

## CONFLICTS OVER RIVER KRISHNA AND GODAVARI: IMPACT ON THE ECONOMIC SECTOR AND THE ENVIRONMENT AND POLICIES AND FRAMEWORK TO PREVENT FUTURE CONFLICTS

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### ABSTRACT

The Andhra Pradesh Reorganization Act of 2014, require states to take approval from river boards, the Apex Council and the Central Water Commission for proposing several projects for industrial and agricultural activities. The Apex Council was responsible for supervision and functioning of Godavari River Management and Krishna River Management (Iqbal 2015). The Apex Council involved the Chief Ministers of both states and the Union Water Resources Minister. However, both Telangana and Andhra Pradesh took projects without taking approval from river boards. On the other hand, conflicts between the two states deepened when the Andhra Pradesh government proposed to raise the utilization of the river Krishna's water from a section above Srisailem Reservoir, which was opposed by the Telangana government. An economic analysis of the issue is not included in this issue's legal framework. This issue isn't only about a shared river; it's also vital to look at and grasp economic aspects (Prakash, Singh and Brouwer 2015). Hence, a framework to analyse the effects the conflicts is needed to lower them in the future and enable better co-operation. For the purpose, it is effective to explore the laws and frameworks that helps to lower conflicts, illegal activities and improve efficiency.

**Keywords:** Conflicts, Krishna, Godavari

### I. Introduction

Objections were raised by the states of Karnataka and Andhra Pradesh, concerning the diversion of more water at the Krishna River. The river was a part of the multi-purpose project that aimed at reducing down-stream flow of the Krishna River in Andhra Pradesh and Karnataka in order to boost the consequences on agriculture and industry (Adhikari et al. 2018). The case has various economic implications that require critical discussion. Despite the fact that prior studies in the area were conducted, no legislative framework was provided to assist lessen the concerns surrounding the sharing of the Godavari and Krishna rivers. Provision of a legal framework is important to prevent the misappropriation of river water, safeguard the surrounding territories, and reduce tensions between the states of Telangana and Andhra Pradesh. Hence, it is crucial to study about the environmental implications, its policies to enable a framework that helps in preventing the future conflicts.

### II. Statement of Problem

On 10th of April, 1969 the Indian Government constituted a common tribunal for settlement of the river water utilization among the river basin states of Krishna and Godavari rivers under the provisions of Interstate River Water Disputes act-1956 (Das and Panchal 2018). The states of Karnataka, Orissa, Maharashtra, and Madhya Pradesh had to share river Krishna and Godavari. As a result, there aroused a dispute from these states concerning the share of river water. In 2014, the bifurcation of Andhra Pradesh into two more states- Telangana and Andhra Pradesh that has led to sharing stretches of Krishna and Godavari and their own tributaries. Yet again, it has created conflicts over the usage of water from rivers, Godavari and Krishna in Andhra Pradesh and Telangana.

### III. Aim of the research

The construction of projects without approval from the river board, causes disturbance and poor consequence on the natural flow of river that tends to destroy the lowland with backwaters. It leads to flooding that has created the disruption to the environment and affected the operation of natural habitat. Creation of a legal framework for the issue focus in preventing the conflicts and the environmental concerns of using the river for economic purpose in Telangana and Andhra Pradesh.

The aim of the paper is to create a no conflict framework for the future by exploring all the reports and problems caused by the states of Andhra Pradesh and Telangana concerning the share of river water in Godavari and Krishna. The creation of legal framework has the following objectives:

- To explore the past framework, guidelines and future requirements concerning the usage of river water, Andhra Pradesh and Telangana
- To decrease the enmity between the two states Andhra Pradesh and Telangana
- To lower the illegal activities in the rivers, Godavari and Krishna that helps in controlling pollution and allow future sustainability
- To provide solution that prevents conflict in the future problems and allows utilization of resources, without affecting the environment

### IV. The theoretical framework of literature

Reasons concerning conflicts between Andhra Pradesh and Telangana

There were many reasons concerning the conflicts of Krishna and Godavari rivers. It is significant to understand the consequences, before and after the bifurcation of Andhra Pradesh. After years of discussions, finally in 1956, Andhra Pradesh was segmented from Tamil Nadu. Andhra Pradesh wanted to part itself from Tamil Nadu for various reasons (Swetapadma and Ojha 2017). The prime cause was to settle the ongoing disputes from other states such as Karnataka, Maharashtra, Orissa, and Madhya Pradesh. These states were sharing the water of river Krishna and Godavari for their economic activities. The result of bifurcation in 2014 enabled the formation of two or more states, namely Telangana and Andhra Pradesh respectively. On the contrary, both the state's share the river water that was divided by tribunals, jointly created by the central government and the Supreme Court of India.

Sharing stretches of the Krishna and the Godavari and their tributaries in Telangana and Andhra Pradesh has economic implications, as it meant that industries and agriculture in both states are heavily dependent on the water of Godavari and Krishna (Gaupp, Hall, and Dadson 2015). The government made it mandatory to take permission from the river boards, the Central Water Commission and the Apex Council before taking projects that required dependency on the rivers. However, in 2014 the two states has proposed several new projects, without getting clearance from the river boards, the Apex council, the Central Water Commission.

The AP Reorganisation act of 2014 helped in mandating the constitution of an Apex council by the Central Government. The Apex Council includes the Union Water Resources Minister and the Chief Ministers of Telangana and Andhra

Pradesh. On the contrary, the government of Andhra Pradesh made a proposal to the river board of Krishna and Godavari to raise the usage of Krishna River from a section of the river above the Srisailem Reservoir (Chatterjee et al. 2015). In this contrast, the Telangana government filed a complaint against Andhra Pradesh.

Effect of economic activities on the river Godavari and Krishna and choosing legal framework

Agricultural activities like irrigation, industrial work like cooling, diluting, processing, fabricating, smelting, and washing require water. It cost-effective to take the water for economic activities from rivers as it is freely available (Gaupp, Hall, and Dadson 2015). As a result, industries heavily depend on river water, which creates a pressure on the river water. For lowering the pressure, the government formed the river board and made it mandatory to take permission from the board for undergoing any project that involves river Krishna and Godavari. Building dams require approval from the river boards as the activity disturbs the natural flow of water and affects the lowland with backwater. The dammed river creates a reservoir upstream from dam that spills water into the surrounding environment. As a result of the backwater, the lowlands are affected with flooding that cause soil erosion. The flooding tends to displace and kill different organisms including wildlife, plants and even humans. The land loses its fertility and do not get the ability to grow crops that are used both for agriculture and industrial purpose (Majumdar 2018). Moreover, the disturbance in natural habitat affects the performance of living organisms that causes an impact over the entire bio-cycle. Effluent from industries pollutes the water and prevent it from human use. The economic activities serves as a source of income to many people in the area or other regions, such that disruption of soil quality lowers production and hampers the sale. Although dams are constructed to provide water for human consumption, it causes negative impacts on the economy.

According to the laws, dams must be built between heights 10 meters to 15 meters with certain design and structural condition that must be approved by the river board (Das and Panchal 2018). Dams with height more than 15 meters require special permission and request from the river board about design, structure, economic and environmental impacts. Various factors are considered under the legal laws such as topography, material availability, height, earthquake zone, geology conditions, and ability to store maximum water without affecting the operation of nearby areas. The state has the ability of making laws about water usage from rivers such as storage and water power. The parliament has the power to regulate and develop inter-state river valleys, when they seem it as necessary (Gaupp, Hall, and Dadson 2015). Hence, the opposition from the Telangana government against Andhra Pradesh's utilisation of river water above the Srisailem Reservoir is likely to be checked by the Parliament. Dams that tend to spill water and affect the lower beds are not supported by the government. Thus, government intervention is significantly needed. This might require legal action like imposition of fines and re-testing the design significantly. Godavari and Krishna river management boards now have authority and ability to regulate, operate, and maintain all projects in the two river basins in Andhra Pradesh and Telangana. In accordance with Section 4 of the Inter-State River Water Dispute (ISRWD) Act, 1956, the Central Government established the Krishna Water Disputes Tribunal (KWDT) on April 2, 2004, by Notification number S.O. 451(E).

## V. The research questions

Concerning the conflicts of Andhra Pradesh and Telangana, and illegal activities in rivers of Godavari and Krishna, the paper has the following research questions:

- What are the situations that are causing conflicts between the two states and overall issues, in concern with previous policies and framework?
- How does the framework effect the environment, irrigation and industrial sector??
- How does the state or apex or governing council act on the issues?

## **VI. The Research Methods**

In this section, the methods of the research has been discussed. There are various methods to be used in a research. The usage of qualitative paper is the best option. Data can be collected from primary or secondary means, where primary data are originally collected by researcher and secondary data are already collected by researchers through primary means. In order to conduct this investigation, we shall use qualitative methods. There will be a positive impact on such a large collection using this method. Additionally, the qualitative techniques are also followed (Wakui et al., 2017). To sum up: Qualitative research is a complex process that requires careful data collection and analysis that cannot be relied upon to understand and recognise ideas and perspectives that also include the experience. Primary and secondary sources provide a complete picture of the underlying topics and generate fresh research ideas.

## **VII. The justification and expected contribution of the research**

The research is significant in figuring out the most sensitive problems and policies, which are associated with reducing the problems effectively. Legal restrictions are already given that limits the abuse of water. However, the issues surrounding the distribution of water between Andhra Pradesh and Telangana are not addressed adequately as the economic activities are generally dependent on the river water. The research suggests to put forth some permanent remedy that transforms the future actions in between the states in connection with the legal laws as a whole, the study proposes to improve the economic activities and provide enabling solutions.

## **VIII. The Preliminary Outline**

The research paper would comprise of six chapters for understanding the legal framework that is effective to handle the conflicts between Andhra Pradesh and Telangana. The six chapters comprise of Introduction, Literature review, Methodology, Findings, Discussion and suggestion for further research and Conclusion respectively. At last the section of 'Reference' is added to refer to the sources used in writing. It helps in avoiding plagiarisms by making it clear about the ideas, given by other researchers. The first chapter of 'Introduction' introduces with the topic, its background. The aims and objectives, problem statement, and significance of the study are highlighted. The second chapter of 'Literature Review' gives a review about the past papers and research done on the similar topic to understand the past work associated with the topic. The third chapter of 'Methodology' choses the method, data and time period of the study. The chapter of 'Findings' is the most important chapter as the data is analysed using specific models. The 'Discussion' chapter, elaborately discusses the analysis and gives suggestions for further research. The final chapter 'Conclusion' wraps up the ideas by summarizing the findings and signify the future implications of the proposed legal framework.

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