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Learning lessons from natural disasters – sectorial or holistic perspectives?

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Lessons learning from systematic analyses of past natural disasters is of great importance for future risk reduction and vulnerability management. It is one crucial piece of a puzzle towards disaster resilient societies, together with e.g. models of future emerging climate-related risks, globalization or demographic changes. Systematic analyses of impact and management of past events have commonly been produced in many sectors, but the knowledge is seldom shared outside the own organization or produced for other actors. To increase the availability of reports and documents, the Swedish Rescue Services Agency has created the Swedish Natural Hazards Information System, in accordance with a government commission from 2005. The system gathers accident reports, investigations and in-depth analyses, together with societal additional costs and mappings of consequences from central and local governments, NGO's and private actors. Evaluation of the collection reveals large differences in quality, systematic approach, depth and extent, clearly consistent with the lack of coherent harmonization of investigation and reporting approaches. Type of hazard, degree of impact and time elapsed since present are decisive for the collected volume. LPHC (low probability high consequences) disasters usually comprise most data and analytical activities, since they often are met with surprise and highlight the failure to integrate resilience into normal societal planning. During the last 50 years, several LPHC events in Sweden have functioned as alarm clocks and entailed major changes and improvements in government policies or legislations, safety management systems, risk assessments, response training, stakeholder communication, etc. Such an event occurred in January 2005 when Northern Europe was confronted with one of the most severe storms in modern history. Accidents that caused 24 fatalities occurred (17 in Sweden), several regions in UK and Germany were flooded and extensive areas of storm-felled forests left nearly one million households in Scandinavia without electricity. In Sweden the quantity of storm-felled trees was equivalent to the combined volume felled by other storms during the whole of the 20th century, which caused exceptional damage to forests, roads, railways and electricity and telecommunications networks, including cellphones. Follow-ups and evaluations at local level, as regulated by law, together with government commissions to central authorities and interest from research communities, have resulted in an extensive production of documented lessons learning. Our case study describes their thematic extent, identifies different perspectives in relation to their basis for analyses, emphasizes the complementary need of a holistic perspective and puts the Swedish systematic procedure into an international comparison.