

## **RT21 | VULNERABILITY ANALYSIS IN PLANNING EDUCATION**

### **Organizers**

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### **Description**

Disaster Risk Reduction (DRR) is largely a matter of Development and Spatial Planning (SP). Hazard modification, exposure and vulnerability reduction are all (partly) attainable through SP oriented toward risk mitigation. Especially prevention gets in the way of SP. It seems besides that the more the role of SP is disregarded the more difficult becomes for disaster risk prevention to be implemented. Furthermore, it seems that the risk management systems that reserve a minor or no role for SP in the pre-disaster phase are weak in their prevention component.

SP has not only a vital role to play in prevention. Its involvement in all stages of DRR is an essential precondition for effective coordination of the RPPR chain (response-remediation-preparedness-prevention). Indeed SP is possible to function as a soldering tissue piecing together response, prevention, preparedness and remediation actions and measures.

However, SP policies are usually risk-blind. Basic preconditions for these policies to become risk-sensitive are (a) a new SP culture to contain “vulnerability and safety thinking”, (b) changes in the legal framework and public administration structures responsible for SP and DRR and (c) above all changes in planning education.

Vulnerability reduction and resilience enhancement are the basic, preventive, long-term pre-disaster strategies for DRR and their embeddedness in planning education is an important step for integration of SP with DRR. However, while resilience has been consolidated recently as a fundamental objective of spatial and development

plans to cope with uncertainty and risks, its counterpart vulnerability is almost unknown to planners.

Vulnerability reduction necessitates vulnerability defining, analysis and assessment. It has been acknowledged that vulnerability has a generic component, i.e. a component independent of the hazard and a hazard-specific component that includes exposure. Vulnerability is principally determined by the carrying agent, which may be a social unit (e.g. human, social and community vulnerability), an economic unit (e.g. vulnerability of a firm or a regional economy), a physical unit (e.g. technical vulnerability of a building or infrastructure), an institution (e.g. institutional vulnerability of a Planning Authority) or a territorial unit (e.g. vulnerability of a neighbourhood, urban area, city, region, country).

Most of the above aspects of vulnerability especially social, economic, institutional and territorial get in the way of, or their mitigation is subject to spatial and development planning. Therefore, definition, identification, assessment, analysis and mapping of these vulnerability aspects should become part of the planning education curricula. One might trace elements of vulnerability analysis in some of the methods that are already familiar to planners. This is for instance the case of the SWOT Analysis, referring among others to the weaknesses of a territory or community and threats to its envisaged development trajectory. Indeed, vulnerability represents shortages, handicaps, deficiencies and weaknesses implying susceptibility or sensitivity to losses in case of a shock and obstacles to sustainability and progress. Reduction of all these drawbacks becomes a basic challenge to planning.

The objectives and scope of the present roundtable are (a) to address the conditions facilitating and/or inhibiting integration of the concept and analysis of vulnerability in planning education and planning culture and (b) to identify the changes in the existing body of planning knowledge that are necessary for this integration. More specifically, the Round Table participants are invited to respond to the following indicative queries:

- Why has resilience been embedded as a basic objective in spatial/development plans to counteract uncertainty and risks while vulnerability reduction has not?
- Is it true that current planning education and culture are inadequate for promoting policies of (social, economic and territorial) vulnerability reduction?
- Why is vulnerability reduction impossible or inadequate without the support of SP?

- Are skills and knowledge currently offered by SP curricula sufficient for a (socio-economic and territorial) vulnerability analysis and the formulation of a respective vulnerability reduction strategy for a city or region?
- What kind of data bases does a territorial vulnerability analysis presuppose and how is it related to scale?
- How might vulnerability analysis and the imperative of vulnerability reduction impact on SP objectives, methods, tools, implementation and feedback?
- What are the necessary changes in SP modules to address the impact of vulnerability reduction objectives and processes on the conventional SP objectives, methods, tools, implementation and feedback?
- What new communication and cooperation channels with other scientific and policy-making fields are necessary for planners to address vulnerability reduction and what are the consequences for SP curricula?
- If there is a need of harmonization of territorial with risk governance what are the repercussions on SP curricula?

A round table for discussion and deliberation on the above topics may prove to be an important step forward to the direction of convergence/coupling of Development and Spatial Planning with DRR. This roundtable builds upon earlier discussions on educating planners on disaster risk reduction at the AESOP and WPSC conferences in Prague (2015) and Rio de Janeiro (2016).

The Round Table will start with an introduction by the organizers. Each participant is supposed to make a presentation/speech of approximately 10 minutes. Consequently, he/she will respond to a set of queries by the organizers that will be disseminated beforehand and to the queries of the audience. The Round Table will close with the conclusions / messages out of the presentations and discussion.