SESSION DESCRIPTION

F1 Advancing urban resilience through the strategic use of spatial data

Presentations

Date: Saturday, June 1, 2013
Language: English
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Organized by: ICLEI

OBJECTIVE

Much effort has been expended to understand the global effects of climate change. However, municipalities are often limited in their ability to analyze localized risks. Spatial data and analysis tools, including those using Geographic Information Systems (GIS) technology, are a powerful, multi-purpose resource available to cities. Spatial data tools can be applied in a variety of ways to assess a multitude of climate risks and vulnerabilities. For example, they can assist with collecting and sharing risk data, pinpointing vulnerable areas and populations, and rationalizing urban development plans.

This presentation session will provide concrete examples of how spatial data tools, are being used to inform resilience planning and improve risk policy development. Three challenges and solutions will be presented. First, techniques for using spatial data infrastructure to enable more transparent, participatory approaches for climate adaptation will be discussed. Second, a project in Ferizaj/Urosevac Municipality, Kosovo supported by UN-Habitat to generate hazard maps using GIS for disaster planning and risk assessment will be shared. Finally, the application of a vulnerability index developed using Multi-Criteria Analysis and GIS by Project RENCOASTAL in Portugal, to both inform and support municipal decisions on risk management, will be shared.

OUTCOMES

- Participants will learn how urban resilience planning can benefit from the use of spatial data across different sectors;
- Through the case studies, participants will gain a deeper understanding of the multitude of uses spatial data can have at the local level for informing decision making, assessing urban risks, managing disasters and planning future urban development; and
- They will be able to take this knowledge with them to apply in their own cities and regions.

METHODOLOGY

- The facilitator will provide an overall introduction to the session topic and contributors. (5 minutes)
- Each presentation will be allotted 15 minutes. (3 x 15 minutes)
- The facilitator will manage questions and answers. (35 minutes)
- Closing remarks by the facilitator. (5 minutes)
GIS and spatial data infrastructure (SDI) for urban sustainability and resilience

Good decision making regarding sustainable development and urban resilience requires good information. GIS and SDI can provide cities with an enabling environment for better governance, public engagement and decision making such that government can better measure urban conditions and trends over time, and further inform policy through these insights.

Disaster Risk Assessment Management (DRAM) - Experience from Kosovo

Disaster Risk Assessment Management (DRAM) and Resilience is a new topic in Kosovo and municipalities lack the expertise to integrate it into spatial and urban planning. Recently, risks from unplanned development in flood-prone areas alerted officials of Ferizaj/Urosevac Municipality in southeast Kosovo to the need for DRAM. UN-Habitat supported the municipality to retrofit planning documents with the use of GIS data.

Measuring coastal vulnerability to maritime action in urban areas: The case of Espinho and Caparica, Portugal

Project RENCOASTAL aims to provide knowledge on social conflicts due to public interventions on coastal zones subject to the risk of erosion and ocean overwash. This presentation will demonstrate the role of GIS and Multi-criteria Analysis in the construction of a human vulnerability index in two Portuguese coastal urban areas: Espinho and Costa de Caparica.