

## Systemic leadership in sustainable collaborative governance: A case study of urban green space management in Surabaya

### *Kepemimpinan sistemik pada tata kelola kolaboratif berkelanjutan: Studi kasus pengelolaan ruang hijau perkotaan di Surabaya*

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#### Abstract

Collaborative governance has been widely recognized as an effective strategy to address complex public challenges, particularly in managing urban green spaces. This research examines systemic leadership in promoting cross-sectoral collaboration for sustainable urban green space management. Specifically, it explores the role of systemic leadership in fostering cross-sectoral collaboration for sustainable urban green space management in Surabaya during Mayor Tri Rismaharini's administration (2010-2020). A qualitative case study approach was employed, involving in-depth interviews with 15 informants from various sectors, document analysis, and observations. The findings reveal that systemic leadership ensures alignment between private sector contributions and public goals. Additionally, the integration of multifunctional green infrastructure, such as pedestrian pathways and stormwater management systems, contributes to environmental sustainability and urban resilience. This study reinforces existing collaborative governance theory and highlights the importance of long-term leadership in nurturing sustainable urban green space partnerships. It concludes that systemic leadership acts as a balancing force among stakeholder interests, facilitating compromise and institutional interactions crucial to achieving collaborative goals. This research contributes to the literature by emphasizing the significance of systemic leadership in promoting sustainable urban governance and offers practical insights for policymakers and urban planners to enhance collaborative processes in similar contexts.

**Keywords:** cross-sector collaboration; environmental sustainability; urban green spaces; systemic leadership

#### Abstrak

Tata kelola kolaboratif telah diakui secara luas sebagai strategi yang efektif untuk mengatasi tantangan publik yang kompleks, khususnya dalam mengelola ruang hijau perkotaan. Penelitian ini mengkaji kepemimpinan sistemik dalam mendorong kolaborasi lintas sektor untuk pengelolaan ruang hijau perkotaan yang berkelanjutan. Studi ini mengkaji peran kepemimpinan sistemik dalam kolaboratif lintas sektoral untuk pengelolaan ruang hijau perkotaan yang berkelanjutan di Surabaya selama masa Wali Kota Tri Rismaharini (2010-2020). Pendekatan kualitatif studi kasus digunakan, yang melibatkan wawancara mendalam dengan 15 informan dari berbagai sektor, analisis dokumen, dan observasi. Temuan penelitian mengungkapkan bahwa kepemimpinan sistemik memastikan keselarasan antara kontribusi sektor swasta untuk tujuan publik. Selain itu, integrasi infrastruktur hijau multifungsi, seperti jalur pejalan kaki, pengelolaan air hujan, berkontribusi pada keberlanjutan lingkungan dan ketahanan perkotaan. Studi ini memperkuat teori tata kelola kolaboratif yang ada dan menyoroti pentingnya kepemimpinan jangka panjang dalam membina kemitraan ruang hijau perkotaan yang berkelanjutan. Studi ini menyimpulkan bahwa kepemimpinan sistemik bertindak sebagai kekuatan penyeimbang di antara kepentingan pemangku kepentingan, memfasilitasi kompromi dan interaksi kelembagaan yang penting untuk mencapai tujuan kolaboratif. Penelitian ini berkontribusi pada literatur dengan menekankan pentingnya kepemimpinan sistemik dalam mempromosikan tata kelola perkotaan yang berkelanjutan dan menawarkan wawasan praktis bagi para pembuat kebijakan dan perencana perkotaan untuk meningkatkan proses kolaboratif dalam konteks yang sama.

**Kata kunci:** tata kelola kolaboratif; keberlanjutan lingkungan; ruang hijau perkotaan; kepemimpinan sistemik

## Introduction

Urban green spaces are crucial components of sustainable urban development, providing ecological, social, and health benefits to cities worldwide (Gallo et al. 2017, Wang 2024). These areas play a significant role in enhancing biodiversity, reducing urban heat effects, improving air quality, and offering recreational opportunities—all of which contribute substantially to urban quality of life (Wolch et al. 2014, Aronson et al. 2017). The high rate of urbanization underscores the need for green infrastructure that balances environmental, social, and economic factors, making urban green space management an essential aspect of sustainable urban planning (Chen et al. 2021).

Collaborative governance has been highlighted as a strategic approach to managing complex public issues (Bryson et al. 2006, Page et al. 2015) and creating value through cooperative interactions (Douglas et al. 2020). This governance approach has gained traction in fields such as environmental management (Ulibarri 2015, Liu et al. 2021) and climate change mitigation (Ansell & Gash 2008, Kalesnikaite 2019, Avoyan 2022). Collaborative governance enables the mobilization of resources, knowledge, and capacities from various sectors, including public institutions, private companies, and civil society groups (Liu et al. 2021, Sørensen & Torfing 2022). The flexibility and inclusivity of this governance model allow public managers to address challenges that are difficult for a single entity to tackle alone (Ansell & Gash 2008, Hofstad et al. 2022).

Academics argue that the complexity of modern public issues, such as urban sustainability and the management of urban green spaces, necessitates a collaborative approach involving multiple cross-sector stakeholders (Ansell & Gash 2008, Emerson & Nabatchi, 2015a). In the context of urban green space management, collaborative governance can help ensure that diverse resources, skills, and perspectives are leveraged to comprehensively address sustainability challenges. Leadership plays a crucial role, providing the guidance needed to align the efforts of various actors and to maintain momentum toward shared objectives (Ansell & Gash 2012, Bryson et al. 2014).

Systemic leadership within collaborative governance is characterized by its capacity to integrate a wide range of stakeholders and harness their collective strengths to address complex urban challenges. Research suggests that leaders in collaborative governance contexts must adopt roles beyond traditional hierarchical leadership. They are often viewed as facilitators who encourage open dialogue, mediate conflicts, and help align diverse interests toward common goals (Ansell & Gash 2008, Emerson et al. 2012). Systemic leadership supports these processes by actively promoting trust and mutual understanding among participants, which are essential for fostering cooperation and ensuring collaborative sustainability (Emerson & Nabatchi 2015b). In urban governance, such leadership is vital, as it requires cross-sector coordination to tackle issues like environmental sustainability (Bulkeley 2010) and public space management (Bryson et al. 2015).

Despite advancements in collaborative governance, the literature highlights several gaps, particularly in understanding the specific conditions that influence the success of such frameworks in achieving various public value outcomes (Emerson & Nabatchi 2015a, Cristofoli et al. 2022). While many studies focus on outcomes such as effectiveness and efficiency, fewer explore how collaborative governance can simultaneously support democratic values, such as accountability and legitimacy, alongside practical results (Bryson et al. 2014, Sørensen & Torfing 2021). Recent research underscores the importance of balancing these values, as collaborative governance often involves trade-offs between inclusiveness and efficiency, or between responsiveness and decisiveness (Voets et al. 2008, Page et al. 2015, Cristofoli et al. 2022).

Additionally, although the role of leadership in collaborative governance is widely recognized, there is a lack of detailed analysis on how different leadership styles impact specific aspects of collaboration, particularly in urban settings (Ansell & Gash 2012, Bianchi et al. 2021). Systemic leadership has been identified as essential for aligning stakeholder interests and fostering sustainable change. However, empirical studies examining how this leadership approach functions within the institutional design of collaborative governance frameworks remain scarce. While some research highlights the role of systemic

leadership in building capacity for joint action (Emerson et al. 2012), fewer studies explore how systemic leaders can mitigate conflict and build trust among diverse stakeholders over time (Huxham & Vangen 2005, Ansell & Torfing 2021, Page & Stone 2023).

The primary objective of this research is to analyze the role of systemic leadership within a collaborative governance framework, specifically in the context of urban green space management in Surabaya. The study examines how systemic leadership facilitates collaboration among diverse stakeholders, including public institutions, state-owned and regional enterprises, private sector entities, and non-governmental organizations, to achieve sustainable outcomes. It draws on the collaborative governance framework, which underscores the importance of leadership in mobilizing collective action to address complex social issues (Emerson et al. 2012). By focusing on the case of Surabaya, this study aims to provide empirical insights into the mechanisms through which systemic leadership enhances urban green spaces and broader public value outcomes such as effectiveness, legitimacy, and accountability (Page et al. 2015).

The novelty of this research lies in its emphasis on systemic leadership, a connection recognized in the literature but underexplored within the context of urban sustainability. Through an in-depth examination of Surabaya’s collaborative governance approach under Mayor Tri Rismaharini from 2010 to 2020, this study contributes to a deeper understanding of how public managers navigate complex stakeholder dynamics and optimize collaborative outcomes. Furthermore, by addressing identified research gaps, the findings are intended to inform practitioners and policymakers involved in urban governance and sustainability, offering insights into replicable strategies for effective green space management in other urban settings.

Collaborative governance has emerged as a crucial paradigm in public administration, characterized by the involvement of diverse stakeholders—including public institutions, state-owned and regional enterprises, private entities, and civil society—in collective decision-making processes. The literature has examined various frameworks of successful collaborative governance (Bryson et al. 2006, Ansell & Gash 2008, Emerson et al. 2012, Bryson et al. 2015, Emerson & Nabatchi 2015a). This manuscript draws upon the leadership concept from Emerson et al. (2012), which views leadership as essential for creating institutional and procedural arrangements that facilitate long-term collaboration. Leadership in this model involves fostering principled engagement, shared motivation, and capacity for joint action (Emerson et al. 2012). Principled engagement refers to ongoing, inclusive interactions within the collaborative governance framework, requiring all relevant actors to have a platform to express their perspectives, nurturing an environment where differences can be constructively negotiated (Ansell & Gash 2008). Shared motivation builds on this by cultivating trust and commitment among participants, reinforcing the collaborative process and encouraging long-term engagement (Huxham & Vangen 2005). Meanwhile, the capacity for joint action entails mobilizing resources and organizing collective efforts, which are critical for translating collaborative intentions into tangible outcomes (Sørensen & Torfing 2009). These elements collectively form a cycle that strengthens collaborative governance dynamics, enabling systemic leaders to effectively manage complex urban challenges.

In the case of Surabaya, systemic leadership has played a significant role in transforming urban green space management by embedding these principles into the city’s collaborative framework. The municipal government actively engages with both state and non-state actors, thereby operationalizing systemic leadership principles to achieve urban sustainability goals (Sørensen & Torfing 2021). Public managers can facilitate principled engagement by creating opportunities for stakeholder participation (Torfing et al. 2020), including public consultations and collaborative planning sessions. By fostering shared motivation around the importance of green spaces, they align the diverse interests of various actors and build a collective commitment to urban environmental goals (Douglas et al. 2020). This alignment enables the mobilization of shared resources and sustainable collaborative action, contributing to the transformation of the city into a greener and more livable urban environment.

## **Research Method**

This research employs a qualitative methodology using a case study approach, which is effective for understanding complex social phenomena within real-life contexts (Denzin & Lincoln 2005, Stake, 2005, Yin 2006, Skate 2010). The case study provides empirical evidence of theoretical concepts and

contributes to theoretical development (George & Bennett 2005, Yin 2014:41). The focus of this study is on the management of urban green spaces in Surabaya and how systemic leadership contributes to collaborative governance. Primary and secondary data were collected to ensure a comprehensive analysis. Primary data were obtained through semi-structured interviews, guided by an interview protocol consisting of open-ended questions. A total of 15 informants were selected from diverse backgrounds, including bureaucracy, academia, NGOs, community leaders, private sector representatives, state-owned enterprises, regional-owned enterprises, and community members. These informants were chosen using purposive and snowball techniques to ensure adequate representation of key stakeholders involved in urban green space management (Parker et al. 2019). The anonymity and confidentiality of informants were maintained, with pseudonyms assigned to each to protect their identities.

Secondary data, non-participant observations, relevant literature analysis, and documentation from related government offices were collected to triangulate and corroborate the interview findings. Following data collection, the information was processed using qualitative data analysis techniques, as suggested by Miles et al. (2018). Data processing involved selecting, simplifying, and categorizing data, which included complete textual sections from interview transcripts with informants, relevant documents, and other empirical materials. After this step, the research presented the data, where collected data were summarized and refined to reach conclusions. The validity and reliability of the data were further ensured through data triangulation, involving cross-checking data from various sources over different periods. This rigorous process facilitated a comprehensive understanding of the dynamics of systemic leadership in urban green space management in Surabaya.

The data preparation process in this study involved selecting a diverse group of informants who could provide in-depth insights into the collaborative governance of urban green space management in Surabaya. To ensure a comprehensive representation of perspectives, purposive and snowball techniques were employed to identify individuals with direct experience and involvement in the management of the Resource Allocation Strategy (RAS) (Parker et al. 2019). This approach facilitated the inclusion of key stakeholders across various sectors, including representatives from government agencies, academia, non-governmental organizations, community leaders, private sector entities, state-owned enterprises, and local communities.

A total of 15 informants, consisting of nine men and six women, were selected based on their knowledge, experience, and active participation in urban green space management in Surabaya (see Table 1). This diverse group of informants allowed the research to capture a range of perspectives on how systemic leadership contributes to collaborative governance processes. Informants were contacted directly, and their willingness to participate was confirmed after being informed about the study's objectives and assured of confidentiality. Consent was obtained from all participants before data collection, ensuring ethical compliance throughout the research process. The primary data collected from these informants provide nuanced insights into the roles, challenges, and leadership dynamics involved in achieving sustainable green space management in Surabaya.

The experimental setup for this qualitative case study was designed to explore the role of systemic leadership in collaborative governance for the management of urban green spaces in Surabaya. This study utilized a semi-structured interview approach, involving a series of open-ended questions developed to guide interviews with selected informants (Denzin & Lincoln 2005, Maxwell 2008). This method allows for an in-depth exploration of the experiences and perspectives of key stakeholders, providing participants the flexibility to express their thoughts comprehensively while ensuring that the research objectives are adequately addressed (Stake 2010).

Data collection was conducted through various channels, including face-to-face, Zoom, and telephone interviews, to accommodate the informants' schedules. Interviews were conducted with 15 informants from diverse sectors such as government bureaucracy, academia, NGOs, community leaders, private sector representatives, and state-owned enterprises. This setup ensured a holistic understanding of the urban green space management processes in Surabaya, facilitating a comprehensive examination of inter-sectoral collaboration and the influence of leadership on institutional interactions and decision-making processes.

**Table 1.**  
Demographic information of informants

Informant Name	Age	Gender	Informant Group
HAH	51	M	State Civil Apparatus Surabaya - Surabaya City Environmental Service
OAD	54	F	State Civil Apparatus Surabaya - Surabaya Regional Development Planning, Research and Development Agency
HHH	57	M	Surabaya City Regional People's Representative Council
MAM	47	F	State Civil Apparatus Surabaya - Surabaya City Environmental Service
DDS	45	M	State Civil Apparatus Surabaya
VVV	54	F	State Civil Apparatus Surabaya - Surabaya City Government Cooperation Section
YIY	40	F	State Civil Apparatus Surabaya - Regional Development Planning Agency, Research and Development
PRP	46	M	State Civil Apparatus Surabaya
DAD	48	M	State-Owned Enterprises (BUMN) - CDC Manager PT. Telkom Region 5 Surabaya City
JSS	72	M	Academics
EEE	47	F	State-Owned Enterprises (BUMN) - Manager of Resources of BNI Bank, KCU Graha Pangeran, Surabaya City
APY	45	F	State Civil Apparatus Surabaya
BAA	39	M	Director of Environmental Education, Tunas Hijau - Non Governmental Organization
WSS	45	M	Nol Sampah in Surabaya - Non Governmental Organization
MKT	46	M	Public

Source: Created by the author

In addition, secondary data were gathered through non-participant observation and document analysis from relevant government offices, reports, and literature related to urban green space management. Following the approach by Miles et al. (2018), the collected data were systematically organized, condensed, and analyzed to identify patterns, themes, and relationships. This process contributes to understanding the role of systemic leadership in promoting sustainable collaborative governance in the management of urban green spaces in Surabaya. This approach ensures the study captures both the breadth and depth of collaborative processes and leadership dynamics in urban green space management.

## Results and Discussion

The following section discusses how systemic leadership enables cross-sector collaboration for sustainable urban green space management in Surabaya. It first explores the role of systemic leadership in promoting collaborative governance by aligning public and private sector efforts toward shared environmental goals. This approach includes fostering community participation and optimizing resource utilization through corporate social responsibility (CSR) initiatives. The discussion then examines how systemic leadership enhances the operational and financial capacities of green space projects through both international and

local partnerships. Key sustainability aspects in the management of urban green spaces in Surabaya are analyzed. Finally, a case study on systemic leadership in the revitalization of Taman Bungkul highlights the effectiveness of long-term public-private partnerships in supporting urban resilience.

### **The role of systemic leadership in cross-sector collaboration**

Interviews underscore the critical role of systemic leadership in fostering cross-sector collaboration, particularly through corporate social responsibility (CSR) initiatives, in the development of urban green spaces in Surabaya. Tri Rismaharini's leadership was repeatedly highlighted as instrumental in mobilizing private sector participation without over-relying on public funding. Informant WSS explained, "Ms. Risma often implements policies without heavily drawing on the regional budget (APBD), instead involving the private sector through CSR. For example, PT Telkom directly built Bungkul Park using a design provided by the city government" (Informant WSS). This strategy not only reduces the financial burden on the city but also enhances stakeholder ownership in urban development projects.

Moreover, several informants from both the government and legislative bodies supported the view that Ms. Risma's leadership fosters private sector collaboration. Informant HAH noted, "Ms. Risma communicated her vision for urban green space development to private entities, such as PT Telkom, ensuring their contributions align with the city's sustainability goals" (Informant HAH). This clear communication and alignment of objectives cultivate a shared sense of responsibility and promote long-term investment in urban infrastructure. Another significant aspect is how her leadership influences the allocation of public funds for urban green spaces. Informant HHH observed, "Collaboration with private companies motivates the city council to approve larger budgets for green spaces, knowing that these investments are maximized through partnerships." This collaborative model is further validated by Informant OAO, who detailed the vital role of CSR in enhancing urban spaces under Risma's leadership: "The most notable collaboration was with PT Telkom for Bungkul Park, where they directly constructed the park under Ms. Risma's strict design oversight." These consistent findings across sectors illustrate the profound impact of systemic leadership in aligning diverse interests and leveraging private resources for public benefit.

The advantages of systemic leadership in leveraging private sector engagement through CSR in Surabaya contrast with the traditional public sector approaches observed in other cities. In many urban contexts, city governments primarily rely on public funding for infrastructure development, leading to delays and limited scope due to financial constraints (Ansell & Gash 2008). In contrast, Surabaya's model under Risma's leadership demonstrates how systemic leadership can mobilize private resources more effectively. The leader promotes principled engagement through interactions aimed at sustainable and inclusive environmental management. As explained by Informant WSS, "Ms. Risma often formulates policies without relying heavily on the APBD, instead involving the private sector through CSR." This strategy aligns with findings from Bryson et al. (2015), which emphasize the role of cross-sector collaboration in addressing resource constraints in public projects.

Moreover, while many cities face challenges with fragmented efforts between the public and private sectors, Surabaya achieves a cohesive governance model. Emerson et al. (2012) highlight that collaborative governance frameworks rely on strong leadership to align diverse stakeholder interests. Surabaya exemplifies this by maintaining strict oversight on CSR projects, ensuring that private contributions align with public objectives. Informant OAO notes that "the involvement of private companies is always closely monitored by the city," echoing Emerson's observation that systemic leadership fosters accountability (Acar et al. 2008, Emerson et al. 2012, Sørensen & Torfing 2021) and goal alignment in collaborative governance.

The benefits of this approach are also evident in the speed and efficiency of project implementation in Surabaya. Traditional public sector projects often suffer from slow bureaucratic processes (Emerson et al. 2012), but as noted by MAM, Risma's collaboration model enables the city to implement urban green spaces more efficiently.

“Ms. Risma is very meticulous, requiring approval for details down to the color of pedestrian pathways. She also focuses significantly on developing parks through corporate social responsibility (CSR) collaborations, such as with Telkom at Bungkul Park. This collaboration helps to conserve the city budget (APBD) while maximizing private sector contributions to the city.” (Informant MAM).

By minimizing reliance on public funds and empowering private stakeholders to execute projects directly, Surabaya has been able to implement urban green spaces more efficiently. This reflects the broader literature on the effectiveness of systemic leadership in creating agile and responsive governance structures, as seen in similar studies on urban management (Bussu & Bartels 2013).

The implementation of systemic leadership in Surabaya under Tri Rismaharini has had profound implications for urban governance, particularly in fostering cross-sector collaboration for sustainable development. A significant impact of this leadership style is its ability to mobilize private sector resources for public projects without imposing a burden on the city budget. As emphasized by Informant WSS, Risma’s leadership has enabled the city to undertake projects “without heavily relying on the regional budget but by engaging the private sector through CSR.” This approach not only enhances the local government’s capacity to expand urban green spaces but also sets a standard for how local governments can address budget constraints through strategic partnerships. These models reflect a broader trend in collaborative governance, where systemic leadership is crucial for aligning stakeholder interests to achieve public benefits, as noted by Bryson et al. (2015).

Furthermore, Risma’s strict control and oversight ensure that these collaborations maintain high standards, thereby maximizing public value. The literature on collaborative governance emphasizes that leadership plays a vital role in mediating the expectations and responsibilities of various stakeholders (Emerson et al. 2012). In this case, the implications of Risma’s approach are clear: private sector contributions extend beyond financial support, encompassing well-managed major projects aligned with the city’s vision. As noted by Informant OAO, “the involvement of private companies is always closely monitored by the city,” ensuring that public interests are consistently prioritized.

The broader implications of this model extend beyond the immediate benefits of urban development. By establishing benchmarks for public-private collaboration, Surabaya’s leadership approach demonstrates how cities can leverage CSR for sustainable urban growth. It also offers a replicable model for other cities facing similar financial constraints. The success of such collaboration, driven by systemic leadership, underscores the importance of inclusive, transparent, and accountable governance in achieving long-term sustainability. In the context of rapidly urbanizing regions, Surabaya’s case highlights how systemic leadership can effectively mobilize diverse resources and align them with public goals to achieve holistic urban management, in line with global sustainability trends.

### **Strengthening cross-sectoral capacity**

Interview findings highlight the crucial role of systemic leadership in strengthening cross-sectoral capacity, particularly through collaboration with private entities and international partners. Under the leadership of Tri Rismaharini, Surabaya successfully leveraged corporate social responsibility (CSR) initiatives to address public funding limitations in the development of urban green spaces. As Informant HAH noted, “We need private sector involvement because the budget from the Regional Budget (APBD) is insufficient, so collaboration is essential.” This collaboration enabled Surabaya to execute significant urban projects despite limited financial resources, thereby enhancing the city’s ability to pursue sustainable development initiatives. A prime example is the partnership with PT Telkom for the development of Taman Bungkul, often cited as a flagship CSR-based urban development project in Surabaya. As Informant DDS explained, “CSR is crucial because it is impossible for everything to be covered by the APBD. We need third-party assistance, which is why we collaborate through CSR with entities such as State-Owned Enterprises.” The success of this collaboration demonstrates how systemic leadership fosters mutually beneficial partnerships that not only contribute to urban infrastructure but also align with the city’s long-term urban planning goals.

In addition to local partnerships, Surabaya's systemic leadership extends to international collaboration, which further enhances the city's capacity. As Informant OAO noted, "Under Bu Risma's leadership, collaboration was not limited to the local level but also included international partners, such as United Cities and Local Government (UCLG), which provided significant support for Surabaya's green infrastructure," this highlights how Surabaya leverages global networks to advance its urban development projects, bolstering its ability to execute large-scale infrastructure improvements. Overall, these findings illustrate how systemic leadership integrates local, national, and international collaboration to strengthen the city's operational and financial capacity, ensuring the sustainability of its urban green spaces.

The collaborative approach in Surabaya under Tri Rismaharini's leadership, particularly through CSR initiatives, closely aligns with the broader literature on collaborative governance. Emerson et al. (2012) emphasize that successful collaborative governance requires leaders capable of aligning diverse stakeholder interests, a strategy reflected in Risma's ability to unify private sector entities, state-owned enterprises, and even international organizations in Surabaya's urban development projects. As Informant OAO highlighted, "Under Bu Risma's leadership, collaboration was not limited to the local level but also included international partners, such as UCLG, which provided significant support for Surabaya's green infrastructure" This international collaboration extends the literature by demonstrating how local governance can incorporate global networks to enhance capacity, an aspect less explored in traditional governance models.

Conversely, cities that rely solely on public funding for infrastructure often face significant financial constraints, which can impede long-term sustainability (Ansell & Gash 2008). In Surabaya, systemic leadership enables resource diversification through CSR initiatives, addressing these funding gaps. Informant HAH states, "The budget from APBD is insufficient, so collaboration is necessary," thereby reinforcing the literature's argument that collaborative governance reduces the financial burden on public institutions (Bryson et al. 2015). By securing external resources, Surabaya successfully executed key green space projects, such as Taman Bungkul. Informant MAM described it as "managed by the city government but built with CSR contributions from PT Telkom." This contrasts with traditional models where public projects are often delayed or downsized due to budget limitations. Furthermore, while Emerson et al. (2012) emphasize the importance of alignment in collaborative governance, Surabaya's model also demonstrates that leadership must ensure oversight and quality control. As noted by Informant MAM, "After construction, the management is handed over to the government, and it becomes a government asset." This level of oversight ensures that private sector involvement goes beyond financial contributions, integrating into the management and long-term sustainability of public assets. Therefore, Surabaya's experience offers a comprehensive example of how systemic leadership can enhance collaborative governance by diversifying funding sources while maintaining control over project outcomes.

By diversifying funding sources through CSR initiatives and involving local and international partners, Surabaya has expanded its operational capacity without burdening its public budget. This model of urban development can be adopted by other cities worldwide, particularly in regions experiencing rapid urbanization, where public funds alone are insufficient to meet infrastructure demands. Furthermore, the scientific implications align with a broader understanding of collaborative governance, reinforcing theories that emphasize the importance of leadership in coordinating cross-sector collaboration (Emerson et al. 2012, Bryson et al. 2015). Surabaya's model extends these theories by demonstrating how systemic leadership can integrate not only private sector participation but also international partnerships to address local challenges. Effective leadership in collaborative governance not only resolves immediate financial issues but also strengthens the city's long-term capacity to manage and sustain public assets. This is consistent with the research hypothesis that systemic leadership is crucial for successful collaborative governance in urban development, as evidenced by the sustained impact of initiatives in Surabaya.

### **Sustainability of urban green space management**

The findings emphasize several critical aspects of sustainability in urban green space management in Surabaya, ranging from waste management to community involvement and green infrastructure integration. Informant HAH underscores the importance of a comprehensive management strategy, stating, "Discussing a green city is not just about plants; it encompasses everything, especially waste



management, which is closely related. No matter how beautiful the park is, if there is a pile of garbage, it is worthless”. This statement highlights the role of waste management as a fundamental aspect of sustainable urban green space management, reinforcing the notion that aesthetic improvements alone are insufficient without addressing operational issues like cleanliness. Another key component of sustainability is community participation, particularly through land donations, as explained by Informant DDS: “Land given to the city forms part of the public urban green space, obtained through various means, including land acquisition or donations. This is a form of community participation in realizing public urban green spaces.”

Community involvement in land donations or grants represents a crucial mechanism for expanding urban green spaces without solely relying on potentially limited public funds. In the context of green infrastructure, Informant OAO discusses how sustainability efforts extend beyond urban green spaces to include innovative infrastructure that addresses environmental challenges. “Pedestrian walkways are built with underground channels, functioning as long-term rainwater storage” (Informant OAO). This statement illustrates how Surabaya’s green infrastructure serves not only as a recreational resource but also plays a significant role in urban water management, contributing to the city’s climate resilience. Informant MAM further elaborates on the role of private developers in ensuring the sustainability of urban green spaces, particularly within new residential areas: “Private developers are required to provide urban green spaces as part of their obligations for public facilities and infrastructure. Once 80% of residential development is complete, these green spaces are handed over to the government for management.” This process ensures that privately-owned urban green spaces ultimately integrate into the public domain, contributing to the city’s overall urban green space management and long-term sustainability. Additionally, Academic Informant JSS highlights the necessity of adequate urban green space coverage to mitigate urban pollution, stating, “Ideally, urban green spaces should cover 30% of the city, with 20% being public and 10% private. With one-third of the area green, air pollution issues can be reduced.” This underscores the environmental benefits of extensive urban green space coverage, which supports not only recreation but also air quality improvement and urban resilience. Overall, these findings reflect a holistic approach to urban green space management in Surabaya, where waste management, community involvement, green infrastructure, and developer obligations collectively contribute to the city’s long-term sustainability.

Sustainable urban green space management in Surabaya, under the leadership of Tri Rismaharini, aligns with global literature on urban sustainability, which emphasizes an integrated approach combining environmental, social, and infrastructural elements. Unlike cities that primarily focus on the aesthetics of urban green spaces, Surabaya’s model incorporates waste management, community engagement, and multifunctional infrastructure. As Informant HAH stated, “Waste management is closely tied to this. No matter how beautiful a park is, if there is a pile of waste, it is useless.” This statement reflects the need to address operational challenges that often undermine the sustainability of urban green spaces. This aligns with the findings of Gómez-Baggethun and Barton (2013), who argue that the ecological functionality of urban green spaces is essential for their sustainability, beyond their recreational or visual appeal.

The Surabaya model also integrates community participation, extending beyond traditional top-down governance. The process of acquiring land for urban green spaces through community donations—as explained by Informant DDS, “Land donated to the city becomes part of the public urban green space, obtained through various means, including land acquisition or donation,” which aligns with literature that highlights the significance of community engagement in urban sustainability (Ney & Verweij 2015). This participatory approach contrasts with more centralized models where the government solely dictates land use, often resulting in reduced public investment in the long-term success of urban green spaces. By involving the community in land donations, Surabaya fosters a sense of ownership and shared responsibility, which is essential for the sustainability of these spaces.

In comparison to other urban models, Surabaya’s use of multifunctional green infrastructure stands out for its innovative integration in water management. As noted by Informant OAO, “Pedestrian pathways are built with underground channels, serving as long-term storage to capture rainwater,” reflecting a proactive approach to climate resilience. This multifunctionality aligns with the concept of “green-blue infrastructure”

discussed by Kabisch et al. (2017), which emphasizes the role of urban green spaces in managing stormwater and mitigating climate change impacts. Conversely, many cities worldwide continue to treat urban green spaces and water management as separate entities, often missing opportunities to develop multifunctional infrastructure that enhances environmental sustainability and urban resilience. Surabaya's integration of green infrastructure, waste management, and community participation thus presents a more comprehensive and sustainable model compared to traditional approaches focused solely on green aesthetics.

The findings on sustainable urban green space management in Surabaya have significant implications for urban governance and environmental sustainability. By addressing the interconnectedness of waste management, community participation, and multifunctional infrastructure, Surabaya has developed a comprehensive model that goes beyond the conventional aesthetics of urban green spaces. As highlighted earlier, the importance of waste management is critical, as illustrated by Informant HAH's statement: "No matter how beautiful the park, if there is a pile of garbage, it is useless." This underscores the need for an integrated system that supports not only the creation but also the maintenance of urban green spaces. The practical implications here are clear: effective urban green space management must incorporate waste handling to ensure long-term environmental and social benefits. Furthermore, the role of community involvement emphasizes how local residents can be key contributors to urban sustainability. This participatory model fosters public ownership and responsibility, reinforcing the long-term viability of green space projects. The implications for other cities suggest that engaging citizens and private stakeholders can alleviate financial constraints while fostering a sense of collective responsibility for public spaces.

Furthermore, the use of innovative green infrastructure, such as pedestrian pathways that double as rainwater storage systems, exemplifies a forward-thinking approach to urban design that meets both ecological and infrastructural needs. As noted by Informant OAO, "Pedestrian pathways... function as long-term storage to hold rainwater." The scientific significance of this lies in its alignment with climate resilience strategies, providing practical solutions for urban areas facing water management challenges due to increasing rainfall variability. The multifunctionality of such infrastructure represents a scalable model for cities aiming to integrate climate adaptation into their urban planning. Collectively, these findings underscore the importance of systemic leadership in coordinating various elements—waste management, community engagement, and infrastructure innovation—to create sustainable urban green spaces. The implications are profound for other cities seeking to enhance environmental sustainability and resilience, illustrating that a holistic approach is essential for long-term success. The coherence between these findings and those in cross-sector collaborations further reinforces the argument that systemic leadership is crucial for achieving comprehensive and sustainable urban development outcomes.

### **Challenges in collaborative governance of urban green spaces in Surabaya**

The findings reveal several key challenges in collaborative governance in Surabaya, particularly in managing partnerships between the government and private sector entities. One of the primary challenges is the gap between the initial identification of community needs and the actual requirements discovered during project implementation. As Informant DAD explained:

"When conducting field inspections alongside the city government, we often find that community needs are far broader than initially identified... The mayor's letter to PT Telkom usually provides only a general outline, which necessitates more in-depth field surveys to ascertain the true priority needs in the park." (Informant DAD).

This highlights the difficulty in accurately capturing and addressing the full scope of community needs during the planning phase of collaborative projects. Another significant challenge in collaborative governance is the negotiation process, particularly concerning budget allocations and the distribution of responsibilities. Informant EEE noted:

"The Surabaya City Government once negotiated with BNI regarding funding and aid provision. Initially, we agreed on the contributions, but when it came time to sign the agreement, the city negotiated for BNI to handle maintenance for five months." (Informant EEE).

This example illustrates how last-minute negotiations can create uncertainty and disrupt the collaboration flow, especially regarding financial and operational responsibilities. Furthermore, legal and regulatory issues complicate collaborative projects, particularly in cases involving land use. Informant VVV emphasized:

“This process is not easy due to legal issues. Previously, many roadside areas were used as gas stations with permits. We pioneered changes starting with the gas station on Jalan Jaksa Agung Suprpto, which is city cooperative land and serves as an example for others.” (Informant VVV).

This legal complexity, especially when altering land use for public benefit, adds another layer of difficulty to collaborative governance, requiring careful navigation of legal frameworks and regulatory processes. The coordination between civil society organizations and government agencies presents significant challenges. Informant BAA from Tunas Hijau explained, “Our advocacy strategy is conducted directly in the field based on actual conditions. Therefore, the reports we produce stem from real activities... However, we often coordinate greening concepts with the relevant regional government organizations.” This statement underscores the difficulties in aligning civil society initiatives with governmental processes, particularly when both operate with differing organizational structures and approaches to project implementation. These findings collectively highlight the varied nature of challenges in collaborative governance, involving gaps in needs identification, financial negotiations, legal complexities, and stakeholder coordination. The challenges identified in Surabaya’s collaborative governance reflect broader issues documented in the literature on cross-sector partnerships, particularly regarding stakeholder alignment and the complexities of coordination. Informant DAD’s observation that “community needs were far broader than initially identified” aligns with common collaborative governance challenges, specifically the discrepancy between expectations during planning and findings during implementation. Emerson et al. (2012) highlight that a key task in collaborative governance is accurately identifying and aligning the goals of various stakeholders. However, they also recognize that discrepancies often arise when abstract plans confront practical realities. Surabaya’s experience underscores the need for more detailed baseline assessments to ensure that community needs are fully understood and incorporated into project planning.

In terms of negotiation and financial arrangements, Informant EEE’s account of the “last-minute renegotiation where the city negotiated for BNI to handle maintenance for five months” reflects challenges highlighted in the literature, where public-private partnerships often face tensions over cost-sharing and responsibility allocation (Bryson et al. 2015). Such negotiations, although essential for ensuring adequate funding and maintenance, can introduce delays and uncertainties that affect the smooth implementation of collaborative initiatives. This contrasts with best practices identified by Ansell & Gash (2008), who argue that clear, upfront agreements on roles, responsibilities, and financial commitments are crucial for successful collaboration. The situation in Surabaya underscores the need for more structured negotiations to prevent operational disruptions.

Legal and regulatory issues, as described by Informant VVV —“many roadside plots are used as fuel stations with permits. We pioneered changes starting with a station on Jalan Jaksa Agung Suprpto” — highlight bureaucratic hurdles that can slow collaborative efforts. These findings align with studies on collaborative governance, emphasizing the complexity of navigating legal frameworks, particularly in land-use decisions (Purdy 2012). Such issues are especially prominent when public interests, such as the development of urban green spaces, clash with pre-existing private or commercial land uses. The literature suggests that collaborative governance models require flexible legal mechanisms to address such conflicts; however, many cities, including Surabaya, continue to struggle with these challenges.

The coordination challenges between civil society organizations and government bodies, as described by Informant BAA — “we often coordinate greening concepts with relevant local government departments” — reflect broader issues of institutional misalignment and coordination difficulties. Bryson et al. (2015) observed that cross-sector collaboration frequently fails when organizational goals, resources, and operational approaches are not aligned. In Surabaya, the challenge of aligning advocacy initiatives with government protocols illustrates how diverse organizational structures can complicate cross-sector cooperation. In summary, the misalignment of expectations, negotiation complexities, legal barriers,

and coordination challenges in Surabaya resonate with the literature on collaborative governance, underscoring the ongoing need for improved communication, clear agreements, and flexible legal frameworks to address the complexities of cross-sector collaboration.

The challenges identified in Surabaya’s collaborative governance underscore the complexities of cross-sector partnerships in urban management and highlight key areas for enhancing the effectiveness of such initiatives. These challenges reveal critical issues, including gaps in need identification, negotiation difficulties, legal complexities, and coordination barriers among stakeholders. These issues are not unique to Surabaya but reflect broader challenges within collaborative governance models, where aligning diverse stakeholder interests and ensuring smooth implementation of joint projects often require sophisticated management and leadership. The scientific significance of these findings lies in their contribution to understanding collaborative governance theory, particularly the challenges of implementing these models in real-world contexts. As noted by Emerson et al. (2012) and Bryson et al. (2015), collaborative governance is essential for addressing complex public issues that necessitate multi-sectoral cooperation. However, findings from Surabaya indicate that theoretical frameworks must also account for practical difficulties that arise during collaboration, such as last-minute renegotiations (as described by Informant EEE) and legal hurdles associated with land use (Informant VVV). These practical challenges, though often underexplored in the literature, are crucial for the success of governance models reliant on public-private partnerships.

From a practical perspective, these findings provide key insights for enhancing future collaborative governance efforts. First, the gap between the initial project plans and the actual community needs, as highlighted by Informant DAD, indicates the necessity of conducting more thorough field assessments prior to project implementation. Addressing this issue enables both the government and private partners to allocate resources more effectively and fully meet community requirements. Furthermore, the negotiation challenges encountered by Informant BNI and the city government underscore the need for clearer and more structured agreements from the outset of collaborative projects. Establishing well-defined and transparent roles and responsibilities can help prevent delays and foster trust among stakeholders. The legal and regulatory complexities raised by Informant VVV reflect the need for a more adaptive and flexible legal framework in collaborative governance. This framework should facilitate smooth land-use transformations while balancing public and private interests. This is particularly crucial in urban areas where commercial and public land uses often conflict.

**Table 2.**  
Key aspects of systemic leadership in urban green space sustainability

<b>Systemic leadership in sustainable collaborative governance of urban green spaces</b>			
The role of systemic leadership in cross-sector collaboration	Strengthening cross-sectoral capacity	Sustainability management	Challenges in collaborative governance
<ul style="list-style-type: none"> <li>▪ inclusive</li> <li>▪ transparent</li> <li>▪ accountable governance</li> <li>▪ sustainability orientation</li> </ul>	<ul style="list-style-type: none"> <li>▪ cross-sector collaboration [local and international]</li> <li>▪ alignment with stakeholder interests</li> <li>▪ project oversight</li> <li>▪ control</li> </ul>	<ul style="list-style-type: none"> <li>▪ community participation</li> <li>▪ integrated environmental, social and infrastructure management</li> <li>▪ waste management</li> <li>▪ infrastructure innovation</li> </ul>	<ul style="list-style-type: none"> <li>▪ identification of needs</li> <li>▪ negotiation challenges</li> <li>▪ legal complexities</li> <li>▪ coordination with stakeholders</li> <li>▪ land use</li> </ul>

Source: Created by the author

Table 2 provides an overview of the key elements of systemic leadership in the sustainability of urban green spaces in Surabaya, these findings contribute to a deeper understanding of the barriers that may hinder collaborative governance and offer practical insights for policymakers and urban planners. By addressing these challenges through better planning, clearer agreements, and legal adaptability, cities like Surabaya can strengthen their collaborative governance models and ensure the successful development of sustainable urban spaces. The coherence between these findings and previous studies underscores that addressing these challenges is essential for advancing both the scientific and practical applications of collaborative governance in urban environments.

### Case study of systemic leadership implementation

The revitalization of Bungkul Park in Surabaya serves as a prime example of systemic leadership, demonstrating how cross-sector collaboration and government oversight can effectively implement urban green space projects. The involvement of the private sector, particularly through Corporate Social Responsibility (CSR) initiatives, played a crucial role in this case. As highlighted by Informant DAD, "In the CSR project at Bungkul Park, we were generally involved in the initial development based on the government's request, budget availability, and our priorities." This illustrates how the government, led by Tri Rismaharini, effectively coordinated with private companies such as PT Telkom to mobilize resources for urban development, even when public funding was insufficient. The findings also underscore the ongoing partnership between PT Telkom and the city government, particularly in the maintenance and revitalization of the park. Informant DAD further explained that after the initial development in 2006.

"We identified many facilities that needed repair, such as damaged pedestrian paths and outdated PT Telkom logos. Consequently, we collaborated with the city government to upgrade these park facilities to ensure they remain comfortable and accessible for public use." (Informant DAD).

This reflects a long-term commitment fostered through systemic leadership, where collaboration extends beyond the initial construction phase to encompass continuous maintenance and improvement efforts. Informant MAM emphasized the notion that systemic leadership is essential in maintaining control over the project: "PT Telkom assisted in constructing Taman Bungkul, but the design remained under the control of the Surabaya city government. After completion, the management was transferred to the government, making the park a public asset." This level of oversight ensures that the park's development aligns with broader city planning objectives, reinforcing the role of leadership in integrating private sector contributions not only operationally but also sustainably within the city's public infrastructure. Moreover, the leadership's ability to coordinate across sectors is evident through the city's control over design and execution. As Informant OAO explained, "The collaboration for Taman Bungkul was significant, involving PT Telkom, though they did not provide direct financial support. Instead, they built the park, with the design originating from the Surabaya city government." These findings illustrate how the Surabaya government retained a strong role in steering the project, ensuring external contributions align with public interests and urban design standards. The systemic leadership exhibited in this project is reflected in the capacity to manage resources, coordinate across sectors, and ensure the project's sustainability beyond the initial implementation phase.

The revitalization of Taman Bungkul under systemic leadership in Surabaya demonstrates a successful model of cross-sector collaboration, particularly in integrating private sector resources with public sector oversight. This case aligns with the literature on collaborative governance, which highlights the importance of leadership in coordinating diverse stakeholders and ensuring alignment with public objectives (Bryson et al. 2015). In the case of Taman Bungkul, as noted by Informant MAM, "PT Telkom helped construct Taman Bungkul, but the design was controlled by the Surabaya city government." This reflects the findings of Emerson et al. (2012), who emphasize that successful collaborative governance requires a central authority to guide and oversee projects, ensuring that private contributions serve broader public interests.

Unlike traditional models where private companies offer financial support without direct involvement in execution, the Taman Bungkul project saw PT Telkom actively participating in the construction process. As Informant OAO stated, "PT Telkom did not directly provide funds. Instead, they constructed the park, with the design originating from the Surabaya city government." This approach differs from the commonly discussed public-private partnership models in the literature, where private entities often provide financing while the public sector handles implementation (Ansell & Gash 2008). Surabaya's approach highlights a more integrated model where private entities directly engage in implementation but under close government supervision, ensuring the project meets public needs.

Furthermore, PT Telkom's involvement in both the initial construction phase and subsequent revitalization, as described by Informant DAD— "We collaborated with the city government to update park facilities to ensure they remain comfortable and accessible for the community" — contrasts with other collaborative efforts where private sector involvement is typically limited to short-term project phases. The sustained collaboration between PT Telkom and the city underscores the value of long-term partnerships in supporting urban development, reinforcing Emerson et al.'s (2012) argument that systemic leadership is crucial for fostering enduring collaboration.

However, unlike some collaborative models that struggle to balance the interests of private and public stakeholders, Surabaya's leadership has successfully navigated these challenges by retaining control over project design and execution. As Bryson et al. (2015) note, one of the primary challenges in collaborative governance is aligning the priorities of private and public entities. In Surabaya, systemic leadership has ensured that while PT Telkom makes substantial contributions to the project, the city maintains control over key aspects such as design and long-term management. This stands in contrast to cases where private interests may dominate collaborative projects.

In conclusion, the Bungkul Park project under Surabaya's systemic leadership aligns with broader collaborative governance theories but stands out due to its effective engagement management of state-owned enterprises through a long-term and sustainable collaboration model. This approach not only ensures the park remains a public asset but also underscores the importance of leadership in maintaining a balance between private contributions and public oversight.

The case of Bungkul Park's revitalization under systemic leadership illustrates the consistent role of cross-sector collaboration in Surabaya's urban development strategy. The previous findings indicate that systemic leadership, particularly under Tri Rismaharini, has been crucial in mobilizing private sector resources, ensuring public oversight, and sustaining urban projects over the long term. As discussed in the section on the Role of Systemic Leadership in Cross-Sector Collaboration, the involvement of PT Telkom in both the initial construction and later revitalization of the park, guided by the city's control over design and implementation, exemplifies how systemic leadership fosters enduring public-private partnerships. Informant DAD emphasized, "PT Telkom helped build the park, but the design was still controlled by the Surabaya city government," highlighting the balance between private sector contributions and public sector management.

The coherence of these findings is further reinforced by the strengthened cross-sector capacity, where the long-term collaboration with PT Telkom extended beyond the park's development. The city's leadership continues to collaborate with PT Telkom to address maintenance needs, as reflected in Informant DAD's comments on the revitalization efforts: "We work with the city government to update park facilities to ensure it remains comfortable and usable by the community." This indicates that systemic leadership in Surabaya treats private sector involvement not as a one-time event but as part of a sustained partnership that contributes to the park's continuity and utility.

In the sustainable management of green spaces, discussions on design and operational control further support the hypothesis that systemic leadership is crucial in ensuring that urban projects, such as Taman Bungkul, align with public interests. Informant MAM states, "After construction, its management was handed over to the government, making it a government asset," highlighting the role of leadership in preserving the public character of these collaborative projects. The transformation of the park into a public asset illustrates how systemic leadership aligns private sector efforts with long-term public ownership, ensuring that the benefits of such collaborations remain accessible to the community. The challenges discussed in collaborative governance, such as stakeholder coordination and legal complexities, provide additional context for understanding the broader framework in which systemic leadership operates. Despite these challenges, Surabaya's leadership effectively manages these issues, ensuring that projects like Taman Bungkul can progress and be maintained. This alignment between public and private interests, along with the ability to navigate challenges, strengthens the hypothesis that systemic leadership is essential for achieving sustainable urban development through collaborative governance. In summary, the findings across this section reveal a coherent narrative where systemic leadership in Surabaya

successfully integrates private sector resources into public projects, maintains oversight and control, and navigates challenges to ensure the long-term success of urban green spaces. This case supports the research hypothesis that systemic leadership plays a vital role in facilitating cross-sector collaboration and sustaining the benefits of such partnerships for public infrastructure development.

## **Conclusion**

This research demonstrates that systemic leadership plays a critical role in collaborative governance for sustainable urban green space management in Surabaya. Under the leadership of Tri Rismaharini, resource contributions from various stakeholders—including the public sector, state-owned and regional enterprises, private entities, non-governmental organizations, and the community—were effectively mobilized. This model illustrates how systemic leadership can steer cross-sector collaboration through clear communication, transparency, and a shared objective orientation. The success of this collaboration, exemplified by the development of Bungkul Park through PT Telkom’s corporate social responsibility (CSR) initiative, shows that systemic leadership not only optimizes resources from various sectors but also ensures that contributions align with public goals. In this role, systemic leaders act as facilitators and mediators, bridging differences among stakeholders, encouraging active participation, and monitoring the alignment of private sector contributions with public governance standards.

The theoretical contribution of this study is the reinforcement of collaborative governance concepts within urban contexts, highlighting systemic leadership as a key factor in achieving long-term sustainability. This study enriches collaborative governance literature by demonstrating that systemic leadership is essential not only for mobilizing resources but also for fostering community involvement and strengthening public oversight mechanisms—an area that has often been underexplored. The findings expand the understanding of urban green governance, showing how effectively managed cross-sector collaboration can offer sustainable solutions to urban environmental challenges. Systemic leadership’s emphasis on inclusivity, as illustrated in the Surabaya case, promotes environmental sustainability and resilience.

For future research, comparative studies encompassing multiple cities in Indonesia or other international contexts are recommended to explore how systemic leadership functions across diverse socio-political and cultural settings. Quantitative studies are also suggested to more accurately measure the impact of systemic leadership on urban green governance outcomes. Such future research would deepen the understanding of leadership roles in collaborative governance and provide broader insights into factors influencing the success of sustainable green space governance.

## **References**

- Acar M, Guo C, & Yang K (2008) Accountability when hierarchical authority is absent: Views from public–private partnership practitioners. *The American Review of Public Administration* 38 (1):3-23. <https://doi.org/10.1177/0275074007299481>.
- Avoyan E (2022) Inside the black box of collaboration: A process-tracing study of collaborative flood risk governance in the Netherlands. *Journal of Environmental Policy & Planning* 24 (2):227-241. <https://doi.org/10.1080/1523908X.2021.2000380>.
- Ansell C & Gash A (2008) Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory* 18 (4):543-571. <https://doi.org/10.1093/jopart/mum032>.
- Ansell C & Gash A (2012) Stewards, mediators, and catalysts: Towards a model of collaborative leadership. *The Innovation Journal: The Public Sector Innovation Journal* 17 (1):1-20. <https://www.proquest.com/scholarly-journals/stewards-mediators-catalysts-toward-model/docview/1362242533/se-2>.
- Ansell C & Torfing J (2021) *Public Governance as Co-Creation: A Strategy for Revitalizing the Public Sector and Rejuvenating Democracy*. London: Cambridge University Press.
- Aronson M, Lepczyk C, Evans K, Goddard M, Lerman S, MacIvor J, & Vargo T (2017) Biodiversity in the city: Key challenges for urban green space management. *Frontiers in Ecology and the Environment* 15 (4):189-196. <https://doi.org/10.1002/fee.1480>.

- Bianchi C, Nasi G, & Rivenbark WC (2021) Implementing collaborative governance: Models, experiences, and challenges. *Public Management Review* 23 (11):1581-1589. <https://doi.org/10.1080/14719037.2021.1878777>.
- Bryson JM, Crosby BC, & Bloomberg L (2014) Public value governance: Moving beyond traditional public administration and the new public management. *Public Administration Review* 74 (4):445-456. <https://doi.org/10.1111/puar.12238>.
- Bryson JM, Crosby BC, & Stone MM (2006) The design and implementation of cross-sector collaborations: Propositions from the literature. *Public Administration Review* 66 (s1):44-55. <https://doi.org/10.1111/j.1540-6210.2006.00665.x>.
- Bryson JM, Crosby BC, & Stone MM (2015) Designing and implementing cross-sector collaborations: Needed and challenging. *Public Administration Review* 75 (5):647-666. <https://doi.org/10.1111/puar.12432>.
- Bulkeley H (2010) Cities and the governing of climate change. *Annual Review of Environment and Resources* 35 (1):229-253. <https://doi.org/10.1146/annurev-environ-072809-101747>.
- Bussu S & Bartels K (2013) Facilitative leadership and the challenge of renewing local democracy in Italy. *International Journal of Urban and Regional Research* 38 (6):2256-2273. <https://doi.org/10.1111/1468-2427.12070>.
- Chen C, Bi L, & Zhu K (2021) Study on spatial-temporal change of urban green space in yangtze river economic belt and its driving mechanism. *International Journal of Environmental Research and Public Health* 18 (23):12498. <https://doi.org/10.3390/ijerph182312498>.
- Cristofoli D, Douglas S, Torfing J, & Trivellato B (2022) Having it all: Can collaborative governance be both legitimate and accountable? *Public Management Review* 24 (5):704-728. <https://doi.org/10.1080/14719037.2021.1960736>.
- Denzin NK & Lincoln YS (2005) Introduction: The discipline and practice of qualitative research. In: Denzin NK & Lincoln YS (ed). *Handbook of Qualitative Research*, 3rd Edition. Thousand Oaks: Sage. 1-32.
- Douglas S, Ansell C, Parker CF, Sørensen E, 'T Hart P, & Torfing J (2020) Understanding collaboration: Introducing the collaborative governance case databank. *Policy and Society* 39 (4):495-509. <https://doi.org/10.1080/14494035.2020.1794425>.
- Emerson K & Nabatchi T (2015a) *Collaborative governance regimes*. Washington DC: Georgetown University Press.
- Emerson K & Nabatchi T (2015b) Evaluating the productivity of collaborative governance regimes: A performance matrix. *Public Performance & Management Review* 38 (4):717-747. <https://doi.org/10.1080/15309576.2015.1031016>.
- Emerson K, Nabatchi T, & Balogh S (2012) An integrative framework for collaborative governance. *Journal of Public Administration Research and Theory* 22 (1):1-29. <https://doi.org/10.1093/jopart/mur011>.
- Gallo T, Fidino M, Lehrer E, & Magle S (2017) Mammal diversity and metacommunity dynamics in urban green spaces: Implications for urban wildlife conservation. *Ecological Applications* 27 (8):2330-2341. <https://doi.org/10.1002/eap.1611>.
- George AL & Bennett A (2005) *Case Studies and Theory Development in the Social Sciences*. London: Cambridge University Press.
- Gómez-Baggethun E & Barton DN (2013) Classifying and valuing ecosystem services for urban planning. *Ecological Economics*, Elsevier 86 (C):235-245. <https://www.sciencedirect.com/science/article/abs/pii/S092180091200362X>.
- Hofstad H, Sørensen E, Torfing J, & Vedeld T (2022) Designing and leading collaborative urban climate governance: Comparative experiences of co-creation from Copenhagen and Oslo. *Environmental Policy and Governance* 32 (3):203-216. <https://doi.org/10.1002/eet.1984>.
- Huxham C & Vangen S (2005) *Managing to Collaborate: The Theory and Practice of Collaborative Advantage*. London: Routledge.
- Kabisch N, Korn H, Stadler J, & Bonn A (2017) Nature-based solutions to climate change adaptation in urban areas. <https://doi.org/10.1007/978-3-319-56091-5>.
- Kalesnikaite V (2019) Keeping cities afloat: Climate change adaptation and collaborative governance at the local level. *Public Performance & Management Review* 42 (4):864-888. <https://doi.org/10.1080/15309576.2018.1526091>.



- Liu Y, Wu J, Yi H, & Wen J (2021) Under what conditions do governments collaborate? A qualitative comparative analysis of air pollution control in China. *Public Management Review* 23 (11):1664-1682. <https://doi.org/10.1080/14719037.2021.1879915>.
- Maxwell JA (2008) *Designing a qualitative study* (Vol. 2). The SAGE Handbook of Applied Social Research Methods. California: Sage Publications. 214-253.
- Miles MB, Huberman AM, & Saldaña J (2018) *Qualitative Data Analysis: A Methods Sourcebook*. California: SAGE Publications.
- Ney S & Verweij M (2015) Messy institutions for wicked problems: How to generate clumsy solutions? *Environment and Planning C Government and Policy* 33 (6):1679-1696. <https://doi.org/10.1177/0263774x15614450>.
- Page SB & Stone MM (2023) Collaborative architecture: Components, relationships, and implications for partner influence. *Perspectives on Public Management and Governance* 6 (1):14-27. <https://doi.org/10.1093/ppmgov/gvac027>.
- Page S, Stone MM, Bryson JM, & Crosby BC (2015) Public value creation by cross-sector collaborations: A framework and challenges of assessment. *Public Administration* 93 (3):715-732. <https://doi.org/10.1111/padm.12161>.
- Parker C, Scott S, & Geddes A (2019) *Snowball Sampling*. California: SAGE Research Methods Foundations.
- Purdy JM (2012) A framework for assessing power in collaborative governance processes. *Public administration review* 72 (3):409-417. <https://doi.org/10.1111/j.1540-6210.2011.02525.x>.
- Stake RE (2005) Qualitative case studies. In: Denzin NK & Lincoln YS (ed). *The Sage Handbook of Qualitative Research*, 3rd Edition. London: Sage Publications. 443-466.
- Stake RE (2010) *Qualitative Research: Studying How Things Work*. New York: The Guilford Press.
- Sørensen E & Torfing J (2009) Making governance networks effective and democratic through metagovernance. *Public Administration* 87 (2):234-258. <https://doi.org/10.1111/j.1467-9299.2009.01753.x>.
- Sørensen E & Torfing J (2021) *Making Public Governance More Democratic: A Public Value Approach*. London: Cambridge University Press.
- Sørensen E & Torfing J (2022) Co-creating ambitious climate change mitigation goals: The Copenhagen experience. *Regulation & Governance* 16 (2):572-587. <https://doi.org/10.1111/rego.12374>.
- Torfing J, Sørensen E, & Røiseland A (2020) Transforming the public sector into an arena for co-creation: Barriers, drivers, benefits, and ways forward. *Administration & Society* 52 (4):566-596. <https://doi.org/10.1177/0095399719858322>.
- Ulibarri N (2015) Collaboration in federal hydropower licensing: Impacts on process, outputs, and outcomes. *Public Performance & Management Review* 38 (4):578-606. <https://doi.org/10.1080/15309576.2015.1031004>.
- Voets J, Verhoest K, & Molenveld A (2008) Coordinating for integrated outcomes: An analysis of collaboration mechanisms in local and regional government in Flanders. *International Journal of Public Administration* 31 (12):1252-1276. <https://doi.org/10.1080/01900690802197104>.
- Wang G (2024) Optimization of green space pattern for alleviating the urban heat island effect in Qiantang district. 274-282. [https://doi.org/10.2991/978-94-6463-398-6\\_27](https://doi.org/10.2991/978-94-6463-398-6_27).
- Wolch J, Byrne J, & Newell J (2014) Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and Urban Planning* 125: 234-244. <https://doi.org/10.1016/j.landurbplan.2014.01.017>.
- Yin RK (2014) *Case Study Research*. California: SAGE Publications.
- Yin RK (2006) Mixed methods research: Are the methods genuinely integrated or merely parallel. *Research in the Schools* 13 (1):41-47.

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