

## **Thematic Session on Urban Risks**

(English only)

*Issues pertaining to urban risks are a pressing concern for those in the field of disaster mitigation. As more and more uncontrolled growth such as urban sprawl and the emergence of mega-cities around the world continues, disasters of all genres become an inevitable consequence of urbanization. This session focused on four main issues of urban risks and disaster mitigation: 1. Impact of disaster on development 2. Actors (especially the local governments) in managing the risk and their roles 3. Sustainability of risk management activities and 4. Role of international assistance.*

*In a first session, on January 16<sup>th</sup>, experts from around the world shared their knowledge on disaster management and mitigation to discuss the four specific topics set by the coordinator. They produced several objective recommendations for the reduction of urban risk around the world. Using especially prepared charts, which were distributed at the session's beginning, feedback was also collected, from the audience attending the session.*

*On January 17th, a plenary session used a summary of the first session's presentations to continue the discussions on urban risk reduction. The floor was opened to the expert panelists and to the audience at large and several recommendations to improve urban risk reduction were suggested and discussed. These recommendations were summarized to conclude the session.*

### **Thematic Session Summary**

**15:40 - 17:30 (Thursday, 16 January 2003) Venue: Room 403**

**Coordinator:** Dr. Carlos Villacis, ISDR Secretariat/UNESCO

**Rapporteur:** Mr. Kenji Okazaki, UNCRD

**Speakers:**

- Mr. Masahiro Uehara, Hyogo Prefecture, Japan
- Dr. Badaoui Rouhban, UNESCO
- Prof. Renan Ma. Tanhueco, UNU
- Mr. Alan Mearns, SOPAC, Fiji
- Mr. A.J. Loy Rego, ADPC, Thailand
- Prof. Kimiro Meguro, ICUS/INCEDE, Japan

**Mr. Masahiro Uehara** briefly explained the extent of the effects that the Great Hanshin Awaji Earthquake of 1995 brought upon to Hyogo Prefecture. He described the reconstruction process of the greater Kobe City area, where the earthquake hit the hardest. He also explained the system that the local government adopted to identify the damage. This system allowed for the government to prioritize areas of recovery as well as establish redevelopment schemes according to the specific needs of each area in the city.

**Dr. Badaoui Rouhban** explained the work of UNESCO in relation to disaster mitigation and prevention. He illustrated UNESCO's comprehensive and extensive approach in disaster mitigation programs ranging from pure science to culture and art. Mr. Rouhban described UNESCO's extensive operational network in various parts of the world such as in Japan, Skopje, and the Mediterranean region and how these locations act as portals of both quantitative and qualitative solutions towards risk assessment. Finally, Mr. Rouhban described the risk monitoring system that UNESCO has established.

**Prof. Renan Ma. Tanhueco** discussed risk from a more quantitative perspective. After presenting the traditional method of calculating risk, he described his proposal to include variables that represent social aspects. Prof. Tanhueco explained the difficulty of deriving variables that represent such aspects due to their intangibility. Finally, he presented a sample estimation and explained the outcome and how it can be interpreted.

**Mr. Alan Mearns** described SOPAC's (South Pacific Applied Geoscience Commission) work and its strategies for disaster management and mitigation. He reviewed the organizational structure of SOPAC and the programs that it promotes to mainstream risk management in the SIDS (Small Island Developing States) of the Pacific. Mr. Mearns introduced the Comprehensive Hazard and Risk Management (CHARM) Guidelines and its major features. He shared the challenges that the SIDS face in mitigating risks of natural disasters and the ways in which SOPAC is responding to those challenges.

**Mr. Loy Rego** described various disaster mitigation strategies deployed by ADPC in Asian countries. He claimed that nine (9) of the largest mega-cities in the world today are located on the Asian continent and stressed the importance of giving attention to this region. Mr. Rego described how ADPC deployed community based mechanisms of disaster management through various techniques that are accessible and easy to understand for the local citizens. Finally, he explained the capacity building programs implemented by ADPC to educate local communities and their government officials about risks and disasters.

**Prof. Kimiro Meguro** introduced the integrated disaster management system, which puts emphasis on structural robustness of buildings. He claimed that the heart of disaster prevention lies in the structural stability of buildings since, for example, the majority of casualties during the *Great Hanshin Awaji Earthquake* were caused by the collapse of buildings on people. He presented a method by which people can see the effects of earthquakes of different intensities on buildings. He proposed a policy that motivates homeowners to retrofit their homes. He also stressed the importance of people's consciousness towards disasters and of their capability to envision the effects of those disasters.

### **Panel Discussion**

**13:30 - 15:00 (Friday, 17 January 2003)**

**Coordinator:** Dr. Carlos Villacis, ISDR Secretariat/UNESCO

**Rapporteur:** Mr. Kenji Okazaki, UNCRD

**Panelists:**

- Dr. Badaoui Rouhban, UNESCO
- Prof. Renan Ma. Tanhueco, UNU
- Mr. Alan Mearns, SOPAC, Fiji
- Mr. A.J. Loy Rego, ADPC, Thailand
- Prof. Kimiro Meguro, ICUS/INCEDE, Japan
- Mr. Yoshinobu Fukasawa, DRI, Japan
- Prof. Serguei Balassanian, ASC

Dr. Villacis started the panel discussion quickly summarizing the focus of the session: 1. Impact of natural disasters, 2. Actors in managing their risk and their roles, 3. Sustainability of risk management activities, and 4. Role of international assistance.

Mr. Kenji Okazaki opened the session with an introductory presentation on the works of UNCRD. He stressed the importance of community-based activities for sustainable disaster mitigation and described the RADIUS Initiative for urban seismic risk reduction, the Global Earthquake Safety Initiative (GESI) for understanding urban risk, the School Earthquake Safety Initiative (SESI) for retrofitting vulnerable school buildings and development of educational materials, and several other initiatives for capacity building. He summarized the key factors of sustainability as (1) participation and ownership of the programme by the local community, (2) confidence building with non-engineered technologies, (3) affordability and practicality, and (4) multi-disciplinary cooperation among stakeholders. Then, as the *rapporteur* of this session, Mr. Okazaki briefly summarized the presentations that were made by all the experts the day before.

During the panel discussion various topics relating to disaster management and mitigation programs were raised. A panelist started the discussion by recounting how public institutions play a major role during natural disasters. Hence he stressed that one of the most important methods in preventing devastating disasters is to construct reliable public buildings that are well equipped and planned. He stressed that public buildings, such as schools, should act as a security portal by providing physical safety, social network of support, and material goods during emergencies.

In response to this comment, some panelists pointed out that disaster mitigation is not a simple matter of reconstruction or physical preparedness against disasters. A panelist claimed that psychological issues should also be explored in connection with disaster management. He claimed that some psychological issues linger around in people's lives much longer than physical damages they experience. Hence, a more comprehensive approach incorporating both physical and mental recovery was suggested.

Another panelist initiated a discussion on the effectiveness of disaster mitigation programmes. He pointed out that many countries that experience frequent natural disasters should not only be equipped with disaster mitigation programmes but also, be conceptually aware of what success should look like. He stated that this awareness is important so that citizens can work towards a clear goal.

Later, the panelists discussed the effectiveness of risk reduction strategies. One panelist emphasized the importance of comprehensive plans that are easy enough for everyday citizens to understand. Furthermore, he pointed out that local communities should be highly involved in the process of creating a comprehensive plan against disasters. He reminded the participants that community participation and empowerment at a local level was a critical element to establishing an effective and sustainable plan. In response, a participant from the audience shared how the Indian government mandates that some percentage of the emergency budget has to be allocated by local government bodies to reinforce local capabilities in preparing for disasters.

The general consensus at this session was that federal governments should enforce changes in the budgeting process at a legislative level. One participant suggested that central governments should recognize the importance of setting aside funds specifically and only for disaster mitigation planning and research purposes, hence, establishing "disaster planning" and "relief" as two separate line items on the budget document. To achieve this, another panelist pointed out that a well-formed economic impact assessment study would be highly useful in convincing a national government to adopt such a system. In response to this comment, one participant representing Switzerland shared

how the Swiss government already practices such system. In addition, he suggested that many donor countries should also be encouraged to demand this budget system to be used by the recipients of financial aid.

Dr. Villacis ended the panel discussion by summarizing the recommendations that were raised.

## **Recommendations**

The following is a summary of the recommendations produced by this session. These recommendations are grouped under the four issues that were the focus of the discussions.

### 1. Impact of natural disasters on development

- Carry out systematic documentations of the impact of disasters on development using past events.
- Perform cost-benefit analyses to demonstrate quantitatively both the actual impact of disasters on development and the financial benefits of risk reduction.
- Share experiences. Kobe City has used the disaster as an opportunity to change planning and development processes. Kobe integrated reconstruction into an overall development plan. It is very important to transfer these experiences to other cities.

### 2. Actors in managing urban risk and their roles

- Promote the increase of risk management abilities of local governments. Support and encourage local government's efforts. Kobe's recovery process shows the importance of local governments' active, long-term commitment to risk management.
- Intergovernmental mechanisms are indispensable at the regional level. The South Pacific region's work is a good example of generating political will at the regional level and coordinating it for effective risk reduction. For this to happen, it is important to target key government officials and identify natural risk management champions among them.
- Encourage participatory roles of the communities in disaster mitigation. This can be achieved by identifying the people's needs and preferences and giving them voice in risk reduction decision making.
- Increase the collaboration between technical and social scientists in order to properly include social vulnerability in the assessment of risk and to better understand the actual impact of disasters on sustainable development. It is essential to improve the links and communication between government and the scientific community.
- Promote city based partnerships among local government, technical institutions, NGOs, and community organizations. Disasters affect everybody and, therefore, it is everybody's duty (and right) to collaborate, in a coordinated manner, in reducing disaster risk.

### 3. Sustainability of risk management activities

- Risk education (understanding and communication) is crucial. Everybody should have a clear picture of the existing risk at both community and personal levels as well as of available risk reduction measures. Effective use of educational and mass communication systems and risk management training for decision makers are recommended.
- Consult with the community to ensure acceptance and long-term support of risk reduction programs. It is necessary to identify what the community appreciates, wants, and supports.

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- Identify and set up long-term goals to ensure that all the individual efforts go in the same direction and contribute to common goals.
- Incorporate risk management as integral part of public policy and mainstream culture to ensure that risk reduction activities are independent from political and administrative changes.
- Promote regional efforts in which the joint work of high income countries with medium and low income ones makes risk reduction activities affordable. (SOPAC is a remarkable example)
- Increase institutional capacity of cities to implement long-term risk reduction programmes. This includes the establishment of required legal, financial, political, and organizational frameworks.

4. Role of international assistance

- Disseminate and communicate techniques, results, and best practices at the international level
- Promote and facilitate the creation of international partnerships and the coordination of efforts
- Raise awareness of the importance and benefits of risk reduction at the global level
- Facilitate the initiation of long-term risk reduction programs at local level but prepare the local communities to take charge in the long-term