


Mapping the Evolution of Institutional Governance in Disaster Risk Reduction: A Bibliometric Analysis

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ARTICLE INFO	ABSTRACT
<p>Article History: Received: 2025-11-16 Accepted: 2026-02-19 Published: 2026-03-30</p> <p>Keywords: bibliometric analysis; disaster risk reduction; institutional governance; regional disparities; sustainability</p> <p>Corresponding author: Aduma Lestariastuty Situmorang Email: aduma.situmorang@gmail.com DOI: 10.37905/jgej.v7i1.35356</p> <p>Copyright © 2026 The Authors</p>  <p>This open access article is distributed under a Creative Commons Attribution-NonCommercial (CC-BY-NC) 4.0 International License</p>	<p>Institutionalization, understood as the spatially embedded process of translating ideas into formalized programs, governance arrangements and practices, that critical in strengthening community resilience, particularly within the context of Disaster Risk Reduction (DRR). Despite growing global research in DRR, the geographic dimensions of community institutionalization and its influence in local-level disaster governance remained underexplored. This study adopted a geographic perspective to examine global patterns and regional disparities in research in DRR institutionalizational governance. A systematic review combined with Bibliometric Analysis (BA) was conducted to map the global research lanscape. Using VOSviewer, 41 peer-reviewed journal articles indexed in Scopus were analyzed to identify key trends, thematic clusters, and geographic concentrations of scholarship. The findings revealed that while scholarly interest spans multiple continents, research output was disproportionately concentrated in high-income or more developed countries. Regions with high disaster exposure, particularly Asia and Africa remain underrepresented in international peer-reviewed literature. This imbalance does not reflect an absence of DRR practices in these regions; rather, it stems from structural, historical, and institutional differences affecting research production, publication and visibility. Many Asian and African DRR initiatives are robust in practices but often documented in grey literature, government reports, or local-language publications rather than peer-reviewed journals. As a result, critical dimensions of community institutionalization such as local governance structures, decision-making processes, and institutional sustainability remain underexamined, due to the dominance of technical and engineering-focused research. The complexity of community institutions, limited social-science funding, and political sensitivities further constrain scholarly attention. This study highlighted the need for inclusive, context-sensitive and geographically grounded research approaches alongside sustained investment in local research capacity for enhancing DRR effectiveness and sustainable adaptive resilience.</p>

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1. Introduction

The increasing frequency and intensity of disasters have amplified interconnected risks, including poverty, climate change, environmental degradation, and uncontrolled population growth. This highlights the urgent need for comprehensive strategies and strengthened DRR governance (UNDRR, 2000). These efforts are indispensable for minimising vulnerability and reducing disaster risks, which pose significant obstacles to sustainable development. The four main principles of DRR are as follows: governance and institutional arrangements tailored to local needs, community empowerment and capacity building, and innovation integrated into local and scientific knowledge with a focus on equity, inclusivity, and equality (Klein et al., 2019, Lansakara et al., 2023). An emergency management study by the Greater London authority in the United Kingdom showed that comprehensive investment in DRR is essential to effectively address complex, uncertain, and interdependent disasters (Pescaroli et al., 2023) with its policy, strategy, and multidisciplinary and multisectoral knowledge and practices. Strengthening localised initiatives is fundamental to developing sustainable, long-term DRR strategies (Syamsaputri & Hermon, 2025).

Institutional theory emerged as a response to the formalism of classical political economy, offering an alternative that grounds economic understanding in real-world contexts rather than abstract models

alone. Meyer & Rowan, (1977) introduced the concept of institutionalisation and proposed that the growth of rationalised formal organisations increases organizational complexity and requires the development of relational networks within structured systems. Brinton C & Nee (1998) expanded this view by defining institutions as interconnected concepts, rules, norms, and networks, both formal and informal, that regulate social relationships between individuals, communities, and the natural environment. These processes are embedded in social interactions and sociological structures. Although institutional theory and social capital theory originate from different paradigms, both emphasise critical dimensions supporting sustainability and collaboration. They emphasised the importance of networks, shared norms, trust, and repeated practices or rules in promoting sustained participation and institutional resilience (Halme, 2021). Social capital enables the formation of networks and behavioural norms, and institutionalisation embeds these into governance structures. Thus, institutionalisation is seen as a key pillar for achieving sustainable development, incorporating elements such as transparency, participation, accountability, resource mapping, legal frameworks, and respect for local culture (Haghighi & Takian, 2024). In the context of DM and DRR, strong institutional capacity is critical and closely tied to the quality of governance (Tiller et al., 2022). However, several institutional challenges persist, including poor interagency coordination, limited policy ownership, weak information flows, political interference, inflexible systems, and inadequate human resources, all of which undermine effective disaster governance.

Recent studies indicate that disaster risk reduction (DRR) research has expanded significantly, particularly in developing countries, with increasing attention to community resilience and local practices (Dwirahmadi et al., 2023; Ayala et al., 2025; Henderson et al., 2025). However, this body of literature has largely emphasised technical, engineering, and policy-driven approaches, often overlooking the institutional and governance dimensions that are critical to sustainable resilience. Evidence from recent reviews shows that governance arrangements, social structures, and institutional mechanisms remain insufficiently examined, while robust local DRR practices in regions such as Asia and Africa are frequently documented only in grey literature, government reports, and non-English sources, limiting their visibility in international academic discourse. Case studies from Nicaragua, Scotland, and Jakarta further highlight persistent challenges, including inconsistent institutional capacity, unclear roles and responsibilities, and fragmented governance structures, which undermine effective local-level DRR implementations.

Although DRR research is growing, especially in developing countries, the role of community institutionalisation and its impact at the local level on DRR and DM remains underexplored (Ayala et al., 2025). This gap in the extant literature reflects a dominant focus on technical, engineering, or policy-driven approaches, which often overlook the institutional and governance dimensions that are critical to sustainable resilience. The novelty of this study lies in integrating BA with a systematic review to map and quantify the research landscape comprehensively. This data-driven approach identifies research trends, thematic patterns, geographic disparities, and collaboration networks, helping to reveal underexplored areas and guide future research, policy development, and context-sensitive strategies to strengthen community resilience. Evidence from BA and systematic reviews further shows that governance, social structures, and institutional mechanisms remain insufficiently examined. In developing countries, such as those in Asia and Africa, robust local DRR practices are frequently documented only in grey literature, government reports, or non-English sources, limiting their visibility in international academic discourse (Hadlos et al., 2022; Okunola, 2025). A recent review of DRR and community resilience studies from 2023 to 2025 identified persistent gaps in institutional governance. Studies from Nicaragua, Scotland, and Jakarta highlight inconsistent institutional capacity, unclear roles and responsibilities, and fragmented governance structures as major barriers to effective DRR (Dwirahmadi et al., 2023; Ayala et al., 2025; Henderson et al., 2025).

Previous studies on community institutionalisation in DRR have examined a range of themes, including local governance mechanisms, community resilience practices, and institutional responses to hazards. These studies provide valuable insights into specific case studies, regional practices, and theoretical frameworks. However, the literature remains fragmented, with limited cross-regional thematic synthesis and uneven geographic coverage. While prior research has identified important trends, it often lacks a comprehensive, quantitative mapping of the institutional and governance dimensions of community resilience, making it difficult to fully understand the evolution of the field and the relative contributions of different regions and scholars.

To address this gap, this study employed BA to map and analyse research trends, identify knowledge gaps, and visualise the development of community institutionalisation in DRR. This method allows the visualisation of research patterns, identification of key contributors, recognition of emerging trends, and detection of gaps. This study also traced the evolution of various lines to provide a clearer understanding of how the topic has evolved over time through the following research questions (RQ): RQ1: What were the dominant research themes and topics within the literature on community institutionalisation in DRR? RQ2: What gaps are present in the existing literature? RQ3: What are the potential directions for future research addressing these gaps?. This analysis aims to offer a structured and comprehensive understanding of academic discourse on community-based institutional approaches in the DRR context.

2. Method

2.1. Research Method and Sequences

This study employed a systematic review and BA using VOSviewer software to identify, analyse, and consolidate relevant literature and research publications related to community institutionalisation in DRR. Furthermore, the researchers supported the use of artificial intelligence (AI) tools to extract critical data from the selected studies, which enabled us to facilitate a rigorous and comprehensive analysis with information on research trends, thematic developments, and knowledge gaps. A systematic review was employed as the primary tool for conducting BA to systematically collect, evaluate, and organise scholarly literature by identifying relevant journal publications. BA is a component of a broader systematic review that structures the analysis of existing literature within a defined research domain (J. Paul et al., 2023). This approach requires careful interpretation to maintain objectivity and minimise research bias, (Lim & Kumar, 2024) a statistical technique, and BA data extracted from academic sources such as books, journal articles, and other publications (Akudugu & Ogwu, 2024). It enables researchers to examine publication trends, citation impact, and contributions of authors, institutions, and countries (Lim & Kumar, 2024). Moreover, BA facilitates the identification of leading authors, influential journals, and the co-occurrence of keywords, thereby allowing the thematic analysis of research topics (Tripathy et al., 2024). Beyond a simple data description, BA provides deeper insights into research trends and patterns, helping scholars understand the evolution of a field and its potential future directions (Lim & Kumar, 2024). It also allows for the assessment of the academic impact at the level of individual authors, research groups, or specific publications (Akudugu & Ogwu, 2024). Through systematic document sorting and visual mapping, BA offers a comprehensive overview of research developments within a particular topic (Obreja et al., 2024).

To address the research questions, the authors developed a research framework outlining the key steps, organised into four main stages: (1) formulation of research questions to define the scope and limitations of the study and guide the overall research direction; (2) literature review, in which all relevant journal articles were sourced from the Scopus database using specific keywords; (3) a screening process to ensure the inclusion of only relevant publications; (4) data extraction and BA, in which the selected publications were analysed using bibliometric methods with the support of VOSviewer software to map key trends, patterns, and relationships; and (4) in-depth analysis and interpretation, as the final stage involved interpreting the bibliometric results to derive key findings and formulate research insights and recommendations.

2.2. Data Extraction and Screening Methodology

Data were collected through a literature search on the topic of community institutionalisation in DRR using the Scopus database, guidelines, and other web-based scientific resources. The initial investigation was carried out by extracting journal publications from Scopus, with critical steps presented in Figure 1. The researchers started the investigation using the keywords "Community," "Institution," and "Disaster Risk Reduction," with an initial result of $n = 209$ journal publications. The screening process continued by refining the journals and limiting the investigation to "journal article" and "Final," resulting in $n=127$ journal articles. Subsequently, the authors focused on screening papers presented solely in the "English language," resulting in 123 journals. In addition to the keyword search, other inclusion criteria were applied for the selection of papers by limiting the journal to "open access," resulting in $n= 58$ journals. The refinement screening process ended with a final limit of journal publications from the period of 2020–2025, resulting in 41 journal publications as the basis for the BA. To facilitate BA, the 41 final search results presented in Table 2 were converted into XLSX and CSV files

for VOSviewer analysis, as illustrated in Figure 1. A systematic review was then conducted of the 41 selected journal articles, as summarised in Table 2.

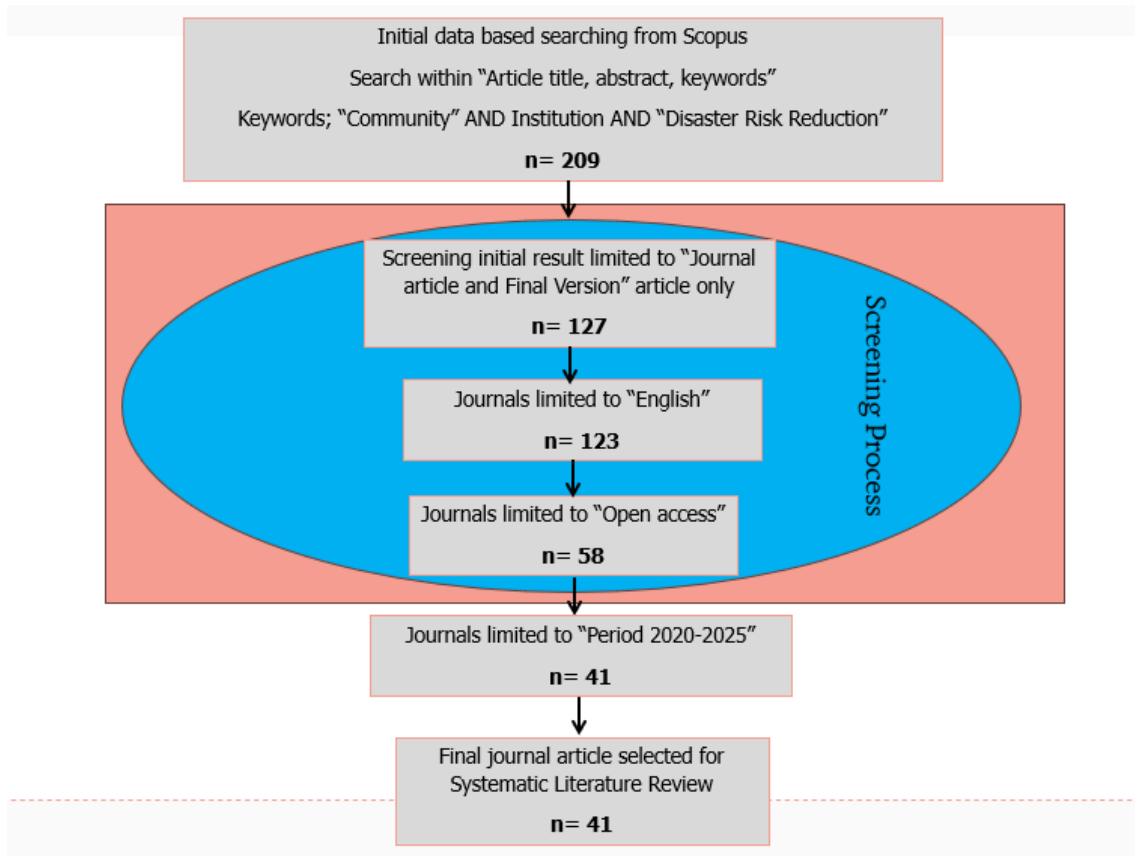


Figure 1. Journal Selection Workflow

3. Results and Discussion

3.1 Trends of Journal Publication Produced in Scopus

Given the widespread occurrence of disasters globally in recent decades, integrated approaches to DRR have become essential to reduce vulnerabilities and improve community well-being. One critical pathway for strengthening DRR strategies is the institutionalisation of local initiatives, which enhances community resilience and adaptive capacity. However, these goals rely heavily on the role of each institution in promoting good local governance and disaster awareness (Husna et al., 2022). This study revealed that despite strong international commitments, previous research on community institutionalisation in DRR has not yet fully aligned with broader trends in academic scholarship. As shown in Figure 2, scholarly publications on this topic have remained limited, averaging only six publications per year: five in 2020, nine in 2021, eight in 2022 and 2023, seven in 2024, and four in 2025. This finding highlights the notable gap between policy emphasis and academic focus. This disconnect is particularly striking considering the growing global consensus that local communities and their institutions play a central role in effective DRR and sustainable development. Further investigation on the progress of scientific journal publication was also conducted by analysing the territorial distributions of countries as producers of scientific journal publications specifically with the topic of community institutionalisation in DRR. Figure 3 (a) illustrates the distribution of the top five countries as producers of journal publications: namely, the United Kingdom (with eight documents), Australia (five journal articles), South Africa (five journal articles), Bangladesh (four journal articles), and Japan (four journal articles). In addition, Figure 3 (b) highlights the significant contributions of universities and research institutes, demonstrating their collaborative efforts in advancing scientific knowledge in this field. These figures identify the top five academic institutions contributing to journal publications since 2020: Charles Darwin University (three journal articles), the University of Johannesburg (two articles), the University of Glasgow (two articles), Hohai University (two articles), and the University of Leed (two articles).

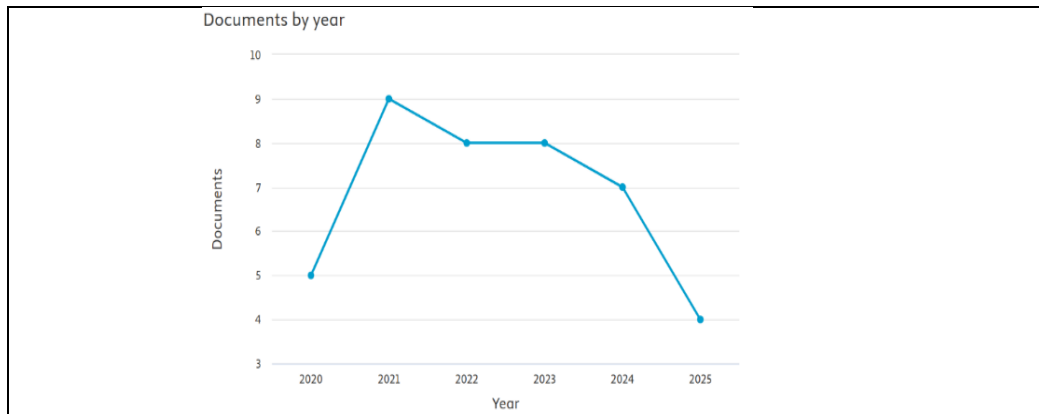


Figure 2. Annual Journal Publications on Community Institutionalization in DRR (2020–2025)

Despite global commitments that emphasise the critical role of local participation in DRR, scientific knowledge on community institutionalisation remains limited. An examination of research contributors and their institutional affiliations revealed a strong dominance of universities and research institutions in the United States, Australia, and Europe, highlighting a significant imbalance in the production and dissemination of knowledge across regions. Notably, despite facing the highest levels of disaster risk, Asia, Africa, and other regions remain underrepresented, while high-income countries in Europe, North America, and Oceania have produced most studies on community institutionalisation in DRR (Yang et al., 2021, Liu & Ghani, 2025). This uneven geographical distribution prompts important questions regarding the underlying factors contributing to such imbalances, especially given the increasing frequency and severity of disasters worldwide. Importantly, this imbalance does not reflect the absence of DRR practices in Asia, Africa, or other regions outside the United States, Australia, and Europe. Rather, it is rooted in structural, historical, and institutional barriers, such as unequal research infrastructure, limited funding, and lower visibility in major databases that shape the patterns of knowledge production and dissemination in the field (Liu & Ghani, 2025).

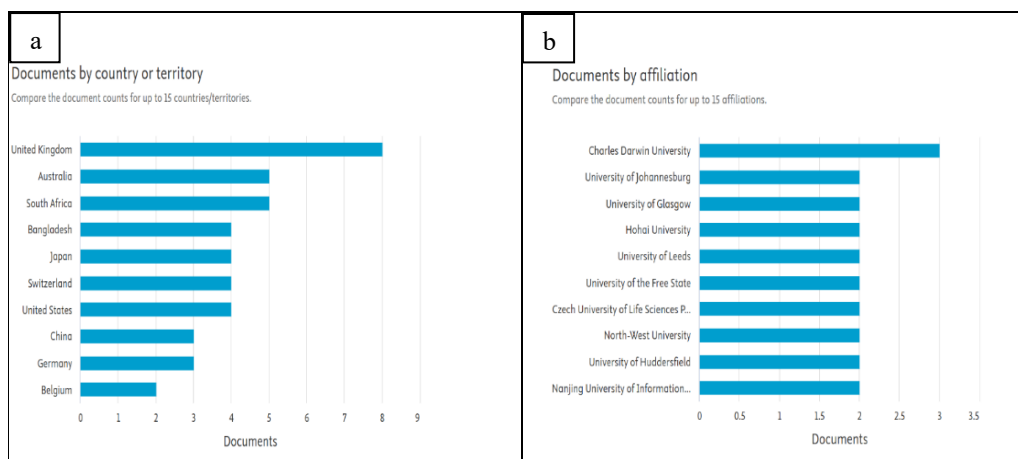


Figure 3. Geographical Distribution of Journal Publications by Country and Institutional Affiliation

Many Asian DRR initiatives are robust in practice; however, their documentation often appears in gray literature, government reports, or local-language publications rather than in international peer-reviewed journals. Consequently, these contributions remain less visible in global academic circuits. Consequently, U.S., Australian, and European scholarship has appeared more prominent, not necessarily because more DRR work has been undertaken there, but because a larger proportion of it is indexed in global academic databases, such as Scopus and Web of Science (Figure 3). Disciplinary focus differences, linguistic barriers, and structural inequities in global knowledge production further contribute to the

reduced visibility of research originating in Asian and African institutions. Addressing these disparities is essential for fostering a more inclusive, equitable, and representative body of DRR research. Greater recognition and integration of community-based DRR knowledge from all regions into a global academic system is crucial to ensure that diverse experiences, innovations, and institutional practices inform global policy and research agendas.

3.2 Bibliometric Analysis

A more focused investigation was conducted by selecting sample data from journal publications that were obtained and analysed using Bibliometrix and VOSviewer software (Obreja et al., 2024), which are designed for constructing, visualising, and analysing bibliometric networks. A total of 41 journals selected from the final screening were overlaid and analysed using VOS viewer to visualise keyword co-occurrences and thematic patterns. This analysis enabled us to identify trends at different levels and topics highlighted in the selected publications. The VOS viewer analysis illustrated the thematic trends and interconnections among the issues discussed in the literature. For this investigation, a minimum keyword occurrence threshold of two was applied, resulting in 42 keywords that met the criteria for inclusion in the visualisation. The information presented in Figure 4 highlights the key trends and topics discussed in the context of community institutionalisation in DRR. The majority of the discussions focused on themes such as local institutions, local participation, climate change and adaptation, hazard management, disaster resilience, disaster management, and disaster risk reduction. These keywords were grouped into six distinct clusters, as detailed in Table 1: Cluster 1 (red), Cluster 2 (green), Cluster 3 (blue), Cluster 4 (yellow), and Cluster 5 (purple).

Despite the relevance of foundational DRR theories, our analysis indicates that critical dimensions of community institutionalisation, such as local governance structures, decision-making processes, and institutional sustainability, remain underexplored in the scholarly literature. This gap reflects the historical dominance of technical- and engineering-focused DRR research, which prioritises hazard modelling, infrastructure resilience (Liu & Ghani, 2025), and early warning systems over social and institutional aspects. Furthermore, much knowledge of community-based DRR practices, particularly in Asia, Africa, and Latin America, exists primarily in grey literature, government reports, and local languages, limiting its visibility in international scholarship. The complexity and context-dependence of community institutions, combined with limited funding for social science-oriented research and political sensitivities around local governance, further constrain academic attention. The fragmentation between academic research and practitioner experience, alongside the lack of standardised conceptual frameworks, underscores a significant theoretical and empirical gap in understanding how community-level institutional norms and structures are established, maintained, and transformed in DRR. Addressing these gaps requires more inclusive, context-sensitive, and globally visible research on community institutionalisation.

The information in Figure 4 demonstrates that the most frequently occurring and highly interconnected keywords were predominantly represented within the red and green clusters. Among these, four keywords emerged as particularly central: *Disaster Risk Reduction* (Muhamad et al., 2021, Uddin et al., 2021, Coetzee et al., 2023, Haque et al., 2024, Bignami et al., 2024), *Climate Change* (Senevirathne et al., 2022), *Disaster Management* (Rahmafritria et al., 2021, Munsaka et al., 2021, S. K. Paul et al., 2022, Rivera Flórez et al., 2024), and *Risk Assessment* (Hochrainer-Stigler et al., 2024). While these findings reflect prevailing research priorities, they also reveal a notable gap in the application of community institutionalisation theory in the field. As articulated in Meyer & Rowan, (1977), institutionalisation within communities entails the development of rationalised institutional rules manifested through formalised structures, programs, and activities, which are further embedded in broader social and organizational frameworks. In addition Brinton C & Nee (1998), institutions are conceptualised as systems of interrelated concepts, rules, norms, and networks designed to regulate social relations, both among individuals and between humans and their environment, which operate through formal and informal mechanisms embedded in social structures.

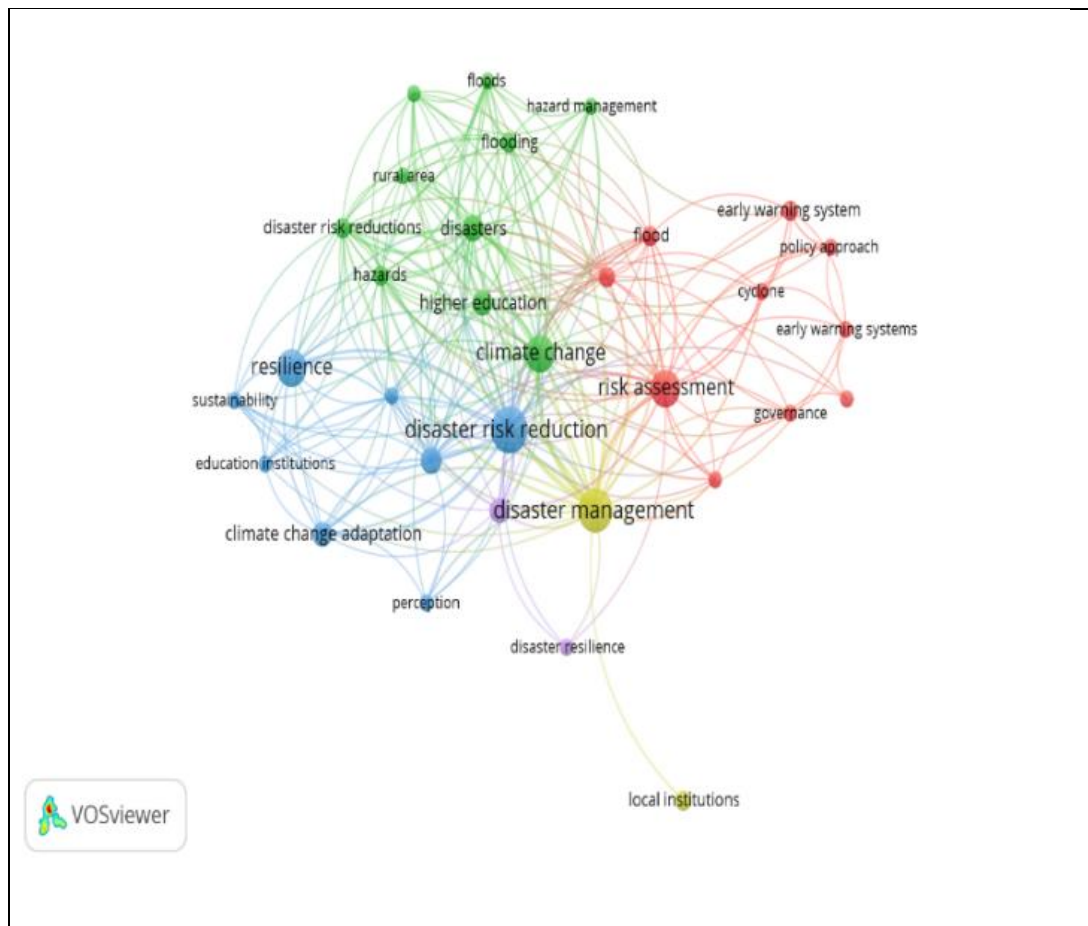


Figure 4. Analysis of keywords co-occurrence

Table 1. The Occurance of Keywords Based on the Cluster. Source

Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6
Cyclone	Climate Change	Climate change adaptation	Disaster resilience	Disaster management	Higher education
Early Warning System	Disaster Risk Reduction	Education institution	Disaster Risk Reduction	Local institutions	Sendai
Flood	Disasters	Quantitative analysis	Perception		
Governance	Flooding	Resilience	Vulnerability		
Governance approach	Hazard management	Sustainability			
Institution	Hazard	Sustainable development			
Policy approach	Local participation				
Policy making	Rural area				
Risk assessment					

Source: Analisis of the Authors, 2025

Further analysis was conducted to examine annual trends in DRR-related topics from 2020 to 2025, as shown in Figure 5. The results indicate that DRR as a general theme has been consistently discussed throughout this period, reflecting its sustained prominence in scholarly discourse. However, topics critical to understanding institutional change, such as governance structures, local participation, and community-level institutions, only began to receive notable attention from 2023 onwards. This temporal gap has highlighted a delay in the academic response to the increasingly recognised importance of institutional dynamics in effective DRR implementation. The lag is particularly striking given the simultaneous global emphasis on community-based approaches, capacity building, and local

resilience, as outlined in international frameworks, such as the Sendai Framework for DRR. Despite substantial investments by many countries in organising communities, fostering local leadership, and promoting participatory approaches, the process of institutionalising local participation and community engagement has been inadequately documented in academic literature. This underrepresentation raises important questions about the disconnect between practice and scholarship: Why are essential, context-specific, on-the-ground practices not being systematically captured, analysed, or shared globally? Limited scholarly attention may hinder the development of evidence-based strategies, constrain cross-regional learning, and reduce the ability to assess long-term DRR initiatives. Addressing this gap is critical to ensure that community institutionalisation as a core component of sustainable DRR is recognised, understood, and integrated into global academic and policy discourse.

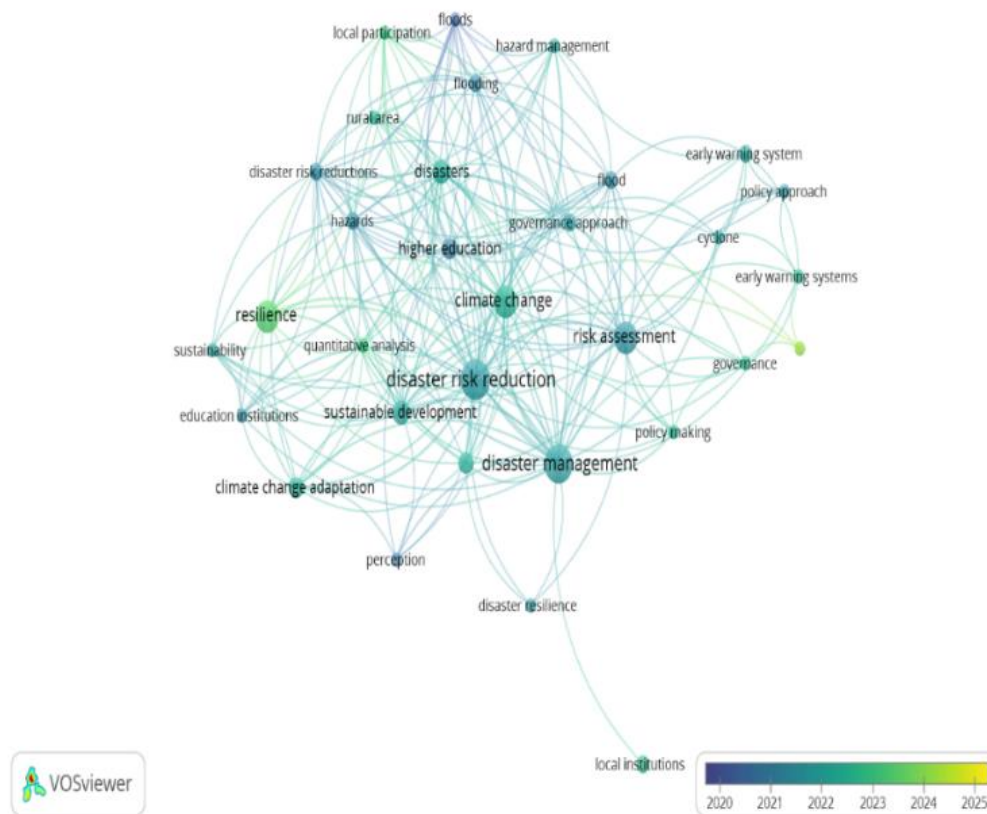


Figure 5. Trend of Annual Discussion and Topic from 2020 – 2025

3.3 Systematic Review and Critical Discussion

A more systematic and in-depth review was conducted to examine the trends in the focus, discussion, and discourse of community institutionalisation in DRR based on 41 selected journal publications, providing a comprehensive overview of previous research (see Table 2).

Table 2. Trend and Highlight of the Discussion From 41 Selected Journals

No.	Topic of Discussions	References
1	Previous disaster research has demonstrated that social inequalities such as persistent poverty, marginalization, and institutionalized racism that substantially impact community resilience and adaptive capacity in the face of disasters	(Uekusa et al., 2024)
2	Many of local community and institution face difficulties and challenges in developing and mobilizing the resources to enhance their resiliences primarily due to the resource limitations and information gaps	(Quader et al., 2023, Haque et al., 2024, Nyahunda, 2025)
3	Strong networks play a vital role in supporting coordinated action and promoting the exchange of experiences	(Bignami et al., 2024)

No.	Topic of Discussions	References
4	Local government commitment with its “localized partnership” is very criticals to ensure the effectiveness and sustainable disaster management	(Quader et al., 2023, Bignami et al., 2024)
5	In Practise, each countries experiences the challenges to develop and implement the DRR strategies and policies due to the diverse and multitude of institutions involved (governments, NGOs, public private sector, and other key stakeholders)	(Bignami et al., 2024)
6	National policies and strengthening the partnerships with more diverse stakeholders are the critical elements in developing collective action for DRR and participatory community engagement	(Ibeanu et al., 2023, Quader et al., 2023, Haque et al., 2024, Moises et al., 2024)
7	DRR policies and strategies will be more sustainable implemented if institutional coordination and communication are established at all levels of government	(Moises et al., 2024)
8	Local networks play a crucial role in mobilizing a diverse range of resources to effectively address community needs. Lack of community engagement obstructs the government’s capability to develop the DRR strategy to strengthen the institutionalized the local	(Moises et al. 2024)
9	In the field of DRR, integrating local knowledge with scientific expertise is considered a key strategy for promoting active community participation	(Vasileiou et al., 2022, Abdalla et al., 2024)
10	Collaborative efforts along with the enforcement, monitoring, evaluation, qualified and capable workforce, and sufficient of funding resources was generally weak which has hindered coordinated institutional action to strengthen DRR strategies and their implementation across all phases: before, during, and after disasters	(Munsaka et al., 2021, Ibrahim et al., 2023, Quader et al., 2023, Dwirahmadi et al. 2023).
11	Strengthening the capacity of individuals and institutions significantly contributes to the effective implementation of risk mitigation and adaptation strategies, enabling them to better prepare for and respond to future disasters in alignment with local contexts and available resources	(Sarabia et al., 2020, Shah et al., 2020, Cremin et al., 2023, Xu et al. 2024, Martins et al. 2024)
12	Decentralizing DM governance by promoting the active involvement of local institutions can significantly reduce the vulnerability of local populations and their livelihoods by enhancing the effectiveness of good governance practices	(Quader et al. 2023)
13	In many experiences, local institutions are not well functioning since they are not fully aware with their roles and responsibilities that impact to their lack of involvement in DM and DRR	(S. K. Paul et al., 2022)
14	Strengthening the efficiency and capacity of local institutions and related stakeholders through capacity building, awareness raising will contribute to eliminate the potential risk of economic impacts during the disaster	(Sarabia et al., 2020, Munsaka et al., 2021, Paul et al., 2022)
15	Establishing communication channels and strengthening community-based approach are indeed concrete examples of how improving an institution’s capacity contribute to empower individual and community in DM and DRR	(De Majo, 2022)
16	Program capacity strengthening and development remains crucial in ensuring robbust and sustainable institutional collaboration including in DRR	(Sarabia et al., 2020, Senevirathne et al., 2022)
17	Trust in institution’s capacity, governance, democracy and sustainable development are the core element to achieve a resilience country	(Gavari-Starkie et al., 2021)
18	Societal institution will significantly impact to people’s knowledges, experiences, beliefs, practises and behaviors	(Kalogiannidis et al., 2022)
19	Schools considered as a core institution resources in fostering community resilience and to eliminate the potential risks and effects of the disaster	(Pacheco et al., 2021)
20	Investment in capacity strengthening of local government institutions and local community leaders in Early Warning System (EWS) have strong influence in building community resilience	(Sarabia et al., 2020, Munsaka et al., 2021)
21	Integration of government institutions DRR and CCA will support the management of cross-cutting issues and shared institutional responsibilities of each department interest	(Nemakonde et al., 2021)
22	A symbolic level of participation has been identified as a critical gap that must be addressed in order to achieve meaningful participation of local communities in Disaster Risk Management (DRM) and DRR program	(Duque Monsalve et al., 2024)

No.	Topic of Discussions	References
23	Promoting the institutionalization of DRR is essential for ensuring better coordination between disaster risk management (DRM) agencies and related stakeholders	(Coetzee et al., 2023)
24	The structural and non-structural governance components essential for the successful and sustainable management of flood prevention projects	(Ibeanu et al., 2023)
25	Efforts to strengthen the science-policy interface should shift from project-based research to long-term collaboration to ensuring continuous, science-informed guidance and better integration into policy and risk management frameworks	(Hochrainer-Stigler et al., 2024)
26	Building a strong and effective institutional system is a fundamental first step toward shaping preparedness for efficient disaster management and strengthen community resilience	(Rahmafritria et al., 2021)
27	Greater access to such information can strengthen community resilience by improving awareness of hazards and emerging risks among information-poor population	(Muhamad et al., 2021)
28	Weather and climate information serves to prompt timely action and improve disaster preparedness, with decision-oriented, user-cantered information being essential for its effective utilization	(Awolala et al., 2022)
29	The core priority in DRR is protecting the most vulnerable by bridging the digital divide and ensuring they benefit from available technologies	(Shaw, 2020)
30	Self-built and academic communities must strengthen ties by sharing knowledge and experiences in community mapping using participatory and popular education methods.	(Rivera Flórez et al., 2024)
31	Disaster politics, including resource allocation, should reflect disaster realities, policy framings, and response practices, requiring long-term, place-based planning to address underlying climate-related vulnerability	(Manda & Thindwa, 2025)
32	The development of effective local DM structures and DRR strategies fundamentally depends on the principles of good governance and the empowerment of local institutions	(Uddin et al., 2021)
33	Disaster risk reduction is fundamentally oriented toward supporting sustainable development and, as such, emphasizes long-term strategies and interventions	(Etongo et al., 2024)
34	The integration of DRR and CCA is challenged by limited institutional and actor capacities, policy gaps, mismatches in scale, knowledge, and norms, governance failures, weak coordination and collaboration, mainstreaming and planning difficulties, funding constraints, and overall capacity shortages	(Islam et al., 2019)

Source: Indepth analisys by the Authors, 2025

Table 2 synthesises key insights from the 41 selected journal articles, highlighting the critical roles of policy (Islam et al., 2019) frameworks, local participation, and multistakeholder partnerships in enabling collective action for DRR and promoting community engagement. These findings emphasise the necessity of inclusivity across all phases of the DM cycle, with a particular emphasis on DRR initiatives through the existing institutional structure, collaborative efforts, and active participation from community members to shift perception into tangible behavioural change (Bubeck et al., 2024). This highlights the spatially grounded interplay among institutions, communities, and local practices. Institutions with robust integrated management systems and information frameworks are foundational for building disaster-resilient communities. This demonstrates how institutional capacity shapes social and geographic patterns of vulnerability and resilience.

The principles of good governance, such as transparency, accountability, and sustained participatory collaboration, are essential for the long-term effectiveness of DM and DRR programs. Local institutions must uphold the rule of law, foster transparency, encourage active participation, and promote gender equity and inclusiveness (Uddin et al., 2021). Governance practices should also encompass inclusive decision-making processes (Annahar et al., 2023) by ensuring the engagement of all key stakeholders to address disaster-related challenges collaboratively and sustainably (Hochrainer-Stigler et al., 2024). These principles will strengthen trust among local institutions, communities, and stakeholders, thereby advancing equitable, context-sensitive, and effective approaches for strengthening local resilience. Beyond institutional and governance dimensions, DRR initiatives also contribute to social geography by

enhancing individuals' perceived self-reliance, while simultaneously creating opportunities to strengthen personal resilience (A. Haque & Fatema, 2022) and enhance response capacity to coordinate geographically informed DM strategies that minimise casualties and damage (Sapuntala et al., 2025).

Effective community institutionalisation requires substantial investments in capacity building that are tailored to local contexts, such as community knowledge, skills, and competencies shaped by place, scale, and spatial networks linking communities to external actors. Strengthening community capacity is important for fostering resilience and enabling individuals and institutions to anticipate, respond to, and recover from disasters more effectively. Beyond infrastructure and policy, resilient communities depend on empowered citizens who can actively participate in risk-reduction initiatives, apply locally relevant strategies, and adapt to evolving hazards. Therefore, sustained support for context-specific capacity development not only complements DRR efforts but also forms a critical foundation for long-term and adaptive resilience. It is important to recognise that capacity disparities are both social and spatial: vulnerable groups are often concentrated in high-risk, low-access areas, whereas those with higher levels of education or income benefit from greater advantages (Duque Monsalve et al., 2024). Moreover, current research has insufficiently addressed how investments in community institutionalisation should be modelled to enhance local resilience across different spatial scales and networks. Addressing this gap is crucial for future studies to inform policies and practices that strengthen DRR at the community level and ensure that resilience-building efforts are equitable, place-sensitive, and responsive to both social and geographic inequalities.

4. Conclusion

This study offers valuable insights into the prevailing trends in scholarly discussions of community institutionalisation in DRR, drawn from an analysis of 41 corpus-indexed journal publications. Although the topic has gained global attention, the findings reveal a pronounced geographical imbalance, with the majority of contributions originating from high-income countries such as the United States, Australia, and Europe, rather than Asia, Africa, or other parts of the world. This imbalance does not reflect the absence of DRR practices in Asia, Africa, or other regions outside these three. Rather, it is rooted in structural, historical, and institutional differences that have shaped patterns of research production, publication, and visibility. For example, many Asian DRR initiatives are robust in practice; however, their documentation often appears in gray literature, government reports, or local-language publications rather than in international peer-reviewed journals. Consequently, these contributions remain less visible in the global academic arena. Consequently, scholarship in the United States, Australia, and Europe appears more prominent, not necessarily because more DRR work has been undertaken there, but because a larger proportion of it is indexed in global academic databases such as Scopus and Web of Science.

Despite the relevance of foundational DRR theories, the critical dimensions of community institutionalisation, such as local governance structures, decision-making processes, and institutional sustainability, remain underexplored, particularly in underrepresented regions. This gap reflects the historical dominance of technical and engineering-focused research, limited funding for social science-oriented studies, and the context-dependent nature of community institutions and political sensitivities, further constraining academic attention. The fragmentation between academic research and practitioner experience, along with the lack of standardised conceptual frameworks, underscores a significant theoretical and empirical gap in understanding how community-level institutions are established, maintained, and transformed. Addressing these gaps requires more inclusive, context-sensitive, and globally visible research on community institutionalisation. Sustained investment in local capacity building, tailored to community contexts, is equally important to strengthen knowledge, skills, and competencies essential for resilience. It is critically important to understand that resilient communities depend not only on infrastructure and policies but also on empowered citizens who can actively participate in DRR initiatives, apply learned strategies, and adapt to evolving hazards. Therefore, strengthening community institutionalisation through targeted research and capacity development is critical for enhancing DRR practices and building long-term adaptive resilience.

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Data availability. Data will be made available on request

AI Use Declaration. AI Use Declaration: The authors used Google Scholar to conduct a broad academic literature search; ChatGPT to assist the authors in organising and structuring the ideas; and Turnitin's AI writing detection tool, facilitated by the Graduate School of Sustainable Development, Universitas Indonesia, to check manuscript similarity. The authors reviewed and edited all AI-assisted output and are fully responsible for its content and any errors.

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