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**Para-diplomacy's Role in Central Asian Transboundary Water Cooperation: An Assessment of Subnational Actors**

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### Abstract

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**Keywords:** Para Diplomacy, Transboundary Water Cooperation, Subnational Actors, Central Asia, Water Management, Regional Governance

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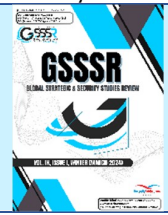
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## Title

### Para-diplomacy's Role in Central Asian Transboundary Water Cooperation: An Assessment of Subnational Actors

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#### Abstract

*This paper aims at identifying how Para diplomacy influences the Transboundary Water Cooperation in Central Asia with a special reference to the non-state and sub-state actors. This research aims at finding out what para diplomacy is, why it is done, the benefits and the risks associated with doing para diplomacy especially in managing the shared water resources. The research method used in the study combines the scenario mapping, typology analysis, and comparative case studies in order to obtain data from the Central Asian context. Thus, the reason for the findings is to increase an understanding of the Para diplomacy enhancement of transboundary water security.*

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**Keywords:** [Para diplomacy](#), [Transboundary Water Cooperation](#), [Subnational Actors](#), [Central Asia](#), [Water Management](#), [Regional Governance](#)

## Introduction

One of the most emergent global issues presently is water resources management across the borders, and climate change together with the rapidly growing population aggravate this challenge. To that end, transboundary water cooperation is deemed vital, hence the following arguments (Li et al. , [2016](#)). Altogether, most of the strategies have been placed on the high-level government diplomacy though the general concept of para diplomacy (Gupta, [2023](#)) concerning the subnational and non-governmental players has not been well explored. Indeed, this is due to the fact that transboundary waters is of a necessity a topical

issue in the field of international relations because of its indispensability as water resources can only be managed effectively if efforts are pooled together. Thus, speaking of governance, scholarly discourse tends to focus more on the approaches on the national/international level while admitting the presence and importance of non-governmental and subnational actors (Islam & Repella, [2015](#)). It is with regard to this background that this research seeks to assess the extent to which these actors enhanced sound transboundary water cooperation and governance using the Para diplomacy paradigm. Hence, the significance of the future work consists in filling this theoretical gap with reference to the multifaceted but insufficiently





addressed role of the non-governmental and subnational actors in TBC (Wang et al. , 2021). Policy and decision-makers involved in water governance at various levels which include national regional within study areas would be in a better position to benefit from this papers' analysis of effectiveness of Para diplomacy in enhancing transboundary water security (Gao et al. , 2021). This study consequently will strive to sensitize the shifting dynamic of international relations, water management, and subnational actors in response to global challenges focusing on Central Asia Para diplomacy and transboundary water security.

### Research Questions

This study unfolds through a framework of four central inquiries that guide its exploration into the realm of para diplomacy within the context of transboundary water cooperation:

- 1) Exploring the contribution of sub-national and non-governmental actors in the cooperation in transboundary water resources and to what extent the "Paradiplomacy" helps the process ?
- 2) Which actions are encompassed by the term "Paradiplomacy," and how does it affect the work on transboundary waters?
- 3) Considering the activity described as 'paradiplomacy,' what could be the advantages and the drawbacks of such an approach towards the security and management of transboundary water resources?
- 4) What roles and impact of political context, degree of the autonomy and kinds of paradiplomacy define the results of "Paradiplomacy" in various regions?

### Objectives

The primary objectives of this forthcoming study include:

- 1) To compare the specifics of the subnational and non-governmental actors in the context of "Paradiplomacy" concerning the transboundary water cooperation.
- 2) To explicate on the "Paradiplomacy" activities and possible acts and then review the roles that they play in creating improved transboundary water safety.

- 3) In order to evaluate such factors one needs to define the potential opportunities and risks of 'paradiplomacy' for collaboration on transboundary watercourses.
- 4) To see how various paradiplomacy categorizations, political context, and level of independence impact the outcomes of "paradiplomacy."

### Materials and Methods

The typology analysis carried out initially in the study will help to classify those who are involved and the nature of paradiplomacy in the Central Asia region in cooperation on trans-boundary water. This work will differentiate between tasks and roles of local governments, subnational governments, and other relevant actors in the field and provide a basic understanding of paradiplomacy in regard to the given specific case of transboundary water security in Central Asia.

To get a better picture of the sorts of activities various stakeholders engage in within the framework of transboundary water cooperation, it will be sufficient to apply the technique of scenario mapping only to the CA region. With regard to Central Asia, the above mapping strategy will help define the key stakeholders, their functions, and the extent of their influence (Wei et al., 2021). The discussion of the scenario mapping will shed light on the relationships of the players and the interdependence of the actors in the framework of the "paradiplomacy" of Central Asia. In addition, this study will employ a comparative case study and since the focus will be on the effects of environmental regulation on the firms the main case study will be limited to Central Asia.

Thus, literature review, documents review, interviews with key stakeholders, and, if necessary, questionnaires will be used to collect data, with a special focus on one region, namely Central Asia. In data analysis, there will be the use of both qualitative and quantitative techniques; and theme analysis of the qualitative data; while for the quantitative data, statistical analysis. The goal of this technique is to give a summarized assessment of the function and result of 'Paradiplomacy' in the management of transboundary waters in the Central Asia region.

## **Study Area: Central Asian Transboundary Rivers**

Consequently, this study, which is geared towards the analysis of Transboundary water cooperation in the Central Asia, commenced with the Typology analysis of the players with the ultimate aim of categorising systematically the various players and their paradiplomacy activities as identified by Micklin in [2010](#). Based on the findings of this research the roles and responsibilities of the subnational governments, the municipal governments, and other related parties were identified clearly. Some of these are general on the nature of paradiplomacy and as a framework that may be deployed to address the issue of the attainment of transboundary water security in the case of the centrality of the Central Asian nations.

## **Situational Analysis**

Although the situation mapping was only in Central Asian area, it was useful in mapping the complex interaction of actors involved in paradiplomacy (Giordano et al. , 2014). This is due to the fact that through comprehensive mapping one is able to easily identify the players that are involved, their roles, and their level of involvement in TsWC. The study contributed towards the understanding of paradigm as it established various interconnectivity of paradiplomats from the different entities of Central Asia.

## **Approach to Comparative Case Studies**

The primary research methodology of comparative case study was Central Asia for this study (Pak, Wegerich, & Kazbekov, [2013](#)). Framed in the context of the paradigm of transboundary water cooperation and paradiplomacy, this typological division provided a deeper insight into the nature of the case and its unique characteristics. It was applied during the course of the work because by narrowing the focus on Central Asia, it was easier to analyze the social environment affecting paradiplomatic activity in the region.

## **Data Gathering**

The data collection techniques were as prompt as systematic document reviews, aimed interviews with key informants, Central Asia questionnaires and a literature review (Pak, Wegerich, &

Kazbekov, 2013). The kind of data sources that were employed in the course of the study meant that the author had enough background information in order to define the mi of paradiplomacy in water cooperation in Central Asia.

## **Information Analysis**

The study design was based on the mixed methodological approach, and this is whereby both the qualitative and quantitative data analysis approaches were applied (Bernauer & Siegfried, [2012](#)). For the data collected as part of the qualitative research method, thematic analysis was done, as it is useful for identifying details and patterns within the material (Cole et al. , [2017](#)). In order to assess and quantify a number of factors pertaining to the Transboundary Water Cooperation in Central Asia, a series of quantitative research analysis techniques were employed:

## **Moral Reflection**

Therefore ethical considerations are appropriate to protect the research scope, validity/integrity, credibility, and ethical practices on transboundary water cooperation and paradiplomacy research (Fang et al. , [2015](#)). Another pertinent ethic one has to consider especially when conducting any form of survey, interview or any other form of data collection is the informed permission. It is imperative to have participants' consent in order to ensure that they are voluntarily participating in the research and that they understand the intention and procedures for the study as well as their individual rights as the participant (Falkingham, 2005). Furthermore, some actions should be made for masking the participants and preserving the confidentiality of all details to avoid the violation of individuals' rights. When undertaking a research and / or interacting with people of different cultural background, it is important to be cultures sensitive so as to respect cultural values. Second to non-maleficimce is that researcher should not add any form of negative consequences to the participants or the societies involved. In the course of undertaking the proposed study, ethical practice is necessary when it comes to the collection, analysis and reporting of the data so as to come up with this genuine study.

## Findings

This work analyzed the studied area of cooperation and non-cooperation on transboundary water resources in Central Asia and identified the complex nature of the issues that indicate timeliness of applying paradiplomacy when addressing the cooperation projects (Gleick, 1993). Conduct of the investigation therefore afforded understanding of the numerous factors which contribute to the utilization of the water resources within the region. As for the highly increased and rather valuable function of paradiplomacy, it defined it as an intermediary between the opposing parties. In this context of a highly connected world, this account of many interconnections underscored paradiplomacy as the way of achieving the required coordination for the survival of the water resource management systems.

The second discourse stemmed from the very process of scenario mapping and a detailed typology study – the stocktaking of the broad spectrum of actors involved in paradiplomacy. These analytical tools outline the information about the numerous subnational governments, organizations and stakeholders involved in the various networks and provide information on their responsibilities, interrelations, and levels of involvement (Abdullaev & Rakhmatullaev, 2013). This research aimed at disaggregating this analytically intricate web and the dynamics rendering the transboundary water cooperation and consequently towards a better prognosis. In this regard, it stated that many participants are interdependent, and they all have their role to play towards economic development during the paradiplomatic process.

Finally, using comparative case study gave deeper understanding in comparison and analysis of paradiplomacy processes in Central Asia. By applying this method of analysis, it was possible to identify several other contextual factors that are rather closely connected with paradiplomacy in the region according to (Cabrera et al., 2012). It assisted in providing a sound typology of the manifold socio-political, environmental and economic factors that underpinned the transboundary water cooperation in Central Asia region. In this way, the gains and dynamics of the area of interest were more comprehensively analyzed and useful information on how paradiplomacy can be

addressed and approached, as well as the existence and evolution of typical challenges in the region, was identified.

Such practice of analysis along with extreme slang gathering and focusing contributed to improved understanding of the many faceted correlation between paradiplomacy and transboundary water cooperation in Central Asia (Cooley, 2009). The study also presented the definition of paradiplomacy as the basis of global relations and the need for the use of this approach to address complex problems associated with the regulation of water supply at the international level.

## Results

### Typology Analysis Findings

Observing the typology analytical data resulted in identifying the broad classification of paradiplomatic actors involved in the cooperative approaches to the transboundary water management in Central Asia. More specifically, in the meticulously designed categories, the roles and duties of different stakeholders regarding responsibility, commitment, and involvement were described (Chen, Li, Fang, & Li, 2018). This examination also focused on the activities of many paradiplomatic players in terms of their initiatives, policies, and actions towards the sustainable development of different areas. That is why the concentration on the described context of alliances and opposed, yet interrelated, positions and the relations between stakeholders gave an overall outlook by observing the transboundary water management programs.

### Situation Mapping Insights

In the area of paradiplomacy, the scenario mapping approach proved useful in developing proper understanding of the main actors and their different roles. It help to distinguish the different levels of involvement on the part of important stakeholders and enabled them to be better defined and categorized in the framework of the cooperation on transboundary water. Network main articulation also revealed the nature of stakeholder relations, coalitions and possible sources of tension and conflicts (Bernauer & Siegfried, 2012). These outcomes shed a certain

light on the cooperative as well as the conflictive processes involving the paradiplomatic framework within the context of managing transboundary water resources in Central Asia and thereby offer a slightly different perspective on the discussed issue.

### Comparative Case Study Findings

Consequently, the specified comparative case study approach provided a significant appreciation of the contextual environment influencing paradiplomacy in the Central Asian region. A strong and rich understanding of the many factors that determine the various socio-political, environmental, and

economical characteristics of paradiplomatic techniques is arrived at based on a review of the different socio-political, environmental and economical factors (Chen et al. , 2018). They used this approach to draw attention to how paradiplomacy resolved various challenges relating to water management in Central Asia and adapt its measures to local problems. The findings established how responsive and sustainable the area is when it comes to the challenges posed in the regulation of transboundary water resources.

### Tables, Figures, and Statistical Outcomes

**Table 1**

*Impacts of Paradiplomacy on Transboundary Water Cooperation in Central Asia*

Paradiplomatic Actor	Impact on Water Cooperation	Activities Undertaken	Influence Level
Subnational Government A	facilitated cooperative water management Joint infrastructure project implementation	facilitated cooperative water management Joint infrastructure project implementation	High
NGO X	promoting the sustainable use of water initiatives for awareness and involvement in the community	promoting the sustainable use of water initiatives for awareness and involvement in the community	Moderate
Municipality B	regional initiatives to save water Programs for public education and local policy advocacy	regional initiatives to save water Programs for public education and local policy advocacy	Low
International Organization	financing for local initiatives Collaborations in research and capacity development	financing for local initiatives Collaborations in research and capacity development	Very High

The first table presented above shows the function and importance of each Paradiplomatic actor concerning the water-sharing cooperation in Central Asia. These entities- subnational governments, municipalities, NGOs, international organizations etc are categorized based on the following categorization. In the same way, it categorizes the influence, action, and importance at the actors' level toward water cooperation. For example, it can be extremely central to advance the provision of regional states' common structural

frameworks for co-operative water resource management. The public may be sensitive and the community may be engaged in the attainment of the organizational objective of water conservation. The mentioned parties might focus on change in local policy and reasonable usage of power for water saving locally. Whenever huge powers are mobilized to back many-sided undertakings in a area repeating massive participation in capacity improvement, large power is denoted on undertakings to cooperate on water .



**Table 2***Interrelationships among Paradiplomatic Actors in Central Asian Water Cooperation*

Paradiplomatic Actors	Collaborative Initiatives	Areas of Conflict
Subnational Government A	cooperative infrastructure initiatives and data-sharing contracts Differences in the distribution of water	cooperative infrastructure initiatives and data-sharing contracts Differences in the distribution of water
NGO X	Initiatives for community involvement and collaborations with local government Policy agendas that differ	Initiatives for community involvement and collaborations with local government Policy agendas that differ
Municipality B	Local policy advocacy and educational initiatives Difficulties in Allocating Resources	Local policy advocacy and educational initiatives Difficulties in Allocating Resources
International Organization	Cooperation in research and financing for joint initiatives Conflicts pertaining to project execution	Cooperation in research and financing for joint initiatives Conflicts pertaining to project execution

The second table displays activities and possible drafted conflicts of several paradiplomatic actors in the water cooperation in Central Asia. Represented in the same fashion as Table 1, these actors have been categorized based on the areas of consensus and disagreement. Subnational governments may have issues on how to provide their resources, though they can cooperate on data-sharing and data infrastructure projects. Out of experience, they act independently and intensively on community mobilization hence, Non-Governmental Organizations (NGOs) may achieve conflicting policies. It may be difficult for towns' campaigning for some local regulations changes and educational activities to find the resources they need. Whereas parties holding each of these perspectives are active in the financing of projects carried out through international organizations and the encouragement of research cooperation, local conflict over project implementation may arise.

These tables are provided in detail to demonstrate multifaceted arrangements and complex interaction of the number of paradiplomatic actors in the sphere of transboundary water cooperation in Central Asia. They also given methodical overview of their impacts, collaborations and potential interference in an effort to seek better understanding and assess the multifaceted mechanisms within the region's water governance. Some elements that are included in the model may be modified by the results

obtained in a particular study or by the need for a more detailed examination of certain objects.

### Overview of the Role of Paradiplomacy in Transboundary Water Cooperation in Central Asia

The analysis carried out in this paper demonstrates that paradiplomacy can be credited with a major role of setting up cooperation in the water sector in Central Asia. The integration of typology analysis, scenario mapping, and comparative cases provided the detailed aspects and contextual factors of paradiplomacy (Cole et al. , 2017). The topics of this paper are the opportunities and risks of subnational and non-governmental involvement, coordination, and ambiguous results of water governance.

### Diverse Effects of Paradiplomacy

The study proves that paradiplomatic members in transboundary water management in Central Asia perform a number of crucial and diverse functions. Particularly, subnational administrations contributed to the enhancement of water security by participating in cooperation programs in water management and development of infrastructure (Dinar, 2012). Despite the perceived weakness of the proceedings of non-governmental organizations (NGOs), they have helped in promoting people participation and sustainable use of water. Municipalities also showed more localized approaches to tackle the peculiar problems of

individual areas in terms of water saving and policy lobbying, and they possessed less authority compared with regions. There is nothing out there which has made a huge impact more than the sponsorship of, and the launching of capacity-building programs by international organizations for regional cooperative projects.

### **Cooperative Efforts and Conflict Areas**

Paradiplomatic actors underlined the cooperative strategies by stressing the advancements on the policy lobbying, the conjoining of infrastructural framework, communion and involvement arrangements, and the climate of data-sharing agreements (Eidem et al. , 2012). But at the same time, the study also identified possible tensions and aggressive attitudes among the actors. Their goals are different, policy issues, and concerns relating to water sharing, difficulties in granting resources, and the conflict that arises when implementing the project were found to present major hurdles to efficient collaboration.

### **In Paradiplomacy, Adaptability and Resilience**

Nonetheless, these restrictions have demonstrated the hypothesis that the comparative case studies of paradiplomacy are flexible and durable in solving context problems (Eidem, Fesler, & Wolf, 2012). The studies showed, for example, how Central Asia's paradiplomatic strategies actively adjust to suit the specific socio-political, environmental, and economic contexts. They indicate the need for more versatile and situation-adequate approaches when addressing the issues of transboundary water management.

### **Ways to Improve the Governance of Water**

The following are some of the policy insights that have been established by the study pointing out various ways that may lead to the improvement of water governance. An increase in the effectiveness of the strategies for cooperation, an increased number of meeting platforms, and efforts to prevent the bias of self-interest among the stakeholders are inevitable (Fang, Chen, & Li, 2018). Furthermore, there is a need to build up subnational systems, engage more people, and consolidate localized initiatives into international programs. The study therefore promotes policy

adaptability mechanism which considers all the stakeholders' needs with the view of adopting effective and sustainable water management systems in the area.

This paper identifies the need for paradiplomacy in dealing with the challenges of transboundary water partnerships in Central Asia. The findings demonstrate the significance of paying proper attention to the diverse role players and stakeholders in the sphere and utilising them as a source for forming the proper policies of water governance (Qin, Fu, & Peng, 2020). Since the suggested approach relied on a broad range of methods that empowered multiple groups of stakeholders, the research's findings and recommendations are invaluable to policymakers, as they promote the cooperation necessary to solve the region's pressing issues concerning water security.

### **Conclusion**

To conclude, this work provided an extensive analysis of the significant functions of the subnational organisations including local administration, global organisations, authorities, and NGOs in the context of the transboundary water cooperation in Central Asia (Wang et al. , 2020). In this study typology evaluation, scenario mapping, and a comparative case study approach have been used in order to bring out the diverse effects or roles of paradiplomacy as a concept in the management of water resources. Subnational governments have demonstrated that they fully prove themselves as subnational stakeholders to contribute appropriate aid for the infrastructural projects and efficient cooperation management. At the same time, interests in water management are also sectarianized by players like the municipalities and non-governmental organizations (NGOs) who equally engage in lobbying, community participation, and local conservationism albeit to different extremes. International organizations also provided a lot of help in regard to the cooperation within projects and capacities enhancement. These findings, therefore, have implication that goes beyond Central Asia. They argue with the population increase, water shortage, and climate change as threats to global water governance for which paradiplomacy must intervene.

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