Policy Brief

Rising Above the Flood: Strategic Disaster Resilience Financing for Greater Jakarta

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Summary

The significant economic and social impacts of recurring severe floods in Greater Jakarta, Indonesia, emphasise the need for robust financing and insurance mechanisms. The financial losses from the recent flood emphasise the challenges in disaster risk financing and the low penetration of insurance. This policy brief aims to analyse the economic impact of the March 2025 floods and advocate for robust disaster resilience financing strategies to enhance financial preparedness and recovery through strengthening disaster risk financing strategy implementation, expanding insurance coverage, enhancing public-private partnerships (PPPs), and leveraging innovative financing to build greater urban resilience.

Greater Jakarta's Recurring Flood Losses and Financial Resilience

Greater Jakarta frequently experiences severe floods, which cause substantial economic losses, infrastructure damage, and social disruption. These strain public finances, disrupt businesses, and increase government spending on disaster response and recovery (VOI Indonesia, 2025). The March 2025 Greater Jakarta floods caused displacement, environmental damage, and economic loss, highlighting the region's vulnerability to extreme weather, exacerbated by rapid urbanisation and climate change.

Disaster resilience financing mechanisms are critical in ensuring financial preparedness, mitigating impacts, and accelerating recovery efforts. Financing instruments such as contingency funds and catastrophe bonds (CAT Bonds) can provide immediate liquidity for disaster recovery efforts. Meanwhile, parametric insurance, which triggers payouts based on pre-defined flood parameters, offers a fast and transparent mechanism to support affected communities. Strengthening disaster resilience financing mechanisms will ensure a timely response to disasters and foster long-term resilience, safeguarding Greater Jakarta's economic stability against future flood risks. A literature review and secondary data analysis were conducted, forming the basis for actionable policy recommendations to enhance Indonesia's disaster resilience.

Assessing the Toll: Flood Losses, Damage, and Economic Recovery Challenges

Greater Jakarta has a long history of severe flooding, causing widespread damage and economic disruption. One significant event was the 2020 flood, which affected over 173,000 people, submerged 5,166 homes, and led to losses exceeding Rp 11.4 trillion (~ USD 698 million)[1] (Alam et al., 2025). The retail sector suffered heavily, with around 400 stores closing, resulting in a daily loss of Rp 10 billion (~USD 613 thousand). Shopping centers experienced a 50% decline in visitors, translating to a daily loss of Rp 41 billion (~USD 2.5 million). Traditional markets were also hit hard, with 28 markets and 7,000 traders losing a combined Rp 3.5 billion (~ USD 214 thousand) per day (Pratomo, 2020).

A similar situation occurred in March 2025 when severe flooding forced 9,250 individuals to evacuate and caused financial losses of approximately Rp 5 trillion (~USD 306 million). The Jakarta Chamber of Commerce and Industry (Kadin) reported thousands of retail closures, business shutdowns, and severe transportation disruptions (Utami, 2025). One major impact was the closure of Mega Bekasi Hypermall, a key commercial hub in Bekasi City, which remained shut for nearly two weeks after flooding on March 4, 2025 (Syarifudin, 2025). The inundation caused extensive property damage and economic losses for vendors. This prolonged closure affected large retailers, small vendors, and employees reliant on daily income. Many small businesses, already operating on tight margins, could not recover, leading to permanent closures, job losses, and worsening economic instability. These recurring disasters highlight the urgent need for a robust disaster response and financing system to ensure timely aid and long-term resilience.

Floods cause extensive structural damage and economic disruption. Destroy buildings, infrastructure, and supply chains, leading to financial losses and job displacement. Rebuilding strains public finances and hinders economic growth, highlighting the need for resilient infrastructure to prevent future disasters.

The low penetration of property and disaster insurance leaves many homeowners and businesses dependent on government aid or personal savings. Without sufficient coverage, those affected face prolonged financial hardship and uncertainty. Limited private sector involvement worsens the issue, as disaster recovery financing relies heavily on government resources. According to the Corporate Secretary of PT Asuransi Jasa Indonesia (2025), many property owners still view insurance as an unnecessary expense rather than a protective investment. However, property owners can mitigate disaster-related asset loss with relatively affordable premiums.

Indonesia faces significant challenges in disaster risk financing across all phases. Despite the need for pre-disaster investments in mitigation and climate-resilient infrastructure, funding remains limited, with more focus on immediate disaster response. Insurance as a financial protection tool is underutilised, as disaster insurance penetration remains low due to high premiums and limited awareness. The government relies on contingency funds and on-call budgets during emergencies, which are often insufficient for large-scale disasters. Post-disaster recovery is particularly constrained by financial limitations, leading to delays in reconstruction and prolonged community hardship. The Disaster Pooling Fund, operational since 2021 in Indonesia, is vital for disaster recovery but is currently underfunded.

Leveraging Disaster Risk Finance: Stakeholder Roles and Opportunities for Flood Mitigation and Recovery

[1] *The average selling exchange rate of the US Dollar against the Indonesian Rupiah, as reported by Bank Indonesia from March 4-10, 2024 (during the flooding period), was 1 USD = 16,312 IDR.*

Flooding and other disasters impose significant financial burdens on households, businesses, and governments. Relying solely on government budgets is insufficient to cover disaster response and recovery costs. The government introduced Disaster Risk Finance (DRF) as a strategic policy mechanism to address this challenge and ensure sufficient financial resources for mitigation, response, and recovery. This commitment was formalised in the 2018 DRF strategy, identifying potential funding sources based on disaster impact and frequency.

Effective disaster risk financing requires collaboration among key stakeholders, each contributing through specific roles and financial instruments. Through the Ministry of Finance, BNPB, and Bappenas, the central government is responsible for policy development, national funding allocation, and international cooperation. At the regional level, provincial and local governments implement DRF mechanisms, integrate them into local development plans, and manage fund disbursement. Governments allocate on-call funds and emergency budgets at national and sub-national levels, and they develop disaster pooling funds to support disaster response. Additionally, the government transfers part of its disaster risk through indemnity insurance for public assets (*Asuransi Barang Milik Negara*/ABMN), facilitated by the insurance industry (Marlina et al., 2024).

The private sector is crucial in disaster resilience financing by offering insurance solutions, co-investing in resilient infrastructure, and supporting risk-sharing mechanisms. Key instruments include disaster insurance such as All-Risk Property Insurance, Business Interruption Insurance for businesses, and ABMN for public assets. PPPs allow private sector investment in resilient infrastructure and disaster management initiatives. Corporate Social Responsibility (CSR) programs contribute to disaster response and early recovery through in-kind donations and financial support, particularly during emergencies. Additionally, communities must also be financially prepared to mitigate disaster risks. To strengthen emergency response, households can benefit from insurance and microinsurance, including community contributions and non-profit support.

International organisations play a key role in disaster risk financing by providing funding, technical assistance, and knowledge-sharing. International aid mechanisms ensure that financial resources from donors enhance national disaster risk management capabilities (World Bank, 2021). Research centers and think tanks also generate data and research and support community-based risk reduction initiatives. Civil society organisations (CSOs) contribute by promoting financial literacy, advocating for community-based disaster funds, and strengthening local preparedness through grassroots efforts.

While current mechanisms provide essential financial support, opportunities exist to enhance DRF for greater flood resilience. Expanding coverage, particularly through microinsurance and parametric insurance, can ensure rapid payouts. Strengthening risk assessment tools using data-driven modeling can improve financial planning, especially for the insurance industry (He et al., 2020). Innovative financing mechanisms, such as CAT Bonds and climate finance, can help secure flood mitigation and recovery funding. Strengthening PPPs and market-based risk-sharing mechanisms can further reduce governments' financial burdens while enhancing disaster risk reduction programs. Finally, scaling up community-based finance through microfinance and savings schemes can complement insurance mechanisms and support faster recovery at the grassroots level.

Key Recommendations

A multifaceted approach is necessary to strengthen Indonesia's financial resilience against flooding. This includes enhancing disaster risk finance policies, expanding insurance coverage, fostering PPPs, and leveraging innovative financing mechanisms. Key recommendations include:

- **Strengthen DRF Implementation** by integrating DRF policies into national and local planning while improving fund allocation for emergency response.
- **Develop Risk Models** for urban flooding to estimate the costs of disasters and create scenarios for financial instruments to reduce the impacts.
- **Expand Insurance and Risk Transfer Mechanisms** by promoting microinsurance, parametric insurance, and the Disaster Pooling Fund.
- **Enhance PPPs** to support resilient infrastructure investments and establish formal mechanisms for channeling CSR funds into disaster relief.
- **Promote Community-Based Financial Resilience** through microfinance, local savings schemes, and financial literacy programs to improve household preparedness.
- **Leverage Innovative Financing** such as CAT Bonds and climate finance while strengthening data-driven risk assessment tools for better financial planning.
- **Continuous Capacity-Building** disseminates DRF strategies, case studies, and innovative practices through peer-to-peer training, enabling stakeholders to learn from existing experiences, regulations, and approaches to implement robust and sustainable DRF.

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Further Readings

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