



Urban Risk Management

Recognizing the immense disaster risks faced by urban centers, UNDP has implemented several urban risk management projects with a clear focus on local action. Risk in urban areas is a combination of two factors: first, location and exposure to hazards; and second, increased vulnerability due to poor local governance, environmental degradation, and the overstretching of resources.

CITIES AND RISKS ARE GROWING

In 2008, for the first time in history, half of the world's population, or 3.3 billion people, lived in urban areas. One-third of the worldwide urban population – or 1 billion people – currently live in slums.

The largely unplanned expansion of cities to accommodate rapid population growth, combined with inappropriate land-use planning and the failure of urban authorities to regulate building standards, contribute to the vulnerability of urban populations. In addition, inadequate living conditions of poor populations – including poor health, inadequate nutrition, poverty, illiteracy, and deficient or non-existent sanitation – constitute a permanent threat to their physical and psychological security and create “everyday risks” which cause small-scale disasters on an ongoing basis. Disaster risks from extreme natural hazards are compounded by these everyday risks, resulting in a process of “risk accumulation” specific to urban areas, where risk is amplified by human activities. Urbanization, therefore, often increases the exposure of people and economic assets to hazards and creates new patterns of risk, making the management of disasters in urban areas particularly complex.

Nevertheless, urban areas can also provide opportunities for reducing risks. Cities are usually the economic drivers within their countries and the centers of intellectual, political, business and financial activities.



Floods, landslides and avalanches affect a Kabul neighbourhood in spring 2009 (© UN Photo/Fardin Waezi).

If managed well, cities have huge potential for influencing improvements in risk management. These advances are achievable through economies of scale and the proximity of risk-reducing infrastructure and services, such as provision for sanitation, drainage, waste collection, health care and emergency services, and through the use of the high-level technical expertise and knowledge that cities often contain. Urban centers typically have people with comparatively higher levels of education in better informed communities and powerful economic and political interest groups controlling economic resources - all of which are potential amplifiers of DRR efforts.

FAST FACTS

- By 2030, at least 61 percent of the global population will live in cities and over 2 billion people in the world will be living in slums.
- In Asia, each day a further 120,000 people join the urban population, requiring the construction of more than 20,000 new dwellings, 250 kilometers of new roads, and additional infrastructure to supply more than six million liters of potable water.



An aerial view demonstrates the extent of damage inflicted by the powerful earthquake that rocked Haiti's capital in January 2010 (© UN Photo/ Logan Abassi).

UNDP ROLE

UNDP emphasizes that national risk reduction must also strongly incorporate reducing risks in urban areas. Recent urban risk reduction projects developed by UNDP with partner governments range from comprehensive national DRR programmes (which include urban DRR components) to city-specific urban DRR programmes at the municipal level, as in Amman and Aqaba (Jordan), Quito (Ecuador), Gorgan and Kerman (Iran), in Damascus (Syria) and in many cities of India and Pakistan. Besides support at the country level, UNDP provides technical advice for developing regional knowledge networks and promotes alliances to address risks for large urban settings in both Africa and Latin America. UNDP's Bureau for Crisis Prevention and Recovery (BCPR) particularly stresses the importance of urban DRR action and is undertaking a series of activities to integrate DRR considerations into urban development processes, using global advocacy, regional partnerships and local implementation. Partners include: the Humanitarian Aid Department of the European Commission (ECHO), the Earthquake and Megacities Initiative, International Strategy for Disaster Reduction (ISDR), International Institute for Environment and Development, UN Habitat, and the ProVention Consortium.

UNDP APPROACH

Most disaster-prone cities are unprepared for future disasters and ill-equipped to reduce associated risks. Policy makers face numerous challenges with respect to urban risk management, including lack of adequate

knowledge and administrative capacities; weak finances; lack of coordination between departments; weak law enforcement mechanisms; and corruption. There is an urgent need to promote a culture of prevention at all levels and to improve management practices. Local action is the centerpiece of UNDP's approach to building disaster-resilient cities. UNDP promotes the establishment of legal and legislative instruments and technical tools that prioritize DRR as an integral part of the urban development process. Although seismic risks are of paramount concern in many urban settings, UNDP promotes a comprehensive multi-hazard approach that builds on risk identification and vulnerability assessments.

UNDP SUPPORT SERVICES

Key policy areas, supported by UNDP, through which urban risk can be reduced, include:

Risk identification and communication

Municipal administrations cannot effectively manage disasters if they lack an institutional understanding of the potential impact of hazards that threaten the local population, infrastructure and economy. Disaster risk assessment is the first step towards designing and implementing prevention and mitigation measures. UNDP supports numerous activities in this area, including safety assessments of critical infrastructure such as schools and hospitals (and assessment of their retrofitting needs); and developing and documenting hazard scenarios for identified demonstration cities in an easily understood format.

Municipal disaster management

The goal of disaster management is to provide appropriate response and recovery efforts following a disaster. This implies that local institutions, including involved municipalities, have adequate organizational capacities, as well as capacity and plans in place to address the consequences of disasters. UNDP support activities in this area across the globe have included training of local government officials and UN volunteers in facilitating the preparation of disaster preparedness plans at the city level; design and equipping of an information portal and emergency operations centers in target cities; training volunteers in first aid, and search and rescue at the district level; and conducting disaster drills at the city level.

Institutional and legislative system support

Adequate governance is fundamental for the sustainability of urban risk management and risk reduction. Institutional and legislative systems at the municipal level must 'own' the disaster reduction process. Local authorities should allocate sufficient financial resources to ensure that risk reduction programmes are implemented, and ensure that there is adequate capacity to monitor compliance with comprehensive rules and regulations. UNDP support in

this area includes reviewing and amending municipal institutional and legislative frameworks; proposing institutional strengthening programmes to enhance local capacity; reviewing and amending existing zoning regulations, building codes and by-laws, and sensitizing building experts to these; and disseminating guidelines for appropriate institutional arrangements to the most vulnerable cities.

Awareness-building for public officials, construction experts and communities

Urban DRR is a relatively new concept that requires further promotion as knowledge about DRR in cities remains low among many national and city governments and with donors and multilateral financial institutions. UNDP support to activities in this area includes designing a campaign for urban risk reduction in identified pilot cities, replicable on a national level; establishment of community information centers to address different aspects of earthquake risk reduction; conduct of specialized training programmes for city managers and local government officials, teaching structural and non-structural urban risk management measures; and training of engineers and architects in disaster-resistant construction technology.



Development of capacities of engineers, architects and masons in disaster-resistant construction is an essential component of UNDP's urban risk management programmes (© UN Photo/Sophia Paris).

UNDP IN ACTION

India

In partnership with the Government of India, the UNDP 'Urban Earthquake Vulnerability Reduction Project' aims to strengthen the disaster mitigation, preparedness and response capacities of vulnerable communities, local bodies and municipal administrations in 38 Indian cities. The project provides a practical model for mainstreaming earthquake risk management initiatives at all levels, and helps to reduce seismic risk in India's most earthquake-prone urban areas. Progress achieved by the ongoing project includes:

- Training, in cooperation with the private sector, of approximately 2,500 engineers, 4,500 masons and 900 architects on disaster-resistant construction technology.
- Publishing on technical documents on earthquake safety and hazard-resistant construction and disseminated to technical institutions and colleges of engineering and architecture across the country. Hazard-resistant construction has become a part of the curriculum in many educational institutions, including secondary schools and universities.
- Initiation of school awareness and safety programmes - with many state governments having retrofitted school buildings using funds earmarked for the purpose. More than 18,000 teachers have been trained in disaster management focusing on earthquakes. 2,800 schools have finalized disaster management plans.
- Training of over 30,000 members of local disaster management teams (DMT) and volunteers have been in first-aid, search and rescue and ward-level planning; Formation of 1,436 ward disaster management committees; Preparation of 716 ward-level disaster management plans. At city and ward level 221 drills have been conducted and 23 cities have strengthened their city emergency operations centers.
- Finalization of disaster management plans in 37 cities. Building by-laws have been amended to ensure structural safety in hazard-prone areas in 11 cities as per the recommendations of India's Ministry of Home Affairs.

By engaging stakeholders at all levels, the Urban Earthquake Vulnerability Reduction Project takes a multi-pronged approach: raising awareness; developing preparedness and response plans at the community and administrative levels; developing a techno-legal regime for states; and developing capacities in urban risk reduction, preparedness and response. Furthermore, urban planning institutions and relevant agencies in the selected cities, as well as the corporate sector, are directly involved in the planning process to ensure sustainability and ownership of the initiative.

FOR MORE INFORMATION:

www.undp.org/cpr/we_do/integrating_risk.shtml
www.unisdr.org
www.emi-megacities.org
www.unhabitat.org

