

Interstate Water Disputes in India: Towards Collaborative Governance

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Abstract

India, with its diverse geography and climate, is home to numerous river basins that are shared by multiple states. The management and distribution of water from these shared basins have historically been a source of tension and disputes between states, with various stakeholders vying for control over these vital resources. The Inter-State River Water Disputes Act of 1956 was enacted to provide a legal framework for the resolution of these disputes, allowing for the establishment of tribunals to decide conflicts between states. However, this approach has often led to protracted legal battles and has not been entirely successful in preventing or resolving disputes (D'Souza, 2002). The limitations of the existing legal framework point to the need for an alternative approach that encourages cooperation and collaboration between states, rather than fostering competition over scarce resources. Cooperative federalism is one such approach, offering a framework that emphasizes the shared responsibilities of both central and state governments in managing water resources. By fostering a sense of shared ownership and responsibility, cooperative federalism can help to facilitate trust, information sharing, and joint decision-making among the involved stakeholders, which can lead to more sustainable and equitable solutions for water management.

Introduction

Interstate water disputes have long been a significant challenge in India, leading to social, economic, and political conflicts between states. As the country grapples with growing demands for water resources due to increasing population, industrialization, and agricultural expansion, these disputes become more complex and pressing. The Indian government has attempted to address these disputes through various means, most notably through the establishment of the Inter-State River Water Disputes Act of 1956. However, despite these efforts, a more collaborative and coordinated approach to water management in India is necessary to foster sustainable solutions and alleviate tensions between states (Ghosh et al., 2021). This paper posits that cooperative federalism has the potential to address inter-state water disputes in India by promoting greater coordination and collaboration between diverse levels of government.

India, with its diverse geography and climate, is home to numerous river basins that are shared by multiple states. The management and distribution of water from these shared basins have historically been a source of tension and disputes between states, with various stakeholders vying for control over these vital resources. The Inter-State River Water Disputes Act of 1956 was enacted to provide a legal framework for the resolution of these disputes, allowing for the establishment of tribunals to decide conflicts between states. However, this approach has often led to protracted legal battles and has not been entirely successful in preventing or resolving disputes (D'Souza, 2002). The limitations of the existing legal framework point to the need for an alternative approach that encourages cooperation and collaboration between states, rather than fostering competition over scarce resources. Cooperative federalism is one such approach, offering a framework that emphasizes the shared responsibilities of both central and state governments in managing water resources. By fostering a sense of shared ownership and responsibility, cooperative federalism can help to facilitate trust, information sharing, and joint decision-making among the involved stakeholders, which can lead to more sustainable and equitable solutions for water management. Furthermore, the increasing impacts of climate change on

water resources demand a more adaptable and resilient approach to water management. As climate change exacerbates water scarcity, flooding, and other water-related challenges, traditional approaches to water management may no longer be sufficient. Cooperative federalism, with its emphasis on collaboration and shared decision-making, can help promote a more integrated and adaptive approach to water management, enabling states to better respond to the evolving challenges posed by climate change.

To fully understand the potential of cooperative federalism in addressing interstate water disputes in India, it is important to consider the broader context of water governance in the country. India's water management system is characterized by a complex web of institutions, policies, and legal frameworks that often lead to overlapping mandates and conflicting interests. Streamlining these institutional arrangements and promoting greater coherence and coordination between various levels of government is essential to foster a more effective and collaborative approach to water management (Chadha & Pandya, 2021). Cooperative federalism can help facilitate this process by promoting dialogue and collaboration between the central government, state governments, and other stakeholders, ensuring that water resources are managed in an integrated and cohesive manner.

In addition to fostering greater coordination among government entities, cooperative federalism can also help promote stakeholder participation in water management decisions. By involving local communities, non-governmental organizations, and the private sector in decision-making processes, cooperative federalism can help ensure that diverse perspectives and needs are under consideration, leading to more inclusive and sustainable solutions. This approach can also help to build trust and reduce tensions between states, as stakeholders are more likely to feel that their interests are being fairly represented and considered. The success of cooperative federalism in addressing interstate water disputes can be further enhanced by adopting a basin-wide approach to water management. This approach involves considering the entire river basin, rather than individual administrative or political boundaries, as the unit of management. By focusing on the holistic management of river basins, cooperative federalism can help promote more integrated and sustainable water management practices, which consider the interconnected nature of water resources and their various uses. This approach can also help to balance competing demands for water, such as domestic, agricultural, and industrial use, ensuring that the needs of all stakeholders are met while minimizing conflicts and promoting the sustainable use of water resources. Another critical aspect of cooperative federalism in addressing interstate water disputes is the promotion of capacity building and knowledge sharing among states. By providing training, technical assistance, and resources to states, cooperative federalism can help to build the necessary capacity for effective and collaborative water management. Knowledge sharing can also facilitate the dissemination of best practices and innovative solutions, enabling states to learn from each other's experiences and adopt more effective water management strategies.

This paper posits that cooperative federalism, with its emphasis on collaboration and shared decision-making between the central and state governments, has the potential to address the persistent problem of interstate water disputes in India and elsewhere. By fostering a sense of shared ownership and responsibility, cooperative federalism can help facilitate trust, information sharing, and joint decision-making among the involved stakeholders, leading to more sustainable and equitable solutions for water management. The paper analyzes the challenges associated with water federalism in India and explores the potential of cooperative federalism in addressing these challenges by understanding how promoting greater coordination and collaboration between various levels of government has helped alleviate the problem.

Theoretical Framework

Transboundary water management is a critical aspect of international relations and sustainable

development, as it involves the shared use and governance of water resources that cross political boundaries. Cooperation on transboundary rivers can provide numerous benefits, such as promoting regional peace, stability, and economic growth, as well as fostering more sustainable and equitable water management practices (Sadoff & Grey, 2002).

Cooperation on international rivers is essential for addressing the growing global demand for water resources, as well as mitigating the negative impacts of climate change on water availability and quality. The United Nations has identified transboundary water cooperation as a key aspect of achieving the Sustainable Development Goals (SDGs), particularly SDG 6, which focuses on ensuring the availability and sustainable management of water and sanitation for all. The principles of Integrated Water Resources Management (IWRM) and cooperative federalism can serve as the foundation for effective transboundary water management, promoting collaboration, joint decision-making, and sustainable resource use among states and nations.

One successful example of transboundary water cooperation is the Nile Basin Initiative (NBI), a regional partnership among the ten Nile Basin countries aimed at promoting the sustainable and equitable management of the Nile River. Established in 1999, the NBI provides a platform for dialogue, information sharing, and capacity building among member countries. Through its various programs and projects, the NBI has facilitated the development of joint water resources management strategies, as well as the implementation of infrastructure projects that promote economic growth and improve the livelihoods of millions of people in the region. The NBI's cooperative approach to water management is rooted in the recognition that cooperation and collaboration are essential for addressing the complex and interrelated challenges of water scarcity, climate change, and population growth in the Nile Basin. By fostering trust and cooperation among member countries, the NBI has been successful in reducing tensions and promoting a more peaceful and stable regional environment. This example serves as a valuable lesson for other regions facing transboundary water disputes, including India.

In the United States and Australia, two federal nations with strong state legislatures, interstate water disputes have also been a significant issue. Both countries have developed legal and institutional frameworks to address these disputes, with varying degrees of success. In the United States, the management of interstate water resources is governed by a combination of federal and state laws, as well as interstate compacts and Supreme Court decisions (Alexandra, 2018). The Colorado River Compact and the Delaware River Basin Commission are notable examples of interstate water management agreements that have facilitated cooperation and collaboration among states in the shared use of water resources. Australia, on the other hand, has faced significant challenges in managing its interstate water resources, particularly in the Murray-Darling Basin, which spans four states and the Australian Capital Territory. In response to these challenges, the Australian government established the Murray-Darling Basin Authority (MDBA) in 2008, a central agency responsible for developing and implementing a comprehensive plan for the sustainable management of the basin's water resources. The MDBA has played a crucial role in fostering cooperation among states and promoting more sustainable water management practices, including water trading and the implementation of environmental water allocations.

These international and interstate experiences underline the importance of fostering a sense of shared responsibility and ownership among states and nations for the sustainable management of transboundary water resources. By adopting the principles of cooperative federalism, countries can work together to develop joint strategies and solutions that address the complex and interrelated challenges of water scarcity, climate change, and population growth (Glennon, 2021). This can lead to more efficient use of water resources, reduced tensions between states, and improved social, economic, and environmental outcomes for all stakeholders.

In general, the global case studies and theoretical framework presented in this section highlight the potential benefits and importance of adopting a cooperative federalism approach to addressing

interstate water disputes in India. By learning from the experiences of other countries and regions, India can develop more effective strategies for managing its shared water resources, ultimately contributing to the resolution of interstate water disputes and the sustainable management of the country's precious water resources (Belay et al., 2010). As India grapples with the complex and pressing challenges of water scarcity, climate change, and increasing demands on its water resources, it is crucial that the country embraces a more collaborative and coordinated approach to water management, rooted in the principles of cooperative federalism and informed by global experiences and lessons learned.

Integrated Water Resources Management

Integrated Water Resources Management (IWRM) is an integrated approach to water management that recognizes the interconnectedness of water resources and their various uses, promoting the coordinated development and management of water, land, and related resources to maximize social, economic, and environmental benefits. By adopting the principles of IWRM, India can address interstate water disputes more effectively and sustainably, fostering collaboration and shared decision-making among states and other stakeholders (Wilk & Jonsson, 2013; Nesheim et al., 2010).

Equitable and efficient allocation of water resources is a core principle of IWRM. Ensuring that the needs of all stakeholders are met while minimizing conflicts and promoting the sustainable use of water resources is crucial. In the context of interstate water disputes in India, adopting IWRM can help to balance competing demands for water, such as domestic, agricultural, and industrial use. By fostering a sense of shared ownership and responsibility among states, IWRM can facilitate trust, information sharing, and joint decision-making, leading to more sustainable and equitable solutions for water management (Ching & Mukherjee, 2015).

Stakeholder participation and collaboration is another essential aspect of IWRM. Involving all relevant stakeholders, including local communities, non-governmental organizations, and the private sector, in decision-making processes related to water management ensures that diverse perspectives and needs are considered. In the context of interstate water disputes in India, promoting stakeholder participation can help to build trust and reduce tensions between states, as stakeholders are more likely to feel that their interests are being fairly represented and considered. Recognizing the interconnectedness of land and water resources, IWRM promotes the integration of land and water management strategies, ensuring that the impacts of land-use decisions on water resources are considered and addressed. In the context of interstate water disputes in India, this approach can help to mitigate the negative impacts of land-use changes, such as deforestation and urbanization, on water resources and promote more sustainable land and water management practices. With the increasing impacts of climate change on water resources, IWRM emphasizes the importance of adaptable and resilient water management strategies. This approach allows for the development of flexible and responsive water management plans that can better address the evolving challenges posed by climate change. In the context of interstate water disputes in India, adopting adaptable and resilient water management strategies can help states to better prepare for and respond to the impacts of climate change on their shared water resources.

Effective governance and institutional arrangements are crucial for the sustainable management of water resources. In the context of interstate water disputes in India, this may involve streamlining existing institutional arrangements, such as overlapping mandates and conflicting interests, and promoting greater coherence and coordination between various levels of government. By adopting a cooperative federalism approach to water management, India can foster more effective and collaborative governance of its shared water resources.

Challenges associated with water federalism in India

In India, there are 14 major rivers and 44 medium rivers, which consists of two major river systems, namely the Great Himalayan Drainage System and the Peninsular River network. 9 of these rivers are inter-state rivers. Because India is a federal democracy, managing these inter-state river flows fairly and efficiently has been a significant legal and constitutional issue for a long time. Ever since India's independence, numerous inter-state river-water disputes have arisen. These inter-state water disputes are complex and typically involve questions of: (1) how to allocate water between states, (2) how to divide construction costs and benefits of projects jointly developed by multiple states, (3) how to compensate states that are negatively affected by projects implemented by another state, (4) resolving disputes regarding interpretation of agreements, and (5) Excess withdrawals by a state (Jamil et al., 2012). Hence, water federalism, a federalist approach to the management of water resources is crucial in addressing these issues.

One of the main challenges of water federalism lies in the lack of effective legal frameworks. Under the current legal framework, the regulation of inter-state water governance comes under two acts – one is the Inter-State Water Disputes Act of 1956, and the other is the River Boards Act of 1956. The former granted the central government the role in settling conflicts around inter-state rivers that arise among state and regional governments, while the latter ensure every state have a river board and the advisory power regarding the regulation and development of inter-state river basins and valleys. However, this system had been criticized to be outdated and ineffective in resolving conflicts since the process of agreement is usually slow and the binding arbitration does not exist – there have been cases where states have rejected the ruling of tribunals, resulting in the arbitration not being considered obligatory (Jamil et al., 2012). The current institutional structure leads to tensions between distinct levels of government because the legal basis providing the fundamental principles agreed upon by both the central and state governments is currently missing, leaving limited room for coordination at multilevel. The centralization of policies has diminished the role of state governments, leading to judicial intervention. Moreover, there is too much focus on arbitration rather than negotiation and resolution, which complicates the disputes and often makes them become a matter of party politics (Bhaduri, 2019).

Another main challenge associated with water federalism in India lies in the lack of stakeholder participation. As an essential resource to sustain life, water should not only be treated according to its economic value, but also be recognized as a shared common - the use or benefit of which should not be just for one individual or organization and the accessibility to which should be acknowledged as a basic right of all human beings (Wade, 2012; Sakar, 2022). While Inter-state River Water Disputes Act provides a useful framework for resolving conflicts, its identification of the several ways in which disputes may occur is framed from a development point of view where the state's sovereignty is viewed as the chief stakeholder, which has undermined the value of the river as a shared common (Sakar, 2022). Many development projects by the central and state governments (e.g., dams) cause massive deaths and displacements to indigenous communities that build their culture and livelihood around the rivers. Take the Sardar Sarovar Dam over the Narmada River for example, The Adivasi people, who resided close to the river for generations, were forced to become intruders in their own territory due to the land procurement measures of the government. This is a perfect illustration of how the government's interpretation of the river as a tool of industrial development deprives those who have built their very lives around it access to it (Sakar, 2022).

Role of cooperative federalism in addressing inter-state water disputes

Inter-state water conflicts have long been a source of contention in India, with many states vying for a fair share of the country's limited water resources. Water governance in India has historically been centralized, with the central government retaining most of the decision-making authority. This strategy, however, has been criticized for ignoring the interests and concerns of state governments and local

communities. As a result, there is an increasing emphasis on cooperative federalism, which emphasises collaboration and coordination across distinct levels of government to handle complex policy concerns such as interstate water conflicts.

International cooperation is an essential component of cooperative federalism in addressing interstate water problems. Because many of India's rivers run through numerous nations, international collaboration is critical for long-term water management. The Indus Water Treaty between India and Pakistan, for example, has been successful in addressing water problems between the two nations. Similarly, the Ganges River Basin Cooperation (Jamil et al., 2012) involving India, Bangladesh, Bhutan, Nepal, and China has aided in addressing transboundary water management challenges in the region. These instances show the value of international collaboration in settling inter-state water issues in India. The judiciary's involvement is another essential component of cooperative federalism in resolving interstate water issues. The Indian judiciary has played a significant role in settling water issues between states. For example, in the instance of the Cauvery River dispute between Karnataka and Tamil Nadu, the Supreme Court of India played an active part in resolving the conflict and providing a ruling that was agreeable to both states (Acharyulu, 2020). This case demonstrates the need for an independent court in settling interstate water issues.

Technology may also play a crucial role in improving collaboration and coordination across various levels of government in resolving inter-state water issues. Remote sensing and geographic information systems (GIS), for example, can be used to monitor water consumption and availability in various sections of the country. This data may be used to create more effective water management policies that consider the demands and concerns of many stakeholders. Furthermore, technologies such as real-time data monitoring may be utilized to detect and respond to water shortages and other water-related emergencies (Jamil et al., 2012).

Technology may also be important in increasing collaboration and coordination across multiple levels of government when resolving inter-state water concerns. Water usage and availability in various parts of the country may be monitored using remote sensing and geographic information systems (GIS). This information might be used to develop more effective water management policies that consider the needs and concerns of many stakeholders. Furthermore, real-time data monitoring systems may be used to detect and respond to water shortages and other water-related emergencies (Jamil et al., 2012). Finally, cooperative federalism has the potential to overcome the complicated difficulties related with inter-state water conflicts in India. International cooperation, an independent judiciary, the use of technology, and the engagement of state governments are all noteworthy features of cooperative federalism in fostering better collaboration and coordination across various levels of government. Working collaboratively, various levels of government and stakeholders may design more effective water management policies that encourage sustainable water usage and safeguard the interests of all stakeholders.

Case studies of successful cooperative federalism approaches

In India, cooperative federalism is crucial in resolving inter-state water issues. Cooperative federalism strategies used successfully in India, such as the Godavari River Basin Management Plan and the Interstate Water Governance and Management Agreement, have proved the possibility of such an approach (Chokkakula et al., 2021). These cases have shown the significance of cooperating to handle interstate water challenges.

The Godavari River Basin Management Plan is a great illustration of how cooperative federalism may be used to resolve water conflicts. The Godavari River is India's second-longest river, flowing through numerous states. The Godavari River Basin Management Plan was developed in 1980 with the goal of resolving inter-state water conflicts and ensuring sustainable water resource management (Singh, 2018). The plan was developed in collaboration with the governments of Maharashtra, Andhra

Pradesh, and Odisha, the three states that share the Godavari River. The plan's goal was to provide a framework for water resource distribution and to guarantee that water consumption was sustainable across the basin.

The Interstate Water Governance and Management Agreement (IWGMA) is another excellent example of cooperative federalism in India. The IWGMA was signed in 2010 by the governments of Punjab, Haryana, Rajasthan, Delhi, and Himachal Pradesh to handle water issues in the Yamuna River basin (Chokkakula et al., 2021). The agreement aims to provide a framework for the long-term management of water resources in the Yamuna River basin. The IWGMA has been effective in resolving water conflicts and improving water management in the area.

Several elements contribute to the effectiveness of these cooperative federalism strategies. Collaboration between the national and state governments is one of the most important components. The federal government has played a vital role in coordinating efforts among states and ensuring that the required resources are available for successful water management (Richards & Singh, 2001). The active participation of state governments is also crucial in executing water management plans and resolving water conflicts.

Technology has also played a significant role in strengthening cooperative federalism in water management. Technological advancements have made it easier to collect and analyze data on water resources, allowing for better informed decision-making (Chokkakula et al., 2021). The use of technology in water management has also simplified communication among many parties and enabled more efficient collaboration.

Furthermore, successful case studies of cooperative federalism tactics in India have proved the utility of such a strategy in resolving inter-state water issues. Two instances of effective cooperative federalism in water management are the Godavari River Basin Management Plan and the Interstate Water Governance and Management Agreement. These instances have highlighted the significance of coordination between the federal and state governments, as well as the use of technology to support successful water management. The effectiveness of these strategies demonstrates the possibility of collaborative federalism in resolving inter-state water issues in India.

Importance of stakeholder engagement in cooperative federalism

It is worth noting that the disputes between Indian states over interstate rivers often arise when one state decides to develop major water resource projects such as the construction of dams. Examples of such disputes include the Narmada River, the Mahadayi River, and the Cauvery River basin (SANDRP, 2016). These projects often cause massive death and displacements to indigenous communities, yet the affected communities usually had no role in dispute tribunal (Sakar, 2022; SANDRP, 2016).

Many argue that the primary issue with how interstate water disputes have been managed by the central and state governments, the tribunals, and the judiciary is that it lacks the consideration for the river, those who directly depend on it, and those who are affected by the decisions made by these institutions. These conflicts are dealt with more politically than scientifically, leaving no place for environmental, social, and cultural aspects related to the rivers (Jamil et al., 2012; SANDRP, 2016). Maheshwari and Pillai (2004) believe that stakeholders play a significant role as social and economic resources for the public good. They define the stakeholders as individuals or group of entities who may be affected by the water resource project during its conception, construction, and operation, and argue that when planners and policy makers ignore the existence of these entities, especially those who are less vocal and non-vocal, the future course of the project would be negatively influenced. Hence, to achieve the best outcome, it is essential to try to create a win-win situation for all stakeholders or establish a harmonious relationship with its diverse constituents to maximize stakeholder value. Dixit (2019) analyzed the significance of stakeholders' participation in river basin management from the standpoint of environmental justice movements. He proposed that integrated planning for river basins

should not only concentrate on the development of water resources but also on the well-being of the human resources residing in the basin and that development projects must be carried out while also taking into account the broader social, economic, and political aspects of the residents, arguing that justice can be done to these rivers only if stakeholders, who are the primary water users, are given a voice in decision-making process. By promoting stakeholder engagement, a sense of shared responsibility and collaboration in decision-making can be achieved, leading to increased trust, sharing of information, and ultimately resulting in more equitable and sustainable water management solutions (Ching & Mukherjee, 2015).

Challenges in implementing cooperative federalism approaches

In India, cooperative federalism has emerged as a potential strategy to resolving inter-state water issues. However, its execution is fraught with difficulties. Appropriate institutional reform is one of the key problems of establishing cooperative federalism in water management. Sharma (2011) argues that India's institutional framework is inadequate for resolving inter-state water issues. The present institutional arrangements for inter-governmental collaboration are insufficient and need to be significantly improved. Furthermore, interstate water disputes frequently include several parties, including state governments, the federal government, and municipal governments. As a result, coordination and collaboration among various parties are required to effectively address the issues.

Another key problem of cooperative federalism is the requirement for adequate financing. Water resource management entails large expenses for infrastructure construction, operation, and upkeep. As a result, adequate financial resources are required to successfully execute cooperative federalism in water management. Lack of financial resources can cause infrastructure improvements and inefficient operation and maintenance, resulting in poor water management. As a result, proper funding is essential for the viability of cooperative federalism methods for water management (Pipara & Verma, 2021).

Another major challenge involved with adopting cooperative federalism in water management is capacity creation. The ability of stakeholders to interact successfully is critical to the success of cooperative federalism. The current ability of stakeholders to manage water resources is insufficient and must be improved. Capacity building entails providing stakeholders with technical and administrative training to improve their abilities to manage water resources. Improving capacity can also help current institutions perform better in managing water resources, which is crucial for the success of cooperative federalism in water management.

In addition to the challenges stated above, Khan (2001) observes that interstate water disputes are prevalent in India due to a lack of adequate execution of laws and regulations. Many water conflicts, for example, have arisen because of the lack of a dispute settlement process and poor law enforcement, such as the Cauvery River water dispute between Karnataka and Tamil Nadu. Cooperative federalism strategies can be valuable in such instances, but only if the existing institutional system is revised and laws are efficiently enforced.

Another issue with cooperative federalism in water management is a lack of political will. The viability of cooperative federalism is dependent on the willingness of state governments and the federal government to interact successfully. However, there have been cases where state administrations have rejected federal government interference in water management. For example, in 2020, the central government submitted three measures pertaining to water management that were viewed as challenges to federalism by several state governments (Acharyulu, 2020). Such occurrences highlight the need for more political resolve to embrace cooperative federalism methods to water management. Additionally, cooperative federalism is a potential technique for resolving inter-state water issues in India. Implementing cooperative federalism approaches in water management, on the other hand, is not without difficulties. To achieve the successful implementation of cooperative federalism in water

management, institutional changes, adequate financing, and capacity building must be addressed. Furthermore, increased political will and effective execution of laws and regulations are required to ensure cooperative federalism's viability.

Conclusion

In this paper, we analyzed the challenges associated with water federalism in India and built a useful framework to resolve interstate water disputes by exploring the global experiences and IWRM principles. We proposed that cooperative federalism, with its emphasis on collaboration and shared decision-making between the central and state governments, has the potential to address ongoing interstate water disputes in the country.

In India's case, the persistence of interstate water dispute comes down to the lack of coordination between multilevel of government and the absence of stakeholder participation in the decision-making. We conclude that cooperative federalism does have the potential to alleviate interstate water problems in India by encouraging more coordination and collaboration across diverse levels of government. Additionally, we believe that involving various stakeholders in cooperative federalism is also necessary for supporting the sustainable and equitable use of water resources. The traditional approach of handling interstate water disputes in India has largely concentrated on the interests of the states and their political representatives while ignoring the rights and needs of the river, the people who depend directly on the river, and those who are affected by the decisions made by these bodies, which has complicated and perpetuated the disputes. Nevertheless, it should also be noted that the implementation of such approach is not without challenges. To achieve cooperative federalism, institutional reforms, proper finance, and capacity building are all necessary. Moreover, greater political will and effective implementation of laws and regulations are also required in order to ensure the success of cooperative federalism. Case studies of successful cooperative federalism techniques in Indian water management are explored as well. These cases have proved the importance of collaboration between the central government and the state governments and the use of technology to promote effective water management. The success of these techniques further highlights the potential for collaborative federalism to address inter-state water disputes in India. By fostering a sense of shared ownership and responsibility, cooperative federalism can help India move towards a more collaborative and coordinated approach to water management with more knowledge, openness, and stakeholder participation.

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