FICHAS BIBLIOGRÁFICAS - ESTUDIOS PROBABILISTAS DE RIESGO EN COLOMBIA

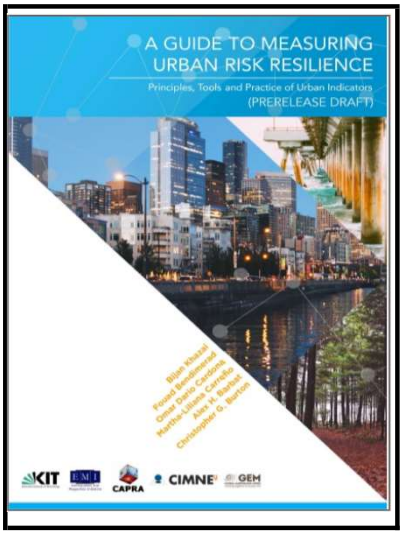
Título: A guide to measuring urban risk resilience

Ficha No. 8

RESUMEN

Most often local governments and city stakeholders do not have a clear understanding of the urban risk and resilience conditions and trends, which has undermined their ability to understand and manage available risk reduction and risk management options. A successful implementation of Disaster Risk Reduction (DRR) options demands appropriate mechanisms to communicate and transfer the overall knowledge on risk and its underlying drivers to the various stakeholders involved in the disaster risk management process of a city. In the age multiple layers of data, indicators can play an important role in turning data into relevant information for decision-makers and public officials. In particular, they can help to simplify a complex array of information about natural hazard risk and resilience in the urban environment and contribute to improved disaster risk management and policy development.

The Guidebook describes three urban risk indicator systems which have been developed as complementary tools to communicate risk and promote discussion around appropriate local level risk and resilience strategies at city level: the Urban Disaster Risk Index (UDRi), the Risk Management Index (RMI) and the Disaster Resilience Index (DRI). In the last decade (2004-2014) these urban indicator systems have been implemented and tested with city stakeholders in 16 city applications around the world. Some of them have been made in Asia by the Earthquake and Megacities Initiative (EMI) and the Karlsruhe Institute of Technology (KIT) (Mattingly et al., 2006; Khazai et al., 2008, Khazai et al., 2009; Khazai and Bendimerad, 2011; EMI, 2012; Bendimerad et al., 2013; EMI, 2014; and Khazai et al., 2015) others have been conducted in the Americas and Europe by the National University of Colombia (UNC/IDEA) at Manizales (IDEA, 2005; Cardona 2006, Suárez and Cardona 2007, Suárez 2008) and by the International Center for Numerical Methods in Engineering (CIMNE) of the Technical University of Catalonia in Barcelona (Marulanda et al., 2013; Salgado-Gálvez et al., 2014a; Cardona et al., 2014; Carreño et al., 2014b). The authors present their



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PALABRAS CLAVE	Urban disaster risk, risk management index, disaster resilience

COMPONENTES DE LA EVALUACIÓN

AMENAZA	1. Tipo de amenaza: Sismo 2. Métricas de intensidad: Peak Ground Acceleration (PGA), velocidad del terreno (PGV) y desplazamiento del terreno (PGD) 3. Escala/resolución: Nacional 4. Resultados: - 5. Localización: Bogotá, Medellín, Manizales, Colombia 6. Metodología: Estudio de amenaza sísmica nacional (Comité AIS-300, 2009). CRISIS 2007 (Ordaz et al. 2007) 7. Períodos de retorno (años): -
VULNERABILIDAD	1. Tipo de vulnerabilidad: Física 2. Metodología: - 3. Tipología estructural: - 4. Representación: -
EXPOSICIÓN	1. Tipo exposición: Edificaciones 2. Portafolios: - 3. Localización geográfica: Bogotá, Medellín, Manizales, Colombia 4. Valor de reposición total: - 5. Área expuesta (m2): -
RESULTADOS DE RIESGO	1. Modelo utilizado: Comprehensive Approach for Probabilistic Risk Assessment (CAPRA) 2. Métricas de riesgo: Pérdida Anual Esperada (PAE), Pérdida Máxima Probable (PML), índices de riesgo 3. PAE: - 4. PML: - 5. Representación del riesgo: -