Approaches and Strategies for Urban Risk Reduction: Experience from Asia

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Asia is one of the fastest urbanizing regions in the world. In 2000, 37 per cent of Asia’s population lived in cities. This proportion is projected to rise to more than 50 per cent within the next twenty-five years.
Hazards in existence

In Asia, most cities are located along major earthquake belts, river flood plains, landslide prone mountain slopes or on tropical cyclone tracks.
Emerging hazards and new threats

The spread of health hazards such as HIV/AIDS and SARS are among the most recent examples of regional, trans-boundary health hazards. Terrorism, fatal accidents and chemical and biological risks are new threats that Asia’s urban centers must learn to manage.
New challenges

On December 26, 2004 the worst catastrophe in living memory struck 10 countries in Asia, mostly in South Asia, wiping out mostly cities located on the coastline. The devastation caused by the Tsunami event was enormous in terms of death and destruction, never seen in most of the affected countries before as a result of a natural calamity.
Every new disaster will reveal the existing vulnerabilities of the affected society.

- As in the case of previous disaster events, the Tsunami event of 12/26 reveals the existing vulnerabilities of physical built up, institutional mechanisms, socio-economic set up resulting in heavy casualties, physical, material and economic losses to coastal cities.
Window of opportunity

Tsunami event 2004 December provided a window of opportunity for mainstreaming disaster risk management in urban context.
It is our sincere hope that all the recovery programs integrate disaster risk reduction interventions in recovery planning and implementation.
Need for a Collective vision for cities

Vulnerable communities need a collective vision to determine a strategic framework with identified action areas to make cities competitive, manageable, sustainable, and safer places to live.
Historic urban areas

Historic urban areas mean much more than their physical presence, as imposing and beautiful as they may be, and convey a sense of identity, strength, beauty, know-how, technical skills, social structure and economic prowess among others.
Identified key issues of the increasing vulnerability

The lack of human settlement, land planning and new shelter development policies and programs to settle urban populations in safer areas.

Increasing socio-economic vulnerability of rural communities caused by over-population and environmental concerns such as the availability of water, water quality, land degradation and plot fracturing. Large migration to urban areas creating concentration of population in marginal land what was once dispersed rural poverty.
Identified key issues of the increasing vulnerability

Failure of urban governments to anticipate shelter demands leading to the growth of slums or to create credit facilities for shelter and retrofit programs.

Limited application of technical information related to hazard environment, social, economic and physical vulnerabilities and assessment tools for ascertaining potential risk.
Identified key issues of the increasing vulnerability

Lack of information on hazard scenarios, absence of early warning mechanisms and lack of historical information on destructive events that limit the capacity of municipalities to assess the vulnerability of the built environment.

Poor enforcement of building codes and appropriate non-engineered construction practices

Traditional urban boundaries that are breaking up and disturbing delicate ecological relationships and that are exposing historic urban areas to increasing risks.
Pioneering work of ADPC in Urban Risk Reduction

- Since 1995, ADPC has successfully been implementing the Asian Urban Disaster Mitigation Program (AUDMP).

- AUDMP, funded by USAID/OFDA, identified specific models that reduce vulnerability to disasters and documented those models for replication.
Asian Urban Disaster Mitigation Program

**Goal:** Reduce the disaster vulnerability of urban populations, infrastructure, lifeline facilities and shelter in Asia.

1995-2005

Core funding from USAID/OFDA
The Philippines
floods & cyclones

Indonesia
earthquakes

Nepal
earthquakes

Sri Lanka
multiple hazards

India
technological hazards
earthquakes

Bangladesh
floods

Lao PDR
Urban fires

Thailand
floods

Cambodia
floods

The Philippines
floods & cyclones

AUDMP National Demonstration Project Sites & Hazards
Pioneering work of ADPC in Urban Risk Reduction

- The program was implemented with partner organizations in nine countries: Bangladesh, Cambodia, India, Indonesia, Lao PDR, Nepal, Philippines, Sri Lanka and Thailand to showcase number of cost effective local level mitigation solutions.
Pioneering work of ADPC in Urban Risk Reduction

- It established strong networks of municipalities, development agencies, regional and national disaster mitigation professionals and experts, volunteers, who continue to support and replicate disaster mitigation models unique to the Asian context throughout the region.
Innovative strategies for urban risk management

• Employing a participatory approach to city-level action planning for risk reduction.
• Creating capacity at the local level to carry out risk assessment and avoid arbitrary decision-making and establish priority interventions.
• Engaging with the private sector for financial support and commercial and industrial hazard risk identification and mitigation
Innovative strategies for urban risk management

• Building resilience in vulnerable communities by activating and motivating poor communities to improve their built environment and emergency response skills and resources.
• Promoting a community-based approach to convert victimized communities into a resource for their own protection.
• Developing and applying new skills to design and implement demonstration projects and their scaling-up to safer shelter programs in order to reduce losses.
Innovative strategies for urban risk management

- Institutionalizing risk communication in local government, the media and NGOs to create a safety conscious public.
- Building the capacity of stakeholders to monitor, evaluate and revise their policies and programs to keep information current, procedures updated and response and preparedness materials in working order.
Long-term institutional support provided by USAID/OFDA has had a significant impact on attitudes, knowledge and skills in the countries where the Asian Urban Disaster Mitigation Program has been implemented.

Image source: CARE Bangladesh
Local government units have proved to be the most responsive unit of government for effective implementation of mitigation initiatives within a decentralized system of administration. It is the unit where land use practices can be regulated and safer construction methodologies can be promoted and enforced.
The next step for ADPC envisions safer urban communities by preventing, minimizing and mitigating the suffering of city inhabitants and reducing their economic and material losses while preserving the gains and benefits of urbanization.
Key strategies to be employed

Planning and building safer cities through investment in mitigation derived from domestic capital and finance institutions that build on successful ADPC pilot projects in AUDMP target countries
key strategies to be employed

Policy development and technical support for disaster mitigation programs and emergency management and response planning at the local government and community level that integrates scientific data and information into decision-making.
key strategies to be employed

• Development and implementation of public awareness and risk communication strategies that involves the media as an important stakeholder in risk reduction initiatives.
key strategies to be employed

Information and knowledge management initiatives to help train a new generation of professional and political leaders who are more aware of the measures needed to create a safer built environment.