Analysis of the Potential Resilience and Preparedness of Districts affected by the June 2013 Flood in Germany

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The June 2013 floods had severe impacts on people, transportation and the economy. Numerous levee breaches, e.g. in Bavaria and along the Elbe, resulted in large-scale regional floods. Despite similar flood intensities in several affected regions in Bavaria, Saxony and Saxony-Anhalt and Thuringia, CEDIM analyses show differential impacts in terms of both evacuations and transport disruptions. Based on social, economic and institutional indicators compiled from the 2006 Census and partially-based on a household questionnaire following the August 2002 floods, a Potential Resilience Index was developed for districts (Landkreise) of affected areas in the catchment of the Lech, Elbe, Mulde, Danube and Rhein. Furthermore, a Flood Preparedness and Response Scorecard was developed and evaluated in interviews with district officials for over 20 districts in the affected regions that experienced a flood intensity greater than a 100–year recurrence interval. The Potential Resilience Index is compared against qualitative data derived from the Scorecard, and the actual response measured in the self-evaluation with district officials. Actual metrics of response in terms of economic losses, number of people affected by evacuations and the length and type of transportation disruptions as two measures of the flood impact were also used in evaluating the impact against the degree of preparedness and effectiveness of crisis management during the 2013 floods in affected districts.