

## Post Flood Disaster Management Practices with Collaborative Governance in Indonesia

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Article Info	ABSTRACT
Keyword multi-stakeholder collaboration, post-flood Collaborative, Governance disaster,	This research is motivated by the fact that the major floods and landslides that struck Aceh, North Sumatra, and West Sumatra at the end of 2025 caused multidimensional impacts, including loss of life, mass displacement, and damage to infrastructure and ecosystems. The complexity of post-disaster management demands cross-sector collaborative governance in accordance with the mandate of Law No. 24 of 2007. This study aims to analyze the urgency and design of multi-stakeholder collaboration from a Public Administration perspective, grounded in Collaborative Governance theory, Collaborative Governance Regimes, and the Pentahelix model. The research employs a qualitative-descriptive approach through literature review and policy analysis. Data are drawn from regulations, theoretical literature, reports from BNPB/BPBD, and national media publications. Analysis is conducted by mapping theoretical frameworks to field findings, identifying implementation gaps, and synthesizing policy recommendations. The results indicate that post-disaster management in Sumatra faces obstacles such as regional isolation, disruptions to electricity and telecommunications networks, limited capacity of BPBD, and ecological vulnerability in upstream areas. The application of trust-building principles, small wins, and CGR-based collaborative regimes can strengthen cross-provincial coordination. The Pentahelix model serves as a practical architecture to orchestrate the roles of government, communities, academia, the private sector, and the media in restoring basic services, rehabilitating infrastructure, and reducing recurrent risks. Collaborative governance that integrates the Ansell & Gash framework, the Emerson–Nabatchi CGR, and the Pentahelix model is key to effective post-disaster flood management in Sumatra. Policy recommendations include establishing cross-provincial Collaborative Command Posts, adopting operational small wins, integrating academic studies into technical decision-making, strengthening a unified disaster data system, and considering national disaster status in accordance with the indicators set out in Law No. 24 of 2007
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### Introduction

The major floods and landslides that struck Aceh, North Sumatra, and West Sumatra in late November–December 2025 demonstrated the scale of impacts and the

extraordinary complexity of post-disaster management. Reports from BNPB and national media recorded hundreds to more than a thousand fatalities, hundreds of thousands of displaced people, and the disruption of road access, electricity, telecommunications, and logistics distribution to isolated areas (KOMPAS.com, December 4, 2025; December 11–12, 2025; BNPB Dashboard) (Kompas.com, 2025; BNPB, 2025). The central government deployed integrated operations across ministries and agencies together with the TNI–Polri, Basarnas, and local governments, while issuing seven directives to accelerate recovery, restore connectivity, and support housing (BeritaSatu, December 8, 2025). Nevertheless, various stakeholders advocated for the declaration of a national disaster status to mobilize resources more broadly (Times Indonesia, December 3, 2025; Tempo, December 13, 2025).

Within the legal framework, Law No. 24 of 2007 stipulates that disaster management is the responsibility of the central and local governments and must be conducted in a planned, integrated, coordinated, and comprehensive manner across the pre-disaster, emergency response, and post-disaster phases (JDIH BPK; Peraturan.go.id). This implies the urgency of collaborative governance that integrates multiple actors within the Pentahelix model government, communities, academia, the private sector, and the media as developed and mainstreamed by BNPB and national studies (BNPB, 2020; Pujiono Centre–SIAP SIAGA, 2022).

From a Government Studies (PhD) perspective, this article examines how the theoretical frameworks of Collaborative Governance (Ansell & Gash, 2008) and Collaborative Governance Regimes (Emerson, Nabatchi & Balogh, 2012; Emerson & Nabatchi, 2015), combined with the Pentahelix model, can be used to design post-flood disaster collaboration in Sumatra that is rapid, inclusive, accountable, and sustainable.

## Method

The research approach employed is qualitative-descriptive, using a literature review strategy and policy analysis. Data sources include: (a) regulations and policies Law No. 24/2007, Government Regulation No. 21/2008, and Presidential Regulation No. 8/2008; (b) theoretical literature by Ansell & Gash (2008) and Emerson–Nabatchi (2012; 2015); (c) the Pentahelix model from the Pujiono Centre–SIAP SIAGA report (2022) and materials from BNPB/BPBD; and (d) contextual data from releases by BNPB, KOMPAS.com, BeritaSatu, TIMES Indonesia, Tempo, Serambi/Tribun, Mongabay, BPBA Aceh, and Indonesia.go.id. The analysis was conducted through mapping theoretical elements to field findings (framework mapping), identifying implementation gaps (gap analysis), and synthesizing policy recommendations that can be executed rapidly in the short to medium term

## Results and Discussion

Theoretical Frameworks and Their Relevance to Post-Disaster Management in Sumatra

1. Collaborative Governance – Ansell & Gash (2008). This model positions public agencies as facilitators of multi-stakeholder, consensus-oriented collaborative forums, with key variables including a history of conflict or cooperation, incentives for participation, asymmetries of resources and power, facilitative leadership, institutional design, and

process dynamics such as face-to-face dialogue, trust-building, commitment, shared understanding, and small wins that trigger virtuous cycles of collaboration (Ansell & Gash, 2008). In the context of Sumatra, these variables are evident in the need to reopen access to isolated areas, restore electricity, telecommunications, and fuel supplies, and ensure clear command structures and aid governance (Kompas.com, December 3 & 12, 2025; BeritaSatu, December 5 & 8, 2025).

2. Collaborative Governance Regimes (CGRs) – Emerson, Nabatchi & Balogh (2012) and Emerson & Nabatchi (2015). This framework maps layered dimensions comprising system context (hazards/weather, ecology, socio-economic conditions, legal frameworks), the collaborative regime (actors, rules of the game, internal legitimacy, capacity), internal dynamics (shared motivation, trust, capacity for joint action), and collaborative actions that generate impacts and cross-system adaptation. The application of CGR in Sumatra supports the establishment of cross-provincial collaboration command posts (Aceh–North Sumatra–West Sumatra) with agreed rules, a one data system, and measurable recovery performance indicators (Emerson & Nabatchi, 2015; Coordinating Ministry for Human Development and Culture/IDMS 2025; BNPB).
3. The Pentahelix Model – BNPB and National Studies. The Pentahelix model emphasizes the orchestration of roles among government, communities/volunteers, academia/experts, the private sector, and the media throughout the disaster management cycle (pre-disaster, emergency response, and post-disaster), with the spirit of gotong royong as the foundation of collaboration (BNPB, 2020; Pujiono Centre–SIAP SIAGA, 2022). In post-disaster Sumatra, these roles are reflected in aid distribution, restoration of basic services, river normalization and sabo dam construction, strengthening early warning systems, as well as disaster literacy and public accountability (Indonesia.go.id, June 4, 2024; BNPB, May 23, 2024; KOMPAS/Serambi, December 3–13, 2025).

### **Field Findings: Barriers, Needs, and Entry Points for Collaboration**

The main post-disaster barriers in 2025 include: (a) regional isolation and disruptions to electricity, telecommunications, and fuel networks that slowed response efforts (Tempo, November 27, 2025; BeritaSatu, December 5, 2025); (b) limited capacity of BPBD to conduct cross-provincial operations in difficult terrain (BeritaSatu, November 27, 2025; BPBA Aceh, November 27, 2025); (c) dynamic data conditions and challenging terrain, including missing persons and rapidly changing displacement needs (Serambi/Tribun, December 11, 2025); and (d) upstream ecological vulnerability (area degradation and extractive activities) that exacerbated the impacts of flash floods (Mongabay, December 9, 2025).

Entry points for collaboration aligned with the principles of small wins (Ansell & Gash, 2008) and collaborative action (Emerson–Nabatchi) include restoring connectivity (temporary roads and bridges), prioritizing logistics distribution (clean water, food, medicine) through integrated command posts (Kompas.com, December 3, 2025; BeritaSatu, December 8, 2025); emergency restoration of electricity and telecommunications with support from the private sector and utilities (BeritaSatu, December 5, 2025); provision of temporary shelters, health services, and sanitation facilities that are responsive to vulnerable groups (Kompas.com, December 12, 2025); and river normalization, sabo dam construction, and strengthening early warning systems based on academic and technical studies (Indonesia.go.id, June 4, 2024; BNPB, May 23, 2024).

### **Design of the Post-Disaster Collaborative Governance Regime (CGR): Policy Recommendations**

- a) System context: Use Law No. 24 of 2007 as a reference and Pentahelix-based policy recommendations (IDMS 2025) to establish a cross-provincial focus with clear policy goals (JDIH BPK; IDN Times/Navaswara, December 3–4, 2025).
- b) Regime formation & internal legitimacy: Establish a Sumatra Post-Disaster Collaboration Command Post (BNPB/Coordinating Ministry) with clear rules of engagement, representation of local actors, transparent data mechanisms, and public feedback loops through the media (Emerson–Nabatchi, 2012; BNPB).
- c) Shared motivation & capacity for joint action: Define shared objectives for restoring basic services within 90 days; rehabilitating key infrastructure within 6–12 months; and reducing medium-term risks (sabo dams/EWS) (Indonesia.go.id; BNPB). Build collaborative capacity through cross-sector logistics pooling, mapping of volunteers/CSOs, and academic knowledge hubs (UI SIL, 2022).
- d) Collaborative actions & performance: Conduct joint operations for aid distribution to isolated areas; restore electricity and telecommunications; implement *cash-for-work* programs for debris removal; deploy *mobile clinics*; and ensure protection for women and children (Kompas.com, December 12, 2025; VIVA, December 8, 2025). Measure performance in terms of process indicators (speed of access, coordination) and productivity outcomes (active road/bridge sections, restored public services, reduction in the number of displaced persons) (Kontan, December 10, 2025).

### **Conclusion**

Post-flood disaster management in Sumatra requires collaborative governance that integrates the Ansell & Gash framework facilitative leadership, trust-building, and small wins with the Emerson Nabatchi Collaborative Governance Regimes encompassing context, regime, dynamics, and actions. The Pentahelix model functions as a practical architecture for orchestrating the roles of government, communities, academia, the private sector, and the media. Post-disaster response must also be synergized with environmental and spatial planning policies, including sabo dams, watershed normalization, and early warning systems, to reduce recurrent risks. Accordingly, policy recommendations include

establishing a Sumatra Post-Disaster Collaboration Command Post as a cross-provincial collaborative regime with measurable recovery indicators; adopting operational small wins to restore public trust; integrating academic studies into technical decision-making such as sabo dam construction, watershed normalization, early warning systems, and safe relocation; strengthening a unified disaster data system (one data) and public communication through the media; and considering the declaration of a national disaster status in line with the indicators stipulated in Law No. 24 of 2007 when the scale of impacts exceeds regional capacity.

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