ENABLING DISASTER RISK REDUCTION (DRR) KNOWLEDGE BY WORKING TOGETHER: LEARNING FROM ISTANBUL

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Despite increasing accumulation of knowledge on natural hazards and vulnerability assessment in recent decades, human and economic losses due to disasters continue increasing. Projections prepared by several institutions also forecast further increase in losses due to trends such as an on-going concentration of human activities in risk-prone areas and the projected effects of global warming (Know-4-DRR del. 1.2). At this point, disaster risk reduction (DRR) and adaptation policies gain importance and attract even more the attention of various actors.

DRR policies to be effective require the collaboration and co-operation of various actors among them scientists, decision-makers and practitioners from the private sector, the public sector and the civil society. In addition they call for a better employment of knowledge for decision making and implementation. In practice, however, knowledge even if available, is often fragmented within and among these groups and not adequately integrated in decisions on DRR and the further implementation of risk reducing measures.

This work discusses how knowledge could promote DRR policies and their implementation. For this it combines results of two FP7 EU funded research projects: ENSURE and KNOW-4-DRR. Istanbul is used as a case study to apply and examine the outcome of the two projects.

ENSURE project (www.ensureproject.polimi.it) provided an operational tool for the assessment of vulnerability to natural disasters. According to the ENSURE methodology, matrices structured by systems to be assessed (represented in the rows grouped by colours) and by parameters related to aspects describing components of different systems, are elaborated (Table 1). Parameters are identified by their main target (to be found in the column labelled “aspect parameter”) and by the key criteria to be adopted for assessment (the column “criteria for assessment”). The application of the ENSURE multi-scale vulnerability framework as described above on Istanbul Metropolitan area resulted in a diagnosis of vulnerability that provides a knowledge basis for advancing DRR policies and implementation by different actors.

However, the application of knowledge is not automatic as there are barriers and pathways in the process of employing the previously gathered knowledge. It is a complex and complicated process involving multiple levels and scales, as well as a wide range of stakeholders and competencies dealing with constantly changing risks. Using existing knowledge more effectively is the focus of KNOW-4-DRR project (www.know4drr.polimi.it).

KNOW-4-DRR in its first work package provided a thorough analysis of main knowledge fragmentation issues within and across the four stakeholder groups identified by the consortium: scientists, public sector, private sector, and civil society and identified a range of barriers and pathways in knowledge production, sharing maintenance and usage.

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Our aim is to use the case of Istanbul as a testing lab for trying the findings of KNOW-4-DRR work in progress. Istanbul is an especially relevant case study for this. Not only there is knowledge from the application of the ENSURE multi-scale vulnerability assessment, but also a huge amount of knowledge on hazard and vulnerability assessments. Moreover, there are a number of newly introduced policies, and working relationships among a wide range of actors and competencies dealing with urban development and constantly changing risks.

As barriers and pathways are context depended, it is believed that the analysis in Istanbul will feed the on-going KNOW-4-DRR work which focuses on developing a knowledge management framework for DRR in integration to Climate Change Adaptation.

REFERENCES

WEBSITES
www.ensureproject.polimi.it
www.know4drr.polimi.it