Safe Cities Course

Session 1 - Disaster Risk and Its Management In The Context of Local Government
This session first establishes the relationship between disaster and urbanization by explaining the elements that determine vulnerability in cities, in particular vulnerabilities related to the built environment, population and institutions. It relates the vulnerabilities to typical local governmental organizational functions such as urban planning, public works and social services. It then explains the impediments to disaster risk reduction and their consequences. It argues that decentralization is critical to achieving disaster risk reduction, and that it is the cumulative contribution of all the active agents of a community that reduces risk and develops safer cities within a sustainable development process.

Session 2 - Principles and Components of Disaster Risk Management
This session discusses the elements of "sound" urban disaster risk management at the local level. It defines the role of local government in the ***integration*** of disaster management within the functional structures of government. The concept of Integrated Disaster Risk Management (IDRM) is proposed as a model for implementing a systematic and systemic disaster management program for cities (particularly large and complex urban agglomerations). The session also explains the importance of disaster risk assessment (DRA) and discusses the available tools, such as scenario analysis and risk mapping, for quantifying risk and understanding its demands on the community. It discusses the integration of information and communication tools, and how gaps and needs can be evaluated through a "***consequence analysis***" process, which allows to involve stakeholders and develop a coherent strategy for disaster risk reduction.

Session 3 - Developing and Implementing a City-wide Disaster Risk Reduction Agenda
This session focuses on the implementation of a disaster risk reduction agenda for a city. It presents a framework based on four core objectives: coherent public policies, institutional commitment, mitigation and a culture of prevention. The Disaster Risk Management Master Plan (DRMMP) model is provided as an implementation mechanism to achieve these objectives. DRMMP is driven by the risk parameters developed in disaster risk assessment, that is, by the "demand" from the disaster and ***not*** by the available resources. It allows for the development of four action plans: Response and Recovery, Preparedness, Mitigation and Institutional Building. The importance of tools such as information and communication technology in mainstreaming disaster risk reduction within the city's functions and in communicating risk to stakeholders is further emphasized. The DRMMP assists with capacity enhancement for local governments both in building code development and enforcement, and community preparedness, as well as in retrofitting existing buildings and infrastructure.

Case Study 1 – Floods in Buenos Aires: Learning from the Past
This case study discusses the various laws, building codes and plans that have defined the history of urban planning and flood control in the Buenos Aires municipal area. It gives a critical analysis and the main shortcomings of the system from the 1940s to the late 1970s in order to provide recommendations for improvement. The study reveals that the codes paid little attention to flood plains even though information about them was available. In addition, coordination among the area's municipalities, and the different aspects of urban planning, is fragmented, leaving social actors and considerations out of urban planning. Finally, data collection is weak and flood data is not systematized. The case study makes several recommendations to improve the mechanisms for reduction of socially constructed vulnerability.

Case 2 - Earthquake Risk to Buildings in Istanbul and a Proposal Towards its Mitigation
This detailed reading presents different ways of, and tools for, assessing vulnerability. It then examines the viability of retrofitting as a mitigation strategy and concludes that in Istanbul there exist few incentives for structural mitigation, and that the use of the most catastrophe insurance pools for this purpose is unrealistic, since the premiums are far short of the risks. This necessitates continued public involvement. Finally, characteristics of municipal-wide minimum retrofit campaigns are proposed.

Readings