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Pameran Riset, Inovasi, dan Pengabdian kepada Masyarakat

Polycrisis Leadership and Integrated Risk Communication: A Longitudinal, Systems-Based Case Study of Environmental, Social, and Governance Crises in Indonesia

Program Riset Internasional ITB
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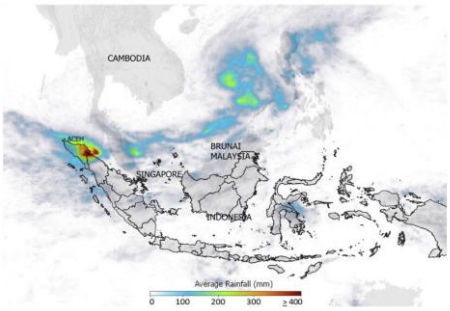
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Abstract

- Indonesia faces interlinked crises: climate disasters, health emergencies, socioeconomic and governance challenges.
- This study examines how polycrisis leadership and integrated risk communication build resilience in Sumatra and Aceh.
- Framework: systems thinking and the Resilient Health System.

Keywords: Polycrisis Leadership | Integrated Risk Communication



Tropical Cyclone Senyar rainfall behind the 2025 Aceh floods

Introduction

2004	COVID-19	2025
Aceh tsunami	Pandemic	Floods & landslides

- **Polycrisis:** crises that interact through cascading effects and feedback loops.
- **Gap:** separate crisis handling leads to fragmented policy and inconsistent communication.
- **Need:** adaptive leadership and integrated risk communication to build public trust.
- **Aim:** an integrated conceptual framework for stronger governance and resilience.



Aftermath of the floods



Local health service

Research Method

Systems-based qualitative, longitudinal multi-level case study in Sumatra and Aceh

1. **Field observation**
   Aceh Tamiang
2. **In-depth interviews**
   12 participants: local government, communities, BNPB
3. **Narrative analysis**
   83 respondents from Indonesian organizations
4. **Social listening**
   16,475 articles, 1,176 media outlets (Nov 2025 – Feb 2026)

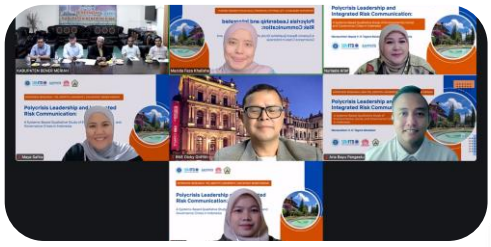
Thematic | **Narrative** | **Sentiment**

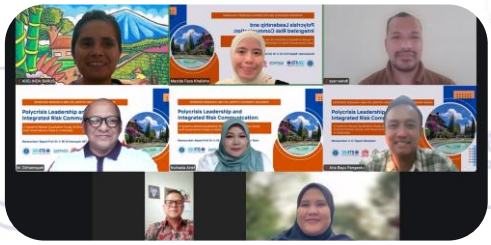


Stage 1: field observation, Aceh Tamiang



Stage 2: on-site interviews





Stage 3: online interviews

Discussion & Result

341,480	16,475
social media conversations	online media articles

106,599 conversations — **76% positive** conversations on the public leadership of Aceh

Key shift in leadership

Command & control → **Adaptive & collaborative**

7 emerging themes (result from interviews)

- **Crisis leadership**
- **Polycrisis management**
- **Resource & logistics**
- **Community resilience**
- **Communication & coordination**
- **Infrastructure & governance**
- **Cultural & local wisdom**

Conclusion

Risk Communication in Disaster
Transparent, timely, consistent messages build public trust and reduce uncertainty.

Recommendation for Policymakers
Strengthen institutional collaboration and involve local communities in preparedness.



Integrated risk communication during disaster