Informal Governance Networks for Disaster Risk Reduction
Evidence from Sendai and Kathmandu
Research Brief
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UCL City Leadership Laboratory

The UCL City Leadership Laboratory brings together world-class academic scholarship, public authorities, international organisations, the private sector and local SMEs to create a unique environment for urban experimentation, research, teaching and – most importantly – action.

The Lab builds on three years of projects, grants and activities of the City Leadership Initiative. A joint effort of the World Bank Group and United Nations Human Settlements Programme (UN-Habitat), with funding from the UK Government’s Economic and Social Research (ESRC) and Engineering and Physical Sciences (EPSRC) Research Councils.

While aim of the Lab is to tackle globally relevant city challenges, the projects undertaken are practically oriented and often locally focused.

The Lab sits within UCL’s policy-focused Department of Science, Technology, Engineering and Public Policy (UCL STEaPP) and has links across UCL’s network of urban research and practice.

Learn more about the Lab at: www.cityleadership.net and on Twitter at @CityLeadersLab

Author and collaborators

This project was led by Dr Rocio Carrero.

Rocio is currently a Research Associate in the City Leadership Lab, at the department of Science, Technology, Engineer and Public Policy (UCL). Over the past 8 years, she has worked for a number of local and international projects related to climate change adaptation and disaster risk reduction over a dozen countries. Rocio’s current work focused on DRR on urban settings, with a focus on societal resilience.

The project co-researchers included: Dr Michele Acuto (Director of the UCL City Leadership Lab), Dr Long Seng (STEaPP Research Fellow), and Mika Morissette (UCL City Leadership Lab Research Assistant). The team has a solid research record on humanitarian crisis and sustainable development.

Partners

This project was conducted with the collaboration of the Global Facility for Disaster Risk Reduction of the World Bank and its Risk Management Hub in Tokyo.
**Project overview**

Informal Governance Systems (IGS) are constituted by individuals and groups connected to each other by non-institutional channels, such as family, neighbours, churches, schools, etc. Cases studies across the globe show that IGS play a fundamental, yet not-well understood, role in disaster risk reduction. Information, knowledge and goods often flow across non-institutional channels, affecting communities’ ability to access resources and processes. A better understanding on IGS is therefore critical to launch effective actions when preparing for, coping with or recovering from a disaster.

With this project, the UCL City Leadership Laboratory aimed to produce evidence on the role of IGS in disaster response and recovery, analysing the cases of Sendai (Japan) and Kathmandu (Nepal), hit by the Tōhoku and the Gorkha earthquakes in 2011 and 2015 respectively. The project examined the IGS activated after the two crises by conducting two field work campaigns, as well as engaging multilateral and bilateral agencies, local officers, humanitarian experts and local civilian groups directly involved in the disasters.

**Results**

**Kathmandu**

100% of the interviewed households recognized to have relied to some degree on informal networks after the disaster. An analysis of the informal network activated after the disaster in the pilot site revealed that local entities and no institutional entities -such as relatives- were particularly critical in providing support to local communities in the Gorkha aftermath. An examination of the informal channels used by communities to access relief resources after the earthquake (Fig 1), showed that, while International NGOs and Government bodies were reached in 33% and 16% of the cases, the mix of local NGOs, Guthi, local clubs, relatives, friends and neighbours make up 45% of the connections. A deeper scrutiny of the post-disaster access to energy showed the surveyed communities obtained electricity from informal networks in 6 out of each 10 cases, including connections to neighbours, relatives, friends and temples.

**Sendai**

All the agencies, government bodies and NGOs interviewed agreed informal networks were key for both the response and recovery from Tōhoku earthquake and tsunami. Two interesting outcomes came out from Sendai: i) Informal networks provided specialised assistance after the disaster for different population segments (e.g. elderly, women, children, disable) and different needs (e.g. psychological support, clothes, medicines, jobs access) and ii) The number and type of informal networks evolved after the disaster (Fig 2), rapidly increasing after the disaster, having a peak within the first 6 months window and then slowly decreasing and adapting as the needs changed from the immediate response to the recovery phases.
**Conclusions**

This pilot results indicate informal networks played a major role in both Tōhoku and Gorkha disasters aftermath, being critical not only in providing access to basic components of relief (e.g. shelter, medicines, water) during the initial response, but also facilitating access to other goods and services (e.g. psychological support, legal advice, jobs orientation, housing reallocation) during the lengthier stage of disaster recovery. Evidence from Kathmandu indicates informal channels might be equally important than formal interventions from government or international organisations under certain circumstances. Evidence from Sendai shows informal networks are more organic in nature than formal ones and therefore, are able to respond, react and rapidly adapt to the specific and mutable local needs.

All this evidence indicates that a better understanding, identification and engagement with informal networks can help us to increase communities’ resilience and capabilities to cope with disasters and crisis.