

The Social Dynamics of Collaborative Governance in Disaster Management: A Systematic Literature Review of Jakarta and Comparable Indonesian Cities

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Abstract

Disasters constitute an inherent and recurrent phenomenon that disrupts social structures and generates substantial losses, with Jakarta facing acute vulnerabilities due to high population density, rapid urbanization, and exposure to floods and other hazards. This study aims to systematically review the implementation of collaborative governance in disaster management efforts in Jakarta, Indonesia, with the objective of identifying patterns of stakeholder collaboration, institutional constraints, and strategies to enhance urban resilience. This research adopted a Systematic Journal Review (SJR) methodology in accordance with PRISMA guidelines. A comprehensive search was conducted across reputable databases including Scopus, Web of Science, ScienceDirect, Taylor & Francis Online, and Google Scholar, resulting in the inclusion of ten relevant peer-reviewed studies published between 2020 and 2025 after rigorous screening. The results indicate that collaborative governance enhances coordination among government institutions, private sector actors, NGOs, and communities, thereby improving disaster mitigation, emergency response, and recovery processes through trust-building and participatory mechanisms. Key facilitators include institutional trust, effective communication, and community engagement, while persistent barriers encompass weak inter-organizational coordination, sectoral egos, and resource limitations. Collectively, the findings affirm the strategic importance of collaborative approaches in fostering adaptive governance for disaster risk reduction in metropolitan contexts. In conclusion, the effective implementation of collaborative governance is crucial for strengthening sustainable disaster management and urban resilience in Jakarta.

2172

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Keywords: Collaborative Governance; Disaster Management; Jakarta; Stakeholder Collaboration; Urban Resilience.

INTRODUCTION

Disasters represent an inherent and recurrent phenomenon within human systems, characterized by their capacity to disrupt social structures, degrade environmental conditions, and generate multidimensional losses. Conceptually, disasters are defined as events or a series of occurrences that threaten and disturb community life, resulting in fatalities, environmental damage, economic losses, and psychological impacts (Taryana et al., 2022). From an analytical perspective, disaster causation can be classified into three principal categories: natural, non-natural, and anthropogenic factors. This multidimensional nature underscores the necessity of integrative governance approaches in disaster management.

Indonesia has documented 25,451 disaster events between January 19, 2020, and January 19, 2026, with floods dominating the occurrences at 9,172 events. These events have resulted in substantial cumulative impacts, encompassing 4,361 fatalities, the displacement of over 47 million individuals, and damage to 657,838 buildings. The empirical findings indicate a structurally embedded vulnerability within Indonesia's socio-ecological system, as demonstrated by detailed flood vulnerability analyses in various regions (Suryanto et al., 2026; Puspitasari et al., 2026). Consequently, disaster risk reduction constitutes a strategic priority that requires both structural and governance-based interventions to address systemic risks effectively (Gunandar et al., 2024; Dwirahmadi et al., 2023).

At the regional level, the Special Capital Region of DKI Jakarta represents a highly complex risk environment. With a population of 10,672,100 (BPS DKI Jakarta, 2023) and an area of 661.52 km², Jakarta reached a population density of 15,976 inhabitants per km² in 2024 (Badan Pusat Statistik, 2024), making it the most densely populated province in Indonesia. Rapid urbanization and demographic concentration intensify spatial pressure and increase exposure to disaster risks. Eldi (2021) emphasizes that urban development produces a dual effect: while enhancing socio-economic productivity, it simultaneously generates complex vulnerabilities, particularly in high-density settlements.

Within this context, Jakarta, Indonesia, is exposed to multiple disaster threats, including floods, earthquakes, extreme weather events, technological failures, epidemics, and urban fires. Among these hazards, floods and urban fires remain the most recurrent and destructive. Rapid urbanization, high population density, unregulated settlement expansion, and environmental



degradation significantly increase the risk of urban disasters, particularly fires (Saragih & Lestari, 2023). In addition, climate variability, inadequate drainage systems, and hydrological constraints exacerbate flood vulnerability in various urban areas intersected by major river systems, including the Ciliwung River. These conditions position Jakarta as one of the most disaster-prone metropolitan regions in Indonesia.

Previous empirical studies indicate that densely populated urban settlements in Jakarta experience heightened disaster vulnerability due to spatial limitations, inadequate infrastructure, and limited environmental carrying capacity (Fubani, 2024). Informal settlements located along riverbanks and densely built residential areas have reduced ecological buffer capacity, thereby intensifying the impacts of recurrent flooding and increasing susceptibility to urban fires (Wardiningsih & Salam, 2019). Furthermore, disaster occurrences in Jakarta demonstrate a persistent and systemic pattern rather than isolated incidents, reflecting the urgent need for integrated and sustainable disaster governance mechanisms (Wardiningsih & Salam, 2019).

From a theoretical perspective, disaster management encompasses four interconnected phases: mitigation, preparedness, response, and recovery. Among these phases, preparedness plays a crucial role in minimizing disaster impacts through institutional capacity building, early warning systems, community awareness enhancement, and disaster risk reduction strategies (Amil, 2025). However, previous studies on disaster management practices in Jakarta reveal substantial gaps in preparedness capacity. These include limited logistical resources, inadequate maintenance of emergency infrastructure and equipment, insufficient coordination mechanisms, and the lack of continuous disaster training and simulation activities. Consequently, institutional readiness and community resilience remain suboptimal in addressing urban disaster risks.

The complexity of disaster management in Jakarta is further intensified by governance-related challenges. Although multiple stakeholders—including government agencies, non-governmental organizations, private sector actors, and community-based organizations—are formally involved in disaster management processes, collaboration among these actors often remains fragmented, reactive, and sectoral in nature. Existing initiatives across pre-disaster, emergency response, and post-disaster recovery phases have not been fully institutionalized within a comprehensive collaborative governance framework. Key constraints include limited resource capacity, weak inter-organizational coordination, low levels of public participation, and the exclusion of relevant stakeholders from strategic decision-making processes. In many cases, disaster management policies and standard operating procedures are formulated without inclusive deliberation, thereby reducing their practical effectiveness and implementation



outcomes. These conditions reveal a significant gap between the theoretical framework of collaborative governance proposed by Ansell and Gash and its empirical implementation within disaster management practices. Collaborative governance emphasizes inclusive, consensus-oriented, and multi-stakeholder decision-making processes in addressing complex public issues. Empirical studies by (Agustina et al., (2024)) demonstrate that effective collaboration among stakeholders contributes to improved coordination, decision-making quality, resource mobilization, and disaster management effectiveness. Nevertheless, in the context of Jakarta, collaborative practices in disaster management frequently remain situational and emergency-driven rather than sustainable, adaptive, and embedded within long-term preparedness strategies.

Based on the foregoing analysis, the core problem addressed in this Systematic Literature Review (SLR) lies in the suboptimal implementation of collaborative governance in disaster management efforts in Jakarta, Indonesia. This issue is highly significant because it directly affects community safety, socio-economic stability, institutional effectiveness, and urban resilience. Moreover, the problem is inherently multidimensional, involving interconnected aspects such as demographic pressure, urban spatial constraints, institutional fragmentation, resource limitations, and community dependency on government intervention during disaster events.

Accordingly, this study seeks to address the following research question: How is collaborative governance implemented in disaster management efforts in Jakarta, Indonesia? This inquiry is further elaborated through an examination of stakeholder collaboration patterns, institutional and resource constraints, governance mechanisms, and the role of community participation in disaster management processes. In line with this objective, the study aims to analyze the implementation of collaborative governance in disaster management, identify gaps between theoretical constructs and empirical practices, and formulate strategic recommendations to strengthen collaborative disaster governance in urban contexts.

By integrating empirical evidence with the theoretical framework of collaborative governance, this study contributes to the development of disaster management literature, particularly within densely populated urban environments. Furthermore, this introduction establishes the conceptual and contextual foundation for subsequent sections of the study, especially the systematic review of relevant literature and empirical findings.



METHOD

A. Research Design

This study employed a Systematic Journal Review (SJR) as the primary research design to identify, evaluate, and synthesize contemporary scientific evidence related to the implementation of collaborative governance in disaster management efforts in Jakarta, Indonesia. The Systematic Journal Review approach was considered appropriate because it enables the development of a comprehensive, transparent, and evidence-based understanding of collaborative governance practices across various disaster management contexts. In addition, this method facilitates the integration of fragmented findings from previous studies concerning inter-organizational collaboration, stakeholder participation, institutional coordination, and policy implementation in disaster risk management.

B. Data Sources and Search Strategy

A comprehensive literature search was conducted across several reputable electronic databases, including Scopus, Web of Science, ScienceDirect, Taylor & Francis Online, and Google Scholar. The keywords were systematically organized into several thematic clusters aligned with the research objectives:

1. Collaborative Governance Dimension:
"Collaborative governance" OR "Collaborative management" OR "Inter-organizational collaboration" OR "Multi-stakeholder governance" OR "Network governance"
2. Disaster Management Dimension:
"Disaster management" OR "Disaster risk reduction" OR "Emergency management" OR "Disaster mitigation" OR "Crisis management"
3. Stakeholder and Institutional Dimension:
"Stakeholder participation" OR "Government collaboration" OR "Public-private partnership" OR "Community engagement" OR "Institutional coordination"
4. Contextual Scope (Jakarta and Urban Disaster Context):
"Jakarta" OR "Urban disaster" OR "Flood management" OR "Urban resilience" OR "Indonesia"

The search strategy was designed to capture interdisciplinary studies examining the implementation, coordination mechanisms, and effectiveness of collaborative governance within disaster management efforts, particularly in urban and metropolitan contexts such as Jakarta.



C. Inclusion and Exclusion Criteria

To ensure the relevance and quality of the selected studies, clearly defined inclusion and exclusion criteria were applied.

Inclusion criteria:

1. Peer-reviewed journal articles published between 2020 and 2025
2. Articles available in full-text format
3. Publications written in English or Indonesian
4. Studies addressing collaborative governance, stakeholder collaboration, or institutional coordination in disaster management
5. Research conducted within disaster management, urban governance, public administration, or related policy contexts
6. Studies focusing on Indonesia, Jakarta, or comparable urban disaster management settings

Exclusion criteria:

1. Non-scientific publications (e.g., blogs, opinion articles, news reports)
2. Conference proceedings without peer review
3. Studies lacking clear methodological rigor
4. Articles not relevant to collaborative governance in disaster management
5. Studies without sufficient empirical or conceptual contribution to the research objectives

D. Study Selection Process

The article selection process was conducted by two independent reviewers to minimize bias and improve the reliability of the review process. The selection procedure involved several stages:

1. Title and abstract screening based on predefined inclusion and exclusion criteria
2. Full-text assessment for eligibility
3. Resolution of discrepancies through discussion or consultation with a third reviewer when necessary

This multi-stage screening process ensured that only relevant, high-quality, and methodologically rigorous studies were included in the final synthesis.



E. PRISMA Flow Diagram

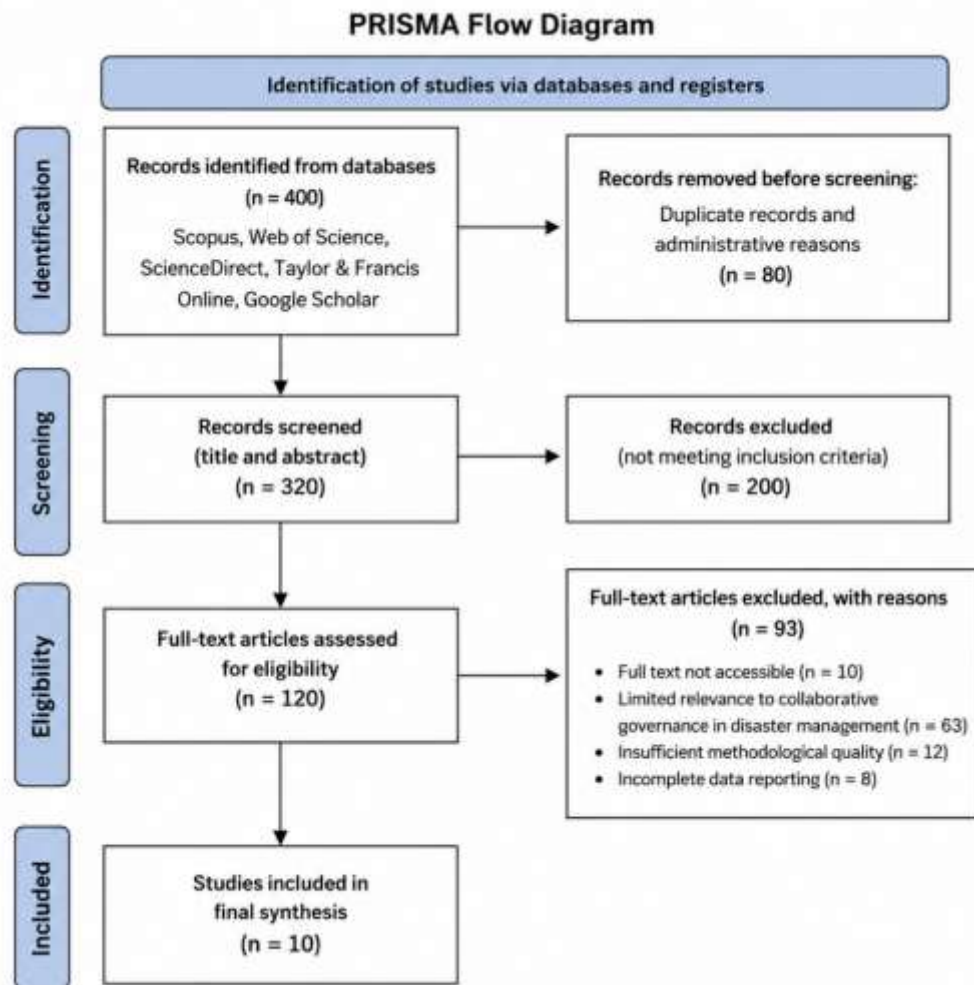


Figure 1. PRISMA Flow Diagram

(Source: https://estech.shinyapps.io/prisma_flowdiagram/)

The PRISMA flow diagram was used to illustrate the systematic process of article identification, screening, eligibility assessment, and final inclusion. The initial database search identified 400 articles, of which 80 were removed prior to screening due to duplication and administrative reasons. Subsequently, 320 articles underwent title and abstract screening, resulting in the exclusion of 200 articles that did not meet the inclusion criteria. A total of 120 articles were then assessed for full-text eligibility, with 10 articles excluded due to inaccessible full texts. During the eligibility stage, 83 articles were further excluded because of limited relevance to collaborative governance in disaster management, insufficient methodological quality, or

2178

incomplete data reporting. Ultimately, 10 studies fulfilled all inclusion criteria and were included in the final synthesis.

F. Data Extraction

Data extraction was conducted systematically using a structured extraction form to ensure consistency and comprehensiveness across all selected studies. The extracted information included:

1. Author(s), year of publication, and research context
2. Research design and methodological approach
3. Key concepts related to collaborative governance and disaster management
4. Stakeholders involved in collaborative processes
5. Coordination mechanisms and governance structures implemented
6. Main findings related to the effectiveness of collaborative governance in disaster management efforts
7. Study limitations and practical implications

G. Data Analysis and Synthesis

The collected data were analyzed using a thematic synthesis approach to identify, compare, and integrate recurring patterns across the reviewed studies. The synthesis was organized into three primary analytical themes:

1. Conceptual and theoretical perspectives of collaborative governance in disaster management
2. Mechanisms of stakeholder collaboration and institutional coordination in disaster management efforts
3. The impact of collaborative governance on disaster response effectiveness, policy implementation, and urban resilience in Jakarta

Furthermore, a quality assessment of the included studies was conducted using evaluation tools appropriate to their respective research designs. This assessment ensured that the synthesis was grounded in reliable, valid, and scientifically rigorous evidence. The overall analytical process was carried out systematically to maintain objectivity, consistency, and accuracy in interpreting the findings. Through this process, the study contributes to the development of a comprehensive understanding of collaborative governance implementation in disaster management efforts in Jakarta, Indonesia.



RESULTS AND DISCUSSION

A. Literature Search Strategy

The literature search process in this study was conducted systematically and comprehensively to support the development of an integrative understanding of collaborative governance implementation in disaster management efforts in Jakarta, Indonesia. Several internationally recognized academic databases were utilized, including [Scopus](#), [Web of Science](#), [ScienceDirect](#), [Taylor & Francis Online](#), and [Google Scholar](#). The search strategy employed a combination of keywords relevant to the research topic, such as “collaborative governance,” “disaster management,” “disaster risk reduction,” “multi-stakeholder collaboration,” “emergency response,” “urban disaster governance,” and “Jakarta,” which were connected using Boolean operators (AND, OR).

The initial search process identified a total of 400 articles. After the removal of duplicate records and administrative screening, 320 articles remained for further evaluation. Subsequently, the title and abstract screening process resulted in 120 articles that met the preliminary inclusion criteria for full-text assessment. Following a rigorous review based on predefined inclusion and exclusion criteria particularly studies focusing on collaborative governance in disaster management, stakeholder coordination, institutional collaboration, public participation, and empirical or theoretical contributions related to disaster governance in urban contexts a total of 27 articles were considered relevant. From these, 10 primary studies were selected as the most representative and methodologically robust for in-depth analysis and thematic synthesis. This systematic literature search strategy ensures the comprehensiveness, transparency, and reproducibility of the review process. Furthermore, it strengthens the validity and reliability of the findings regarding the implementation of collaborative governance in disaster management efforts within the context of Jakarta, Indonesia.

B. Quality Assessment and Risk of Bias

The methodological quality of the selected studies was evaluated using established appraisal instruments adapted to different research designs. Qualitative studies were assessed using the Critical Appraisal Skills Programme (CASP), while quantitative studies were evaluated using the Joanna Briggs Institute (JBI) critical appraisal tools. The assessment criteria included the clarity of research objectives, appropriateness of research design, validity and reliability of data collection instruments, rigor of analytical techniques, and transparency in the presentation of findings.



The quality assessment results indicate that most of the selected studies demonstrate good methodological rigor, particularly in relation to conceptual clarity and relevance to collaborative governance practices in disaster management. Several studies effectively explain the roles of government institutions, community organizations, private sector actors, and non-governmental organizations in strengthening disaster preparedness, emergency response, and post-disaster recovery processes in Jakarta and other urban areas. Nevertheless, several potential sources of bias were identified, including limited case coverage, inconsistencies in stakeholder representation, contextual limitations related to urban governance systems, and challenges in generalizing findings across different disaster management settings.

Overall, the level of confidence in the selected studies can be categorized as moderate to high. Therefore, the findings provide a sufficiently reliable foundation for developing a comprehensive understanding of collaborative governance implementation in disaster management efforts, particularly within the complex urban governance context of Jakarta, Indonesia.

C. Characteristics of the Selected Studies

The ten primary studies analyzed in this research primarily examine the implementation of collaborative governance in disaster management efforts within urban and metropolitan contexts, particularly in Jakarta, Indonesia. These studies demonstrate methodological diversity, including qualitative approaches such as case studies, phenomenological research, and policy analysis; quantitative approaches such as surveys and statistical modeling; as well as mixed-methods studies integrating both qualitative and quantitative perspectives. The study participants and institutional settings commonly involve local government agencies, disaster management authorities, community organizations, non-governmental organizations, private sector actors, volunteers, and affected communities engaged in disaster risk reduction and emergency response activities.

The organizational and governance contexts explored in the selected studies include flood management, urban resilience programs, emergency response coordination, climate adaptation initiatives, and disaster preparedness systems within densely populated urban environments. Several studies specifically highlight the strategic role of collaborative governance mechanisms in facilitating coordination among stakeholders, improving communication networks, enhancing resource sharing, and strengthening participatory decision-making processes during disaster management implementation.



Furthermore, the reviewed studies emphasize that effective collaborative governance depends on several critical factors, including institutional trust, leadership commitment, inter-organizational coordination, policy integration, stakeholder participation, and community engagement. The findings collectively indicate that collaborative governance plays a significant role in improving disaster management effectiveness, strengthening urban resilience, and promoting sustainable disaster risk reduction strategies in Jakarta. In addition, the studies demonstrate that the success of disaster management initiatives is strongly influenced by the ability of multiple stakeholders to establish adaptive, inclusive, and coordinated governance systems capable of responding to complex urban disaster challenges.

Table 1. Summary of Characteristics and Key Findings of Empirical Studies on the Implementation of Collaborative Governance in Disaster Management Efforts in Jakarta, Indonesia

Author (Year)	Study Design	Subjects & Objects of Research	Intervention	Findings
Agustina et al. (2024)	Qualitative (content analysis and case study)	Flood disaster mitigation in Jakarta; stakeholders including government agencies, private sector, community-based organizations, NGOs, and international partners	Collaborative governance framework applied to flood mitigation projects, including canal dredging, nature-based solutions, and multi-stakeholder partnerships	The implementation of collaborative governance in Jakarta's flood management operated optimally through strong synergy between the private sector and community stakeholders. International funding was managed effectively to



				support targeted infrastructure improvements. Community-based organizations enhanced urban resilience via participatory strategies and green infrastructure initiatives. However, sustained collaborative efforts are essential to overcome fragmented coordination and ensure long-term sustainability in disaster risk reduction.
Khafian (2023)	Qualitative descriptive (literature and secondary data analysis)	Disaster management across Indonesia with specific reference to Jakarta floods; government agencies	Collaborative governance in pre-disaster (mitigation/preparedness) and post-disaster (response/recovery) phases, emphasizing coordination and	Collaborative governance facilitated coordination between government and non-government agencies for effective

		(BNPB, BPBD), non-government actors, and communities	community-based approaches	emergency mitigation in disaster-prone areas such as Jakarta. Pre-disaster phases built disaster-resilient communities through partnerships, information-sharing platforms (e.g., Petabencana.id), and community preparedness programs. Post-disaster recovery relied on community-based assistance and multi-sectoral cooperation. Weak coordination, sectoral egos, and leadership gaps remained key barriers to full implementation.
Nilawati (2022)	Qualitative descriptive	Covid-19 pandemic	Collaborative governance model in	Collaborative governance was

		emergency response in Gunungkidul Regency (lessons applicable to urban disaster management in Jakarta); local government, private sector, and community actors	disaster emergency response, involving task forces, partnerships, and new public management principles	successfully realized through principles of togetherness, shared motivation, and joint action capacity among government, private, and community stakeholders. Deliberative forums and mutual trust enabled effective case tracking, isolation, and social assistance during the emergency phase. Partnerships between public and private sectors aligned with new public management principles, enhancing operational and funding capacity. The approach proved suitable
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				for disaster emergency response but requires extension to post-disaster socio-economic recovery.
Atmojo et al. (2025)	Qualitative descriptive (case study)	Flood management along the Ciliwung River in East Jakarta; BPBD, local government, community groups, and related institutions	Collaborative governance in flood mitigation, focusing on trust-building, shared responsibility, and technical-community coordination	Collaborative governance in Ciliwung River flood management in East Jakarta was implemented smoothly through mutual understanding and gotong-royong (mutual assistance) among stakeholders. Government actors provided technical leadership while communities contributed local knowledge and solidarity. Trust, togetherness, and solidarity emerged as core

				facilitators of effective collaboration. The model reduced flood impacts but highlighted the need for stronger institutional support to sustain long-term mitigation efforts.
Suroso (2024)	Qualitative descriptive (interviews, observation, documentation)	Post-landslide disaster management in Banyumas Regency (applicable to Jakarta's multi-hazard context); regional officials, businesses, and community groups	Collaborative governance in post-disaster recovery, including joint preparedness training and resource sharing	Collaborative governance between regional officials, businesses, and community groups operated effectively in post-disaster landslide recovery through combined preparedness activities and joint training. Mutual trust and shared responsibility enabled optimal handling and recovery processes. Obstacles

				included limited awareness among some parties, yet overall collaboration positively influenced disaster management outcomes. The model demonstrated the value of inclusive stakeholder engagement for urban resilience-building in flood-prone areas such as Jakarta.
Lestari (2025)	Qualitative (actor communication analysis)	Disaster management implementation in urban settings (Jakarta-relevant); actors including BPBD and supporting institutions	Communication and collaboration mechanisms within collaborative governance for disaster management	Effective communication between actors strengthened collaborative governance in disaster management implementation. Limited facilities and infrastructure were partially mitigated through multi-stakeholder

				coordination. Actor networks facilitated better information flow and joint decision-making. Enhanced communication channels are recommended to overcome remaining barriers in disaster response and preparedness in densely populated areas like Jakarta.
Thahir (2022)	Qualitative descriptive with verification analysis	Post-disaster social policy in Banten Province following the 2018 tsunami; stakeholders comprising local/central government, community organizations, universities, private sector, NGOs, and military units	Collaborative governance in post-disaster recovery across multiple sectors, emphasizing coordination, community-based approaches, and facilitative leadership	Collaborative governance has been implemented in Banten's post-disaster social policy through coordinated rehabilitation of housing, health, education, and worship facilities using technical standards and local cultural wisdom. Multi-

		(e.g., Kodim 0623 Cilegon) in residential, economic, social, and infrastructure sectors		actor involvement including NGOs, private sector, and academia has facilitated resource mobilization and community empowerment during recovery. However, obstacles such as bureaucratic delays, limited budgets (0.02%–0.07% of regional allocation), and weak inter-agency coordination have hindered consistent policy implementation. Facilitative leadership and enhanced network structures are essential to overcome power and resource gaps for more effective post-disaster outcomes
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				applicable to Jakarta's urban recovery contexts.
Hidayatullah et al. (2024)	Qualitative descriptive	Flood management in Semarang City; stakeholders including BPBD Kota Semarang, BAPPEDA, DPU, private sector, and local communities	Collaborative governance process based on Ansell & Gash indicators (face-to-face dialogue, trust building, commitment to process, shared understanding, and intermediate outcomes)	Collaborative governance in Semarang flood management has progressed effectively through regular face-to-face dialogue, trust building, and stakeholder commitment, resulting in structured strategic plans for faster response. Network structures without hierarchy and easy information access have supported human resource involvement and intermediate outcomes. However, shared understanding

				remains suboptimal due to differing perceptions between private sector, community, and BPBD regarding flood causes and drainage authority. Governance limitations, centralized decision-making, and compartmentalized resource access continue to impede full collaborative effectiveness in urban flood handling
Sanahan (2024)	Collaborative governance in Palembang flood management has facilitated improved	Flood disaster management in Palembang City; BPBD, local government agencies, private sector,	Collaborative governance in flood handling emphasizing coordination, resource sharing, and community-based preparedness	Collaborative governance in Palembang flood management has facilitated improved coordination between BPBD

	coordination between BPBD	and community groups		and other actors, resulting in more efficient emergency response and recovery processes. Community involvement and private-sector contributions have enhanced local preparedness and reduced response times. However, sectoral egos and limited resource allocation have constrained optimal implementation. Sustained trust- building and institutional support are necessary to strengthen long- term collaborative outcomes in flood-prone urban settings.
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Junaidi (2023)	Qualitative descriptive	Flood handling in Samarinda City; government institutions, private sector, and local communities	Collaborative governance framework applied to flood response and mitigation efforts	Collaborative governance in Samarinda has enabled clearer role division and mutual trust among stakeholders, supporting progressive flood mitigation through joint programs. Government technical leadership combined with community local knowledge has contributed to reduced disaster impacts. Persistent challenges in inter-agency communication and funding have limited full effectiveness. The model provides valuable insights for enhancing collaborative
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				mechanisms in densely populated riverine cities similar to Jakarta.
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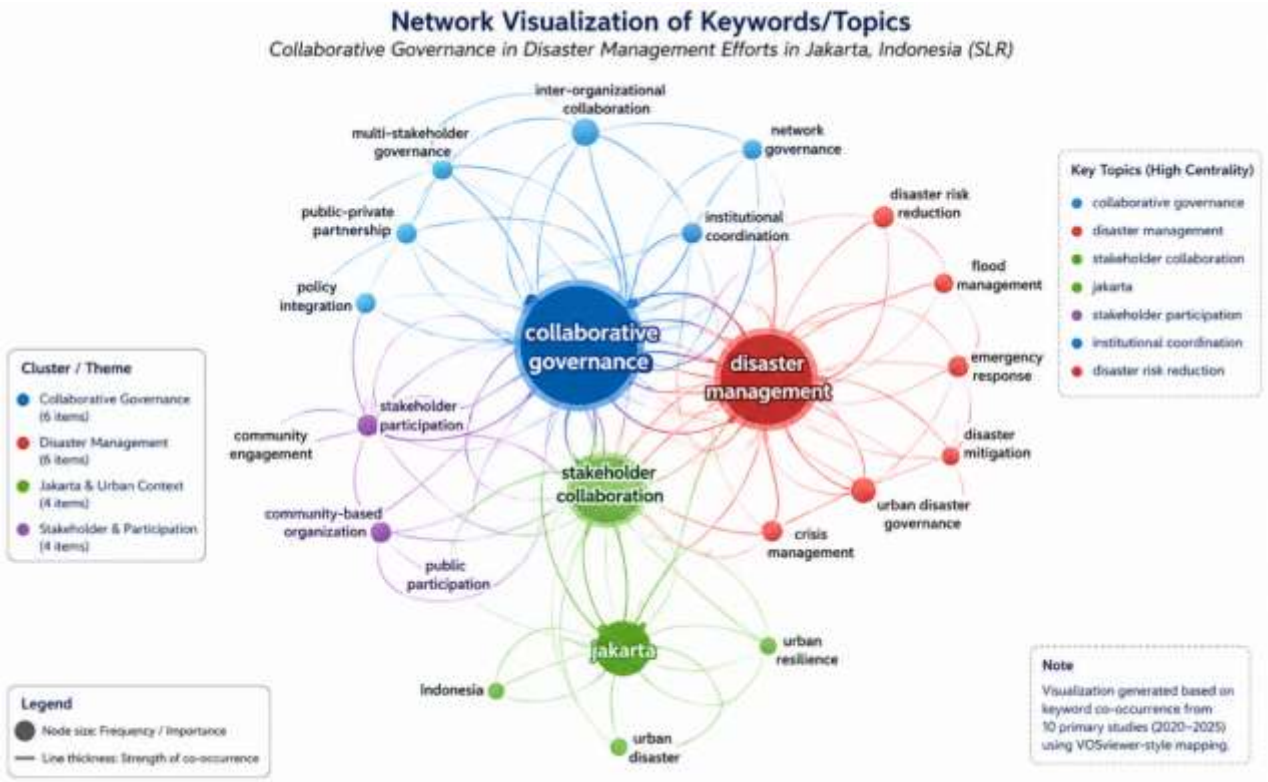


Figure 1. Network Visualization of Keyword Co-Occurrence on Collaborative Governance in Disaster Management Efforts in Jakarta, Indonesia

The network visualization demonstrates the interrelationship among major keywords and thematic clusters identified in the selected studies on collaborative governance in disaster management efforts in Jakarta, Indonesia. The visualization indicates that “collaborative governance” and “disaster management” emerged as the most dominant and highly connected keywords, signifying their central role in the reviewed literature. These core themes are strongly associated with other important concepts such as “stakeholder collaboration,” “institutional

coordination,” “emergency response,” “urban resilience,” and “disaster risk reduction,” reflecting the multidimensional nature of disaster governance in urban settings. Furthermore, the dense interconnections among the nodes illustrate that disaster management effectiveness in Jakarta is highly dependent on integrated coordination mechanisms involving government institutions, communities, private sectors, and non-governmental organizations.

The visualization also reveals several thematic clusters representing different dimensions of collaborative disaster governance. The blue cluster emphasizes governance structures and inter-organizational collaboration, while the red cluster focuses on operational disaster management aspects such as mitigation, emergency response, and flood management. In addition, the green and purple clusters highlight the importance of stakeholder participation, community engagement, and urban resilience within the Jakarta disaster management context. Overall, the network pattern suggests that collaborative governance has evolved into an interdisciplinary and adaptive framework that integrates institutional coordination, participatory governance, and urban resilience strategies to address complex disaster challenges in metropolitan areas such as Jakarta.

DISCUSSION

Based on the research that has been conducted, it can be explained that the implementation of *collaborative governance* in disaster management efforts in Jakarta, Indonesia demonstrates a significant contribution toward strengthening urban disaster resilience through multi-stakeholder collaboration. The reviewed studies collectively indicate that effective disaster governance depends on coordination among government institutions, private sector actors, community organizations, non-governmental organizations, and affected communities in disaster mitigation, preparedness, emergency response, and recovery processes (Agustina et al., 2024; Khafian, 2023; Nilawati, 2022). Furthermore, the findings reveal that institutional trust, communication effectiveness, participatory decision-making, and resource sharing are fundamental components supporting successful collaborative governance implementation (Atmojo et al., 2025; Lestari, 2025). Several studies also emphasize that community engagement and local knowledge significantly contribute to strengthening disaster preparedness and adaptive response capacities in densely populated urban environments such as Jakarta (Suroso, 2024; Junaidi, 2023). Overall, the synthesis of findings confirms that *collaborative governance* has evolved into an adaptive governance framework capable of addressing the complexity of urban disaster management through integrated and participatory approaches.



In relation to the reviewed literature, it can be critically analyzed that although *collaborative governance* has demonstrated positive impacts on disaster management effectiveness, several structural and institutional limitations continue to hinder optimal implementation. Most studies identified persistent challenges such as weak inter-agency coordination, sectoral egos, limited financial resources, bureaucratic fragmentation, and inconsistencies in stakeholder participation across disaster management phases (Khafian, 2023; Thahir, 2022; Sanahan, 2024). In addition, several studies revealed that collaborative initiatives frequently remain reactive and emergency-oriented rather than preventive and sustainability-driven, particularly within long-term disaster preparedness strategies (Agustina et al., 2024; Hidayatullah et al., 2024). The reviewed studies also demonstrate that differences in institutional authority, organizational culture, and access to resources often create unequal power relations among stakeholders, thereby reducing the effectiveness of participatory governance mechanisms (Nilawati, 2022; Lestari, 2025). Consequently, despite the growing adoption of collaborative approaches, disaster governance systems in Jakarta and comparable urban contexts still require stronger institutional integration, policy harmonization, and inclusive governance structures to achieve sustainable disaster risk reduction outcomes.

Based on the comparative analysis of the selected studies, it can be identified that there is substantial consistency regarding the importance of stakeholder collaboration, institutional trust, and participatory governance in improving disaster management effectiveness. Nearly all reviewed studies emphasize that successful disaster governance depends on synergistic coordination among governmental institutions, communities, private sector actors, and civil society organizations in both pre-disaster and post-disaster phases (Agustina et al., 2024; Atmojo et al., 2025; Sanahan, 2024). Moreover, several studies consistently report that trust-building processes, *face-to-face dialogue*, and shared responsibility significantly improve communication networks and accelerate emergency response implementation (Hidayatullah et al., 2024; Nilawati, 2022). Nevertheless, differences among studies emerge in relation to governance capacity, leadership effectiveness, and stakeholder commitment, particularly across varying regional and institutional contexts (Thahir, 2022; Suroso, 2024). Despite these contextual differences, the reviewed literature consistently demonstrates that integrated *collaborative governance* mechanisms contribute positively to urban resilience development and disaster risk reduction in metropolitan areas such as Jakarta.

Based on the findings obtained from the reviewed studies, it can be explained that the implementation of *collaborative governance* in disaster management provides important



theoretical and practical implications for urban governance and public administration studies. Theoretically, the findings strengthen the relevance of Ansell and Gash's *collaborative governance* framework, particularly regarding the importance of trust-building, consensus-oriented processes, facilitative leadership, and institutional collaboration in addressing complex public problems such as urban disasters (Hidayatullah et al., 2024; Agustina et al., 2024). Practically, the reviewed studies indicate that adaptive governance systems integrating community participation, inter-organizational communication, and resource-sharing mechanisms are essential for improving disaster preparedness and emergency response capacities in Jakarta (Khafian, 2023; Lestari, 2025). The findings also suggest that local governments should prioritize inclusive policy formulation, sustainable stakeholder engagement, and long-term institutional coordination to strengthen urban resilience against recurrent disasters (Suroso, 2024; Junaidi, 2023). Therefore, the implementation of *collaborative governance* can serve as a strategic governance model capable of supporting sustainable disaster risk reduction and enhancing institutional responsiveness in highly vulnerable urban environments.

Table 2. Summary of Key Research Findings on the Implementation of Collaborative Governance in Disaster Management Efforts in Jakarta, Indonesia

Category of Findings	Key Research Outcomes	References
Stakeholder Collaboration	Multi-stakeholder collaboration improves disaster mitigation, emergency response, and urban resilience through coordinated governance mechanisms.	Agustina et al. (2024); Khafian (2023); Sanahan (2024)
Institutional Trust and Communication	Trust-building and effective communication strengthen coordination, information exchange, and participatory decision-making processes.	Atmojo et al. (2025); Lestari (2025); Hidayatullah et al. (2024)
Community Participation	Community engagement and local knowledge contribute significantly to preparedness capacity and disaster resilience.	Suroso (2024); Junaidi (2023); Khafian (2023)
Governance Challenges	Weak coordination, bureaucratic fragmentation, sectoral egos, and limited resources hinder collaborative governance effectiveness.	Thahir (2022); Sanahan (2024); Hidayatullah et al. (2024)



Leadership and Policy Integration	Facilitative leadership and integrated policy frameworks support sustainable disaster governance implementation.	Nilawati (2022); Thahir (2022); Agustina et al. (2024)
Urban Resilience and Sustainability	Collaborative governance enhances adaptive urban resilience and supports long-term disaster risk reduction strategies.	Agustina et al. (2024); Suroso (2024); Junaidi (2023)

Based on Table 2, the reviewed studies demonstrate that *collaborative governance* strengthens disaster management effectiveness through stakeholder collaboration, institutional trust, effective communication, and community participation. Participatory governance, facilitative leadership, integrated policies, and local knowledge contribute to improved preparedness, resource mobilization, emergency response, and urban resilience. However, governance fragmentation, sectoral interests, limited institutional capacity, and unequal stakeholder resources remain significant barriers to integrated disaster management. Overall, sustainable disaster governance requires adaptive, transparent, and participatory collaboration among government, private-sector, and community actors.

E. Limitations and Cautions

Based on the research that has been conducted, it can be identified that several limitations should be carefully considered in interpreting the findings of this *Systematic Literature Review* study. First, the reviewed studies predominantly employed qualitative and descriptive approaches, which may limit the ability to establish causal relationships between *collaborative governance* mechanisms and disaster management effectiveness, similar to the methodological limitations identified in previous governance studies. Second, the selected studies were largely concentrated on flood-related disaster management within urban contexts, thereby limiting broader generalization to other disaster typologies such as urban fires, technological failures, or multi-hazard emergencies in Jakarta and other metropolitan areas. Third, several studies relied heavily on secondary data, institutional reports, and stakeholder perceptions, which may introduce subjectivity, inconsistency in stakeholder representation, and potential bias in evaluating collaborative governance effectiveness (Khafian, 2023; Nilawati, 2022). In addition, differences in regional governance structures, institutional capacities, and socio-political conditions across the reviewed studies may affect the comparability and transferability of findings to different disaster management settings. Therefore, the findings of this study should be



interpreted cautiously, particularly regarding the generalization of collaborative governance outcomes across diverse urban governance and disaster management contexts.

F. Recommendations for Future Research

Based on the limitations identified in this study, future research should focus on developing more comprehensive and longitudinal approaches to examine the implementation of *collaborative governance* in disaster management efforts. Future studies are recommended to employ mixed-methods designs integrating quantitative analysis, qualitative interviews, and policy evaluation frameworks to provide deeper insights into the causal relationships between stakeholder collaboration and disaster governance effectiveness. In addition, further research should expand the scope of analysis beyond flood management by examining collaborative governance implementation within multi-hazard disaster contexts, including urban fires, epidemics, climate-related disasters, and technological emergencies in metropolitan environments such as Jakarta. Comparative studies across different cities, governance systems, and socio-cultural contexts are also necessary to enhance the generalizability and contextual understanding of collaborative disaster governance practices (Thahir, 2022; Hidayatullah et al., 2024). Moreover, future research should explore the integration of *digital governance*, *smart city* technologies, and community-based innovation to strengthen adaptive urban resilience and support more sustainable disaster risk reduction strategies within rapidly urbanizing regions.

CONCLUSION

Based on the research that has been conducted, it can be explained that implementation of collaborative governance in disaster management efforts in Jakarta, Indonesia, significantly enhances multi-stakeholder coordination and contributes to improved urban resilience. The synthesis of the ten selected studies demonstrates that effective collaboration among government agencies, private sector entities, non-governmental organizations, and communities facilitates resource sharing, communication networks, and participatory decision-making in mitigation, preparedness, response, and recovery phases. Institutional trust, facilitative leadership, and community engagement emerge as pivotal factors enabling adaptive governance in densely populated urban environments. Nevertheless, structural challenges such as sectoral egos, bureaucratic fragmentation, and limited resources continue to constrain the full realization of collaborative potential.

The findings further underscore that collaborative governance provides a viable



framework for addressing the multidimensional nature of urban disasters in Jakarta. By integrating theoretical constructs with empirical practices, stakeholders can overcome institutional silos and promote sustainable disaster risk reduction strategies. Moreover, the reviewed literature consistently highlights the positive impact of inclusive processes on community resilience and policy effectiveness. Consequently, prioritizing long-term institutionalization of collaborative mechanisms is imperative for bolstering Jakarta's disaster preparedness and response capabilities.

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