



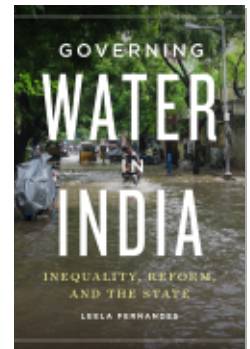
PROJECT MUSE®

---

### 3. The Political Economy of Federalism and the Politics of Interstate Water Negotiations

Published by

Fernandes, Leela.  
Governing Water in India: Inequality, Reform, and the State.  
University of Washington Press, 2022.  
Project MUSE. <https://muse.jhu.edu/book/103144>.



➔ For additional information about this book  
<https://muse.jhu.edu/book/103144>



This work is licensed under a Creative Commons Attribution 4.0 International License.  
[136.0.111.243] Project MUSE (2025-03-16 07:27 GMT)

# The Political Economy of Federalism and the Politics of Interstate Water Negotiations

INTERSTATE NEGOTIATIONS OVER THE SHARING OF WATER RESOURCES and water-related infrastructure provide a unique avenue for an understanding of the nature of federalized state authority in postliberalization India. Tamil Nadu's relationships and conflicts with its neighboring states show how the legacies of the political economy of both the colonial and developmental state are reconfigured in the postliberalization period. More recent developmental pressures of economic growth intensify deep-seated historical strains on water governance. The stratified nature of water governance brings to the fore the consequences of an unwieldy blend of assertive local state governments on the one hand and weak national regulatory mechanisms on the other hand. These contradictions in the federalized governance of water produce institutional dysfunctions and gaps that then in turn draw in the participation of centralized institutions, such as the machinery of tribunal structures and the Supreme Court. Furthermore, the institutional terrain of interstate water governance has intensified the political claims of state governments in ways that consolidate local governmental attempts to assert their authority over water resources.

Bureaucrats navigate these complex historically constituted institutional, political, and socioeconomic fields. At one level, as might be expected,

bureaucrats consolidate the power of local state governmental authority and harden the lines between competing state governments. However, in other cases, bureaucrats provide crucial space for the resolution of interstate negotiations in ways that unsettle homogenized conceptions of a static and ineffective bureaucracy. Understanding how effective bureaucratic agency can be foreclosed by broader political, economic, and institutional contexts is as critical to understanding deficiencies in governance as identifying moments of successful bureaucratic action.

Consider the following vignette from the professional diary of a major figure in Tamil Nadu's water bureaucracy:

Ms. Jayalalitha, Chief Minister, just goes to Anna Samadhi, Marina, in the morning and sits there saying she is on indefinite fast to urge the Central Government to take action to implement the Interim Order of the Tribunal.

Though it was conceived as a strategic move, the sudden decision took even her own Ministers by surprise. They all came running to the Anna Samadhi. . . .

Chief Minister holds the Cabinet Meeting with the Ministers standing around her bed in Marina. A strange scene. Hon'ble Shukla contacts Karnataka over phone and he and the Chief Secretary were trying some modification to the draft to manage the situation. . . . Mixed reaction in the Press on the fasting drama. The whole thing has turned out to be a Political gimmick, the results of which are not known. The Chief Secretary calls for a meeting we will attend and he said he is not able to have any agreed text which is still in the drafting stage for the formation of the Monitoring and Implementation Committee for the Tribunal's Interim Order. Entire day spent in Secretariat attending meetings and drafting notes. (Mohanakrishnan 2016b, 59, 61)

The scene depicting the political dramatic acts of then Tamil Nadu chief minister Jayalalitha provides a rare glimpse of the view of interstate disputes from the perspective of a state bureaucrat. While water-related disputes have often been a fraught area of contestation between state governments, much of this conflict is publicized either through intense political conflicts in the public sphere or through the records of legal adjudication (whether through the centralized state machinery of tribunals set up by the central government or by legal suits brought by state governments before the Supreme Court).

Formal records of tribunal and court judgments provide skeletal accounts of legal claims, technical evidence, and judiciary responses between state governments with hardened positions and conflicting interests.

These observations of Chief Minister Jayalalitha's protest unveil a more complicated set of dynamics that surround what we have come to know about the role of the state in such conflicts. The observations, recorded in the professional diary kept by a distinguished state administrator in Tamil Nadu, provide a rare glimpse of the inner workings of the state. They refer to a small slice of events in the dispute between Tamil Nadu and Karnataka over the Cauvery River, India's longest and most volatile water-sharing dispute, which has unfolded through decades of ministerial meetings, adjudication through the official Cauvery Waters Tribunal, and multiple appeals to the Supreme Court.

This inner glimpse encapsulates various intersecting layers of the state. The chief minister's public fast reflects the deep politicization of interstate water conflicts. State officials use such visible public acts to mount pressure on the central government, to win over public sentiment within the state, and to neutralize opposition from competing political parties. Such forms of public theater, which are characteristic of Indian democratic politics, highlight the complexities involved in negotiations over water sharing and the political strains on the federal institutional mechanisms that are designated for the management of water resources. These political contestations are in turn aggravated as the pressures of accelerated and unplanned economic growth are intensified by the increased competing demands on water in times of drought and scarcity.

A second feature of the state that is evident in this vignette is the sluggishness of state action over difficult political issues. The dramatic speed of the chief minister's rush to the Marina for a hunger fast is matched in inverse proportion with the hidden scenes of phone conversations, negotiations over an "agreed text," and the laborious work encapsulated by the simple description "Entire day spent in Secretariat attending meetings and drafting notes." It would be relatively easy to reduce an analysis of the Indian state to a well-known narrative of the dysfunctions of Indian democratic politics, where politicians use political theater to shore up their own political strength, or to the familiar story of a sluggish state bureaucracy that does not have the capacity or will to act on critical political and economic issues.

Yet the observer describing these events, Professor A. Mohanakrishnan, is himself a member of the state administration and at the time of the events was chairman of the Cauvery Cell of the Tamil Nadu state government. Professor A. Mohanakrishnan's personal records of this vignette of the Cauvery dispute provide a window into a facet of the state that does not correspond to familiar one-dimensional stories of politicization, lethargy, or corruption. This dimension of the state has to do with individuals and institutional actors that negotiate an array of political quagmires and institutional hurdles in order to implement policies, reach agreements, and manage resources. Bureaucrats in effect do the public work of the state through everyday practices that are, paradoxically, largely not visible to the public. A focus on such, usually hidden, dimensions of state practices opens up important analytical space that unsettles exceptionalist arguments that identify a monolithic form of bureaucratic stasis or corruption as the overriding source of problems of governance in contemporary India.

### Interstate Disputes in Southern India

Tamil Nadu's interstate water-related disputes and negotiations with its three neighboring states of Andhra Pradesh, Karnataka, and Kerala bring together these intersecting facets of the state in a unique way. The political, institutional, and agential dimensions of state action are both shaped and constrained by historical structures of political economy. Colonial and post-colonial patterns of development have produced local and regional political-economic conditions that have in turn sparked the prolonged interstate conflicts over water resources that currently weigh on the states that share water resources and infrastructure. Historical structures of political economy have been specifically reshaped by state-led policies of liberalization as patterns of urbanization and new patterns of investment have intensified competing demands over water resources. Interstate disputes and negotiations involve a range of state and civil society actors including the central and state governments, the centralized institutional machinery of tribunals, the Supreme Court, political parties, and social movements. This breadth of actors involved provides a unique understanding of the complex entanglements of the federalized governance over water in the postliberalization period.



MAP 3.1. Southern Indian States, showing the states that make up India's southern region

Both India's planned developmental state in the twentieth-century and the contemporary postliberalization state have inadvertently produced a federal framework that has exacerbated competition between state governments.<sup>1</sup> When such competition takes place over pliable resources, such as budget allocations or private capital, it can be managed politically or remain relatively invisible (especially when both analytical and political-administrative frameworks take local state governments as an autonomous discrete unit). Furthermore, "India has fourteen major rivers, which are all inter-state rivers and 44 medium rivers, of which nine are inter-state rivers having catchments of watersheds in two or more states" (Padhiari and Ballabh 2008, 174). In most contexts, the routes of rivers run without incident. However, when decades of planned agricultural development and intensified urbanization in the context of a liberalizing economy intersect with nonhuman constraints of drought (and the growing unpredictability of weather patterns in the context of climate change), the salience of addressing relationships between states is underscored.

Tamil Nadu represents a significant case for an understanding of this political economy of federalized water governance in the postliberalization period. Tamil Nadu, a lower riparian state, is reliant on water-sharing arrangements and the shared management of water-related infrastructure with all its three neighboring states. The state has also had a history of drought and periods of water distress that have intensified in the postcolonial period and that have brought the state to periods of severe crisis in recent years. The failed northeastern monsoon in 2016, for instance, created acute shortages of water for both agricultural and urban areas. The result was a series of failed crops, farmer suicides, and dried-up reservoirs that supply water to the city of Chennai. This heightened both governmental and political attention on water that was due to the state from Andhra Pradesh and Karnataka according to two interstate agreements. However, given that Karnataka and Andhra Pradesh were also facing water resource constraints, they each were, in different ways, stalling on the release of waters. While Tamil Nadu was unsuccessful in getting Karnataka to abide by the final judgment of the Cauvery River tribunal award, an emergency trip by Tamil Nadu's chief minister to Andhra Pradesh was at least partially successful in gaining a promise of the release of some water from the Krishna River. The contrasting dynamics of these two examples of interstate interaction illustrate that negotiations between states over

water resources and water infrastructure do not inevitably produce intractable conflicts. The dynamics of interstate relations are shaped by historically contingent constraints and patterns of political, economic, and institutional practices that undergird the postliberalization state in India.

The variations between these three cases provide a unique understanding of an understudied dimension of the dynamics of federalism and the complex nature of decentralized state authority in the postliberalization period. Variations between the agreements also point to the importance of understanding how the agential contingencies of political and bureaucratic actors play a significant role in shaping the relative successes or deficiencies in interstate cooperation. The three interstate water-related agreements that link Tamil Nadu with Andhra Pradesh, Karnataka, and Kerala vary in significant ways in terms of the scope of the agreements and the kinds of issues under contention, the political dynamics of the agreement, and the outcome and implementation of each of the agreements. The first case, the Cauvery waters dispute, represents one of India's longest and most politicized conflicts over water sharing between Tamil Nadu and Karnataka. The Cauvery case, which has seen prolonged adjudication in both the Supreme Court and the Cauvery Water Tribunal and intense politicization, including the outbreak of periods of ethnic violence, was officially concluded with a final judgment from the tribunal in 2007, after thirty-seven years of review, negotiations, and conflict. However, the implementation of the agreement remains a continued site of political conflict, particularly in distress years, when both states face severe water shortages. The second case, the Krishna Water Supply Project (also known as the Telugu Ganga Project) represents a negotiated bilateral agreement (spurred by central government intervention) that channels waters from the Krishna River to supply drinking water to Chennai. The agreement is largely seen as a successful case of interstate cooperation. The third case involves a prolonged dispute over Kerala's concerns over the safety of the Mullaperiyar Dam, which is located in Kerala but fully operated by Tamil Nadu. As this case represents a conflict over water infrastructure rather than riparian rights, it played out through a long judicial process in the Supreme Court that was ultimately decided in Tamil Nadu's favor. However, while Tamil Nadu's operational control of the dam removes any practical obstacles to implementation of the judgment, the politicization of the issue continues to provide moments of conflict over water infrastructure matters between the two states.



## The Historical Roots of Interstate Water Disputes

Contemporary interstate conflicts over water in the postliberalization period in southern India have been shaped in large part by historically produced inequalities and political resentments. A key underlying foundation for such antagonisms can be traced back to the political economy of the colonial state. Contemporary political and economic relationships centered on the sharing of water and water-related infrastructure between Tamil Nadu, Andhra Pradesh, Karnataka, and Kerala are rooted in the geopolitical power of the British-ruled Madras Presidency. As a central site of direct British colonial rule, Madras Presidency pursued its own interests in water resources with the neighboring princely states of Mysore, Hyderabad, Cochin, and Travancore. Unequal relationships between the British colonial state and independent princely states that were heavily influenced by indirect British control allowed the Madras Presidency to develop legal arrangements, irrigation infrastructure, and modes of agricultural development that placed it in an advantageous position over the princely states.

These underlying inequalities of both state power and economic development were incorporated into the new federal structure that would govern relations between the states in postindependence India. Such historical processes are embedded in the dynamics of federalism in the postindependence period. In postindependence India, the formation of Tamil Nadu from the Madras Presidency and the formation of Karnataka, Andhra Pradesh, and Kerala primarily from the princely states of Mysore, Hyderabad, Cochin (Kochi), and Travancore has reproduced colonial political and economic inequalities within independent India's federal structure. These relationships have been embedded in each of the three interstate relationships that the state of Tamil Nadu has been negotiating since the late twentieth century.

While the roots of these political and economic tensions between the water-sharing states of the south can be located in colonial history, they were reworked in distinctive ways through the political dynamics that have shaped the architecture of Indian federalism in the postindependence period. A key element of these dynamics lies in the linguistic reorganization of the states, which both drew on popular social movements and culminated in the States Reorganisation Act of 1956. The reorganization drew the boundaries of the southern states along linguistic lines. For instance, the state of

Andhra Pradesh was formed in response to a popular social movement for a Telugu-speaking state in 1953 and was later expanded to incorporate Telugu-speaking districts of Madras State. Karnataka was formed out of Mysore State and the neighboring Kannada-speaking regions of the Madras Presidency (as well as of the Bombay Presidency and princely state of Hyderabad), and Kerala was formed out of the princely states of Cochin and Travancore, along with a small Malayalam-speaking *taluk* (town) from Madras State. Finally, Tamil Nadu was formed out of the Tamil-speaking Madras Presidency. The conjuncture between this linguistic reorganization and the underlying legacies of colonial relationships of power has meant that the legal and political relationships between the Madras Presidency and the princely states both undergird Tamil Nadu's relationships with its neighboring states and complicate these relationships through ethnicized linguistic cleavages that can become politicized in volatile ways in the context of contemporary disputes over water resources and infrastructure.

In the same historical moment as the linguistic reorganization of the states, the historical formation of the national institutional framework also inadvertently intensified the potential for water conflicts to arise between states. The central government created two sites for the negotiation of interstate relationships over water—the Inter-state River Water Disputes Act, 1956, and the River Boards Act, 1956. However, the River Boards Act was sidetracked by centralized planning in the twentieth century “to develop rivers through interstate planning and development because the Union [central government] controlled the purse strings and the planning process” (D’Souza 2002, 89). The Indian state’s institutional architecture was historically oriented toward the mediation and resolution of disputes once they had arisen rather than a policy framework that would promote models of planning and development that would build and strengthen interstate cooperation over water resources.

Contemporary scholarship on interstate water disputes in India has called attention to the deep problems with the institutional mechanisms of adjudication through the central government (Chokkakula 2014; Iyer 2015; Mohan, Routray, and Sashikumar 2010; Moore 2018; Padhiari and Ballabh 2008; Salman 2002; Shah 1994; Swain 1998). Such procedures bring local state governments together in an adversarial judicial framework that makes dispute resolution difficult, hardens polarized positions, and results in lengthy judicial

processes that often remain unresolved when tribunal awards are not attached to an adequate institutional capacity or political will for implementation (Padhiari and Ballabh 2008, 189). These problems have led to some institutional reforms of the central government's framework for the resolution of such conflicts. In 2002, amendments to the Inter-state River Water Disputes Act sought to limit the time for the establishment and operation of the tribunal process and gave the tribunal award the same weight as a Supreme Court decision. However, the time frame still remains lengthy, as the amendments allowed for the government to take a year to establish a tribunal, three years with a possible two-year extension for the tribunal to give its decision, and a further year for its report.<sup>2</sup>

These institutional inadequacies were further strained by the developmental policies of the early decades of the postcolonial period. At one level, the absence of effective national regulatory mechanisms was combined with the centralizing authority of the developmental state. In the absence of effective national regulatory mechanisms for the governance of water, the central government's developmental model was implemented without a broader regional or interstate framework for the management of water resources. Such policies have emphasized the expansion of irrigation potential in order to accelerate agricultural productivity and rested on the exhaustive use of water resources through irrigation schemes, groundwater exploitation, and the building of dams to generate electricity and serve the growing need for drinking water supplies. These policies, combined with the historical legacies of the colonial state, produced the extractive structures that have continued to undergird political disputes over water resources.

Both India's period of planned development and its policies of liberalism have rested on an institutional and economic model of development that has produced and exacerbated competition between the states for resources. They have, in effect, created and relied on a political economy of federalism that has weakened interstate and regional cooperation. In the early decades of independence, the central government's planning process emphasized rapid agricultural development and set into place growing strains on water resources for irrigation that are now the foundation for disputes, such as the Cauvery River dispute between Tamil Nadu and Karnataka. State policies in the postliberalization period have intensified rather than broken from this competitive model of state development. In the postliberalization period,

interstate competition for both private investment and central government resources that are designed to promote city-based models of development exacerbate the strain on water resources and the corresponding competition between states for these resources.

Economic shifts have intensified pressures on water resources in other ways. For instance, the effects of a shift toward export-oriented models of growth have produced shifts in agricultural production. As economist Narendar Pani has argued, as “agriculture, particularly after the mid-eighties failed to keep pace with the overall growth in a liberalizing economy, food grain production did not always provide the economic returns that the rest of the economy was beginning to enjoy. Farmers could hardly be faulted for moving to some more lucrative non-food crops, even if they were more water intensive” (2010, 51). Meanwhile, the pace of economic growth since the 1990s has also intensified the pressures on water resources, as states must manage a range of demands from industries, farmers, and urban and rural residents.

A comparative analysis of Tamil Nadu’s negotiations with its three neighbors illustrates the ways in which such processes are also shaped by patterns of political decentralization that have become a defining feature in India. The shift from a highly centralized polity dominated by the Congress party to a coalition-oriented political landscape in which regional parties and political actors have become significant national players has been a key factor that has shaped the dynamics of decentralization in contemporary India. The consolidation of regional parties in Tamil Nadu and the role of Tamil Nadu in coalitional governments at the national level make it a vital case for analyzing these processes. Such a perspective allows us to move beyond a simplified understanding of decentralization in terms of a shift from power in the center to power in the states. Interstate water negotiations are shaped by the complexities of center-state relationships and national political alliances that affect the interests of both central and state governments.

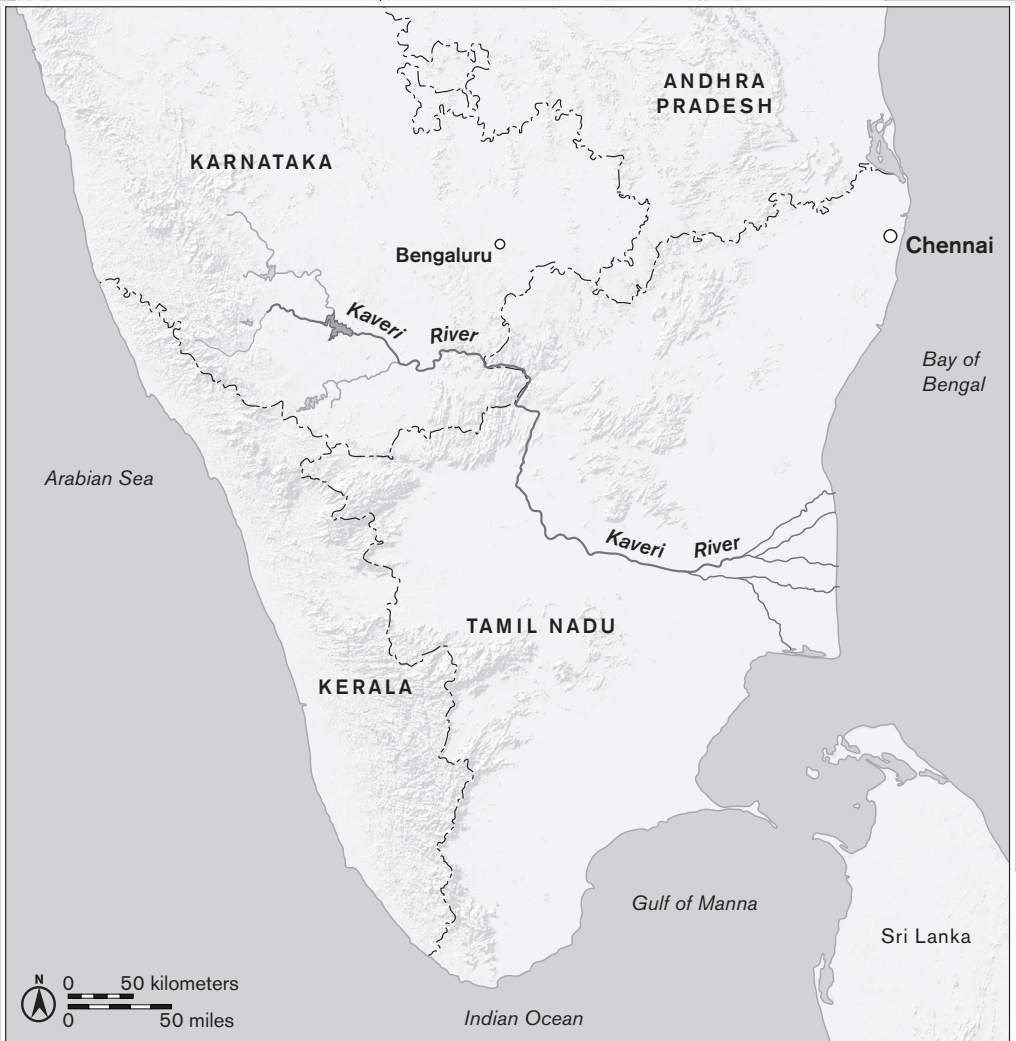
### **Institutional Failures, the Political Economy of Interstate Crises, and the Cauvery River Dispute**

In September 2016, widespread violent protests broke out in Karnataka and Tamil Nadu over the sharing of water from the Cauvery River. Protests on both sides of the border had been slowly escalating as Tamil Nadu began pressing for the release of water according to the final judgment of the

Cauvery Tribunal in 2007 and Karnataka continued to appeal the judgment through the Supreme Court. Farmers on both sides of the border were facing water shortages, and Bengaluru (Bangalore), India's high-tech center, was facing drinking water supply shortages. When Karnataka was eventually compelled to abide by an interim Supreme Court decision to release 13.6 TMC of water to Tamil Nadu over a period of ten days, protests in Karnataka intensified. Bus services and other traffic between the states were canceled, heavy security had to be deployed at reservoirs of the Cauvery Basin, and protests escalated into ethnic violence directed against vehicles and hotels.<sup>3</sup> Violence in Bengaluru was particularly bad, with the unrest effectively shutting down a city that has been branded as the face of the success of a liberalizing India. In the immediacy of the conflict, the combined effects of media sensationalism (including both regional and English-language news and social media reports), rife with language about "water wars" and the politicization of local ethnic-linguistic identities, deepened the polarization between the two states.<sup>4</sup> The politicization of the dispute through political party competition both at the local state level and in terms of national politics played an important role in deepening the conflicts.

The deep-seated sources of such conflicts lie in the entangled roots of state water policies of the colonial, twentieth-century developmental, and twenty-first-century liberalizing state. By the beginning of the twentieth century, the dispute over the sharing of the Cauvery River between Karnataka and Tamil Nadu had already become one of the most infamous examples of the inability of the Indian state to effectively mediate conflicts over water resources. As with many of India's water-sharing disputes, the initial roots of the conflict can be traced back to colonial legal and political agreements that set up a hierarchical political and developmental relationship between the Madras Presidency and the princely state of Mysore. This resulted in a series of legal agreements and political negotiations designed to protect British colonial interests in agricultural development in the Madras Presidency by placing limits on Mysore's ability to construct new irrigation projects. Mysore, in effect, needed the consent of the British colonial state in order to engage in new projects that would potentially affect water supplies to the Madras Presidency (Benjamin 1971).

The unequal political-economic structures of agricultural development that emerged from this colonial history began to change rapidly in the early decades of independence. Irrigation along the Karnataka side of the Cauvery



MAP 3.2. The Cauvery River, depicting the Kaveri (Cauvery) River, which has been the site of India's longest river-sharing dispute, between Karnataka and Tamil Nadu

did not, for instance, begin to accelerate until the 1960s (Guhan 1993, 6). The area of Cauvery irrigation in Karnataka increased from 442,000 acres in 1971 to 2,138,000 gross acres in 1990, with a corresponding increase in water utilization requirements from 110.2 TMC to 322.8 TMC. Meanwhile, Tamil Nadu's irrigation increased marginally, from 2,530,000 gross lakh acres in 1971 to 2,580,000 in 1990, with a corresponding increase in water utilization requirements from 494.6 TMC in 1971 to 501.5 TMC in 1990 (Guhan 1993, 21). This shift meant that Tamil Nadu could no longer rely on a reliable release of water from the Cauvery River. Tamil Nadu's historical advantage was significantly reversed by its geographical location downstream from the river. The political-economic context that provided the need for a resharing of the river had been laid.

The overexploitation of the river was intensified by the Indian state's ambitious centrally directed developmental agenda, designed to engage in the accelerated expansion of both industrial and agricultural production. The harnessing of river waters through large dams and diversion canals was central to India's planned economy, with rapid increases in state investment in the early decades of independence. As Ashok Swain has noted, in "1948, 160 large water projects were being considered, investigated or executed, and 2 years later 29% of the first five year plan (1951-55) budget was allocated for this purpose. . . . Before the eighth plan, 600 billion rupees had been spent for various major and medium irrigation projects" (1998, 168). Budgetary allocations provided important incentives for state governments to embark on strategies of agricultural growth that would expand the exploitation of water resources for irrigation purposes. This centralized framework of planning did not incorporate within it any focus on regional development that could potentially provide an institutional or economic foundation for cooperation between states. The River Boards Act, 1956, was never integrated within the water-intensive planning model of agricultural development. The result in the case of the Cauvery Basin was that Karnataka engaged in the rapid development of irrigation systems, including the construction of a series of dams that heavily reduced water available for Tamil Nadu (Swain 1998, 173). The developmental imbalance that had been produced in the colonial period was rapidly reversed in the early decades of independence. The distinctive nature of this conflict has subsequently rested not simply with a question of sharing river resources but with the task of "re-sharing a heavily used river, involving difficult adjustments" (Iyer 2003, 235). In distress years, farmers

from both states suffer deep consequences from the lack of water resources.<sup>5</sup> Food production and the subsistence of millions of people in both states depend on water from the river (Janakarajan 2010). This overexploitation of the Cauvery River set into motion the decades-long conflict between Karnataka and Tamil Nadu.

In recent years, state-led policies of liberalization have continued to exacerbate these pressures on the Cauvery River, as rapid urbanization and city-based models of economic development that undergird such policies have intensified demands for water resources for both urban drinking water supplies and industrial sources. In the case of the Cauvery River, the city of Bengaluru (Bangalore), which is often branded as the IT capital of the country and serves as one of the most visible symbols of India's economic growth, relies on water from the river as one of its key sources of drinking water supply. While institutional, political, and media narratives focus on the intensity of the conflicts between the states of Karnataka and Tamil Nadu, pressures on water resources caused by economic growth and urbanization have deepened the desperation over claims on the river water in more nuanced ways.

The lens of interstate conflict often blurs the ways in which such water-related stress is as much about inequalities and conflicts within the states in question as it is about conflicts between states. In Karnataka, drinking water resources from the Cauvery Basin are channeled to Bengaluru at the expense of smaller urban and rural localities (Saldhana and Rao 2015, 301).<sup>6</sup> As Leo Saldhana and Bhargavi Rao have shown, "Farmers from Mandya and Mysore in Karnataka, who have vehemently objected to the release of Cauvery waters to downstream Tamil Nadu during droughts, have begun targeting the supply of water to Bangalore [Bengaluru] in protest" (297). This has been institutionally embodied in the growing centralized authority of Bengaluru's municipal water utility, the Bangalore Water Supply and Sewage Board. The supply of drinking water from the Cauvery River to Bengaluru has been structured through this "highly extractive, centralized and financially indebted enterprise" (Goldman and Narayan 2019, 102). Such dynamics point to the hidden complexities of local state authority that lie beneath what seem like intractable interstate conflicts. Or, to take another instance, tensions between Karnataka and Tamil Nadu over the release of water are also shaped by the drinking water needs of Bengaluru during periods of water scarcity. As Karnataka's water minister would point out, the drinking water requirements



could not be met if the state government released water from the Cauvery reservoirs for crops.<sup>7</sup> Such examples illustrate that the underlying structural conditions of the Cauvery dispute are as much about inequalities and competing demands within states as they are about the subsequent intransigence of competing local state governments.

These competing demands for water are intensified by a skewed institutional framework produced by policies of economic liberalization. While in the era of planned development local state governments competed for resources from central government budgetary allocations, they now compete for private capital. This competition has been encouraged by the central government without any institutional framework that has simultaneously promoted cooperative regional or interstate models of growth or development. This centralized framework of reforms that undergirds local state governmental economic policies is marked by an absence of institutional mechanisms that can govern relationships between competing states.

The absence of an interstate institutional framework of economic cooperation has meant that interstate relations are managed through a centralized institutional framework only once they have reached a point of polarization in the form of a dispute that must be adjudicated either through a central government tribunal or by the Supreme Court. The turn to these centralized mechanisms for dispute resolution is an effect of the simultaneous absence of effective regulatory mechanisms on the one hand and the centralized framework of economic development and growth that has promoted interstate competition (which in turn has intensified the local centralized power of state governments) on the other hand.

The weakness of regulatory mechanisms for interstate cooperation over water sharing produces new strains on the state, which unfold through dissonances within the institutions of the central government and can then erupt in political conflicts. The result is a volatile set of negotiations and relations between local state governmental and civil society actors within the states and central institutions such as the Supreme Court, tribunal committees, and the central government itself. The interstate dispute over the Cauvery River reveals ways in which the incapacities of the central government—in this case in the form of the absence of an effective regulatory framework—in turn reinforce more subtle and variegated forms of centralization at both central and local state governmental levels.

Consider the institutional dynamics of the Cauvery Tribunal. The tribunal delivered its final judgment after seventeen years of adjudication, from 1990 to 2007—a period that does not include twenty-six ministerial meetings and negotiations that took place in the preceding twenty-two years (Richards and Singh 2002). The tribunal award was finalized only in 2013, after a Supreme Court intervention directing the central government to notify the award so that it could come into force. Furthermore, the central government continued to stall on the establishment of the regulatory institution, the Cauvery Management Board. According to the terms of the tribunal award, the central government was instructed to set up both the Cauvery Management Board and the Cauvery Water Regulation Committee in order to provide the institutional mechanisms to manage implementation of the agreement.<sup>8</sup> However, the award was met by continued central government inaction.<sup>9</sup>

A primary cause of the paralysis of the central government rests with the political strains on action on behalf of either state. While the rise of regional parties and coalition governments has often been characterized as a positive feature of the deepening of federalism in India, the nationalization of local political dynamics can also place significant strains on effective federal governance. In the case of the Cauvery dispute, the federalization of politics has weakened the potential for cooperative federalism. Consider the ambivalent role of the Modi-led government that came to power in 2014. On the one hand, as a member of the ruling coalition, Tamil Nadu's AIADMK-led government had political weight with the Modi administration. On the other hand, the BJP's attempt to regain power in the state of Karnataka produced counterpressures on its actions. In the run-up to the 2018 state elections, the Modi government specifically delayed the establishment of the Cauvery Management Board (a term of the tribunal award that Karnataka has been opposed to) because of the elections. The reason the central government provided to the Supreme Court, that "the PM and ministers are busy in Karnataka polls and can't approve the scheme for releasing water to Tamil Nadu, as directed," was a thinly disguised sign of the political risks of setting up the board prior to the elections.<sup>10</sup> Meanwhile, opposition political parties in Tamil Nadu kept up continual political pressure on the AIADMK-led government.

The combined result of such central government paralysis and the pressures on water resources that have been intensified by layered sets of state economic policies has meant that water sharing between Tamil Nadu and

Karnataka has continued to exacerbate tensions between the states. The combination of real water distress produced by failed monsoons (for instance in 2012–13 and in 2016–17) and intense political opposition to the terms of the tribunal award has led Karnataka to refuse to release water according to the terms of the tribunal judgment. Tamil Nadu, on the other hand, faced with the severity of its own water scarcity with the failed monsoons and with the challenges of managing its ongoing water insecurity, has aggressively turned to the courts to enforce the agreements.

In response to a Tamil Nadu petition to the Supreme Court to mandate the formation of the Cauvery Management Board by the Ministry of Water, the Supreme Court directed the central government to set up an interim panel to arrange the release of Cauvery waters in 2013. However, the terms of water sharing between the two states remained unresolved and politically volatile, with fierce conflicts breaking out in the context of the interim committee.<sup>11</sup> Once again, on September 20, 2016, central government inaction prompted the Supreme Court to intervene and direct the central government to set up the Cauvery Management Board within four weeks. However, the central government refused to implement the order, arguing that the court did not have jurisdiction over the matter.<sup>12</sup> As the attorney for the central government argued,

Since the central government was not a party to the proceedings before the Tribunal, it did not have opportunity to submit to the Tribunal that the Tribunal will not have any power of recommending to create a Board as suggested. Setting up of a Board is part of legislative exercise. . . .

It is submitted that constitution of a Board as suggested by the Tribunal and ordered by this Court on September 20 is not contemplated by the statute. By setting up of a Board of this nature, the Central Government is denuded of its power under the Act of 1956 to frame a scheme based on an award which goes through a legislative process by placing thereof before the Parliament and the final say is vested in the Parliament.<sup>13</sup>

The state, in effect, argued that the tribunal did not have the authority to recommend the constitution of a water board without the consent of Parliament. The central government was in effect trying to draw boundaries around the power of the Inter-state River Water Disputes Act, which had been amended precisely to avoid lengthy delays in implementing tribunal

awards. The absence of central government action once again prompted the Supreme Court to assert its own authority and compel the central government to form the Cauvery Water Management Board (which it did after the Karnataka elections).<sup>14</sup> Such interventions of the Supreme Court in the years after the tribunal award in themselves reflect a failure of the central government's regulatory state capacity.

According to a 2002 amendment to the Inter-state River Water Disputes Act, the tribunal award was to be "final and binding on the parties to the dispute" (PRI 2002, 4). The amended act specifically sought to circumvent potential lengthy (and politically volatile) challenges through the Supreme Court by giving the judgment the binding authority of a Supreme Court decision. According to the act, "The decision of the Tribunal, after its publication in the Official Gazette by the Central Government under sub-section 1, shall have the same force as an order or decree of the Supreme Court" (4). In light of this amendment, the fact that the Supreme Court had to intervene and direct the central government to notify the award after six years of inaction was a vivid sign of the central government's institutional and political failure in managing the dispute.

What we see unfolding is a deeper dynamic of state incapacity, as the continued inability of the central government to manage the implementation of the award produced an institutional vacuum that compelled the Supreme Court to step in. Yet the 2002 amendment to the Inter-state River Water Disputes Act, 1956, had sought to prevent precisely this kind of situation, where the Supreme Court had to take on an expanded role in order to respond to the paralysis of the central government's executive authority. Evidence of this dynamic has been highlighted by a new amendment to the interstate waters dispute act (LS 2019), which has passed the Lok Sabha and is designed to address these ongoing problems.<sup>15</sup>

The dynamic surrounding the Cauvery River dispute provides a historic case of the institutional incapacity of the Indian state that has shaped the management of the political ramifications of the very real economic distress produced by periods of water scarcity. Meanwhile, the intervention of the Supreme Court in the vacuum provided by this form of state incapacity has complicated the dispute resolution process and produced the very kinds of judicial appeals and claims that the amended Inter-state River Water Disputes Act was intended to avoid.<sup>16</sup> Supreme Court judgments in the case in the period between 2013 and 2016 in fact reflect the actions of a court attempting

to force the government to take executive action—for instance by notifying and implementing the award of a tribunal that the central government’s own legislative action had sought to define as final, binding, and with the “same force” as an order of the Supreme Court. Furthermore, in the context of dire water scarcity (during periods of drought) within both Tamil Nadu (without the release of sufficient water since the notification of the award) and Karnataka, the court has attempted to manage an emergency situation that should have been the responsibility of the central government. In this case, the scarcity of national regulatory state action in the Cauvery case has intensified the consequences of water scarcity in both states, which have been exacerbated by increasing demands on water in the context of state-led policies of liberalization.

The result of this state incapacity has been that both competing central institutions such as the Supreme Court and local state governments have filled these institutional gaps. This has deepened the polarization between the states on matters related to water resources and hardened the desire of state governments to assert control over water resources and infrastructure that in any way impacts such resources. This is evident in the ways in which developmental water-related infrastructure has increasingly become a kind of weapon that continues to exacerbate political tensions over the Cauvery River. Tamil Nadu has sought the central government’s intervention to prevent Karnataka from building infrastructure that would impact the use of the river’s resources, for instance by protesting Karnataka’s proposal to build a dam and reservoir for the generation of hydroelectric power and provision of drinking water for Bengaluru.<sup>17</sup> Meanwhile, Tamil Nadu has itself sought to build a large dam across the river (Saldhana and Rao 2015). Water-related infrastructure becomes a means for political mobilization within the contours of normative state visions of economic development and growth that intensify the very inequalities and forms of scarcity that deepen the distress for local communities in both states. The result is a subtle but significant intensification of local state governmental authority over water. Furthermore, the politicization of water conflicts has led to increased state governmental competition for central government intervention on behalf of their interests.

Consider the ways in which the Cauvery dispute was intensified by the politicized nature of interstate competition in the decades-long tribunal process. At an early stage of the process, tribunal members toured the Cauvery Basin

on both the Karnataka and the Tamil Nadu sides of the river. Both states felt the political pressure to impress the tribunal members not just through the technical and legal arguments emphasized in the formal proceedings but through the social and political rituals of the tour. Tamil Nadu's head of the Cauvery technical cell of Karnataka's weeklong tour, held in 1991, described it thus: "One weeklong tour in Karnataka Cauvery Basin, along with the Chairman and Members of the Cauvery Waters Disputes Tribunal, in a big convoy of 40 cars and saw rousing reception wherever we went. Tea and extraordinary lunches and dinners all through were arranged by the Karnataka Cauvery team. . . . The Karnataka State Government has flexed their muscle to make this Tribunal tour a memorable one for their own benefit" (Mohanakrishnan 2016b, 31).

This narrative does not imply that such social processes influenced the members of the tribunal. Rather, what matters is that a more textured perspective on the role of state governments illustrates that they are operating within an institutional framework which is itself embedded in political processes. While politicians indeed further politicize issues through public and political attacks on opposing parties, such examples reveal the ways in which the institutional mechanisms of the dispute reconciliation process themselves become immersed in political processes that are shaped by the hardened and polarized state governmental authority of each of the states involved.

Consider, for instance, some of the more public political performative dimensions of the tour that Tamil Nadu in turn organized for the tribunal members. Tamil Nadu organized a three-hundred-kilometer-long human chain along the route that the tribunal members' convoy traveled during the tour along with farmers' meetings and a final rally (Mohanakrishnan 2016b, 33). The organization of this human chain provides insight into the complex nature of state-society relations in the context of the dispute. The formation of the human chain was a product of both state-led and farmers' political organizing. It would be a mistake to conceive of farmer mobilization purely as a state-driven process. On the contrary, real problems of water scarcity and economic crises (in the context of failed crops during distress years) have meant that farmers in the state have actively mobilized and often taken the lead in placing political pressure on the state government to address diminishing waters from the Cauvery. The Cauvery Tribunal itself was formed by a Supreme Court directive in response to a petition filed by the Tamil

Nadu Farmers Society (Swain 1998, 173). Nevertheless, such protests within civil society have facilitated the exercise of state governmental power in the dispute. For instance, the Public Works Department, working with local collectors in the districts, played a central role in organizing farmers. The state both foregrounded the significance of the tour and provided institutional mechanisms that helped facilitate the popular response from farmers. State–civil society relations unfolded in ways that consolidated local state power rather than in ways that deepened or expanded the space for democratic political participation.

The dynamics around the Cauvery Tribunal since 1990 have taken place in a political context in which there has been a shift away from Congress party dominance to a more complex national pattern of coalitional politics. The unwillingness and inability of the central government to effectively intervene in the management of the dispute has spanned both Congress and BJP-led governments, as neither party has had the political will to weaken their political influence within the states. Meanwhile, the dispute over the river has become a significant site for political mobilization within both Tamil Nadu and Karnataka, with the various political parties either accusing their opponents of being weak on the issue or risking being the subject of such accusations. The potency of political mobilization has been accentuated both by the cultural significance of the river for communities (Settar 2010) in both states and by the potential politicization of ethnic-linguistic differences between the states (Pani 2010). Such processes of politicization have been hardened in ways that have facilitated the exercise of state power within civil society while polarizing relations between communities of the two states. Protests and demands by civil society actors, in this context, tend to intensify the pressures on state governments to claim sovereign authority over water.

The Cauvery dispute is illustrative of a case in which state–civil society relationships in both states have been polarized by the cumulative effects of decades of state institutional incapacity. As the comparative framework of this chapter illustrates, there have been significant variations in Tamil Nadu's negotiations over water-related matters with its neighbors. The kind of water resharing required under stringent political-economic conditions and the political paralysis of the prolonged adjudication makes the Cauvery dispute a unique situation. Yet its very distinctiveness provides an illustrative case

for an understanding of how the institutional incapacity of the state—in this case the weakness of regulatory mechanisms—has meant that the local state governments have hardened the state–civil society compact within each state in ways that have deepened conflicts between Karnataka and Tamil Nadu.

One of the most significant, though rare, attempts at redrawing these state–civil society relationships by attempting to build civil society relationships between Karnataka and Tamil Nadu was the Cauvery Family initiative. The Cauvery Family initiative took place between 2002 and 2013 and sought to build civil society linkages and dialogues between farmers in Karnataka and Tamil Nadu and to include an array of “academics, bureaucrats, NGOs, lawyers, people from the media, and other concerned citizens” (Janakarajan 2010, 150). Professor S. Janakarajan, founder of the initiative, wanted to build what he has called a multistakeholder dialogue, which would in effect develop a set of both civil society and institutional linkages across the territorial boundaries of the states. The initiative has been held up as a unique example of an alternative approach to the protracted conflict. Years after the conclusion of the initiative and in the midst of the severe violence that unfolded in 2016, Janakarajan would write, “The initiative, Cauvery Family, has met eighteen times. In our last meeting in 2012, we arrived at a water sharing formula acceptable to farmers in both states. Though this initiative was widely appreciated by the media and civil society, it failed to grab politicians and governments’ attention. The initiative failed as it did not receive any political support. The violence we are witnessing in the two states could have been circumvented had the political parties or governments recognized initiatives by non-governmental/non-political organisations.”<sup>18</sup>

At one level, Janakarajan’s reflections on the lack of responsiveness of both governments and politicians points to the constraining effects of both the state’s institutional framework and the deep regulatory weaknesses in the governance of water. The Cauvery Family initiative was in effect trying to build the very institutional mechanisms for reconciliation that have been missing in the existing framework for water resources management that became entrenched in postcolonial India. At a deeper level, they point to the ways in which this prolonged state failure also produces a particular state–society configuration that has intensified the ethnic, linguistic, and territorial divisions between the two states during periods of water scarcity and that has in turn reconsolidated state governmental claims of authority over water.



The enhancement of sovereign claims of state governmental authority in the context of heightened competition between Karnataka and Tamil Nadu has also produced subtle foreclosures in the space for effective bureaucratic agency and negotiation. Consider, for instance, the internal dynamics of the Cauvery Technical Cell documented by the chairman. Mohanakrishnan's professional records provide a unique view of the daily work of negotiations, preparation and presentation of technical data, and filings of court briefings, often at a moment's notice at the request of the Supreme Court or state governmental leaders. The records show Mohanakrishnan's keen critical views of time spent in unproductive bilateral and intrastate meetings (2016b, 24–36) and the waste of resources in the protracted legal proceedings. In one entry on the proceedings of the tribunal, he observes that there were, "of course, a few undeserved Advocates who did nothing, who spoke not a word in the court, who simply sat in the Advocates' conference and the courts and drew their fees in lakhs, we could see, but that is beside the point. They got themselves included in the team on political influence" (44).

Weary as he gets when there is "more of gossiping than serious work" (96), Mohanakrishnan's concerns about waste are not limited to discussions of lawyers but punctuate his records on the multiple meetings, conferences, and events organized for and around the Cauvery dispute. They point to a little-discussed dimension of state practices in scholarly work that has tended to be highly critical of the role of state bureaucrats, professional expertise, and governmental corruption; that is the significance of understanding spaces of ethical agency that exist within the state. Thus, for instance, he characterized his appointment as head of the Cauvery Technical Cell as the start of "the decades-long journey of seeking justice" (2016b, 26). To fully understand this ideal of justice, this characterization must be distinguished from the visible dramatic and public rhetoric of political leaders that invoke norms of justice with broader public or electoral calculations at hand. Indeed, at points in his personal journal, Mohanakrishnan notes (in an understated tone) the pressure of needing to save crops in the Delta region of Tamil Nadu that lies at the backdrop of the endless negotiations, meetings, and travel that he is engaged in (Mohanakrishnan 2016b).

The potential for understanding such spaces of bureaucratic agency within the state provides an avenue for moving past static narratives of state

dysfunction that have become a key dimension of public and political rhetoric in the postliberalization period. Such a textured conception of state agency can also begin to move us beyond rigid views of inevitable deadlocked forms of political polarization and conflict over water resources. One of Mohanakrishnan's overriding concerns, for instance, is with the accuracy of the technical data being presented. Consider, for example, the perspective of one of Karnataka's eminent lawyers who represented the state in the Cauvery dispute: "My own experience in the Cauvery Water Disputes Tribunal has been if the Chief Engineers of Karnataka, Kerala and Tamil Nadu had been assembled to sit across the table with the Chairman (and members) of the Tribunal, it would have been possible to narrow differences and save a great deal of time. . . . The engineers had to be put at ease so that they did not have to keep looking over their shoulders (to their masters, the State) when explaining technical matters" (Nariman 2009, 52).

This potential for a constructive, nonpoliticized process of conciliation, of course, as we have seen, was foreclosed by both state executive inertness and political polarization at the local state and central governmental levels. The result, as S. Guhan has argued, was that "expert engineers on both sides were not able to quietly work together to find common ground; on the contrary, they got co-opted to advance or defend partisan positions" (1993, 35). While state and political fractures overwhelmed the conciliation process, such perspectives point to the significance of taking seriously the role and potential of actors within state bureaucracies who may open up or obstruct the spaces for the effective reconciliation of disputes and expand the space for interstate cooperation.

This range of bureaucratic activity lies in a liminal space between the visible drama and rhetoric of political leaders in the central offices of state governments on the one hand and the inert cultures of the bureaucratic state on the other. It is this kind of hidden work of bureaucratic actors that is perhaps the least analyzed dimension of current social science research on contemporary India. Yet local state actors are themselves negotiating within the institutional constraints and incapacities and political-economic structural conditions. They, in effect, perform the everyday labor of the state. It is the measured observation and analysis of an intermediary local state official engaging in the arduous daily actions of pressing the case forward to a kind of resolution that is the substance of the kinds of practices that institutional

reforms seek to put into place. An understanding that disentangles bureaucratic action from the centralized nature of state action at both the local and central governmental levels is thus crucial for an adequate analysis of the dynamics of institutional reform.

### Interstate Cooperation, the Telugu Ganga/Krishna Water Supply Project, and the Spaces of Bureaucratic Agency

If the Cauvery River dispute has become an infamous example of institutional failure, the Telugu Ganga Project that produced an agreement between Tamil Nadu and Andhra Pradesh is often heralded as a model of interstate cooperation (Sampathkumar 2005). The agreement centers around the Telugu Ganga Project (formally known as the Krishna Water Supply Project), which supplies water from the Krishna River for Chennai's drinking water supply and for irrigation needs in Rayalaseema, a drought-prone area in Andhra Pradesh. The structural conditions and substantive focus of the agreement are fundamentally different from the Cauvery case. Historically, Andhra Pradesh was a part of the Madras Presidency, and the state was first carved out of the Telugu-speaking areas of Madras State in 1953 (with Telugu-speaking areas of Hyderabad State joining the state as part of the state-reorganization process in 1956). While there is a history of politicized linguistic distinctions between Tamil Nadu and Andhra Pradesh, the two states are not shaped by a colonial history of sharp disputes, which has characterized the Tamil Nadu-Karnataka relationship. Bureaucratic officials in Chennai also argue that the two states have shared strong cultural and economic ties because of the links between members of the state bureaucracy in Andhra Pradesh and the city of Chennai (interview, PWD, January 2017). Such ties were accentuated during the early years of negotiation between the two states by the shared background of two chief ministers, M. G. Ramachandran (MGR) of Tamil Nadu and N. T. Rama Rao (NTR) of Andhra Pradesh. Both chief ministers, representing independent regional parties, came to politics as highly successful stars in regional films. NTR, in particular, also had ties to the Tamil film industry. Such ties were a highly visible example of deeper ties between Andhra Pradesh and Chennai-based cultural and economic activity.

A second crucial difference between the Cauvery dispute and the Telugu Ganga agreement lies in the nature of the cooperative water sharing that was

institutionalized. The agreement, formally signed in 1983, represented cooperation over a set of shared interests. The Krishna River, which provides water resources through the states, does not run through Tamil Nadu. Disputes over the sharing of the river water have played out through a separate Krishna Water Tribunal, which has mediated conflicts between the states of Andhra Pradesh, Karnataka, and Maharashtra.<sup>19</sup> The Telugu Ganga agreement served the mutual interests of both states, as it allowed Andhra Pradesh to supply water for a drought-prone area in addition to providing water for Tamil Nadu.

Finally, the political conditions of the central and state governments also played a significant role in jump-starting the agreement. The agreement grew out of a Congress government-led initiative that gained the consent of the states of Maharashtra, Karnataka, and Andhra Pradesh to each provide five TMC of the fifteen TMC to Tamil Nadu in 1976. This would later become the basis for the bilateral agreement providing fifteen TMC from a reservoir in Andhra Pradesh for Chennai's drinking water (Mohanakrishnan 2011a: 12). The cooperation between the states was in effect a product of Congress's one-party rule in the early decades of independence as well as Indira Gandhi's questionable use of executive authority. The agreement was executed in the context of Indira Gandhi's suspension of democratic rights during the Emergency period. More specifically, in the context of Tamil Nadu, Gandhi had dismissed the elected government on February 15, 1976, and instituted president's rule. The announcement of the agreement for Chennai's water supply was part of a visible political ritual that Gandhi was using to produce consent to her political actions. For instance, she visited Madras (now known as Chennai) two weeks after instituting president's rule to announce the agreement. The publicity around the project was of course a strategy designed to gain popular support within Tamil Nadu in the context of Gandhi's anti-democratic actions both at the national level and in Tamil Nadu. Gandhi's authoritarian actions during the Emergency had garnered support from significant sections of the urban middle classes. Moreover, the inauguration of infrastructure projects has long been a strategy that elected officials have used to gain electoral or popular support (Min 2015). Gandhi was, in effect, using the promise of drinking water through a large infrastructure project for the city of Chennai as a political strategy to garner public support in the face of her government's political ousting of the elected state government.

If, in the Cauvery River dispute, complications associated with the fragmentation of the political field produced a kind of state paralysis, paradoxically,

one-party rule provided an important catalyst for the initiation of the Telugu Ganga Project. Seven years later, when the official agreement was signed between the chief ministers of Tamil Nadu and Andhra Pradesh, Indira Gandhi, in power once again, could attend the public ceremony and hold up the project as an emblem of national unity, noting that “it has long been a dream of mine that the rivers of India should be joined together, joining the different peoples, the different cultures together. Bringing water to parched lands and also opening out new ways of transport” (quoted in Mohanakrishnan 2016b, 93). The infrastructure project allowed her to link “the common man,” states that are “strong and self-reliant,” and the “strength” of the central government through a narrative of national unity. As she put it, “We should all regard ourselves not merely as citizens of Tamil Nadu or Andhra Pradesh or Maharashtra or Karnataka or anywhere else but as citizens of India bound together in a common [sic] goal of making our country self-reliant, strong, unified and great. We want strength, not to dominate over anybody, or any other country, any other people. But to be able to protect ourselves and solve our multifarious problems” (94). The rhetoric captured the kind of centralized federal structure that was at the heart of Gandhi’s approach.

The contrast between the central government’s interventionist action in the Telugu Ganga case and the incapacitated nature of state action in the Cauvery case would seem to provide an argument in favor of centralized state action. However, while state action in the Telugu Ganga case did provide a critical factor that set up the foundation for the project, similar action did not prove to be effective in the Cauvery River dispute during the same time frame. In contrast to the Telugu Ganga case, in the Cauvery case, the political and institutional turmoil of the Emergency period foreclosed an agreement that was being forged between Tamil Nadu and Karnataka.<sup>20</sup> In 1971, a coalition of farmers with support of members of both regional and Congress parties in the two states sought an agreement via the Supreme Court. In that context, Gandhi once again intervened and produced a draft agreement in 1976 that had consensus from the two states.<sup>21</sup> However, during the Emergency, the farmers’ case was dismissed by the Supreme Court, and in light of the deterioration in center-state relations, the newly elected DMK-led regional government in Tamil Nadu refused to support an agreement developed through Gandhi’s intervention. Centralized state intervention and the turmoil produced by the Emergency in the Cauvery case broke down

the 1976 consensus and contributed to the acceleration of the dispute into an irreconcilable conflict that was referred to the tribunal in 1990.

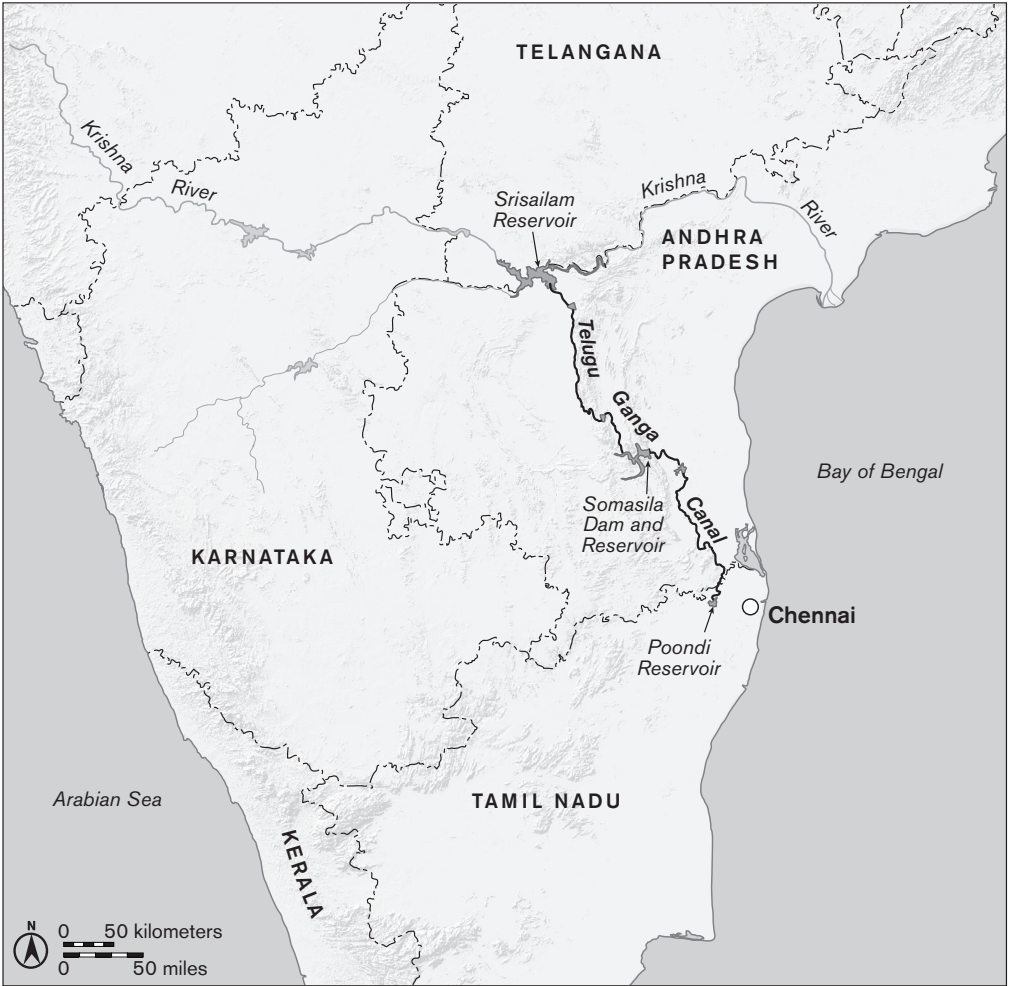
The confluence of a set of shared central and state governmental interests does not fully account for the divergent paths in the Cauvery and Telugu Ganga cases. The deep developmental strains on the Cauvery Basin and the shared strategic interests between Andhra Pradesh and Tamil Nadu are significant factors that explain this divergence. However, a careful analysis of the process and politics surrounding the Telugu Ganga infrastructure project reveals a messier process that is not adequately captured by an explanation of shared strategic interests. Consider, for instance, the passage of time between the initial agreement in 1976 and the completion of the project. It took seven years for the signing of the bilateral agreement to take place in 1983; the public inauguration marking the implementation of the project was held after an additional thirteen years. Since then, the supply of water to Chennai has been uneven. While the formal bilateral 1983 agreement has often been heralded as a model of interstate cooperation, the successful implementation was not an inevitable outcome. Institutional records of the Public Works Department in fact show a much more complex process that moved forward in the face of continued political obstacles. The completion of the project was in large part due to effective technical and bureaucratic agency at the local level. Moreover, while water supplies still do not flow reliably to Chennai, the long-term impact of the prolonged but effective institutional cooperation at the local level has meant that the political and institutional space for negotiation has remained open, in contrast to the Cauvery dispute. While shared political and structural interests were necessary conditions for the establishment of this form of interstate cooperation, they were not sufficient for the implementation of the project.

Institutional records of the Public Works Department reveal numerous delays and roadblocks that could have potentially derailed the successful implementation of the agreement. Such implementation—which entailed the physical creation of the infrastructure needed for the water supply—was successful because of prolonged and persistent cooperative efforts at the local level. A key foundation for this cooperation was the creation of microinstitutional mechanisms for communication and cooperation between state actors and technical experts from the two states. For instance, two committees, a Liaison Committee composed of state officials and a committee of technical officers, provided crucial means for communication, which allowed for the

management of the project in ways that circumvented the escalation of differences into wider political battles (Mohanakrishnan 2011a 20–22).

The interstate agreement is often heralded as a model because it served the interests of both Tamil Nadu and Andhra Pradesh. However, this establishment of shared interests was formulated after the initial agreement was ratified in 1977. The 1977 agreement did not contain any provisions for supplying irrigation waters for Andhra Pradesh, and this demand was not made by Andhra Pradesh until the fourth meeting of the Liaison Committee, in 1979 (Mohanakrishnan 2011a, 22). The demand was then reiterated through a specific proposal to irrigate Andhra Pradesh's drought-prone area made in 1980. While this would become part of the final agreement, records show that key local decisions produced a pragmatic solution to what could in a more polarized political context have escalated into an obstacle to, if not breakdown of, the project. A. Mohanakrishnan, Tamil Nadu's chairman of the Committee of Technical Officers and member of the Liaison Committee, would later note, "This [demand of Andhra Pradesh] put the State of Tamil Nadu in a somewhat piquant situation requiring careful decisions to be taken after deep thinking" (24). Mohanakrishnan's solution was to develop an idea of a combined conveyor system from the reservoir source (Srisaialam) located in Andhra Pradesh (see map 3.3). This technical solution provided a safeguard for Tamil Nadu, as it would serve as an insurance that any future problems with the canal would not leave the state in a powerless situation. In other words, a breach in Andhra Pradesh's canal, which would have been bigger and at a higher level, would have potentially overwhelmed the supply channel to Chennai. The proposal for the joint canal accommodated Andhra Pradesh's needs but in a way that safeguarded some of Tamil Nadu's interests in the future operation of the system (25). While Andhra Pradesh initially held back on this proposal, patient negotiations within the committee structure eventually produced a foundation for the actual implementation of the agreement.

Such processes reveal the intricate negotiations through an institutional form as mundane as a joint committee structure that can too easily be glossed over by simply focusing on the formal signed agreements based on shared economic interests. Consider, for instance, another key obstacle to the implementation of the agreement—the question of funding. The construction of a joint canal meant that the two states had to come to a cost-sharing agreement for the project. While such an agreement was reached, the question



MAP 3.3. The Telugu Ganga/Krishna Water Supply Project, illustrating the route of the water supply infrastructure project designed to supply water from Andhra Pradesh to the city of Chennai



of who would front the funds in the initial stages of the project became a source of contention between the states. As early as 1986, the chief minister of Andhra Pradesh wrote to MGR, his counterpart in Tamil Nadu, expressing concern about inadequate funds released for the project and requesting a meeting between the two chief ministers (cited in Mohanakrishnan 2016b, 116). MGR replied to this concern with an ambivalent response, indicating that “it is desirable that the officials of both the States meet once again and discuss the status of the Project and other related issues, before we meet for a discussion” (117).

While a meeting between the two chief ministers was eventually scheduled, it led to a breakdown in the implementation of the project. Mohanakrishnan described the events in the following way:

We were all waiting, both the Ministers and Officials groups from both the Governments, in the Secretariat from forenoon. But the meeting did not take place since a message was received that the Hon'ble Chief Minister of Tamil Nadu had suddenly fallen sick. The whole Andhra group returned in the evening. On his way to the airport, Sri N.T. Rama Rao called on his brother Chief Minister of Tamil Nadu reported sick, presumably to enquire about his health. There was one-to-one meeting. No one knows what transpired in that meeting. But the flow of funds for the project stopped thereafter. It was true that the work on the project had a bad set-back for nearly two years. (2016b, 63)

The weighty silence embedded in the words “No one knows what transpired in that meeting” is a vivid reflection of the political fragility of interstate relationships. The issue at stake was not the terms of cost sharing but the question of which state would provide more of the funds upfront. What Mohanakrishnan's records reveal are increasing concerns within the Tamil Nadu state government about the high costs of the project (Mohanakrishnan 2016b, 61). It would take a change of government in 1989 for Tamil Nadu to commit funds to the project. Such funding disputes would continue to affect the implementation of the project, particularly as delays would mean a continued increase in the costs of the project.<sup>22</sup> Originally estimated to cost Rs. 760 crores, the entire project would ultimately cost Rs. 2,190 crores (with Andhra Pradesh paying 1,108 crores).<sup>23</sup>

While the project ultimately did come to fruition, the celebrations of the first release of water for Chennai's water supply vividly capture the complex dynamics between state actors, political leaders, and the public narratives surrounding the success of such infrastructure projects. Media reports documented the long and costly journey to the project but celebrated the fulfilled promise of much-needed drinking water to meet Chennai's growing requirements. Politicians were ready for the customary public rituals to show that they had made good on their promise, ensuring that they would gain their share of the return of infrastructural political capital. Meanwhile, behind the scenes, local state actors and technical employers would have to do the labor of this public stagecraft. Engineers would have to work without pause to get the water to flow to the Andhra Pradesh–Tamil Nadu border on the day of the celebration, and as A. Mohanakrishnan would record,

The water that had slowly trickled down to the border was temporarily held back for a short period of time until the Hon'ble Chief Minister Andhra Pradesh operated switch to open the shutter when the waters flowed through the measuring gauge in the deep reach at the border, with the Hon'ble Chief Minister, Tamil Nadu unveiling the Commendation tablet for the occasion. The entire crowd gathered, cheered and lined up along the bank to see the water flow through the Krishna Water Supply canal to infall into the Poondi reservoir [one of the main sources of drinking water supply for Chennai] 25 km off. (2011b, 75)

This carefully designed ritual captures a key dimension of the reproduction of state power. As with the successful implementation of the interstate agreement, the formal visible political rituals are the product of the intensive but rarely visible efforts of state employees.

The idealized narrative of the Telugu Ganga/Krishna Water Supply Project as a successful model of interstate cooperation thus masks a more entangled process of negotiation whose successful implementation was not predetermined. The decades since the first flow of water in 1996 have shown often limited and uneven successes when measured against the goal of providing twelve TMC of water for Chennai.<sup>24</sup> Both technical and political factors have posed obstacles to the delivery of water. The highest volume of delivery was 7.016 in 2009–10 (Mohanakrishnan 2011b, 43), and interviews that I conducted with officials from Chennai's utility company (Metrowater, August

17, 2016) confirmed that the city was not gaining the water resources they had hoped for from the project. In the initial years, technical complications with the canal posed problems for delivery. In more recent years, pressures from farmers within Andhra Pradesh and Andhra Pradesh's construction of new infrastructure projects have impacted the supply of water to Chennai (Ramadevi and Nikku 2008, 386). Such obstacles to the delivery of water to Chennai have been further complicated by the creation of the new state of Telangana in response to an ongoing popular movement in 2014. While the Srisailem Reservoir used for the Telugu Ganga Project remains within the newly bifurcated state of Andhra Pradesh, Telangana receives a portion of water from the reservoir. Since Telangana is not an official signatory to either the 1977 or the 1983 agreement, this has resulted in Andhra Pradesh arguing that a share of the water for Chennai should come from Telangana.<sup>25</sup>

Despite the serious disjunctures between the original promise of the supply of twelve TMC of water for Chennai and the limited delivery of water, there are important ways in which this interstate agreement remains a case of relative success. Most significantly, the bureaucratic and technical work of producing various mechanisms of communication and institutional cooperation has meant that continued disputes over the agreement are managed through negotiations rather than time-consuming and polarized forms of adjudication that occur when bilateral state conflicts over water-related matters become intractable. For example, in the context of the severe drought that placed Chennai's water supply in crisis in 2016, Tamil Nadu's chief minister made an unprecedented personal trip to Andhra Pradesh and was able to gain a public commitment from Andhra's chief minister that water would be released. While the release of water was far short of both the formal agreement and Chennai's supply needs, the significance of such attempts at reconciliation between the two states' interests should not be underestimated. Droughts, produced by complex configurations of human models of unsustainable development (and that may be potentially exacerbated by the effects of climate change) on one hand and the uncontrollable contingencies of nature on the other cannot be contained by the territorial boundaries of states. In crisis circumstances, when Tamil Nadu has faced extreme water shortages, it has been left with the task of trying to press its neighbors to enforce agreements with states that are managing their own water problems and crises. In such constrained circumstances, the politics of negotiations rests on intensified debates and conflicts over reservoir levels and the availability of scarce



MAP 3.4. The Kerala Mullaperiyar Dam, presenting the location of the dam that has been a site of conflict between Kerala and Tamil Nadu. The dam is located in Kerala but managed by Tamil Nadu.

water resources that must be shared by the competing states in question. Technical experts employed by the state become critical actors in the management and mediation of such disputes as they provide the data that becomes the basis for negotiations. The case of the Telugu Ganga/Krishna Water Supply Project illustrates the ways in which the unglamorous hidden agency of technical experts and bureaucratic officials can provide a lasting institutional mechanism that can enhance interstate dialogue even when growing demands on water produce significant constraints on the implementation of formal agreements.

The ineffectiveness of the central state in providing either an effective national regulatory institutional framework for shared river governance or adequate machinery for the implementation of Supreme Court judgments or interstate tribunal awards has meant that state governments have resorted to the aggressive pursuit of their own interests. The result has been a continued hardening of the claims of state governments over water and water-related infrastructure in ways that deepen microprocesses of the centralization of state authority. Such dynamics are well illustrated in an interstate dispute between Tamil Nadu and its third neighbor, the state of Kerala.

### Infrastructural Security and the Mullaperiyar Dam Conflict between Tamil Nadu and Kerala

On March 14, 2014, a team of engineers from Tamil Nadu's Public Works Department attempted to begin work on repairs of the floor of the Mullaperiyar Dam in Kerala. The engineers' work was halted after protests from Kerala's irrigation department despite the PWD's arguments that they had received permission from the Kerala Forests and Wildlife Department.<sup>26</sup> Kerala's objection was that the maintenance work was aimed at strengthening the dam—an issue related to a long-standing dispute between the two states that was under adjudication with the Supreme Court. The dispute was marked by a unique set of circumstances, in which the dam was located in Kerala but owned and operated by Tamil Nadu. Kerala had been raising issues regarding the safety of the dam and had been trying to decommission it, while Tamil Nadu was attempting to press for the dam to operate at a water-level height of 152 feet. On May 14, 2014, the Supreme Court delivered a verdict in favor of Tamil Nadu. However, the court decision has not produced either state or societal consent within Kerala. The result has been a legal resolution

of this interstate dispute but a concurrent securitization of the infrastructure that has produced distrust and conflict between the two states.

The Kerala–Tamil Nadu dispute is shaped by both similarities and differences from the two other major cases of interstate water agreements and disputes that Tamil Nadu has had with its neighboring states. As with the Cauvery case, the contours of contemporary conflict have been shaped by the historical policies of the colonial state. However, in terms of the substance of the matter under consideration, the dam has stronger parallels with the Telugu Ganga Project, as it is an infrastructural project that must be managed between the two states. The issue at hand is not a dispute over water sharing but a dispute over the management of water infrastructure. Finally, underlying the overt focus on safety are political-economic interests in both states. In Tamil Nadu, an explicit reliance on water from the dam for both irrigation and drinking water in the context of systemic water insecurity heightened by Tamil Nadu's lack of control of river waters has hardened its attempts at gaining full control of the dam and its water height. Meanwhile, in Kerala, more nuanced interests in land and tourism in the context of liberalization intersect with its genuine concerns over the safety of the dam.

The Mullaperiyar Dam was constructed by the British colonial state in the second half of the nineteenth century and was specifically designed to divert waters from the Periyar River to serve the irrigation needs of Madurai in the Madras Presidency. After a prolonged set of negotiations, in 1886, the colonial state entered into a 999 lease agreement with the princely state of Travancore that allowed the British to lease the land needed, construct the dam, and maintain full ownership and control of its operation. This structure of ownership and operation was carried over into the postcolonial period, with Tamil Nadu owning and operating the dam under the terms of the 999 lease. As with the Cauvery case, the terms of this arrangement mirrored the relationship of power between the British state and the independent princely states in the colonial period. However, in contrast to the Cauvery case, there has been no political-economic conflict over the sharing of the Periyar River. Unlike Kerala, Tamil Nadu has a heavy dependence on water provided by the dam for irrigation needs as well as for hydroelectric power generation, which Tamil Nadu began in 1959 (Thatayus, Dhanaseeli, and Vanitha 2013). Tamil Nadu's dependence on resources from the dam has only intensified with the growing challenge of water scarcity. For instance,

the city of Madurai, Tamil Nadu's third-largest city, has begun planning to use water from this source to meet its growing drinking water needs.<sup>27</sup> The agreement between the two states was then successfully renegotiated in 1970, with Tamil Nadu providing Kerala with fishing rights and Kerala agreeing to Tamil Nadu's right to construct facilities for power generation (Supreme Court judgment, 2014). As with the case of the Andhra Pradesh agreement, the two states were able to negotiate an agreement that merged their economic interests at the time.

The dispute between the two states was first sparked in 1979 when concerns about the safety of the dam began to take root in the public sphere in Kerala. Media reports in Kerala first began publicizing damage in the dam that was causing leakage (Madhusoodhanan and Sreeja 2010). The publicized damage, in conjunction with fears of the effects of an earthquake after a perilous dam failure caused by an earthquake in Gujarat in 1979, produced both societal and governmental concerns about the Mullaperiyar Dam. In response to a request from the government of Kerala, the Central Water Commission (CWC) conducted a series of inspections and subsequently instructed the Tamil Nadu government to engage in strengthening measures for the dam. At this time, the CWC recommended that the water-level height of the dam be kept at 136 feet until the strengthening work had been completed (Supreme Court judgment, 2014). This question of the height of the water level has become one of the central sources of contention in the dispute.

As with the Cauvery River dispute, years of adjudication, the politicization of the issue by both political parties and civil society organizations, and a complex set of political-economic factors has transformed this issue of dam maintenance into a decades-long dispute between the two states. The intensification of the conflict occurred in the late 1990s, after Tamil Nadu had completed the dam-strengthening measures and requested that the height of the dam be raised. The two states could not come to an agreement about raising the height of the water level, and Tamil Nadu eventually filed a petition in the High Court in 1998. This sparked a familiar chain of events comprising legal proceedings, state governmental maneuvers, increasingly inflamed political rhetoric, and public and social protests in both states until a final Supreme Court verdict deemed the dam safe and allowed Tamil Nadu to raise the water to 142 feet with the possibility of further raising the level to its earlier 2006 judgment of 152 feet. As with the Cauvery River dispute,

existing scholarly work and media reports document in detail the history of the legal proceedings, the various political postures by political leaders, and protests by social groups. As I have noted, this interstate dispute is distinctive from the Cauvery case since it is centered on the management of infrastructure rather than river sharing. This distinction allowed the Supreme Court to claim full purview of the case in lieu of the tribunal process. Nevertheless, there are striking parallels between the two disputes in the underlying institutional and political-economic contradictions that play out in visible ways in court proceedings and political conflict in the public sphere.

The judicial and political conflicts between Tamil Nadu and Karnataka began unfolding in a context where policies of economic liberalization were accelerating with a significant shift at both the national and state levels in the 1990s. Such policies deepened the political and economic stakes in both states. As we have seen, in the case of Tamil Nadu, increasing pressures on water resources were created by continued urbanization. Both city needs for drinking water and industrial uses were intensified by urbanization and economic development. The intersection of such factors with the pressures of being a lower riparian state with unresolved water issues with its other two neighbors significantly increased the political stakes of control of the dam for Tamil Nadu. In the context of the three sets of interstate relations between Tamil Nadu and its neighbors, the Mullaperiyar Dam is the only case where Tamil Nadu has full ownership and control of the infrastructure in question. In the case of Kerala, while the public's safety concerns were genuine, the question of the water height also came with a set of less visible but important economic factors. The area around the Mullaperiyar Dam is a lucrative tourist area in an economy where a new embrace of globalization has heightened the importance of sectors of the economy such as tourism. A report commissioned by Kerala found that there would be a negative impact on revenues from tourism in the area (cited in Madhusoodan and Sreeja 2010, 21). The dam also has potential implications for the generation of hydro-power for Kerala, as the Mullaperiyar Dam could potentially draw away water from a neighboring hydro dam in the district.<sup>28</sup> With the restraint on the height of the dam at 136 feet, numerous local businesses had cropped up in the 1980s and 1990s; raising the height of the dam meant a submergence of these businesses and a loss of the land. Policies of economic liberalization thus accentuated the stakes over two of the most scarce and valuable commodities—land and water.



The competing pressures that undergird the conflict over the dam once again stem from the ways in which state policies have promoted a set of economic policies at both the national and the local state level without providing an adequate institutional framework that can effectively manage economic and political relationships between states as they cope with the effects of such policies at the local level. Conflicts stemming from the scarcity of land and water are once again intensified by the weakness of regulatory mechanisms that can promote interstate cooperation. Critics of legal proceedings around such interstate disputes have expressed concerns about overreach of the Supreme Court in cases such as the Cauvery dispute and the Mullaperiyar Dam conflict (Iyer 2010). However, as with the Cauvery case, the court in effect stepped into a vacuum produced by the absence of effective national institutional mechanisms that could manage the effects of its economic policies. For instance, in the case of the Mullaperiyar issue, the evaluation of dam safety was conducted by Expert Committees set up by the central government only at the direction by the Supreme Court. Yet in 1979, the Government of India had set up the Dam Safety Organisation in the Central Water Commission “to locate causes of potential distress affecting safety of dams and allied structures and to advise/guide State governments in providing suitable remedial measure” (MWR 1987). As with the case of the River Boards Act in the Cauvery case, this regulatory central government institution did not have the substantive mechanisms that could allow it to provide a foundation for reconciliation between Kerala and Tamil Nadu. Once again, the formation of Expert Committees and technical discussions of safety could only occur after processes of adjudication and mobilization around such judgments had politicized the technical data.

The institutional deficiencies of the state’s regulatory frameworks that have catalyzed a more active role of the Supreme Court at the national level have also accentuated the divide between legal and sociopolitical terrains of power and authority. In contrast to the Cauvery Tribunal award, the Supreme Court judgment has been both binding and enforceable because of Tamil Nadu’s ownership and control of the dam. However, the formal resolution of the case has not produced a corresponding political or societal form of consent to the judgment in Kerala. Mobilization over the dam’s safety has been shaped by a complex mix of political interests, social movements, and media narratives. The politicization of dam safety, for instance, must be understood in the context of a broader national sociopolitical field in India

that witnessed growing environmental movements mobilizing against the impact of the dam.<sup>29</sup> The initial petition filed in Kerala to stop the raising of the dam height level was filed by a civil society environmental organization, the Mullaperiyar Environmental Protection Forum (SCI 2006). State governmental action in Kerala, including a 2006 ordinance that sought to nullify the 2006 Supreme Court verdict (by limiting the height to 136 feet after the 2006 decision allowed for the water level to be increased), is often in part a response to social and political pressure from movements and actors within civil society. Similarly, farmers' protests in Tamil Nadu have broken out at various points when farmers have been faced with the threat of water supplies from the dam being denied for their crops.<sup>30</sup>

Indeed, pressure from societal actors, including the media, can restrain state governments from opening up space for interstate cooperation. A vivid example of this was evident when Kerala's newly elected chief minister Pinarayi Vijayan made a public statement suggesting that the question of the safety of the Mullaperiyar Dam was settled by the Supreme Court and that Tamil Nadu and Kerala should resolve these issues through bilateral talks. The comments were immediately politicized within the public sphere with the opposition party's leader saying that the chief minister's "new stand was against the pulse of the people of the State."<sup>31</sup> The chief minister was soon compelled to reverse his position, and public contestation over dam safety has continued in both states. The political limits on the agency of state officials at the local level play a significant role in shaping broader outcomes at the interstate and national level. The representation of the "pulse of the people" foregrounds the embeddedness of states within civil society. Local state actors respond to varying political and social pressures. Farmers (who are themselves a varied group) require irrigation water for their livelihoods, while urban residents in cities need drinking water. Meanwhile, formal civil society institutions such as NGOs and the media (often located in cities that have become powerful sites of investment in postliberalization India) have an important impact on public discourses. State actors weigh these competing demands based on political and electoral calculations.

In the absence of productive interstate negotiations of the kind attempted by the Cauvery Family initiative, such political and societal pressures, along with real concerns of security and livelihood in both states, remain latent sources of conflict. In periods of crisis, the absence of adequate interstate institutional frameworks of cooperation can produce serious consequences.

The underlying volatility of the conflict was vividly brought to light during historic floods in Kerala in 2018, when the height of water in the dam became a point of contention in the midst of severe crisis. The 2018 floods in Kerala have been widely described as the worst floods in the state since the historic flood in 1924. The floods claimed at least 417 lives and produced widespread destruction of livelihoods and property in both rural and urban areas. While the flooding of Kochi's (formally known as the city of Cochin) major airport provided a visual symbol of urban flooding (with the airport closed for a period of two weeks), the entire state was severely affected. Idduki District in the western Ghats was particularly hard hit. A combination of flooding, landslides, and communications and power failures fully isolated the district and compounded the devastating effects on the area. In the midst of this calamitous set of events, the Mullaperiyar Dam, which is located in Idduki District, became a source of heightened anxiety in Kerala. While the Mullaperiyar Dam can draw 2,300 cusecs (cubic feet per second) from the reservoir for irrigation, the inflow of water had reached 20,508 cusecs. The matter at hand was of critical import for Idduki, as the overflow of water from the dam would drain into the Idduki Reservoir.

The institutional and political dynamics of the crisis followed the pattern of earlier processes. During the height of the crisis, consistent with the institutional pattern of interstate governance, the Supreme Court intervened and asked Tamil Nadu to reduce the water level from 142 to 139 feet.<sup>32</sup> Tamil Nadu's chief minister responded with the defensive reaction that the dam was safe at 142 feet and was not the cause of the floods, pointing to the fact that the dam's water level had reached only 140 feet. Kerala, on the other hand, blamed the lack of centralized coordination and the dam's water levels for exacerbating the floods with sudden releases from the dam that forced the release of water from the Idduki Reservoir.<sup>33</sup> The inadequacy of the interstate institutional framework of cooperation was brought into sharp view at the height of the crisis, as the Supreme Court directed the National Committee for Crisis Management to review the possibility of reducing the dam's water level. Directing the various governmental levels to respond effectively, the Supreme Court acknowledged its own inadequacy in the midst of the crisis. As one report noted, "The court said it need not be overemphasized to state it was not an expert to issue any kind of guidelines to manage a situation of the present nature."<sup>34</sup> While Tamil Nadu later accepted the National Committee's recommendation to lower

the water level to 139 feet, the significance of the political tensions and institutional regulatory shortfalls that I have been analyzing come into stark view through the serious consequences in the context of this kind of disaster management.

Such conflicts over water infrastructure, as I have noted earlier, are not inevitable—nor do they have to lead to insurmountable animosity between neighboring states. Rather, they are products of an accumulated history of state policies and institutional deficiencies. Consider the complex nature of the relationship between Tamil Nadu and Kerala. Shared economic ties between Tamil Nadu and Kerala, for instance, have in the past provided the underpinning for Tamil Nadu's effective use of a boycott during the dispute of the Mullaperiyar Dam in 2006 (Madhusoodhanan and Sreeja 2010, 20). Kerala's reliance on low-cost agricultural products from Tamil Nadu meant that the boycott had a serious impact on its population. While this serves as an instance of the deterioration of relations between the states, it also highlights the various relationships and mutual forms of dependencies that exist between them. The two states have cooperated over other water-sharing issues, as they relied on each other for water sharing even during the prolonged dispute over the dam. They have also constructively worked together in sharing water through the Parambikulam-Aliyar Project (PAP). As with the case of the Telugu Ganga Project, the PAP has been managed by an institutional structure, the Joint River Water Regulation Board, which meets regularly in ways that keep open lines of communication between the states.<sup>35</sup> Meanwhile, the Siruvani Dam in Kerala has served as a source of drinking water for the major city of Coimbatore, in Tamil Nadu. The two states have been able to engage in negotiations that build on such mutual dependencies. In the context of drought periods, the states have struck deals to release water from PAP to Kerala and from the Siruvani Dam for Coimbatore's drinking water supply needs.<sup>36</sup> Such spaces for interstate cooperation are increasingly critical as the conjunctural effects of economic development, climate change, and natural stresses will continue to provide acute stresses on shared resources between states.

When interstate cooperation and dialogue stall or break down, as they have in the context of the Mullaperiyar Dam, the absence of effective national institutions needed to mediate relationships produce a more volatile form of securitization of water infrastructure. State governments turn to the coercive dimensions of state power, such as the police and security forces,

when national institutional mechanisms for conciliation are absent. The centralization of local state governmental authority in this context begins to take on characteristics of the security state. For instance, the conflict between the two states over the dam has not been confined to courtrooms or ministerial meetings but has played out through increasingly tense relationships between local bureaucratic and technical officials who are tasked with the management of infrastructure. While the dam is fully owned and operated by Tamil Nadu, the Kerala police have guarded the structure. During periods of tension in the course of the conflict, this has meant that employees of Tamil Nadu's Public Works Department have encountered hostility—in some cases through attacks on their technical work and in rarer instances through attacks on their physical well-being.<sup>37</sup> As the collection of data on the safety of the dam has become politicized, officials from both state governments have sought to limit access of technical officials and research teams from the other side.<sup>38</sup> The intensity of mistrust at the local level has been such that individuals have also been accused of serving as spies.<sup>39</sup>

Such animosity at the local level poses a significant challenge to the continued interstate cooperation required between the states after the legal resolution of the water-level height in the Supreme Court. After the Supreme Court verdict, Tamil Nadu filed a request for the deployment of security from the Central Industrial Security Force to facilitate the operation of the dam, and Kerala, in response, made plans to open a full-fledged police station near the dam.<sup>40</sup> While Tamil Nadu later withdrew the request after it was rejected by the Supreme Court, the action illustrates the securitization of the dam's operation.<sup>41</sup> As with the Cauvery case, the terrain of law and adjudication does not provide a sufficient basis for reconciliation when it is not accompanied by concrete mechanisms for future cooperation. Kerala has continued to make public protestations about the water-level height (which, at the time of writing, is at 142 feet). Meanwhile, Tamil Nadu continues to press for raising the water-level height to its earlier full height of 152 feet, given its escalating challenges of water scarcity during drought periods.

This case of water infrastructure has become the basis for competing conceptions of security. In Kerala, entrenched fears about the safety of the dam have become woven into public views of the security of the state's residents. In Tamil Nadu, continual public anxieties about water supplies have become fundamental elements of the security of both urban and rural residents who rely on water from the dam for drinking supplies and agricultural needs.

The securitization of the dam through policing practices by representatives of both local state officials and local communities across the border fills in the vacuum of sustainable and effective institutional practices that can build trust and cooperation between the two states. The establishment of such institutional mechanisms is crucial to prevent infrastructural politics from becoming overdetermined flashpoints that overwhelm the mutual dependencies and shared interests that undergird interstate relations in postliberalization India. In the face of weak national regulatory mechanisms, local state governments increase their claims of sovereign authority over water and water-related infrastructure.

Tamil Nadu's riparian position has placed it in a geographical context where the management of water resources has enmeshed the state in ongoing interstate negotiations with all three of its neighbors. Taken together, the three major cases of interstate negotiations and disputes examined here reveal the dynamics of federalized state authority over water in the postliberalization period. The historical legacies of both colonial rule and the impact of planned development in the early decades of independence have produced enduring political-economic structures that place political strains on the federal management of water resources in southern India. These strains have been deepened in the postliberalization period—water-intensive irrigation needs now compete with processes of urbanization and national policies that have encouraged states to accelerate power production through sources such as hydropower and aggressively pursue investment in new industries that add new demands on water resources. Such economic policies have intensified interstate competition for water resources without institutionalizing regulatory mechanisms that can promote interstate cooperation over shared resources.

The dynamics of centralization and decentralization play out in complex and contradictory ways. The hollowed-out nature of the regulatory state at the national level has increased the importance of local state actors—a process that is a byproduct of state incapacity at the center of the federal system and not a sign of a designed set of policy reforms or a democratic process of decentralization. Meanwhile, the dynamics of interstate conflicts and electoral and political pressures on state governments have meant that state governments have intensified their claims of authority on water and

water-related infrastructure. Such claims are subtle signs of new forms of centralized authority over water resources that are taking root at the local level.

The cases analyzed here point to a nuanced set of processes that are shaping the centralized control of water at the local level. We have seen that interstate disputes conceal more complex conflicts between different users within states. The territorial nature of interstate disputes and negotiations in effect conceals the crucial differences of interests between different water users in liberalizing India. The pressures on water resources and the phenomenon of water scarcity are themselves shaped by changing patterns of urbanization, investment, and development that are effects of policies of economic reforms. In the context of reforms that have accentuated a city-based model of growth, the realm of local urban governance becomes a central site for an understanding of the governance of water in the postliberalization period.