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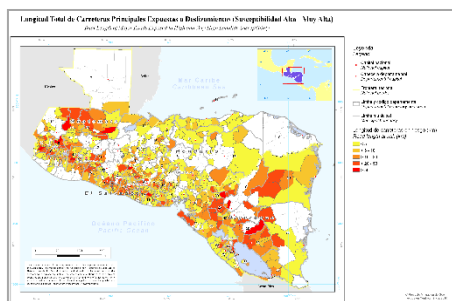
## Understanding disaster risk through building knowledge capacity – a best practice example from Latin America to leverage the Hyogo/Sendai-Framework for Action

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According to both the Hyogo and the Sendai-Framework for Action, understanding disaster risk is a key factor to align Disaster Risk Management (DRM) policies and their practical implementation at all administrative levels. Building the knowledge capacity on DRM issues in all its dimensions has been particularly stressed as a top priority for action to leverage these long-term inter-governmental instruments.

As one of several German organizations for the implementation of technical cooperation (development)



projects, BGR and its foreign governmental partner institutions (e.g. Geological Surveys) implement disaster risk reduction related interventions to assist the mandated counterpart authorities to enhance their political advisory competencies in the field of non-structural disaster mitigation. Based on the geoscientific expertise and the application of best practice knowledge and skills, e.g. in geological hazard/risk assessments, such activities have been executed in Indonesia, Central America [1] and Pakistan.

*Figure 1: Example of a Risk Exposure Map for Central America: Exposure of roads, running through zones of high to very high landslide susceptibility, measured in km per Municipio.*

As a follow-up of a previous regional project in Central America (time period: 2002 – 2010) mainly dedicated to assess risks to natural hazards, a capacity building measure called ‘International Training Course on Risk-Sensitive Spatial Planning’ has been elaborated and executed in the period between 2013 – 2015 in the countries of El Salvador, Nicaragua, Dominican Republic and Argentina. This assignment was predominantly aimed at improving the capacity of mandated governmental institutions to assess the regional risk exposure and therefore to effectively support risk-sensitive spatial and preparedness planning in the framework of DRM.

In the introductory part, the training course provided a sound introduction into DRM related issues including terminology to achieve a common understanding among the participants. Subsequently, applying a risk exposure assessment GIS/database software tool based on a comprehensive training dataset, the course offered a step-by-step tutorial emphasizing data management, and in particular, practical operations to assess the spatial risk exposure to natural hazards (technical part). The realistic scenario-based examples given take into account four different spatial geohazards: volcanic ash fall, landslides, earthquakes and flooding. Regarding the considered ‘Elements at Risk’ the population and several critical infrastructure facilities, such as roads, bridges, hospitals and schools were addressed. The

elaboration of participant's 'own' risk exposure case studies, supplemented by an intensive discussion of the benefit of the created products (Figure 1) among the attendees facilitated a comprehensive understanding of the practical relevance of risk exposure assessment. In total, 53 interdisciplinary professionals from 34 different institutions, for instance ministries of public works, planning & development, disaster management authorities and Geological Surveys were trained. The presentation will broach these course topics, the lessons learned and future prospects.

*References:*

[1] Balzer D, Jäger S and Kuhn D (2010): Guidebook for Assessing Risk Exposure to Natural Hazards in Central America - El Salvador, Guatemala, Honduras, and Nicaragua. –ISBN: 978-3-9813373-7-2

(<http://www.preventionweb.net/publications/view/27023>)

