

POLICY BRIEF

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Building Local Resilience Platforms for Disaster Risk Reduction

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Highlights

As local communities are disproportionately impacted by disasters, there is an urgent need for multi-stakeholder platforms at the local level that can bring together knowledge and resources for resilience-building. Tackling challenges such as low governance capacity, lack of data and resources, and lack of community awareness requires building local platforms for disaster risk reduction (DRR), harnessing local academia, and developing local action plans through an inclusive approach.

The proposed platform would enable an institutionalised scientific and participatory approach to resilience building through a science–policy interface at a local level.

Recommendations:

- Establish local platforms for direct engagement in DRR
- Harness and directly engage with local universities as generators and disseminators of DRR knowledge
- Promote inclusivity in building local disaster resilience

Resilience and the Sendai Framework for Disaster Risk Reduction

Disasters are occurring more frequently, often with increased intensity and detrimental impacts on vulnerable cities and communities. The Sendai Framework for Disaster Risk Reduction (SFDRR) calls for a fundamental shift from emergency responses — which are short term and often ad-hoc — to integrated, multi-sector, and longer-term DRR plans. DRR is the policy objective of disaster risk management, aimed at preventing new risks, reducing existing risks, and managing residual risks, all of which contribute to strengthening resilience. The SFDRR outlines a comprehensive approach, from understanding risks, strengthening governance, and investing in resilience, to disaster recovery and reconstruction. The framework defines resilience as "the ability of a system, community, or society exposed to hazards to resist, absorb, accommodate, adapt to, transform, and recover from the effects of a hazard in a timely and efficient manner" (UNISDR 2015). A set of 38 indicators are used to track and measure progress on achieving the seven global targets of SFDRR, with trends in risk reduction and losses documented in biennial Global Assessment Reports. Other key global frameworks such as the 2030 Agenda for Sustainable Development and the New Urban Agenda also share the objective of building resilience.

Building Disaster Resilience at the Local Level

As disaster impacts can be experienced immediately, the most effective solutions are those implemented at the local level (Kusumasari and Siddiqui 2010). Closer relationships between governments and communities are vital in ensuring that local DRR is compatible with local development policy in areas including land use, environmental management, and local communities. City and local governments are on the front line for DRR since it falls under their mandates and is part of their responsibilities. They are the first port of call for citizens, and usually the first responders to disaster emergencies as they understand the local context and are able to dispatch quickly (UNDRR 2019). Hence, as experience has shown, it is crucial to build the capabilities of local communities to save lives and reduce disaster impacts. (Amaratunga et al. 2018; Shaw 2014).

There are tools available to support communities and cities in building resilience. Guidelines produced by UNDRR (2019) emphasise three key elements to aid the implementation of a local DRR strategy: organising for DRR; knowing and understanding current and future risks; and having financial resources to be able to plan and act. However, most cities still face significant challenges in building local disaster resilience as many governments prioritise poverty reduction and economic development over DRR or they lack institutional capacity, technology, or infrastructure to manage risks and future planning (Lee 2019). Often, relevant hazard data and information may be unavailable, and some local governments simply do not have the capacity to generate, gather, or share evidence and risk data profiles (UNISDR et al. 2017). This prevents local governments from effectively articulating the risks facing cities and communities, advocating for DRR amidst other development agendas, and mobilising resources for DRR. Additionally, a lack of community awareness in building resilience can, in turn, impede the action needed by local stakeholders (UNISDR et al. 2017).

This policy brief aims to guide policymakers and decision-makers at the local level who are responsible for building local disaster resilience — particularly in countries where data relevant to disaster risks are scarce or unavailable. It provides recommendations for building resilience at the local level through engaging multiple stakeholders including governments, academia, communities, and civil society organisations (CSOs), to strengthen local institutions, assess risks, formulate strategies, and develop local resilience action plans.

Policy Recommendations

1. Establish Local Platforms for Direct Engagement in DRR

Governments need to take the lead in building local resilience since they are legally responsible for local development planning, and they represent multiple sectors and actors (UN 2020). Establishing local platforms for DRR would help to address resource scarcity and other development priorities. A local platform is a venue or channel to gather multiple stakeholders to initiate information sharing and build buy-in. It seeks to secure the political will and resources that enable disaster resilience initiatives to be sustainable (Djalante 2012), in turn helping to mobilise resources for risk reduction, including investments from domestic budgets and non-traditional resources in addition to project-based and external funding. A local platform for DRR comprises representatives of local actors, such as the local government, businesses, CSOs, women's groups, persons with disabilities, minority groups, and youth groups.

It is the duty of local policymakers to ensure legislation and regulations are enacted with respect to the country's governance structure, and this is critical for the local platform to be sustainable. Sustaining a local platform for community resilience will be challenging if its programmes and activities disregard the administrative and political agenda. While it may be difficult to mobilise resources to sustain a platform, the greater challenge may be securing resources for the mitigation measures it proposes, which may become the cornerstone of the community's resilience efforts. Unless the platform produces tangible results that are recognised by the community — not only when disasters occur, but also in preparation for them — it will be increasingly difficult to justify its role in urban resilience-building. Setting up a local platform may also directly support the post-disaster recovery process, through actively involving the local government, local universities, and CSOs.

Good examples of local DRR platforms include one in Yogyakarta, Indonesia, which was established after the Merapi volcanic eruption in 2010. Learning from the eruption, local stakeholders formed the Yogyakarta Province DRR Platform, which organises community evacuation drills, develops community-based early warning systems, plans shelters and evacuation sites, and even conducts livelihood training for community and housing programmes during the recovery and rehabilitation phase (Djalante 2012).

Another example is in the Philippines, where a Disaster Risk Reduction and Management Committee is organised in each of the country's 42,000 villages. These committees are in charge of local DRR efforts (Fernandez et al. 2012). Policymakers may draw from these best practices and tailor them to meet the needs of their communities, reflecting the local context.

2. Directly engage local academic institutions as generators and disseminators of knowledge to identify risks and co-design localised disaster resilience action strategies and plans

Local universities and other academic institutions can play an important role through their access to necessary data and information, and by acting as knowledge brokers in platforms for community disaster resilience planning. Such institutions with relevant expertise must be aware of their vital role and the need for continuous efforts to make their research and teaching relevant (Gaillard and Mercer 2013). Local academia and CSOs can facilitate DRR knowledge-sharing to create a two-way dialogue. Firstly, they are able to bridge the demand for knowledge based on the actual and perceived risks faced by the local community, with suppliers of knowledge and know-how, which may include DRR experts from outside the local community (Gaillard and Mercer 2013). Secondly, they can help to capture or translate local and tacit knowledge of the communities into explicit knowledge for creating a resilience-building plan. This includes comprehensive efforts to capture traditional and indigenous knowledge and translate it into development policy language (Iwasaki and Rahman 2017).

As cities develop, multi-hazard risks continue to evolve, requiring the retention, management, and further development of knowledge by local academia. Research in Myanmar and Nepal suggests that effective platforms for urban resilience include representatives from local government agencies, parliaments, universities, schools, NGOs, and local businesses (UNU-IAS 2018). Local government agencies provide leadership and a legal basis, and guide the rules of engagement for the initiation and sustainability of the platform. Furthermore, technical CSOs and universities should proactively offer their DRR expertise, as most local governments are not aware of the kinds of technical assistance available, even when it is needed to enhance skills and capacities for action planning. Accordingly, to build in-house knowledge and skills for DRR, universities should offer relevant training as well as degree programmes catering to the staff of technical CSOs and local governments.

Furthermore, preparing local disaster resilience action plans provides a good opportunity for technical NGOs and universities to practically collaborate with local governments by providing scientific and technical assistance for risk assessment and disaster scenario development, while facilitating action planning processes by engaging potential stakeholders.

3. Promote Inclusivity in Building Local Disaster Resilience

Local governments should institutionalise a participatory platform or mechanism for the involvement of technical CSOs and universities in their DRR initiatives. They should enable joint decision-making on the types of risks to be investigated by local stakeholders and experts; the dissemination of research-based risk information; DRR training and capacity building targeting local actors such as CSOs, women's groups, persons with disabilities, minority groups, and youth groups; co-designing DRR solutions; and the formal mechanism for channelling inclusive DRR action plans that are jointly developed by local actors into policy planning and budgeting to enable communication and flow of expertise from local experts to local policymakers. In turn, both policymakers and academic experts need to promote and build links between schools and their communities, and highlight the significance of school- and university-centred local disaster resilience. This requires both schools and the broader communities to share their needs with other stakeholders, to be addressed by the government, universities, and CSOs. Thus, universities and CSOs must synthesise field-based research findings into policy recommendations that are appropriate to the legal system of the city. In implementation, CSOs, universities, and local businesses can incorporate ideas for building resilience and jointly mobilise resources — including both funding and in-kind contributions.

Contributing to the SDGs

Local disaster resilience platforms have significant potential as tools to facilitate long-term, cross-sectoral contributions to achieving the SDGs. Effective links between local, bottom-up approaches and top-down policymaking should be developed to strengthen the efficiency of DRR management and its impact at the local and national levels. Planning for local resilience will not only advance the risk reduction efforts of local communities, in line with the SFDRR, but also align with the New Urban Agenda and support the pursuit of the SDGs.

While DRR directly contributes to SDG 11 (sustainable cities and communities), it will also support SDG 1 (no poverty) through the legalisation of land and property ownership, and SDG 4 (quality education) through capacity enhancement and knowledge transfer for resilience. Furthermore, engaging academia, CSOs, local governments, and local stakeholders epitomises SDG 17 (partnerships for the goals).

Note

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References

- Amaratunga, D., Malalgoda, C., Haigh, R., Panda, A., and Rahayu, H. 2018. "Sound Practices of Disaster Risk Reduction at Local Level." *Procedia Engineering*. 212. pp 1163–1170. <https://doi.org/10.1016/j.proeng.2018.01.150>
- Djalante, Riyanti. 2012. "Adaptive governance and resilience: the role of multi-stakeholder platforms in disaster risk reduction." *Journal of Natural Hazards and Earth System Sciences* 12. pp 2923–2942.
- Fernandez, G., Uy, N. and Shaw, R. 2012. Community-Based Disaster Risk Management Experience of the Philippines. In Shaw, R., ed. *Community-Based Disaster Risk Reduction* (Community, Environment and Disaster Risk Management, Vol. 10). Emerald Group Publishing Limited. Bingley. pp. 205-231. [https://doi.org/10.1108/S2040-7262\(2012\)0000010017](https://doi.org/10.1108/S2040-7262(2012)0000010017)
- Gaillard, Jean-Christophe and Mercer, Jessica. 2013. "From knowledge to action: Bridging gaps in disaster risk reduction." *Progress in Human Geography*. 37 (1). pp 93–114.
- Iwasaki S., Rahman A. 2017. Roles of Traditional Coastal Management Institution for Mangrove Rehabilitation and Restoration in Aceh Province, Indonesia. In DasGupta R., Shaw R., eds. *Participatory Mangrove Management in a Changing Climate: Perspectives from the Asia-Pacific*. Springer, Tokyo. https://doi.org/10.1007/978-4-431-56481-2_14

Kusumasari, B., Alam, Q., and Siddiqui, K. 2010. Resource Capability for Local Government in Managing Disaster. *Disaster Prevention and Management: An International Journal*. 19 (4). pp. 438–451. <https://doi.org/10.1108/09653561011070367>

Kyoto University & UNU-IAS. 2018. Enhancing Urban Disaster Resilience: A Guide based on the GGS Project Experience. <https://ggsurbanresilience.files.wordpress.com/2018/03/guide-on-enhancing-urban-disaster-resilience.pdf>

Lee, Dae Woong. 2019. "Local Government's Disaster Management Capacity and Disaster Resilience." *Local Government Studies*. 45 (6). pp 803–826.

UN. 2020. Sustainable development: disaster risk reduction. A/RES/75/216. <https://undocs.org/en/A/RES/75/216>

UNDRR. 2019. Words into Action: Local Disaster Risk Reduction and Resilience Strategies. Geneva. https://www.preventionweb.net/files/57399_57399localdrresiliencestrategie.pdf

UNISDR. 2015. The Sendai Framework for Disaster Risk Reduction. <https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030>

UNISDR. 2017. Local Government Powers for Disaster Risk Reduction: A study on local -level authority and capacity for resilience. Geneva. https://www.unisdr.org/campaign/resilientcities/assets/toolkit/documents/LG%20Powers%20for%20DRR_2017_Final_20170531.pdf

UNU-IAS. 2018. Enhancement of urban disaster resilience through activities of local participatory platform. GGS Final Report. <https://i.unu.edu/media/ias.unu.edu-en/news/17003/GGS-2015-Kyoto-University-Project-Final-Report-2015-2017.pdf>

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