

Urban Disasters – Case Studies from Southeast Asia

Report Summary



Esther Lambert
University of Toronto
Urban Climate Resilience in Southeast
Asia (UCRSEA) Partnership
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The objectives of the *Urban Disasters—Case Studies from Southeast Asia* report were as follows: to provide a catalog of the global environmental change disasters impacting the Southeast Asian region over the past five to ten years, which could serve as possible urban case studies for the larger project; to assist with increasing the understanding of the practice of predicting and responding to such disasters; and, to present a set of criteria to use for case selection. The report highlights some of the social, economic, and political factors affecting the region's capacity to predict and respond effectively.

Disaster Management

Although there was some variation in how countries predicted and responded to disasters, the overall approach has been highly reactive, with some instances of a more proactive effort. There has been more of an effort to respond to imminent disasters as opposed to predicting hazards. Generally, the absence of a systematic, strategic approach to disaster risk reduction leaves much lacking in the areas of aid material coordination, clear delegation of responsibility amongst disaster workers, vulnerability awareness, a skilled local emergency response workforce, and an informed public confident of their disaster response and preparedness options. The political environment also plays another key role in restricting aid delivery to communities in most need. For instance, during Cyclone Mahasen (Sittwe, Myanmar), there was disruption of the evacuation of refugees because the Muslim Rohingya people were genuinely wary of security forces discriminating against them.

These case studies demonstrate different levels of vulnerability, as the root causes, dynamic pressures, and unsafe conditions changed with the uniqueness of each case. For example, whereas Cyclone Nargis caused immense destruction in Myanmar, Cyclone Mahasen was much less destructive five years later, partly because of the considerable change in the country's preparedness. The improvements in disaster planning changed the context in which the different actors operated and resulted in a more coherent, strategic response. An improvement in disaster management planning with time, however, is not evident in most of the other case studies. For instance, between Vietnam's 2005 Typhoon Damrey and its 2008 floods, there were few improvements in pre-disaster management. Overall, the more pre-disaster preparations implemented, the less destruction caused by a given hazard. This is demonstrated, for example by the Cyclone Mahasen case study (high pre-disaster preparation) as opposed to the Typhoon Haima case study in Vientiane, Lao PDR (low pre-disaster preparation).

In some cases, for example, with Typhoon Wutip, Cyclone Nargis, and the Vietnam Floods of 2008, there seemed to be considerable involvement by the community, whether it was through volunteering during the recovery period or making their own defenses with blankets and other materials. However, as was seen in the Hanoi floods of 2008, this kind of public involvement did not always result in less damage. In areas such as Vientiane, Lao PDR, the city's natural defenses against flooding were destroyed, leaving the region unable to naturally absorb water-related shocks. The low perception of flood risk seen in the 2008 Hanoi Flood case contributed to the city's vulnerability to the disaster.

Case Selection Criteria

The list of criteria emerged from a consideration of the wide range of environmental change disasters observed throughout Southeast Asia over the past 10 years. As each case study is different, and one set of factors manifests itself differently in different locales (depending on such things as context), there was an effort to avoid looking at such factors as magnitude of hazard and number of fatalities as guidelines for case selection. The criteria are as follows:

- select cases that would allow the project objectives to be addressed;
- select cases that will reflect urban planning differences;
- refrain from selecting more than one case from the same year;
- refrain from selecting more than one case from the same country; select at least one case that is especially unique/different (negatively or positively);
- select cases that reflect the wide range of urban hazards;
- consider case studies that reflect the most recent changes in disaster management and planning in Southeast Asia;
- select cases for which sufficient information can be gathered;
- and, solicit input from other Southeast Asian Climate Change partners.