



**Natural Hazards and Disaster Risk Reduction Policies**  
*Loredana Antronico, Fausto Marincioni (Eds.)*

## **Environmental perceptions: participatory methodologies for the assessment of Social Vulnerability to floods in two communities in Mexico**

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### **Abstract**

This chapter introduces two participatory methodologies in order to obtain environmental perceptions and assess the vulnerability and adaptation strategies in two localities prone to floods due to cyclones and heavy storms in Mexico. The first methodology corresponds to a modification of the one proposed by the National Commission of Protected Areas in Mexico and the Deutsche Gessellschaft fur Internationale Zusammenarbeit (GIZ) that helps to collect community perceptions about climate change. The second one is a participatory mapping approach that helped to collaboratively map out affected households, measures taken by the community to reduce disturbances and the proposed actions to be taken in the future to reduce their vulnerability. The case studies correspond to two communities, one located in the northwest of Mexico and the other located to the southeast of the country. Experts of “Protección Civil”, the agency in charge of disaster risk management, reviewed the results of both participatory methodologies implemented through workshops. All the results were given back to both communities. When combined, the products of the participatory methodologies enabled the population to discuss, propose activities and negotiate with the three levels of governmental authorities in charge of risk management and vulnerability reduction to be able to handle extreme hydro-meteorological events in a better fashion.

**Keywords:** Environmental perception, climate change, semiparticipatory GIS, floods, vulnerability reduction.

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