservation and demand management, as a prerequisite for water sharing rights, is the only lasting solution to the age-old conflict. Consequently, Cauvery River remains a lifeline for both Karnataka and Tamil Nadu in the future.

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