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The Cauvery River Water Disputes in India

The Cauvery River water disputes are among the longest-running inter-state river water disputes in India. In the past, agreements were signed between the disputing States, the tribunal delivered its verdict, and the Supreme Court of India made a number of interventions on the Cauvery issue. Yet, the disputes continue. On 16 February 2018, once again, the Supreme Court of India delivered its verdict on the issue. However, this verdict has also not completely satisfied two of the four parties to the Cauvery disputes – Tamil Nadu and Karnataka.

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The Cauvery, or Kaveri River, originates from Talakaveri (Thalakavery) in Kodagu district in Karnataka. It has a drainage area of around 81,155 square kilometres which is spread across four states – Karnataka (34,273 square kilometres) Tamil Nadu (43,867 square kilometres), Kerala (2,866 square kilometres) and Puducherry (149 square kilometres). Its main tributaries are the Harangi, Hemavati, Kabini, Arkavathy, Amravathi, Lakshmana and Tirtha. The river and its tributaries together form the Cauvery river system. There are around 86 dams on the Cauvery River and its tributaries. Of those dams, 37 have been constructed after 1974. About

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² "Profile of Rivers in Karnataka", ENVIS Technical Report 129: November 2017 http://www.ces.iisc.ernet. in/energy/water/paper/ETR129/sec7.html. Accessed on 13 April 2017.

[&]quot;The 140-year-old conflict", Rajeshwari Ganeshan & Shreeshan Venkatesh, *Down to Earth*. http://www.downtoearth.org.in/feature/war-zone-cauvery-55848. Accessed on 15 February 2018.

17,356 villages fall in the Cauvery basin.⁴ Coimbatore, Mysore, Salem and Trichinapally are among the main cities in the Cauvery basin region. Taking into account the 2011 census records, one can estimate that more than around 50 million people from Karnataka and Tamil Nadu are living in this basin area at the present time.⁵

Tamil Nadu and Karnataka have been embroiled in disputes over sharing the Cauvery waters for more than a century. The other two parties to the disputes are Kerala and the Union Territory⁶ of Puducherry. In the past, many attempts had been made to address this issue, but all of these efforts were unsuccessful. The most recent attempt culminated on 16 February 2018 when the Supreme Court of India delivered its verdict on the issue. In its verdict, taking into account the drinking water situation in Bengaluru city (earlier known as Bangalore), which is not part of the Cauvery basin, the Supreme Court allocated an additional 14.75 thousand million cubic feet of water to Karnataka. Of this, 4.75 thousand million cubic feet are to meet the drinking water demands of Bengaluru city.

Origins and Escalation of the Cauvery River Water Disputes

The dispute over the Cauvery water began in the 19th century between Mysore State (now in Karnataka) and the Madras presidency (now Tamil Nadu). To address their water-related problems, both Mysore and Madras planned various projects on the Cauvery. However, none of the projects were completed. Consequently, both faced famine and drought problems at regular intervals. To address the issue, in 1892, an agreement was signed between Mysore and Madras. Following the 1892 agreement, the King of Mysore, Krishnaraja Wodeyar, planned to build a dam at Kannamabadi village to hold 41.5 thousand million cubic feet of Cauvery water. This was opposed by Madras, which planned to build a dam at Mettur with a water storage capacity of 80 thousand million cubic feet. As their differences came to a head, Madras lodged a complaint against Mysore. In 1914, after listening to both parties, the British government of India allowed Mysore to construct a dam at Kannamabadi village, but with a

⁴ "Cauvery Basin: Rural Population", *India Water Portal*. http://archive.indiawaterportal.org/book/export/html/105. Accessed on 4 March 2018.

⁵ "The 140-year-old conflict", Rajeshwari Ganeshan & Shreeshan Venkatesh, op. cit.

The Union Territories (UT) are controlled by the Union government. At present there are seven UTs – Puducherry, Dadra & Nagar Haveli, Daman & Diu, Lakshadweep, Andaman & Nicobar Islands, and National Capital Territory of Delhi.

capacity to hold only up to 11 thousand million cubic feet of water. Even this was opposed by Madras, which appealed against the decision to the Secretary of State of India.⁷ Following an intervention by the Secretary of State, an agreement was reached between Madras and Mysore in 1924. This was valid for 50 years. As a result, the Krishna Raja Sagar dam was constructed in 1929 by Mysore and the Mettur dam in 1934 by Madras province.⁸

In 1974, the water-sharing agreement of 1924 between Mysore and Madras lapsed. Consequently, their successor States in independent India, Karnataka and Tamil Nadu respectively, found themselves at loggerheads over the Cauvery waters. To look into the matter, Tamil Nadu wanted a tribunal to be set up under the Inter-State River Water Disputes Act, 1956 (amended in 2002). However, this was ruled out by the Union government. After an intervention by then-Prime Minister of India, Indira Gandhi, Tamil Nadu withdrew its demand for a tribunal and started participating in negotiations with the riparian States. During the negotiations, the Union government presented two draft agreements in 1974 and 1976 respectively. Both were rejected by Tamil Nadu. On its part, Karnataka allegedly dragged the negotiations by adopting dilatory tactics such as late responses to issues so that it could gain enough time to build new dams in the upstream region. At that time, a crisis management system was set up for the following 15 years. Under this system, Tamil Nadu annually demanded enough water to save its crops in the delta region, which Karnataka did not agree to initially, citing its own water needs.

In 1990, while looking at a petition filed by a group of farmers from Tamil Nadu, the Supreme Court ordered that a tribunal be set up by the Union government to look into the water disputes between Tamil Nadu and Karnataka. Initially, the Union government, under Prime Minister V P Singh was not interested in the issue. However, the Centre eventually appointed a tribunal, ¹³ headed by a Supreme Court judge, Justice Chittatosh Mookerjee, as the chairman and Justices

⁷ Iyer, Ramaswamy R (2003). Water Perspectives, Issues, Concerns, Delhi: Sage Publication, p 45-46.

⁸ Ibid. Also see Siddiqi, Toufiq A & Shirin Tahir-Kheli (2004), *Water Conflicts in South Asia: Managing Water Resource Disputes Within and Between Countries of the Region*, Project Implemented by Global Environment and Energy in the 21st Century (GEE-21) and the School of Advanced International Studies, John Hopkins University (SAIS), Sponsored by the Carnegie Corporation of New York.

⁹ Iyer, Ramaswamy R (2003). Water Perspectives, Issues, Concerns, op. cit.

Wood, John R, (2007). *The Politics of Water Resource Development in India: Narmada Dam Controversy*; New Delhi: Sage Publication.

¹¹ Ibid, p 71.

¹² Ibid.

¹³ Ibid.

S D Agarwal and N S Rao as members. In 1996, Justice Mookerjee resigned from the tribunal. Justice N P Singh then assumed chairmanship of the tribunal in 1997. Presenting their cases before the tribunal, the disputants made the following points in support of their water-related demands:¹⁴

Karnataka

- (i) "The agreements of 1892 and 1924 are void since they were 'imposed' by the British on the 'vassal princely state' of Mysore;
- (ii) The 1924 agreement has expired in its entirety after 50 years in 1974. The 1892 agreement placed restrictions on Karnataka for the development of irrigation while Tamil Nadu had no corresponding restrictions;
- (iii) Tamil Nadu has the benefit of being exposed to both the South-West and the North-East monsoon;
- (iv) Tamil Nadu's canal systems are to be modernised;
- (v) Karnataka's drought-prone area is almost double that of Tamil Nadu and, therefore,Karnataka, has the right to use more water;
- (vi) Trans-basin diversions for irrigation or power should not be permitted; and
- (vii) The groundwater resources in the delta region are to be taken into account for the purpose of equitable distribution".

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Siddiqi, Toufiq A & Shirin Tahir-Kheli (2004). Water Conflicts in South Asia: Managing Water Resource Disputes Within and Between Countries of the Region, op cit.

Tamil Nadu

"The Central Fact-Finding Commission's reports of 1972 and 1973 with regard to yield and utilisation should be revised. The average annual utilisation is already higher than the yield, even at 50 per cent availability, and hence there is no scope for savings. The 1892 and 1924 agreements are considered inviolable, binding on all the states. There is thus little to be gained from working out any fresh allocation of waters in terms of the actual amount or periodic releases." ¹⁵

Kerala

"The allocation of Cauvery waters should be made taking into consideration the amount and percentage contribution of each state". 16

Puducherry

"The full allocation of a minimum quantity of 9.355 thousand million cubic feet of water for irrigation and drinking water purposes should be made during normal years".¹⁷

After listening to the petitions, on 25 June 1991, the Cauvery Water Disputes Tribunal (CWDT) passed an interim order. In its order, the tribunal directed Karnataka to release water from its reservoir so as to ensure 205 thousand million cubic feet went into the Mettur reservoir of Tamil Nadu in a water year (1 June to 31 May), with monthly and weekly stipulations. Following the order, under Article 143 (1) of the Indian constitution, the President of India made a reference to the Supreme Court in July 1991, asking:

(i) Whether the order of the tribunal constitutes a report and a decision within the meaning of Section 5 (2) of the (Inter-State Water Disputes) Act; and

¹⁵ Ibid, p 95.

¹⁶ Ibid.

¹⁷ Ibid.

 [&]quot;Cauvery Water Disputes Tribunal", Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India. http://mowr.gov.in/acts-tribunals/current-inter-state-river-water-disputes-tribunals/cauvery-water-disputes. Accessed on 4 March 2018.
Ibid.

(ii) Whether the order of the tribunal is required to be published by the central government in order to make it effective.

Responding to the presidential references, the Supreme Court, in its opinion on 22 November 1991, stated that:²⁰

- (i) The order of the tribunal dated 25 June 1991 constitutes a report and a decision within the meaning of Section 5 (2) of the Inter-State Water Disputes Act,1956; and
- (ii) The said order is, therefore, required to be published by the central government in the official gazette under Section 6 of the Act in order to make it effective.

However, Karnataka delayed implementing the interim order sensing public outrage in the State against the decision. Karnataka's withholding the waters had no impact on Tamil Nadu from 1992 to 1994 because, in those years, the State had good rainfall. However, in 1995, when the monsoon failed, the issue of implementation of the interim order came up. Following a plea by Tamil Nadu, the Supreme Court ordered Karnataka to release 30 thousand cubic feet of water immediately to save the rice crop in Tamil Nadu. The order was ignored by Karnataka. Consequently, the Supreme Court requested the then Prime Minister, P V Narasimha Rao, to mediate. After consultations with the chief ministers of Karnataka and Tamil Nadu, Rao called for the release of six thousand million cubic feet of water and set up a committee to see to its implementation.²¹ The continuous interference from the Supreme Court, interventions from the prime minister and non-compliance with the orders by Karnataka made the CWDT a toothless body.²² In 1998, then-Prime Minister, Atal Bihari Vajpayee, convened a meeting, first of the chief secretaries of the three States and the Union Territory in the Cauvery river basin. This was followed by a meeting of the chief ministers from the disputing States. After these meetings, Vajpayee was able to secure an agreement whereby there would be an ad hoc decision each year based on the recommendation of the monitoring committee headed by the

²⁰ Ibid.

Wood, John R, (2007): *The Politics of Water Resource Development in India: Narmada Dam Controversy*, op. cit.

²² Ibid

Union cabinet secretary. A Cauvery River Authority was also set up, headed by the prime minister.²³

Meanwhile, the CWDT continued its work and in February 2007 and delivered its final verdict on the dispute. In its order, the Supreme Court had calculated the total availability of water at 740 thousand million cubic feet (measured at Lower Coleroon Anicut site), at 50 per cent dependability. The CWDT allocated 30 thousand million cubic feet to Kerala, 270 thousand million cubic feet to Karnataka, 419 thousand million cubic feet to Tamil Nadu and seven thousand million cubic feet to Puducherry, while 10 thousand million cubic feet was set aside for environmental protection, and four thousand million cubic feet written off as inevitable escapages into the sea. This allocation meant that Karnataka had to release 192 thousand million cubic feet of water to Tamil Nadu. To implement its decision, the tribunal recommended that a Cauvery Management Board (CMB) be set up by the Union government. The CMB was entrusted with supervision of the operation of reservoirs and regulation of water releases with the assistance of the Cauvery Water Regulation Committee which was to be constituted by the CMB. The CMB was required to submit its annual report to the four disputing parties Karnataka, Tamil Nadu, Kerala and Puducherry before the 30th of September each year. The CMB was required to submit its annual report to the four

Not satisfied with the tribunal's verdict, the disputing parties filed Special Leave Petitions (SLPs) under Article 136 of the Indian constitution in the Supreme Court against the tribunal's order. The Supreme Court granted the SLPs in July 2007. Against this, the Union government filed an affidavit in March 2008 wherein, citing Section 11 of the Inter-State Rivers Water Disputes Act, 1956, it stated that "neither [the] Supreme Court nor any other Court shall have or exercise the jurisdiction in respect of any water dispute which may be referred to the Tribunal under the Act". However, as the Supreme Court granted the SLPs against the tribunal's order, the parties continued their legal battle over the allocation of water. The CWDT

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¹³ Ibid.

²⁴ "The Report of the Cauvery Water Disputes Tribunal – With the Decision", Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India. http://www.thehinducentre.com/multimedia/archive/03225/Vol-V-1580536265_3225709a.pdf Accessed on 12 March 2016. P 238.

²⁵ "Parting the Water", Srinivas Chokkukula, *The Indian Express*, 19 February 2018. http://indianexpress.com/article/opinion/columns/cauvery-dispute-verdict-parting-the-waters-5069108/. Accessed on 20 February 2018

²⁶ "The Report of the Cauvery Water Disputes Tribunal – With the Decision", op. cit.

²⁷ "Cauvery Water Disputes' Tribunal", op. cit.

also carried on its work. On 2 November 2017, the term of the CWDT was extended for six more months, that is, up to 2 May 2018.²⁸

The 2018 Supreme Court Ruling on the Cauvery Water Issue

The legal battle over the CWDT verdict continued in the Supreme Court. In January 2018, the bench of the Chief Justice of India, Dipak Misra, and Justices A M Khanwilkar and D Y Chandrachud found that enough confusion had been created over the Cauvery issue. The bench decided to deliver its final verdict within a month's time. Subsequently, on 16 February 2018, the Supreme Court delivered its verdict on the issue. The bench, comprising Chief Justice Dipak Misra, and Justices Amitava Roy and A M Khanwilkar ordered Karnataka to release 177.25 thousand million cubic feet instead of 192 thousand million cubic feet of water to Tamil Nadu at the inter-state contact point at Billigundlu.

In its order, the Supreme Court accepted Karnataka's contention that Bengaluru is a world-class city which needs water infrastructure. The Supreme Court also scrutinised the position of the CWDT which confined the entitlement of Bengaluru's population in general to only one-third of their requirement because the tribunal found only one-third of the city is in the Cauvery basin region.³¹ The court disagreed with the CWDT on this. The Supreme Court found that, "Territorial or geographical demarcation for extension of beneficial uses of an inter-state river basin cannot always be strictly construed. We are inclined to think so as the perception of a basin State inheres in it a degree of flexibility in approach in a unique fact situation to justify a warrantable flexibility and departure from such rigoristic approach."³² Applying this flexibility in the case of Bengaluru, the Supreme Court stated, "It will be inconceivable to have an artificial boundary and deny the population the primary need of drinking water. We (the bench) hold so in the special features of the case keeping in view the global status the city

²⁸ Ibid.

²⁹ "Verdict in Cauvery disputes within four week, says SC", *The Indian Express*, 9 January 2018. http://indianexpress.com/article/india/verdict-in-cauvery-water-dispute-tamil-nadu-karnataka-in-four-weeks-says-sc-5017930/. Accessed on 20 January 2018.

[&]quot;The State of Karnataka by its Chief Secretary Versus The State of Tamil Nadu by its Chief Secretary & Ors", The Supreme Court of India. supremecourtofindia.nic.in/supremecourt/2007/11993/11993_2007_ Judgement_16-Feb-2018.pdf. Accessed on 17 February 2018; and "Parting the Water", op. cit.

³¹ Ibid.

³² Ibid, p 442-443.

(Bengaluru) has attained and further appreciating the doctrine of equitable proportionality on the bedrock of pressing human needs."³³

Explaining the significance of Bengaluru, the Supreme Court highlighted that the city "has burgeoned over the years and has grown today into a progressively sophisticated, sprawling, vibrant and a much aspired seat of intellectual excellence particularly in information technology and commercial flourish. It has transformed into a nerve centre of contemporaneous significance and its population is daily on the rise, thus, registering an ever enhancing demand for all civic amenities. Having regard to its exclusive attributes, it is incomparable in many ways not only to other urban areas in the State, but also beyond."³⁴ In the light of the achievements of the city, the Supreme Court noted that, "the requirements of its dependent population as a whole for drinking and other domestic purposes, therefore, cannot justifiably, in the prevailing circumstances, be truncated to their prejudice only for consideration of its physical location in the context of the river basin."³⁵

In this case, the Supreme Court also invoked Article 14 of the Berlin Rules.³⁶ The Berlin Rules were adopted in August 2004. Under article 14 of the Berlin Rules, while determining an equitable and reasonable use, the States shall first allocate water to satisfy vital human needs.³⁷

Finally, taking into account all the above-mentioned aspects, the Supreme Court has allocated 284.75 (270 plus 14.75) thousand million cubic feet to Karnataka, 404.25 (419 minus 14.75) thousand million cubic feet to Tamil Nadu, 30 thousand million cubic feet to Kerala, seven thousand million cubic feet to Puducherry and 10 thousand million cubic feet for

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³³ Ibid, p 443-444.

³⁴ Ibid. p 443.

³⁵ Ibid, p 444.

The first principle on water use was adopted in 1966 and was called the Helsinki rules. Thereafter, a number of meetings took place and, in 1999, the International Law Association updated the Helsinki rules to match the present situation and adopted water rules in the Italian city of Campione. In 1997, the United Nations adopted a convention on water laws. In the same year, the Water Resources Committee of the International Law Association started working to revise the Helsinki principles. After a number of conferences where drafts were presented, in its 71st meeting, the International Law Association finally adopted the Berlin principles in 2004 in Berlin. This is a comprehensive and detailed draft on water laws. See Salman M A Salman, "The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law", *Water Resources Development*, Vol. 23, No. 4, 625–640, December 2007. https://www.internationalwaterlaw.org/bibliography/articles/general/Salman-BerlinRules.pdf. Accessed on 2 March 2018.

International Law Association, Berlin Conference 2004, Water Resources Law. http://www.cawater-info.net/library/eng/l/berlin_rules.pdf. Accessed on 2 February 2017.

environmental protection while four thousand million cubic feet was written off as inevitable escapages into the sea.³⁸ About the additional water to Karnataka, the Supreme Court stated, "In totality, we (the bench) deem it appropriate to award to the State of Karnataka an additional 14.75 thousand million cubic of water, that is, 10 thousand million cubic (on account of the availability of groundwater in Tamil Nadu) + 4.75 thousand million cubic (for drinking and domestic purposes, including such need for the whole city of Bengaluru)."³⁹ This apportionment of the Cauvery waters by the Supreme Court has to be followed for the next 15 years.

In the past, besides using constitutional means and legal methods, there have been attempts to get the problem solved by the people themselves, the people residing in the Cauvery basin. In one such attempt, dialogue was initiated among the farmers from the Cauvery basin. This was influenced by the Multi Stakeholders Dialogue approach attempted by the Madras Institute of Development Studies and coordinated by Professor S Janakranjan. It brought together farmers, academics and journalists from Tamil Nadu and Karnataka.⁴⁰ The idea of a "Cauvery family" emerged out of that initiative where there was recognition that the people of the basin area live together like members of a family.⁴¹ However, the family spirit could not play an active role in addressing the Cauvery water issues between Tamil Nadu and Karnataka.

Protests over the SC Judgement on the Cauvery Water Disputes

As a precautionary measure, on 16 February 2018, security was stepped up in both Karnataka and Tamil Nadu. In the past, both States had witnessed violent agitations by the fringe elements over the water allocation. Kannadigas had been attacked in Tamil Nadu and Tamils in Karnataka. On the day of the judgment in 2018, many drivers refused to cross to the other side of the Karnataka-Tamil Nadu State borders, fearing damage to their vehicles. However, both States remained peaceful after the judgment.

³⁸ "The State of Karnataka by its Chief Secretary Versus The State of Tamil Nadu by its Chief Secretary & Ors", The Supreme Court of India, op. cit., p 448-449.

³⁹ Ibid, p 463

⁴⁰ Iyer, Ramaswany R (2007), Towards Water Wisdom: Limits, Justice, Harmony, op. cit., p 88.

⁴¹ Ibid.

Soon after the judgment, the Karnataka government announced that it opposed that part of the order which called for a CMB to be formed within six weeks by the Union government to implement the water allocation to Tamil Nadu.⁴² Earlier also, Karnataka had made its opposition to the CMB clear in a memorandum to the Union government, stating that the "[The] Cauvery Management Board unduly infringes upon the authority of the State of Karnataka to use even its allocated share of water."⁴³ The State fears that, with the CMB in place, Karnataka will be forced to supply more water even during years of low rainfall. ⁴⁴

Tamil Nadu's Chief Minister Edappadi K Palaniswami called the reduction of its share of the Cauvery waters "disappointing". He said that his government would take the next step after discussions with the experts. He accused Karnataka of engaging in dam-building without holding discussions with the Union government. The Dravida Munnetra Kazhagam Working President M K Stalin said that the Supreme Court's verdict in the Cauvery water-sharing dispute had "cheated" Tamil Nadu. Film actor Kamal Hasan, who has recently entered into active politics, said that he was "shocked" by the verdict. Later, the chief minister chaired an all-party meeting where it was decided that he would lead a delegation of members from all political parties and farmers' organisations to the prime minister, and urge him to constitute the CMB within six weeks.

The Centre found that it could not prepare a draft plan to constitute the CMB by 29 March 2018. As a result, on the eve of the deadline, it moved a plea in the Supreme Court, seeking a three-month extension. Hearing the plea on 9 April 2018, along with a contempt petition filed by Tamil Nadu in which the State accused the Union of not "protecting the interests of the

share-5072084/. Accessed on 22 February 2018.

⁴² "Karnataka to Oppose board by Centre to allocate Cauvery water share", *The Indian Express*, 21 February 2018. http://indianexpress.com/article/india/karnataka-to-oppose-board-by-centre-to-allocate-cauvery-water-

⁴³ Ibid.

⁴⁵ "'Disappointing', says Tamil Nadu CM Palaniswami after Supreme Court's Cauvery verdict', *Scroll .in*, 16 February 2018. https://scroll.in/latest/868929/tamil-nadu-has-been-cheated-says-dmks-stalin-after-sc-verdict -on-cauvery-water-dispute. Accessed on 19 February 2018.

⁴⁶ Ibid.

⁴⁷ Ibid.

^{48 &}quot;Cauvery Row: Edappadi K. Palaniswami-led team to meet Narendra Modi' Dharani Thangavelu", *Live Mint*, 23 February 2018. http://www.livemint.com/Politics/ZGhWbM7vWJ7pUFy2eR0q9O/Cauvery-row-Edappadi-K-Palaniswamiled-team-to-meet-Narend.html. Accessed on 24 March 2018.

farmers and larger interests of the state",⁴⁹ the Court criticised the Union government for not drafting a framework to implement the schemes mentioned in the Court's judgement of 16 February 2018.⁵⁰ The schemes suggested by the Court included setting up a Cauvery Water Management Board and Monitoring Authority to ensure monthly water releases to the lower riparian States. The Court has now indicated 3 May 2018 as the new deadline.

More than the legal and inter-state issue, the real cause for concern is the diminishing availability of water in the Cauvery basin. The groundwater level is drastically falling all along the Cauvery and its major tributaries. Droughts and flash floods are almost a regular phenomenon in the basin.⁵¹ According to S Janakarajan from the Madras Institute of Development Studies, the Cauvery delta has shrunk by over 20 per cent. There is also a thirteen-fold increase in the deterioration of cultivable lands into wastelands. According to his study, "More and more cultivable agricultural land was coming under seawater and the soil was turning saline".⁵² This is because of over-exploitation of the groundwater which links the land with the seawater. Sediment deposits in the basin have been reduced by 80 per cent in last century. These sediments are important to hold waters and absorb them to recharge the ground.⁵³ Also, the basin is experiencing less rainfall than before. Earlier, the southwest monsoon rain used to bring enough water into the Cauvery basin. However, over the years, the region has been facing problems due to climate aberrations. Overall, the Cauvery River system is short on supply to satiate the water needs of the people in the basin area.⁵⁴

As the Cauvery basin covers about 33 parliamentary seats (18 in Tamil Nadu, 11 in Karnataka, three in Kerala and one in Puducherry),⁵⁵ the issue has been exploited for electoral gains, especially by the regional parties. However, the state units of the national political parties too have benefited from stoking sub-nationalism over water sharing with the other riparian States.

⁴⁹ "SC to hear Cauvery case on April 9", *The Hindu*, 4 April 2018. http://www.thehindu.com/news/national/tamil-nadu/sc-to-hear-cauvery-case-on-april-9/article23428356.ece?homepage=true. Accessed on 4 April 2018.

⁵⁰ "Frame draft scheme for Cauvery judgment implementation by May 3: Supreme Court to Centre", *Times of India*, 9 April 2018. https://timesofindia.indiatimes.com/india/frame-draft-scheme-for-cauvery-judgment-implementation-by-may-3-supreme-court-to-centre/articleshow/63678960.cms. Accessed on 13 April 2018.

⁵¹ "Not enough water in stressed Cauvery to fulfill SC verdict", Jaideep Hardikar, *The Indian Express*, 19 February 2018. http://indianexpress.com/article/opinion/cauvery-water-dispute-supreme-court-verdict-karnat aka-tamil-nadu-5069375/. Accessed on 22 February 2018.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ "Profile of Rivers in Karnataka". ENVIS Technical Report 129, op. cit.

In the past, Kannadiga versus Tamil sub-nationalism had caused violence and damage to public property in Karnataka and Tamil Nadu. One of the reasons for the procrastination by the Bharatiya Janata Party-led Union government on the CMB issue is the Karnataka assembly elections scheduled for 12 May 2018. The party does not want to take any step which could work against it during the assembly elections.

The on-going protests over the Cauvery water issues in Tamil Nadu have also found support from Tamil superstar Rajnikanth and other members of the Tamil film industry. Agitations over the formation of the CMB took place outside Chepauk Stadium on the day of the Indian Premier League (IPL) cricket match between Chennai Super Kings and Kolkata Knight Riders on 10 April 2018. This forced the IPL governing body to shift all future matches out of Chennai. On 13 April 2018, during the visit by India's Prime Minister Narendra Modi to Chennai to inaugurate the DefExpo show, Tamil outfits and political groups expressed their unhappiness by carrying black flags and carrying out marches wearing a black dress and chanting "Modi, Go Back". 56

Conclusion

As water-stressed States, Tamil Nadu and Karnataka depend greatly on the Cauvery River basin. The increasing supply-demand gap in both the States has made them try every means to get as much water as they can from the Cauvery River system. That includes constitutional and legal means to assert their rights over the Cauvery water.

However, to lessen their dependence on the Cauvery waters, the two States should seek to make optimum use of properly treated waste water. Unfortunately, India has the capacity to treat only 37 per cent of the 62 billion litres of sewage water generated daily by its urban areas.⁵⁷ Bengaluru city generates around 1,400 million litres of waste water a day. Out of this, only on an average of about 521 million litres are treated per day, though the capacity of the

[&]quot;Chanting 'Go back Modi', Cauvery protesters bring Chennai to standstill", Arun Janardhanan, *The Indian Express*, 13 April 2018. http://indianexpress.com/article/india/chanting-go-back-modi-cauvery-protesters-bring-chennai-to-standstill-5135306/. Accessed on 13 April 2018.

⁵⁷ "Waste water Treatment and Reuse", *Urban Waters*. http://bengaluru.urbanwaters.in/wastewater-treatment-and-reuse-49. Accessed on 3 March 2018.

treatment plants in the city is around 721 million litres per day.⁵⁸ Also, there are only a handful of tertiary treatment plants in India that supply water to the industries. One such plant is in Yelahanka, Bengaluru. This has a capacity of around 10 million litres per day. There is a need to increase the quantity of water treated by the plant. That will reduce Bengaluru's dependence on the Cauvery waters. Introducing this waste water treatment technology will mitigate water problems in other cities as well.

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⁵⁸ Ibid.