

## **Multi-Actor Governance in Stunting Reduction A Qualitative Study with Contextual Validation in East Jakarta**

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### **Abstract**

This study examines how collaborative governance operates in the implementation of stunting reduction policies in Indonesia by integrating the perspectives of collaborative governance and the Penta-Helix model. It aims to identify the dominant governance patterns found in national empirical studies and to examine how these patterns are reflected in the governance practices of East Jakarta. A qualitative research design was applied through a two-stage approach. The first stage involved bibliometric analysis and a systematic literature review of national studies on collaborative governance and stunting reduction, followed by thematic coding to identify key governance dimensions. The second stage consisted of contextual validation through interviews with key stakeholders and analysis of policy documents related to stunting governance in East Jakarta. The findings show that national studies mainly emphasize actor configuration, especially the distribution of roles among government institutions, private sector actors, communities, and media stakeholders. Governance processes, such as leadership coordination and multi-level planning, are also important in sustaining collaboration, while institutional mechanisms, including monitoring systems and data coordination, receive less attention in the literature. Empirical evidence from East Jakarta indicates that the local government acts as a central integrator, coordinating multi-actor participation through institutional platforms and policy coordination mechanisms. The interaction among actor configuration, governance processes, and institutional mechanisms shapes the operational structure of collaborative stunting governance. Based on these findings, the study proposes an integrated governance framework that emphasizes alignment among actor participation, coordination processes, and institutional support. It recommends strengthening institutional coordination,

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improving cross-sector data integration, and increasing the role of non-government actors to support sustainable stunting reduction initiatives.

Keywords: Collaborative Governance, Penta-Helix Model, Stunting Reduction, Multi-Actor Collaboration, Policy Coordination.

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## **INTRODUCTION**

Public sector reform has become a central agenda in many developing countries, including Indonesia, as governments seek to improve administrative effectiveness and national development outcomes. Despite ongoing bureaucratic reform initiatives, Indonesia continues to face structural challenges rooted in a traditional bureaucratic political model that often constrains innovation, accountability, and cross-institutional collaboration (OECD, 2021; Setiyono & McLeod, 2020). In response to these limitations, governance scholarship increasingly emphasizes collaborative approaches as an alternative paradigm for addressing complex policy problems. Collaborative governance promotes participatory decision-making and cross-sector coordination, enabling governments to mobilize diverse actors and resources in tackling multidimensional public challenges. The Strategic Collaborative Governance (SCG) framework highlights collaboration not merely as administrative coordination but as a strategic mechanism through which public institutions align stakeholders toward shared policy objectives (Emerson et al., 2011).

Within this perspective, collaborative governance is often associated with multi-actor engagement involving government institutions, private sector actors, academic institutions, civil society organizations, and media stakeholders. This configuration is frequently conceptualized through the Penta-Helix model, which emphasizes the interaction among these five actors in addressing complex societal issues that cannot be resolved by a single institution (Calzada, 2020). One policy domain that illustrates the necessity of such collaboration is stunting reduction. Stunting, defined as impaired growth and development in children due to chronic malnutrition and repeated infections, remains a major public health concern in Indonesia (Nshimiyiryo et al., 2020). National data show that Indonesia's stunting prevalence declined from 24.4% in 2021 to 21.6% in 2022 and further to 17% in 2023, with the government targeting a reduction to 14% by 2024 (Bappenas, 2023). Although this progress is encouraging, achieving the national

target requires strengthened governance mechanisms that enable integrated interventions across sectors and administrative levels.

Existing studies emphasize the importance of collaborative governance in addressing complex policy challenges that require coordinated action across institutions. The collaborative governance model developed by Ansell & Gash (2018) highlights several key elements that shape successful collaboration, including initial conditions, facilitative leadership, institutional design, and collaborative processes characterized by trust-building, commitment to shared objectives, and the development of mutual understanding among stakeholders. These elements provide an analytical basis for evaluating the effectiveness of cross-sector governance arrangements in delivering public services. However, while collaborative governance has been widely applied in fields such as environmental management, disaster mitigation, and education, its application within the domain of stunting reduction remains relatively underexplored.

In Indonesia, collaborative approaches to stunting reduction have been formally institutionalized through policy instruments such as Presidential Regulation No. 72/2021 on the Acceleration of Stunting Reduction and Law No. 17/2023 on Health. These regulations emphasize cross-sector coordination, community participation, and the use of data-driven decision-making to strengthen policy implementation. Nevertheless, policy evaluations continue to reveal significant implementation challenges, including limited institutional synchronization, uneven stakeholder participation, and weak accountability mechanisms across local governments (Kementerian Kesehatan Republik Indonesia, 2022). These findings suggest that while collaborative governance is formally recognized within national policy frameworks, variations in governance capacity and coordination practices across regions continue to influence the effectiveness of stunting reduction programs.

A growing body of literature has examined collaborative governance practices in stunting reduction programs across different regions of Indonesia. For instance, Niga (2023) found that collaborative governance implementation in South Central Timor Regency was constrained by weak joint decision-making and inadequate data integration among institutions. Similarly, Pangkey et al., (2022) reported that cross-sector collaboration in Bolaang Mongondow Regency remained only partially effective due to

low trust among actors and limited participation from the private sector. Conversely, Afandi et al., (2023) demonstrated that the application of the Penta-Helix approach in West Java facilitated multi-stakeholder engagement that fulfilled many of the collaborative governance criteria proposed by Ansell & Gash (2018), although achieving balanced participation among actors remained a challenge.

Additional studies highlight similar dynamics in other regions. Sukanti & Faidati, (2021) observed that collaborative efforts in Sleman Regency were relatively well managed but still constrained by the absence of structured communication platforms and limited private sector involvement. Nasution & Trimurni (2024) reported that collaborative arrangements in Medan City enhanced participatory decision-making and strengthened public trust in governance processes. Other studies also demonstrate the potential benefits of collaborative governance in improving policy outcomes. Fernandes et al., (2022) documented a measurable decline in stunting prevalence in East Flores following the effective performance of the local stunting convergence task force. Similarly, Hertati (2021) found that collaborative practices involving dialogue, shared commitment, and facilitative leadership contributed to effective program implementation, while (Sutikno & Naufal, 2023; Tinov, et al., 2023) emphasized the importance of actor commitment, coordination across governance levels, and a supportive political environment in sustaining collaboration.

Despite these empirical contributions, several important research gaps remain. First, at the theoretical level, collaborative governance and the Penta-Helix model are often discussed separately, with limited efforts to integrate these perspectives into a unified analytical framework for examining governance dynamics in public health interventions. Second, at the methodological level, most existing studies focus on single case analyses, while systematic synthesis of national empirical evidence remains scarce. Third, at the contextual level, previous research rarely links national evidence with empirical validation within a specific metropolitan governance setting characterized by administrative complexity and multi-level coordination demands.

To address these gaps, this study adopts a two-stage analytical design. The first stage synthesizes national empirical evidence through a systematic literature review to identify dominant governance patterns and institutional determinants in stunting

reduction across Indonesia. The second stage contextualizes these findings through empirical insights from East Jakarta Administrative City, an urban governance setting where stunting prevalence remains relatively close to the national target yet still reflects localized disparities (Kementerian Kesehatan Republik Indonesia, 2022). Rather than serving as the primary empirical case, East Jakarta functions as a contextual validation arena through which the applicability of the synthesized governance framework can be examined within a decentralized metropolitan administrative environment.

Building upon this approach, the study seeks to develop an integrated analytical framework that combines the actor-based perspective of the Penta-Helix model with the process-oriented perspective of collaborative governance. While the Penta-Helix framework clarifies the configuration of actors involved in policy implementation, collaborative governance theory provides insights into the mechanisms through which interaction, trust-building, and institutional coordination are operationalized. By integrating these perspectives, this study aims to explain not only which actors participate in stunting reduction governance but also how their interactions are structured and sustained within complex administrative systems. Through this synthesis, the research contributes to the development of a context-sensitive governance framework derived from national empirical evidence and validated within the metropolitan governance context of East Jakarta.

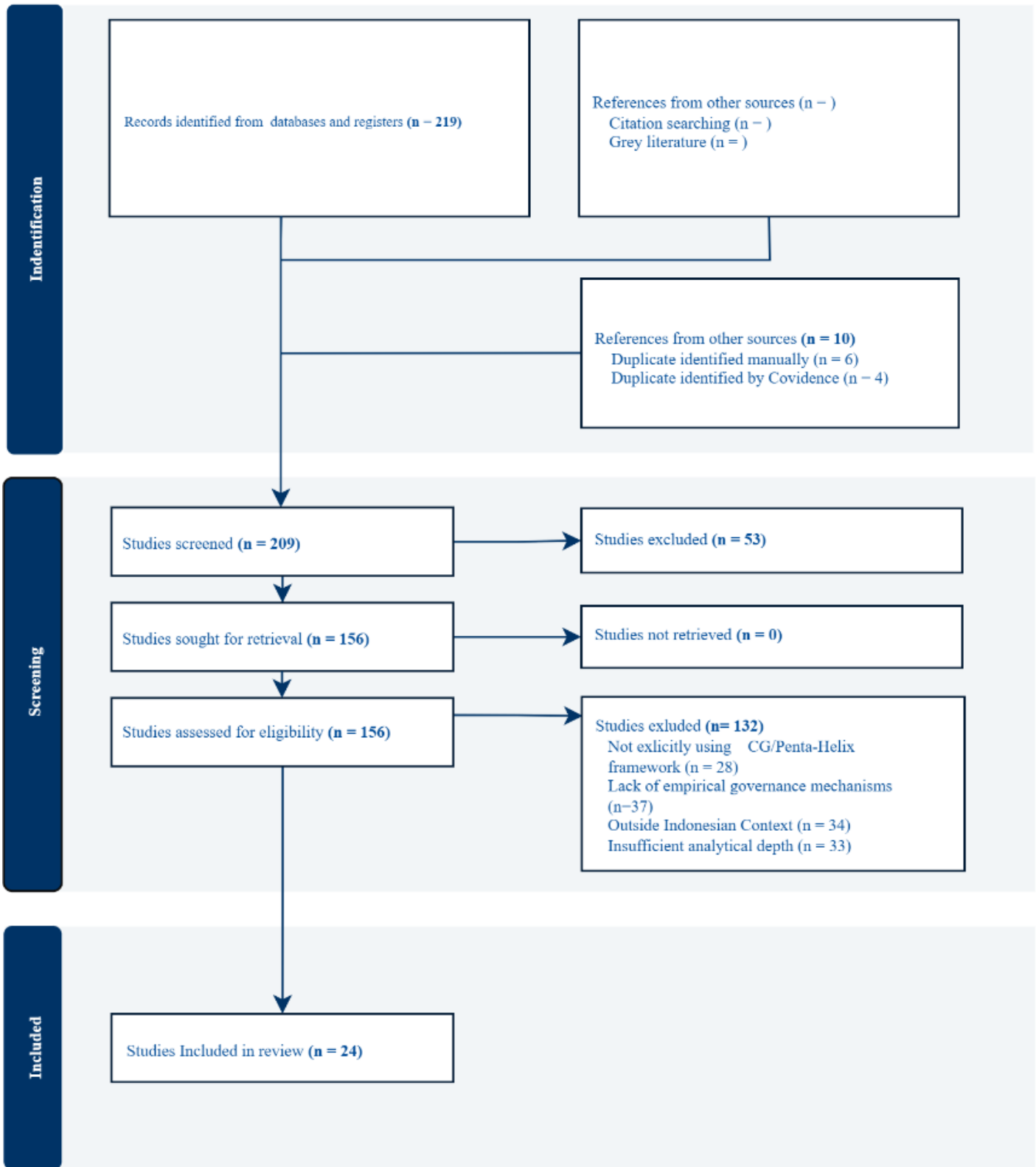
## **RESEARCH METHOD**

This study adopts a qualitative research design aimed at interpreting governance processes and actor configurations in stunting reduction policies rather than testing predetermined causal relationships. Because collaborative governance involves complex interactions among institutions and stakeholders, the research applies a two-stage analytical design integrating bibliometric mapping, systematic literature review (SLR), thematic synthesis, and contextual adaptive validation (Moher et al., 2009; Page et al., 2022; Terry et al., 2017). The formulation of the review question follows the PICOC framework to ensure conceptual clarity and methodological rigor (Lockwood et al., 2015). In this structure, the Population/Problem refers to governance mechanisms in stunting reduction policy implementation; the Interest concerns the integration between

Collaborative Governance and the Penta-Helix model; the Outcome focuses on the development of an empirically grounded Collaborative Governance-Penta-Helix analytical framework; and the Context is Indonesia with subsequent validation in East Jakarta Administrative City. The study therefore examines how collaborative governance mechanisms and Penta-Helix actor configurations are conceptualized in Indonesian stunting reduction policies and how the synthesized framework aligns with governance dynamics in East Jakarta.

The first analytical stage begins with bibliometric analysis to map conceptual trends within the national research landscape. This step provides a macro-level overview of dominant research themes and identifies the relationship between governance process perspectives and multi-actor collaboration approaches. Data were collected from Scopus, Semantic Scholar, and Crossref covering publications between 2020 and 2025. Bibliometric mapping was conducted using VOSviewer through co-occurrence analysis with a full counting method and a minimum threshold of five keyword occurrences (van Eck & Waltman, 2023). Manual filtering removed geographic labels and non-substantive technical terms to maintain conceptual relevance (van Eck & Waltman, 2023).. The resulting network visualization highlights clusters of governance concepts and demonstrates the limited intersection between Collaborative Governance and Penta-Helix perspectives in national scholarship. This stage provides empirical justification for integrating both perspectives in the subsequent literature synthesis.

The systematic literature review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol to ensure transparency and replicability (Moher et al., 2009; Page et al., 2022). Searches were performed in Scopus, Semantic Scholar, and Crossref using structured keyword combinations related to collaborative governance, stunting reduction, Penta-Helix, and Indonesia. The initial search identified 219 records, of which ten duplicates were removed. A total of 209 articles were screened based on title and abstract, and full-text eligibility assessment subsequently resulted in the exclusion of 132 studies due to insufficient analytical relevance, lack of empirical grounding, or absence of explicit application of the Collaborative Governance or Penta-Helix framework. This process resulted in 24 studies retained for final synthesis:



**Figure 1. Prisma SLR Flow Diagram**

Source: Data processed by Covidence, 2026

The selected studies were analyzed through thematic synthesis supported by NVivo 15 to ensure coding transparency and analytical consistency. Open coding was first conducted inductively to identify governance-related categories emerging from empirical findings, including actor participation, leadership configuration, coordination mechanisms, and institutional constraints. Axial coding then grouped these categories into higher-order analytical clusters, while selective coding refined the core explanatory dimensions that consistently appeared across studies. NVivo analytical tools such as Hierarchy Chart (treemap visualization), category clustering, and Concept Map visualization were used to illustrate relationships among governance dimensions and support the construction of the integrated Collaborative Governance-Penta-Helix framework (Gösgens et al., 2021; Nvqsrinternational, 2025; Suliatna, 2022).

The second analytical stage involves contextual adaptive validation in East Jakarta Administrative City to examine how the synthesized framework resonates within a metropolitan governance environment characterized by multi-level coordination and administrative complexity. Primary data were collected using purposive sampling from stakeholders directly involved in stunting reduction governance (Moleong, 2006). The main informant was the Chair of the Stunting Reduction Acceleration Team (TPPS), who also serves as Secretary of East Jakarta Administrative City, while key informants included the Head of the Health Office, the Head of the PPAPP Office, and the Head of the Regional Development Planning Agency. Supporting informants consisted of community representatives. Data collection involved semi-structured interviews complemented by documentary analysis of policy reports, coordination records, and planning documents. In addition, non-participant observations were conducted during coordination meetings, program implementation activities, and routine monitoring processes to capture interaction dynamics among stakeholders and institutional coordination practices in stunting governance (Moleong, 2006). The synthesized framework derived from the literature review was subsequently compared with observed governance practices in East Jakarta to identify alignment, contextual variations, and potential refinements. This adaptive validation ensures that the proposed analytical framework (Vargas-Bianchi, 2025).

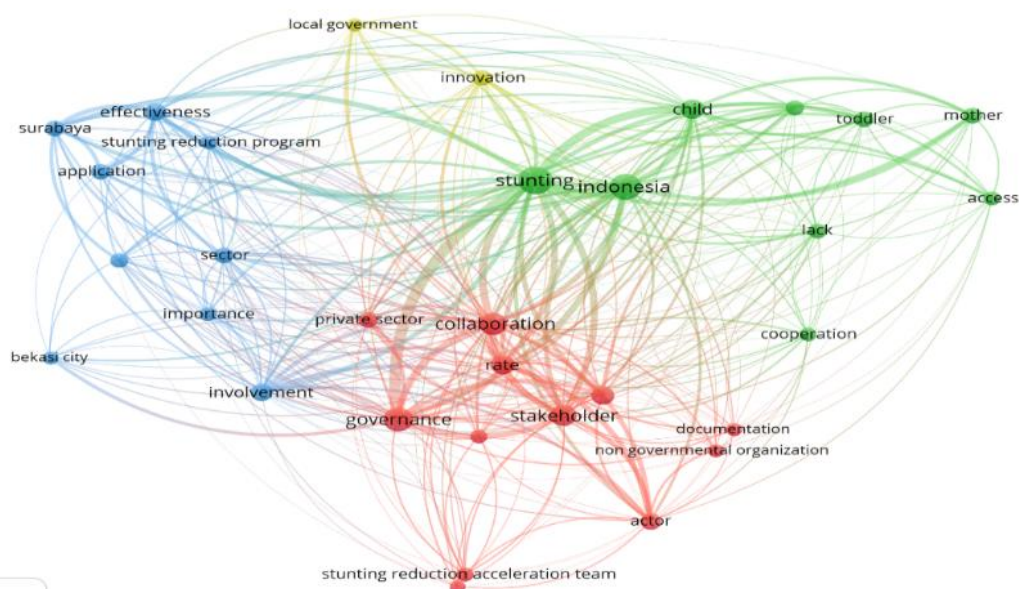
## **RESULT AND DISCUSSION**

This section presents the findings based on the study's two-stage research design and directly addresses the research questions. The first stage synthesizes national evidence to examine how collaborative governance mechanisms and Penta-Helix actor configurations are conceptualized and implemented in stunting reduction policies across Indonesia. The second stage evaluates how the synthesized governance structure aligns with the institutional dynamics of East Jakarta Administrative City. To maintain analytical coherence, the results follow a macro-meso-micro progression. The analysis begins with macro-level conceptual mapping through network visualization to situate governance discourse within national scholarship. It then moves to meso-level thematic synthesis of 24 selected studies using open and axial coding, before presenting micro-level contextual findings derived from interviews and documentary analysis in East Jakarta. Guided by Collaborative Governance and the Penta-Helix model as analytical lenses, open coding identifies governance patterns such as actor participation, leadership configuration, and coordination mechanisms, which are later grouped into three relational dimensions: Actor Configuration, Governance Process, and Institutional Mechanism.

### **Conceptual Network Structure of Collaborative Governance and Penta-Helix in Indonesian Stunting Research**

To situate the thematic terrain of national scholarship before moving to in-depth synthesis, we present a keyword co-occurrence network generated in VOSviewer (van Eck & Waltman, 2023). The network visualization maps how terms co-appear across the corpus of retrieved publications (2020-2025) and therefore indicates the macro-level conceptual neighborhoods in which stunting, governance, and multi-actor discourse are embedded. It is important to note that this visualization is a descriptive, macro-level diagnostic: co-occurrence shows proximity and topical association but not analytical depth or the quality of governance analysis in any single paper. The figure below should

be read as an empirical justification for the subsequent SLR focus rather than as a substitute for it.



**Figure 2. Network Visualization of Co-occurrence**

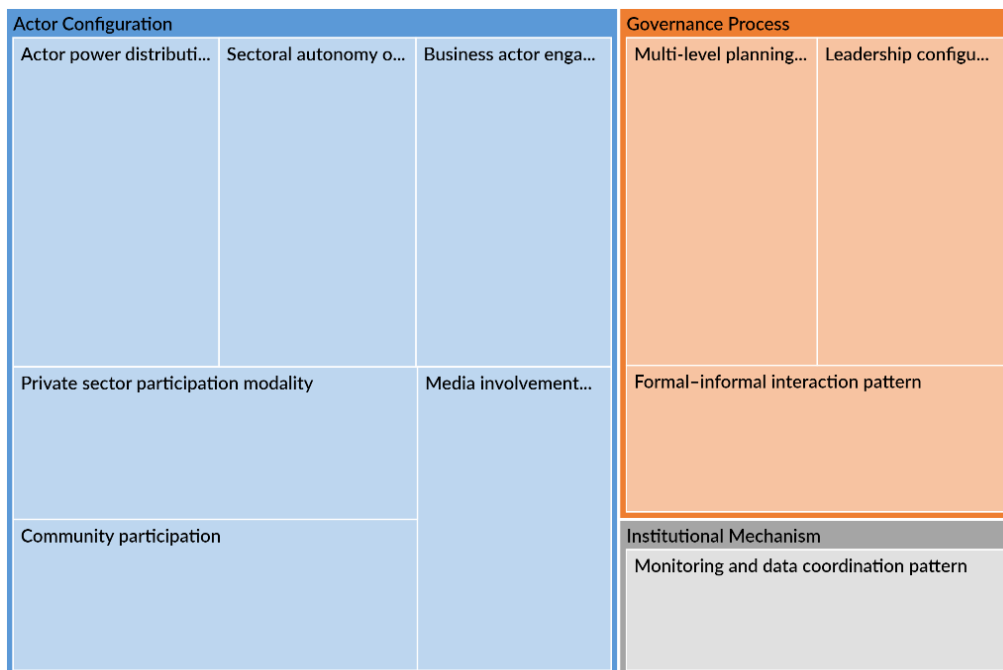
Source: Data processed by VOSviewer, 2026

Figure 2 reveals three analytically meaningful clusters. The first cluster centers on clinical and public health terms such as *stunting Indonesia*, child, toddler, mother, and access, reflecting literature that primarily examines nutritional and epidemiological aspects of stunting. The second cluster groups governance-related terms including collaboration, stakeholder, actor, governance, private sector, and stunting reduction acceleration team, indicating a body of research that frames stunting as a governance issue requiring multi-actor engagement. The third cluster highlights locality and implementation terms such as local government, effectiveness, and specific city references, emphasizing place-based policy implementation and program performance. Bridging nodes like collaboration, private sector, and innovation connect these clusters, suggesting emerging but limited integration between health-focused and governance-oriented research. This pattern supports the study’s two-stage design: the network visualization provides a macro-level landscape of national scholarship, while the subsequent systematic literature review and coding stages examine how these bridging concepts are operationalized and integrated at the study level.

**Thematic Distribution of Governance Dynamics in Selected Studies**

Following the macro-level conceptual mapping, the analysis proceeds to a meso-level thematic synthesis of the 24 eligible studies. Open coding was first conducted to identify substantive governance patterns emerging from empirical findings. This process generated ten primary categories: actor power distribution, business actor engagement, community participation, media involvement, private sector participation modality, sectoral autonomy orientation, formal-informal interaction pattern, leadership configuration, multi-level planning mechanism, and monitoring and data coordination pattern. These categories were derived inductively from the empirical content of the selected studies without imposing a predetermined evaluative structure.

Subsequently, axial coding was employed to organize these open-coded categories into higher-order analytical dimensions. Through this process, the ten substantive categories were grouped into three broader dimensions: Actor Configuration, Governance Process, and Institutional Mechanism. The hierarchy chart (treemap) presented in Figure 3. provides a hierarchical representation of axial categories based on aggregated open codes, visualizing both the structural grouping and the relative weight of each category within the dataset.



**Figure 3. Hierarchy Chart (Treemap)**

Source: Data processed by Nvivo 15, 2026

The visual distribution shows that Actor Configuration emerges as the most dominant axial dimension across the selected studies. This dimension aggregates open-coded categories related to actor power distribution, business actor engagement, community participation, media involvement, private sector participation modality, and sectoral autonomy orientation. Its comparatively larger proportional area indicates that national empirical research on collaborative governance in stunting reduction primarily concentrates on how actors are positioned within governance systems, how authority and responsibilities are distributed, and how cross-sector participation is structured. Within this dimension, actor power distribution appears as the most frequently coded category, with many studies highlighting a government-centered configuration in which public institutions retain primary coordinating authority.

The second axial dimension, Governance Process, encompasses categories such as multi-level planning mechanisms, leadership configuration, and formal-informal interaction patterns. Its moderate representation suggests that interaction dynamics and leadership arrangements are recognized in the literature but receive less emphasis than the structural configuration of actors. This indicates that national scholarship tends to prioritize questions of who participates in collaboration rather than how collaborative interaction unfolds.

In contrast, Institutional Mechanism, represented mainly by monitoring and data coordination patterns, appears as the smallest dimension. While less frequently emphasized, this does not imply reduced importance; rather, it reflects limited analytical attention to formal monitoring systems and data integration mechanisms. Overall, the hierarchical visualization indicates that governance challenges in stunting reduction are predominantly framed at the level of actor configuration rather than institutional structuring.

### **Relational Patterns among Governance Dimensions (Axial Interaction Analysis)**

While the hierarchy chart visualizes the relative dominance of axial dimensions, the cluster analysis provides insight into relational proximity among open-coded categories. Unlike the treemap, which represents proportional weight, the clustering model illustrates coding similarity—indicating which governance categories frequently co-occur

within the same empirical studies. In this sense, the clustering output does not measure importance but relational cohesion.

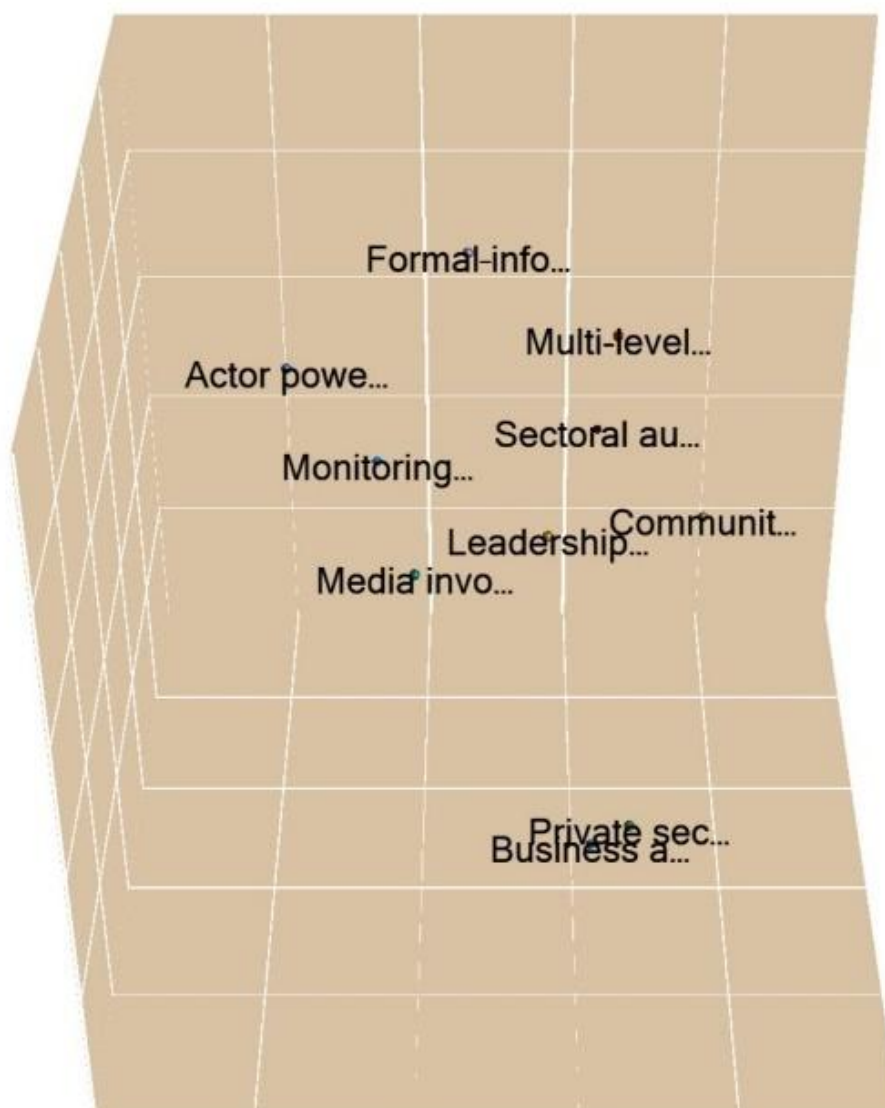
The clustering visualization reveals several distinct yet interconnected relational patterns across the coded categories. The strongest relational proximity appears between business actor engagement and private sector participation modality, indicating that across the 24 selected studies, discussions of business engagement are consistently articulated alongside concrete forms of private-sector involvement. Rather than emerging as separate analytical strands, these two categories form a consolidated discourse cluster within national scholarship. This relational cohesion refines the treemap

finding by showing that the prominence of Actor Configuration is not only proportional but also internally structured around private-sector participation.

**Figure 4. Items Clustered by Coding Similarity**

Source: Data processed by Nvivo 15, 2026

A second relational grouping connects leadership configuration, community participation, sectoral autonomy orientation, and multi-level planning mechanisms. The closeness among these categories suggests that leadership arrangements are commonly



examined together with participatory dynamics and cross-level coordination. In this configuration, governance processes are embedded within actor participation structures

rather than treated as isolated procedural dynamics. Leadership therefore operates within a relational field shaped by community engagement and intergovernmental coordination.

Additionally, actor power distribution and formal-informal interaction patterns occupy bridging positions across clusters. Their centrality indicates that power distribution and interaction modalities intersect multiple governance themes, functioning as cross-cutting variables linking actor structures with governance processes.

By contrast, monitoring and data coordination patterns appear comparatively less integrated within the relational network, corresponding with the treemap finding that Institutional Mechanism carries the smallest proportional weight. Together, these patterns demonstrate that actor configuration and leadership-mediated coordination dominate national discourse, while institutional mechanisms remain comparatively peripheral. To ensure transparency and traceability, the following section presents Table 1: Evidence Mapping of 24 Included Studies, linking these aggregate patterns to study-level empirical evidence.

**Table 1. Evidence Mapping of 24 Included Studies**

No	Author	Collaborative Governance Dimensions Identified	Penta-Helix Actors Present	Key Governance Insight
1	(Zuhri et al., 2024)	Actor configuration under strong government control	Government, Academia, Business sector, Community, Media	Government as dominant coordinator; community and media weakly institutionalized
2	(Utomo & Pratama, 2024)	Synergistic multi-actor integration	Government, Business sector, Media (strongest roles)	Cross-sector synergy enhances program effectiveness
3	(Afandi et al., 2021)	Consultation-based participation	Government, Academia, Business sector, Community, Media (limited non-state ownership)	Participation remains invitation-based rather than power-sharing
4	(Ashari et al., 2024)	Programmatic coordination model	Government with supporting sectoral agencies and local community structures	Operational commitment present but impact remains limited

5	(Lino et al., 2024)	Government resource centrality	Full Penta-Helix	Institutional capacity highly centralized within government apparatus
6	(Yayuk & Rahayu, 2020)	Cross-sector rule fragmentation	Government agencies, Local community institutions	Sectoral silos weaken monitoring coherence
7	(Daur & Sugiharto, 2024)	Inter-sector communication challenge	Sub-district government actors, Community health cadres	Need for stronger horizontal communication
8	(A. A. Putri & Hertati, 2023)	Coordination without deep partnership	Government, Academia, Business sector, Community	Coordination forums substitute for structured collaboration
9	(Mansyur et al., 2024)	Weak academia-media integration	Government, Academia, Media (limited structural cooperation)	Interaction occurs mainly in meetings, not formal collaboration
10	(Noor et al., 2024)	Innovation-driven governance	Government, Academia, Business sector	Innovation requires regulatory support and incentives
11	(Afandi et al., 2023)	Mandated collaboration dynamics	Government agencies with limited non-state actor engagement	Mandate risks bureaucratic vertical dominance
12	(Afandi et al., 2024)	Convergence coordination limits	Government agencies, Local partners (limited formalized roles)	Shared commitment often unclear
13	(Ardianti & Afandi, 2023)	Functional task allocation model	Regional government agencies (OPD-based structure)	Formal task division does not automatically produce collaborative ownership
14	(Absor & Ratriana, 2024)	Vertical institutional rigidity	Government agencies (strong hierarchical structure)	Strict vertical accountability constrains adaptive governance
15	(Noor et al., 2024)	Incomplete stakeholder inclusion	Government, Community actors (external actors weakly integrated)	Wider stakeholder engagement remains limited
16	(Fardianti & Bintari, 2024)	Policy inconsistency and actor exclusion	Government, Community, Academia (Business and Media partially excluded)	Unequal actor inclusion reduces commitment
17	(Fatikha & Permatasari, 2024)	Inter-ministerial alignment	Multiple government ministries and agencies	Strong formal coordination mechanisms

18	(Fernandes et al., 2022)	Bureaucratic clarity versus relational trust gap	Government agencies with emerging bureaucratic force	Institutional clarity does not ensure trust-building
19	(Hadi, 2023)	Divergent stakeholder priorities	Government, Private sector, Civil society, International organizations	Goal divergence complicates coordination
20	(Oktaviyanti et al., 2024)	Sectoral ego barrier	Regional government agencies (multiple OPD actors)	Sectoral ego delays data integration and program synergy
21	(Afandi et al., 2024; Erlanda & Rahmadanik, 2023)	Program implementation orientation	Government and Community structures	Output-driven collaboration dominates
22	(S. N. Putri & Hardjati, 2025; Yayuk & Rahayu, 2020)	SDGs alignment framing	Government, Multi-sector actors	Convergence framed as compliance mechanism
23	(Andayani et al., 2022; Daur & Sugiharto, 2024)	Local-level coordination practice	Sub-district government, Community actors	Horizontal coordination remains procedural
24	(Mansyur et al., 2024; Pratama et al., 2025)	Marginalization of non-state actors	Government with limited Academia and Media engagement	Discursive inclusion without structural power-sharing

Source: Obtained from secondary data, 2020-2025

Table 1 reveals a consistent structural pattern across the 24 included studies. First, government actors overwhelmingly occupy the central position in collaborative arrangements. In nearly all cases, the Indonesian government—at central, provincial, or district level—functions as initiator, regulator, coordinator, and primary resource holder. Non-state actors are frequently present in discourse, yet their institutional authority and decision-making power remain limited. This confirms the earlier treemap finding that Actor Configuration constitutes the most dominant axial dimension within the national literature.

Second, private sector engagement and business participation tend to appear in closely associated forms, often framed as corporate social responsibility or programmatic support rather than co-equal governance partners. This reinforces the relational clustering result in Fig. 3, where business engagement and private sector participation

form the most cohesive pairing. The literature does not treat them as distinct governance variables, but rather as a consolidated participation modality.

Third, leadership configuration and multi-level planning mechanisms frequently appear alongside community participation narratives. However, the table shows that such participation is often consultative rather than power-sharing. This suggests that leadership acts as a mediating mechanism linking vertical planning structures with horizontal participation efforts—again aligning with the clustering visualization.

Finally, monitoring and data coordination mechanisms appear less structurally embedded across the corpus. While mentioned, they are rarely positioned as central determinants of collaborative success. This per-study evidence supports the treemap finding that Institutional Mechanism carries comparatively smaller proportional weight in the literature.

In sum, the evidence mapping demonstrates that the aggregated patterns observed in Fig. 3 and 4 are not abstract constructions but are consistently reflected at the level of individual studies. The table shows that collaborative governance in national stunting discourse tends to be actor-centered, leadership-mediated, and institutionally uneven—particularly in monitoring integration.

### **Contextual Governance Practices in Stunting Reduction: Evidence from East Jakarta**

To complement the national findings presented in the previous sections, this study examines how collaborative governance practices operate within the administrative context of East Jakarta. The analysis draws on interviews with key policy actors involved in the local stunting reduction program, supported by documentary evidence from official reports, monitoring publications, and coordination materials produced by the East Jakarta government. The interviews were guided by the governance dimensions identified earlier in this study, including actor configuration, governance processes, and institutional mechanisms. However, consistent with qualitative inquiry, these analytical dimensions functioned as interpretive guidance rather than rigid variables, allowing empirical findings to reflect the institutional realities of policy implementation in the local administrative setting.

One prominent theme emerging from the interviews concerns the central role of government leadership in coordinating multi-sectoral actors involved in stunting

reduction. The main informant, serving as the Chair of the Stunting Reduction Acceleration Team (TPPS) and Secretary of East Jakarta Administrative City, emphasized that although collaboration involves multiple institutions, the coordination structure remains strongly government-centered.

“In practice, the city government still becomes the main driver of coordination. We bring together the health office, the planning agency, the social sector, and also partners outside the government. But honestly, if the coordination does not start from the city administration, the program tends to move in different directions. Each institution has its own priorities, so someone has to ensure that everything remains aligned with the stunting reduction targets.” (An in-depth informant interview with a main informant on Sept 16, 2026)

This statement indicates that collaborative arrangements in East Jakarta are structured around administrative leadership rather than purely horizontal cooperation. Documentary evidence supports this observation. The formal coordination structure of the stunting reduction program is institutionalized through the Stunting Reduction Acceleration Team established under gubernatorial regulation, which assigns coordination responsibilities to the city administration.

The researcher interprets this arrangement as reflecting a government-centric actor configuration, where collaboration is organized through hierarchical coordination rather than fully distributed governance.

Another important dimension concerns the role of multi-level planning and administrative coordination. Interviews with the Head of the East Jakarta Health Office highlighted that implementation relies heavily on vertical coordination between the city administration, district-level health centers, and community health posts (*posyandu*).

“At the policy level we discuss targets at the city government, but implementation happens at the neighborhood level. The puskesmas and the posyandu are actually the front line. They collect data, monitor child growth, and communicate with parents directly. So coordination across these levels is very important. If one level does not work well, the whole monitoring process becomes incomplete.” (An in-depth informant interview with a key informant on Sept 17, 2026)

This explanation illustrates that governance processes in the local context operate through hierarchical planning structures. Supporting documents describing the local surveillance system indicate that stunting monitoring relies on data collected through community health services and aggregated through administrative reporting channels (Dinas Kesehatan Kota Administrasi Jakarta Timur, 2024).

The researcher interprets this finding as evidence that multi-level planning mechanisms play a central role in operationalizing collaborative governance, particularly in large metropolitan administrations where coordination across organizational layers is necessary.

Community participation also emerged as a significant element of the governance process, although its role appears primarily implementation-oriented rather than decision-making oriented. Supporting informants representing local residents described their involvement mainly through routine health service activities organized by community health posts.

One supporting informant, a resident of East Jakarta identified here as Mrs. Sari, explained:

“Usually we come to the posyandu every month to weigh the children and check their growth. The health volunteers also give information about nutrition and how to prepare food for toddlers. For parents like us it is helpful because we do not always understand what causes stunting or how to prevent it. Sometimes the cadres also remind us through WhatsApp groups about the schedule or the importance of bringing the children for measurement.” (An in-depth informant interview with a supporting informant on Sept 17, 2026)

Another community participant, Mr. Ahmad, described a similar experience:

“From what I see, most of the activities happen through the health posts. The cadres explain about nutrition, sometimes they also invite parents to attend small discussions. But in terms of planning the program, we usually just follow what the health officers organize. We are involved more in the activities rather than in deciding the policies.” (An in-depth informant interview with a supporting informant on Sept 17, 2026)

These accounts suggest that community actors function primarily as program participants and service recipients rather than as policy co-designers. The researcher interprets this as indicating that community participation in East Jakarta tends to be operational rather than strategic, which partially aligns with the national literature where community actors are often engaged through service delivery mechanisms.

The interviews also reveal the growing importance of monitoring and surveillance systems in the governance structure. According to the Head of the Regional Development Planning Agency (Bappeda), data reporting plays a critical role in determining priority intervention areas.

“We depend heavily on monitoring data to understand where the problems are located. Every year the measurement results from the health posts are compiled, and from that information we identify which neighborhoods require more attention. The planning process uses this data to determine program priorities and budget allocations.” (An in-depth informant interview with a key informant on Sept 20, 2026)

Official monitoring reports confirm that the local government regularly publishes surveillance results to track stunting prevalence and intervention coverage across administrative areas (Dinas Kesehatan Kota Administrasi Jakarta Timur, 2023).

The researcher interprets this evidence as demonstrating that institutional mechanisms related to monitoring and data coordination are increasingly embedded within the governance system, although their operational integration still varies across institutions.

However, some informants also pointed out limitations in data accuracy and coordination across sectors. A technical officer from the Health Office noted:

“The monitoring system works quite well for tracking services, but sometimes the data does not fully represent the real situation. Not all families bring their children to the health posts regularly. So the data helps us monitor the program, but it still has limitations in representing the entire population.” (An in-depth informant interview with a key informant on Sept 17, 2026)

This observation suggests that although monitoring systems are institutionalized, they remain dependent on community participation and service attendance. The

researcher interprets this as indicating a partial institutionalization of monitoring mechanisms, where data infrastructure exists but may not yet fully capture population-level conditions.

Finally, the role of non-government actors such as media and private sector organizations appears comparatively limited in the governance structure. While public communication regarding stunting programs is occasionally disseminated through local media and public campaigns, their role remains largely supportive rather than integrative (Beritajakarta, 2023).

Similarly, private sector involvement tends to occur through specific program initiatives rather than sustained participation in governance coordination forums. Overall, the findings from East Jakarta reveal a collaborative governance arrangement characterized by strong administrative leadership, multi-level coordination across health service institutions, and operational participation from community actors. Elements of the broader multi-actor governance framework are present, yet their roles differ in intensity and institutional integration. Government agencies remain the primary coordinators of policy implementation, while community and non-government actors contribute mainly through service delivery and public communication activities.

### **Integrative Discussion: Collaborative Governance and Penta-Helix in Stunting Reduction**

The integration of findings from the systematic literature review and the empirical investigation in East Jakarta demonstrates that stunting reduction governance is shaped by interactions among multiple actors, institutional arrangements, and collaborative processes. Within public administration scholarship, collaborative governance refers to governing arrangements in which public institutions engage non-state stakeholders in collective decision-making processes to address complex public problems that cannot be effectively resolved by government institutions alone (Ansell & Gash, 2018; Emerson et al., 2011). In this perspective, collaboration is not limited to coordination among organizations but involves structured interaction processes such as dialogue, trust building, and shared understanding among actors participating in the governance system.

In the context of stunting reduction, collaborative governance becomes particularly relevant because the determinants of stunting extend beyond the health sector and involve social, environmental, and economic dimensions. Consequently, policy interventions require coordinated actions across multiple sectors and institutions. Empirical studies in Indonesia consistently demonstrate that collaborative governance mechanisms enable cross-sector coordination among government institutions, health agencies, community organizations, and development actors in implementing integrated stunting reduction programs (Absor & Ratriana, 2024; Suyanti et al., 2025). These collaborative arrangements allow different actors to mobilize resources, knowledge, and institutional capacities that cannot be provided by a single organization alone.

The evidence mapping of the twenty-four studies reviewed in this research further indicates that actor configuration constitutes the most dominant analytical dimension within the literature. Many studies emphasize that the effectiveness of stunting reduction programs depends heavily on the involvement of multiple stakeholders who contribute complementary resources and expertise. Multi-actor collaboration involving government agencies, civil society organizations, health providers, and educational institutions has been shown to strengthen policy implementation and expand community outreach in addressing child nutrition issues (Hamka & Ibrahim, 2025; Ramlan et al., 2025). These findings support the argument that multi-stakeholder engagement is essential for addressing the multidimensional causes of stunting.

However, despite broad agreement on the importance of multi-actor participation, the literature presents a more complex picture regarding the distribution of influence among actors. Several studies indicate that government institutions frequently remain dominant within collaborative arrangements, particularly in policy planning and resource allocation processes (Bjärstig et al., 2024; Fliervoet et al., 2016). In this perspective, collaborative governance often operates within administrative governance structures where public institutions retain central authority. By contrast, other studies emphasize the importance of more balanced participation among actors, arguing that effective collaboration requires stronger involvement from non-government stakeholders in strategic decision-making processes (Hong et al., 2024; Karambelkar & Gerlak, 2020).

This divergence suggests that collaborative governance in practice may range from government-centered coordination systems to more horizontally distributed collaborative networks.

This tension in the literature can be explained through the concept of mandated collaboration, in which collaborative arrangements are established through policy directives issued by government institutions. In mandated settings, collaboration is formally institutionalized through regulatory frameworks, while the design of governance structures and coordination mechanisms remains largely determined by public authorities. Research on stunting governance in Indonesia shows that such institutional arrangements often result in government-centered coordination systems where public agencies function as the primary integrators of cross-sector initiatives (Herawati & Sunjaya, 2022). While this configuration may ensure administrative coordination and policy coherence, it may also limit the degree of autonomy and influence of non-state actors within the collaborative process.

The empirical findings from East Jakarta reflect similar governance dynamics. The implementation of stunting reduction programs is coordinated through the Stunting Reduction Acceleration Team (TPPS), which serves as the central institutional platform for multi-sector collaboration at the city level. Through this mechanism, government agencies coordinate planning, monitoring, and evaluation processes while facilitating participation from other stakeholders. Although the collaborative framework formally includes multiple actors, the governance structure remains strongly mediated by administrative coordination mechanisms led by government institutions. This finding supports previous research suggesting that collaborative governance in public health interventions often evolves within hybrid governance arrangements that combine hierarchical coordination with participatory engagement among actors.

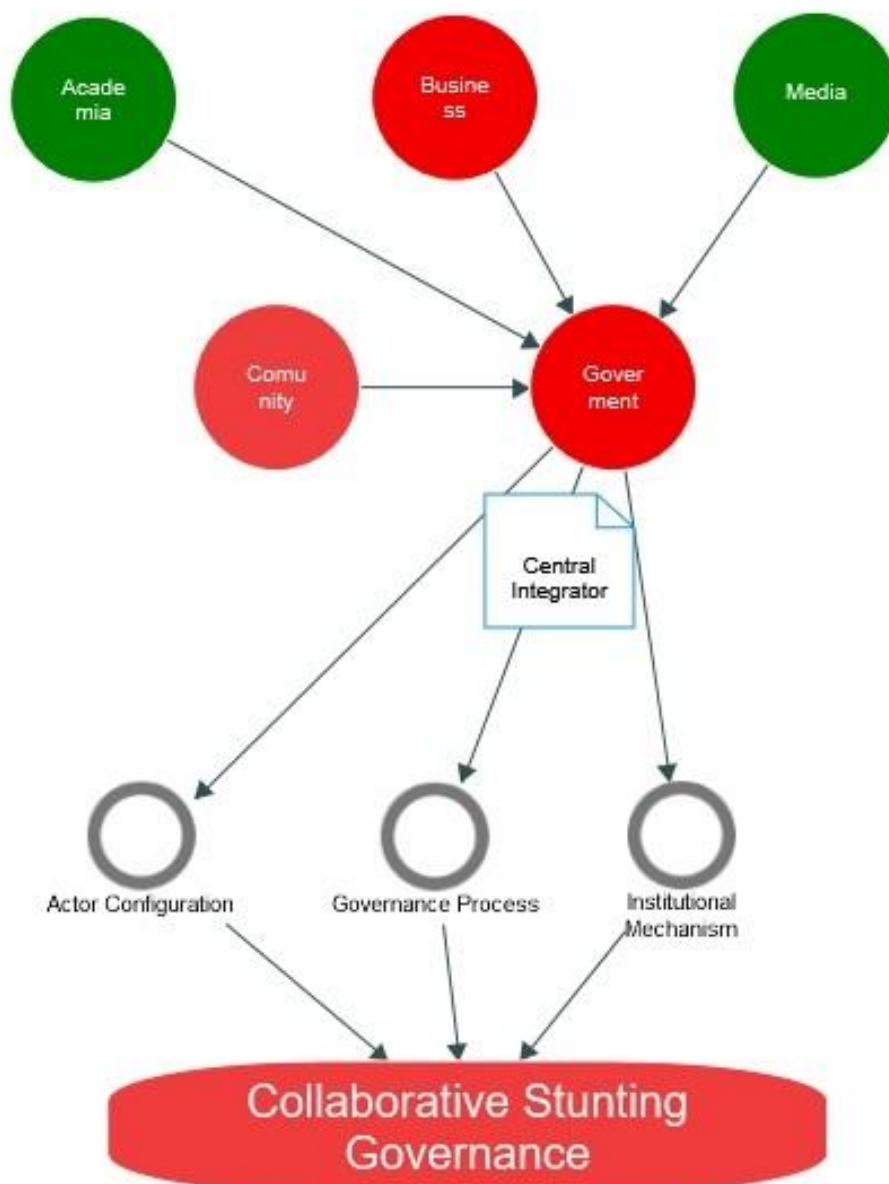
Another dimension highlighted in the literature concerns the relevance of the Penta-Helix collaboration model in organizing multi-stakeholder participation. The Penta-Helix framework emphasizes the interaction among five key actors—government, academia, business, community, and media—whose roles collectively support policy implementation and innovation processes. In the context of stunting reduction, government institutions act as regulators and coordinators, academic actors contribute

knowledge and research-based policy analysis, private sector organizations provide financial and technological resources, community organizations mobilize grassroots participation, and media actors facilitate public communication and awareness (Noor et al., 2024; Oktavianti et al., 2024). The interaction among these actors forms a collaborative ecosystem that enables policy implementation across different institutional domains.

Nevertheless, both the literature review and the East Jakarta findings indicate that the presence of Penta-Helix actors does not automatically guarantee balanced collaboration. Institutional constraints, resource disparities, and unclear role distribution often result in uneven participation among actors, with government institutions maintaining dominant authority in collaborative structures (Afandi et al., 2021; Sjögren Forss et al., 2021). Rather than representing a fully horizontal governance model, collaborative governance in stunting reduction frequently operates within hybrid institutional arrangements where hierarchical policy coordination coexists with participatory engagement among stakeholders.

Overall, the integration of findings from the literature review and the East Jakarta case study highlights that collaborative governance in stunting reduction is shaped by the interaction of three interrelated dimensions: actor configuration, governance processes, and institutional coordination mechanisms. Actor configuration determines the constellation of stakeholders participating in the governance system, governance processes structure the interactions through which actors coordinate actions and exchange knowledge, and institutional mechanisms provide the administrative infrastructure necessary to sustain collaborative initiatives. The Concept Map framework developed in this study emerges from these empirical patterns, illustrating how collaborative governance and Penta-Helix participation interact within a multi-actor

governance ecosystem where government leadership functions as the central integrator connecting institutional coordination with stakeholder participation.



**Figure 5. Items Clustered by Coding Similarity**

Source: Data processed by Nvivo 15, 2026

The conceptual framework developed in this study illustrates how collaborative governance in stunting reduction emerges from the interaction between multi-actor participation and governance dynamics within a coordinated institutional structure. At the actor level, the framework adopts the Penta-Helix perspective, which recognizes the

involvement of academia, business, community, media, and government as the key stakeholders shaping policy implementation. The empirical findings from the literature review and the East Jakarta case indicate that these actors do not operate in isolation but interact within a governance ecosystem where the government assumes the role of a central integrator. In this role, the government facilitates coordination, aligns sectoral priorities, and institutionalizes collaborative arrangements that enable different actors to contribute according to their respective capacities.

The integrative function of government subsequently shapes three interconnected governance dimensions identified through the coding process: actor configuration, governance process, and institutional mechanism. Actor configuration reflects how roles and influence are distributed among stakeholders, including the participation of private sector actors, community groups, and media engagement. Governance process captures the dynamics of interaction that sustain collaboration, such as leadership configuration, cross-level planning coordination, and patterns of formal and informal communication among stakeholders. Meanwhile, institutional mechanism refers to the structural arrangements that support sustained coordination, including monitoring systems, data integration practices, and administrative coordination platforms.

Together, these three dimensions form the structural foundation through which collaborative governance is operationalized in the context of stunting reduction. Rather than functioning as isolated components, actor configuration, governance processes, and institutional mechanisms interact to shape the overall effectiveness of coordination across sectors and governance levels. The framework therefore demonstrates that collaborative stunting governance is not merely the presence of multiple actors within a policy domain, but the outcome of an integrated system in which actor participation, governance interaction, and institutional coordination operate simultaneously to sustain collective policy action.

## **CONCLUSION**

This study examines how collaborative governance and the Penta-Helix model interact in shaping the implementation of stunting reduction policies in Indonesia and how these dynamics can be contextualized within the administrative environment of East

Jakarta. The findings demonstrate that national scholarly discussions on stunting governance are primarily structured around issues of actor configuration rather than institutional design. The literature consistently highlights the importance of multi-actor participation, particularly the involvement of government institutions, private sector actors, community organizations, and media actors in supporting policy coordination. However, institutional mechanisms such as monitoring systems and integrated data coordination appear less emphasized in the national discourse, indicating that governance challenges in stunting reduction are more strongly associated with how actors are configured and coordinated rather than with the absence of formal institutional frameworks.

Empirical insights from East Jakarta further reinforce this pattern by showing that the implementation of collaborative stunting governance relies heavily on the coordinating role of the local government through institutional platforms such as the Stunting Reduction Acceleration Team. In this context, government institutions function as the central integrator that aligns sectoral programs, facilitates coordination among stakeholders, and maintains policy continuity across administrative levels. The interaction between Penta-Helix actors and the governance dimensions identified in this research—actor configuration, governance process, and institutional mechanism—collectively forms the operational structure through which collaborative governance is realized in practice. This study therefore demonstrates that effective stunting governance is achieved not only through the presence of multiple actors but through the alignment of actor roles, interaction processes, and institutional coordination mechanisms.

Despite these contributions, several limitations should be acknowledged. The systematic literature review relies on published studies, which may introduce potential publication bias, as studies with significant findings are more likely to be published than those reporting null results. In addition, the reviewed literature exhibits heterogeneity in research design, geographic scope, and methodological approaches, which may influence the comparability of findings across studies. The empirical validation of the proposed framework is also limited to a single metropolitan administrative context, which restricts the generalizability of the findings to other regions with different institutional capacities and governance structures. Future research should therefore expand

empirical investigations to multiple regional contexts, including rural and provincial governance settings, in order to test the adaptability of the proposed framework across diverse administrative environments. Further studies may also explore the role of digital governance tools, integrated data systems, and cross-sector policy platforms in strengthening collaborative governance mechanisms for stunting reduction.

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