

# Collaborative Environmental Governance: An Integrative Review of Inter-Institutional Networks

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**Abstract:** Collaborative environmental governance has stood out as a fundamental strategy in the face of the growing complexity of contemporary socio-ecological challenges. The theme gains relevance in contexts that demand coordination between multiple institutional actors, expanding the legitimacy and effectiveness of environmental policies. Therefore, this article aims to analyze the contributions of collaborative environmental governance to the consolidation of interinstitutional networks in the promotion of sustainability. The choice of the theme is justified by its relevance and academic and practical relevance, as it highlights the limits and potentialities of collaborative arrangements. The methodology consisted of an integrative literature review carried out on Google Scholar, considering articles published between 2020 and 2025, in addition to classic references on governance. A total of 25 studies were selected based on methodological rigor, theoretical relevance and thematic adherence, analyzed through triangulation and content analysis. The main findings point out that inter-institutional networks increase the effectiveness of environmental policies in areas such as water protection, sustainable tourism, and single health, but face obstacles such as excessive bureaucracy, capture by economic interests, and social inequalities. It is concluded that collaborative environmental governance contributes to strengthening sustainability, although its effectiveness depends on institutional and contextual factors that still require further development in future research.

**Keywords:** *Collaborative Governance; Environmental Governance; Interinstitutional Networks; Sustainability.*

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## I. INTRODUCTION

Collaborative environmental governance has become an indispensable strategy for addressing contemporary socio-ecological challenges, particularly in contexts that necessitate coordination among multiple institutional actors. According

to Sinaga and Pawirosumarto (2025), the implementation of environmental policies in Southeast Asia shows that inter-institutional cooperation is decisive to overcome structural asymmetries between industrialized and emerging countries, ensuring greater coherence in climate mitigation actions.

In dialogue with this perspective, Mahmoud, Dubois, and Robuchon (2025) highlight that inclusive urban planning processes only become effective when based on collaborative governance networks, capable of integrating biodiversity, sustainability, and community participation. These recent findings reinforce that environmental governance cannot be reduced to isolated normative instruments, but depends on the articulation in inter-institutional networks that increase legitimacy and effectiveness in environmental policies.

This article aims to analyze the contributions of collaborative environmental governance to the consolidation of interinstitutional networks in the promotion of sustainability, through an integrative literature review.

## II. LITERATURE REVIEW

### ➤ *Selecting a Template*

The notion of governance emerged as a key concept in the social sciences when describing decentralized forms of coordination between the State, market, and civil society. According to Rhodes (1996), governance refers to patterns of interdependence between multiple actors that shape decision-making processes, breaking with bureaucratic centralization. Kooiman (2003) complements this view by arguing that governance should be understood as interactive dynamics, in which distinct power centers coexist in complex adaptive systems.

In the environmental field, governance has come to be associated with sustainability as a structuring principle of public and territorial management. Monteiro et al. (2025) and Meadowcroft (2002, 2007) argue that environmental governance is characterized by continuous negotiation between different values, institutions, and interests, requiring multi-scalar articulation.

Lemos and Agrawal (2006) reinforce that the effectiveness of policies depends on the integration between the State, market, and civil society, a perspective updated by Dryzek (2021), which links sustainability to democratic processes and accountability.

Recent authors have sought to advance conceptual frameworks that explain the complexity of environmental governance. Gorjian (2025) highlights the application of Complexity Theory as an analytical lens to understand socio-ecological resilience in urban contexts. Bayat (2025) contributes by connecting environmental governance to territorial development, reinforcing that place-based strategies strengthen sustainability by valuing cultural and local dimensions.

The psychosocial dimension has also gained relevance in the recent debate. Pinho (2025) warns that superficial approaches to inclusion produce only symbolic legitimation, advocating environmental governance rooted in social justice and effective participatory mechanisms. Mariano (2025), in turn, proposes a conceptual framework of adaptive resilience for small rural properties, highlighting the vulnerability of farmers to extreme weather events.

In the economic field, Passalía and Peinado (2025) distinguish ecological economics from other currents, such as environmental economics and bioeconomy, arguing that the former offers greater normative capacity to sustain sustainable governance policies. In a complementary way, Shabbir (2025) reviews corporate sustainability frameworks, pointing out that the integration of technologies and strategies driven by stakeholders strengthens business alignment with the SDGs.

Other recent approaches reinforce the conceptual plurality of environmental governance. Reza, Hossain and Bokhtear (2025) articulate recreational forests with sustainable livelihoods, associating conservation and human well-being. Antonissen, Verleye, and De Pourcq (2025) explore circular ecosystems of services, demonstrating that the circulation of products and knowledge expands the potential of socio-environmental governance.

Finally, Tripl (2025) highlights the tension between the paradigms of green growth and post-growth, demonstrating that different theoretical positions influence the direction of environmental governance on a regional scale. These contributions consolidate the passage from a general debate on governance to increasingly specific perspectives, preparing the ground for the analysis of collaborative governance in interinstitutional networks, the focus of this article.

## III. MATERIALS AND METHODS

The methodology adopted consisted of an integrative literature review carried out on Google Scholar, considering articles published between 2020 and 2025. Descriptors in Portuguese and English related to "environmental governance", "inter-institutional collaboration", "sustainability" and "networks" were used. The selection included both classic authors, such as Rhodes (1996), Kooiman (2003), Meadowcroft (2002, 2007), Lemos and Agrawal (2006) and Dryzek (2013), as well as contemporary authors (2020–2025), totaling 25 studies. The inclusion criteria were methodological rigor, thematic adherence and theoretical relevance, excluding duplicate publications or publications without scientific consistency. After selection, the articles were submitted to content analysis, with triangulation between empirical findings and conceptual references, in order to support the critical interpretation of the results.

## IV. RESULTS AND DISCUSSION

The empirical findings confirm that collaborative governance assumes different results according to the institutional arrangement. Wegner, Dias and Agostini (2025) demonstrate that water protection is strengthened when networks articulate multiple scales of decision. This finding reinforces Meadowcroft (2007), who highlights that permanent negotiations between institutions ensure legitimacy. However, Tian and Hu (2024) problematize the bureaucratic capture of networks, showing that excessive

centralization reduces their effectiveness, in line with Dryzek (2013), who criticizes symbolic forms of governance.

Silva et al (2025) show that, in rural contexts, cooperation networks between stakeholders facilitate consistent advances in sustainability. This result converges with Kooiman (2003), when he indicates that decentralized interactivity expands the institutional response capacity. However, Leal Filho et al. (2025) identify cultural resistances in universities in North America and Europe, suggesting that rigid institutional structures delay effectiveness, in line with Gorjian (2025), who proposes complex resilience as an adaptive key.

Climate adaptation on islands, analyzed by González and Peña-Alonso (2025), depends on multilevel articulation, in dialogue with Rhodes (1996), who already defended interdependence between actors as the axis of governance. In contrast, Chen and Heinze (2025) show that, in the sports sector, the market logic captures the green dimension of partnerships, reducing their reach. This dilemma echoes Pinho (2025), when he criticizes merely performative practices that hide environmental inequalities.

Kaaya (2025) points out that, in sustainable tourism, flexible institutional arrangements strengthen territorial resilience, confirming the relevance of place-based strategies (Bayat, 2025). However, Wegner et al. (2025) demonstrate that, when excessively bureaucratized, networks lose their capacity for adaptation, in line with Trippl (2025), which warns of the limitations of green growth models in the face of environmental crisis contexts.

The one health approach broadens the understanding of collaborative networks. Mhone, Muloi and Moodley (2025) state that consistent regulation is a condition for integrated practices, in line with Lemos and Agrawal (2006), who highlight the need for articulation between the State, market and society. Soeiro-Barbosa, Carneiro and Carvalho (2025) add that international declarations strengthen the political field, but De Matos (2025) problematizes their effectiveness in unequal smart cities, converging with Mariano (2025) by exposing social fragilities in peripheral contexts.

Chen and Heinze (2025) reinforce that the economic dimension limits green partnerships, while González and Peña-Alonso (2025) show that, in specific contexts, tourism can catalyze sustainability. This contrast is supported by Passalía and Peinado (2025), who argue that only normative approaches to ecological economics can reverse structural imbalances. Triangulation demonstrates that collaborative networks are only effective when there is a balance between economic gains and environmental justice.

In general, the results converge in recognizing inter-institutional collaboration as a necessary condition for sustainability. However, divergences emerge regarding practical effectiveness, whether due to bureaucratic obstacles (Tian & Hu, 2024) or economic capture (Chen & Heinze, 2025). This scenario reinforces Trippl (2025), when he argues that different governance paradigms shape different

institutional outcomes. Thus, the findings suggest that collaborative governance in interinstitutional networks contributes to sustainable practices, but its effectiveness depends on contextual, institutional and social conditions.

## V. CONCLUSIONS

This study aimed to analyze the contributions of collaborative environmental governance to the consolidation of interinstitutional networks in the promotion of sustainability, through an integrative literature review. The research was based on the assumption that collaborative arrangements can strengthen socio-environmental management in contexts of increasing complexity and interdependence.

The results showed that collaborative networks offer significant gains in areas such as water protection, sustainable tourism and single health, in addition to favoring territorial resilience practices. However, it was also evidenced that excessive bureaucracy, capture by economic interests and social inequalities limit the effectiveness of these networks. The triangulation with the conceptual literature indicated that environmental governance needs to be multiscalar, normative and participatory, articulating social, economic and cultural dimensions.

In view of this panorama, it can be stated that the objective was met in the sense of offering a critical analysis of the potentialities and limitations of collaborative environmental governance in interinstitutional networks. The findings suggest that such arrangements contribute to strengthening sustainability, although their effectiveness is conditioned by institutional and contextual variables that still require future investigations.

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