

REFERENCES CHAPTER 5

5.1 Prevention and mitigation: avoiding and reducing the new and existing risks

- Aakre, S., Banaszak, I., Mechler, R., Rubbelke, D., Wreford, A., Kalirai, H., 2010. Financial adaptation to disaster risk in the European Union. *Mitigation and Adaptation Strategies for Global Change* 15(7), 721-736.
- ABCBA, Australian Building Codes Board, 2015. Landslide hazards. <http://www.abcba.gov.au/Resources/Publications/Education-Training/Landslide-Hazards>, [accessed 30 September, 2016].
- Aerts, J.C.J.H., Botzen, W.J., 2011. Flood-resilient waterfront development in New York City: Bridging flood insurance, building codes, and flood zoning. *Annals of the New York Academy of Sciences* 1227(1), 1-82.
- Aerts, J.C.J.H., Mysiak, J., 2016. Novel Multi Sectoral Partnerships. EU Enhance project, 347 pp.
- Alexander, D.E., 2011. Sense and sensibility about terrorism: a European perspective. *Integrated Disaster Risk Management Journal* 1(1), 1-12.
- Alferi, L., Salamon, P., Pappenberger, F., Wetterhall, F., Thielen, J., 2012. Operational early warning systems for water-related hazards in Europe. *Environmental Science & Policy* 21, August, 35-49.
- Botzen, W., Mechler, R., Aerts, J.C.J.H., Hochrainer-Stigler, S., Timonina, A., Lorant, A., Veldkamp, T., Hudson, P., Jenkins, K., Mysiak, J., Surminski, S., Monteagudo, D., 2015. ENHANCE policy brief: natural hazard risk assessments for improving resilience in Europe. ENHANCE — Partnership for Risk Reduction. <http://enhanceproject.eu/uploads/biblio/document/file/69/EnhancePolicybriefv04.pdf>, [accessed 30 September, 2016].
- Brown, S., Nicholls, R.J., Hanson, S., Brundrit, G., Dearing, J.A., Dickson, M.E., Gallop, S.L., Gao, S., Haigh, I.D., Hinkel, J., Jiménez, J.A., Klein, R.J.T., Kron, W., Lázár, A.N., Neves, C.F., Alice, N., Pattiaratchi, C., Payo, A., Pye, K., Sánchez-Arcilla, A., Siddall, M., Shareef, A., Tompkins, E. L., Athanasios T.V., van Maanen, B., Ward, P.J. and Woodroffe, C.D., 2014. Shifting perspectives on coastal impacts and adaptation. *Nature Climate Change* 4(9), 752-755.
- Bulkeley, H., Castán Broto, V., 2013. Government by experiment? Global cities and the governing of climate change. *Transactions of the Institute of British Geographers* 38, 361-375.
- Burby, R.J., 2006. Hurricane Katrina and the paradoxes of government disaster policy: Bringing about wise governmental decisions for hazardous areas. *Annals of the American Academy of Political and Social Sciences* 604(1), 171-191.
- Burby, R.J., Deyle, R.E., Godschalk, D.R., Olshansky, R.B., 2000. Creating hazard resilient communities through land-use planning. *Natural Hazard Planning Review* 1(2), 99-106.
- Carmin, J., Dodman, D., Chu, E., 2013. Urban Climate Adaptation and Leadership: From Conceptual Understanding to Practical Action. OECD Regional Development Working Papers, 2013/26, OECD Publishing, 48 pp.
- CEA, 2007. Reducing the Social and Economic Impact of Climate Change and Natural Catastrophes Insurance Solutions and Public-Private Partnerships. European Insurance and Reinsurance Federation, Brussels, 40 pp.
- Coppola, D., 2015. Introduction to International Disaster Management. 3rd ed. Butterworth-Heinemann, Oxford, 760 pp.
- CORDIS (Community Research and Development Information Service), 2016a. BRIDges the GAp for Innovations in Disaster resilience BRIGAID Projects and Results Webpage: http://cordis.europa.eu/project/rcn/202708_en.html, [accessed 20 December, 2016].
- CORDIS (Community Research and Development Information Service), 2016b. LIQUEFACT Projects and Results Webpage. http://cordis.europa.eu/project/rcn/202709_en.html, [accessed 20 December, 2016].
- Daniell, J.E., Khazai, B., Wenzel, F., Vervaeck, A., 2011. The CATDAT damaging earthquakes database. *Natural Hazards Earth Systems Science* 11(8), 2235-2251.
- De Moel, H., van Alphen, J., Aerts, J.C.J.H., 2008. Flood maps in Europe — methods, availability and application. *Natural Hazards Earth System Science* 9, 289-301.
- De Moel, H., van Vliet, M., Aerts, J.C.J.H., 2014. Evaluating the effect of flood damage reducing measures: a case study of the un-embanked area of Rotterdam, the Netherlands. *Regional Environmental Change*, 14, 895-908.
- Disaster Risk Management Knowledge Centre (DRMKC), 2016a. DRMKC Innovation Webpage. <http://drmkc.jrc.ec.europa.eu/innovation/#/>, [accessed 15 January, 2017].
- Disaster Risk Management Knowledge Centre (DRMKC), 2016b. DRMKC Presentation September 2016. <http://drmkc.jrc.ec.europa.eu/overview/About-the-DRMKC>, [accessed 15 January, 2017].
- Dolce M., 2012, The Italian national seismic prevention programme, 15th World Conference on Earthquake Engineering, 24-28.
- Dolce M., 2012, The Italian National Seismic Prevention Program. In: Proceedings of 15th World Conference on Earthquake Engineering, 24-28.
- Dorren, L.K.A., Berger, F., Imeson, A.C., Maier, B., Rey, F., 2004. Integrity, stability and management of protection forests in the European Alps. *Forest Ecology and Management* 195(1), 165-176.
- Environmental Resources Management and Department for International Development, 2005. Natural Disaster and Disaster Risk Reduction Measures. A Desk Review of Costs and Benefits. ERM, London, 45 pp.
- European Commission, 2007. Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks (Floods Directive). EC, Brussels, Belgium.
- European Commission, 2013. Disaster Risk Reduction: Increasing resilience by reducing risk in humanitarian action. DG ECHO Thematic Policy Document No 5. http://ec.europa.eu/echo/files/policies/prevention_preparedness/DRR_thematic_policy_doc.pdf, [accessed 12 April, 2017].
- European Commission, 2016a. Action Plan on the Sendai Framework for Disaster Risk Reduction 2015-30. http://ec.europa.eu/echo/sites/echo-site/files/1_en_document_travail_service_part1_v2.pdf, [accessed 15 January, 2017].
- European Commission, 2016b. Disaster Risk Management ECHO Factsheet. http://ec.europa.eu/echo/files/aid/countries/factsheets/thematic/disaster_risk_management_en.pdf, [accessed 15 January, 2017].
- European Commission, 2016c. European Commission Work Programme: No time for business as usual. <http://ec.europa.eu/atwork/>

- pdf/cwp_2016_en.pdf, [accessed 15 January, 2017].
- European Commission, 2016d. What is Horizon 2020?. <https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>, [accessed 15 January, 2017].
- European Union, 2011/92/EU on the assessment of the effects of certain public and private projects on the environment. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52012PC0628>, [accessed 15 January, 2017].
- European Union, 2012. SEVESO III directive. EU directive on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012L0018>, [accessed 15 January, 2017].
- EXCIMAP, European Exchange Circle on Flood Mapping, 2007. Handbook on good practices for flood mapping in Europe. http://ec.europa.eu/environment/water/flood_risk/flood_atlas/pdf/handbook_goodpractice.pdf, [accessed 15 January, 2015].
- FEMA, Federal Emergency Management Agency, 2009. Earthquake-Resistant Design Concepts: An Introduction to the NEHRP Recommended Seismic Provisions for New Buildings and Other Structures. http://www.fema.gov/media-library-data/20130726-1759-25045-5477/fema_p_749.pdf, [accessed 12 April, 2017].
- Fowler, J., 2015. Inventions for disaster risk reduction. ReliefWeb. <http://reliefweb.int/report/world/inventions-disaster-risk-reduction>, [accessed 30 September, 2016].
- Geneva Association, 2016. Events Webpage. <https://www.genevaassociation.org/events-overview>, [accessed 30 September, 2016].
- Genovese, E., Przulski, V., 2013. Storm surge disaster risk management: the Xynthia case study in France. *Journal of Risk Research* 16(7), 825-841.
- Golnaraghi, M., Surminski, S., Schanz, K., 2016. An Integrated Approach to Managing Extreme Events and Climate Risks Towards a Concerted Public-Private Approach. The Geneva Association. https://www.genevaassociation.org/media/952146/20160908_ecoben20_final.pdf, [accessed 12 April, 2017].
- Greiving, S., Fleischhauer, M., Wanczura, S., 2006. European Management of Natural Hazards: The Role of Spatial Planning in selected Member States. *Journal of Environmental Planning and Management* 49(5), 739-757.
- Hauer, M., Evans, J., Mishra, D., 2016. Millions projected at risk of displacement from sea level rise in the continental United States. *Nature Climate Change* 6(7), 691-695.
- IPCC, 2012. Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change. Cambridge University Press.
- Jenkins, K., Hall, J., Mechler, R., Lorant, A., Haer, T., Botzen, W., Aerts, J.C.J.H., Köhler, M., Pulido-Velazquez, M., Lopez-Nicolas, A., 2015. Key economic instruments for risk reduction and management for the case studies. ENHANCE deliverable 5.2. http://www.enhanceproject.eu/uploads/deliverable/file/22/ENHANCE_D5_2_Final.pdf, [accessed 30 September, 2016].
- Jenkins, K., Surminski, S., Hall, J., Crick, F., 2017. Assessing surface water flood risk and management strategies under future climate change: insights from an Agent-Based Model. *Science of the Total Environment* [accepted subject to minor revisions].
- Jongman, B., Ward, P.J., Aerts, J.C.J.H., 2012. Global exposure to river and coastal flooding — long term trends and changes. *Global Environmental Change* 22(4), 823-835.
- JRC (Joint Research Centre), 2014. Science for Disaster Risk Reduction. Thematic Report. http://publications.jrc.ec.europa.eu/repository/bitstream/JRC76764/jrc_disater%20reportweb.pdf, [accessed 30 September, 2016].
- JRC (Joint Research Centre), 2015. <http://forest.jrc.ec.europa.eu/effis/>, [accessed 30 September, 2016].
- JRC (Joint Research Centre), 2016. European Crisis Management Laboratory Webpage. <http://drmkc.jrc.ec.europa.eu/innovation/ENCML>, [accessed 30 September, 2016].
- King, D., Gurtner, Y., Firdaus, A., Harwood, S., Cottrell A., 2016. Land use planning for disaster risk reduction and climate change adaptation: Operationalizing policy and legislation at local levels. *IJDRBE* 7, Issue 2.
- Lavell, A., Maskrey, A., 2014. The future of disaster risk management. *Environmental Hazards* 13(4), 267-280.
- Lloyd's, 2008. Coastal Communities and Climate Change: Maintaining Future Insurability. Part of the 360 Risk Project. Lloyd's, London. [http://www.lloyds.com/~media/lloyds/reports/360/360%20climate%20reports/360_coastalcommunitiesandclimatexchange.pdf#search='360 risk project'](http://www.lloyds.com/~media/lloyds/reports/360/360%20climate%20reports/360_coastalcommunitiesandclimatexchange.pdf#search='360%20risk%20project') [accessed 30 September, 2016].
- McEntire, D.A., 2001. Triggering agents, vulnerabilities and disaster reduction: towards a holistic paradigm. *Disaster Prevention and Management* 10(3), 189-196.
- Mechler, R., 2008. The Cost-Benefit Analysis Methodology. From Risk to Resilience Working Paper 1. In: Moench, M., Caspari, E., Pokhrel, A., (Eds.), 2008. ISET, ISET-Nepal and ProVention. Kathmandu, Nepal.
- Mechler, R., 2016. Reviewing estimates of the economic efficiency of disaster risk management: opportunities and limitations of using risk-based cost-benefit analysis. *Natural Hazards* 81(3), 2121-2147.
- Mikkonen, N., Moilanen, A., 2013. Identification of top priority areas and management landscapes from a national Natura 2000 network. *Environmental Science and Policy* 27, 11-20.
- MMC, 2005. Natural hazard mitigation saves: an independent study to assess the future savings from mitigation activities. Volume 2—study documentation. Multihazard Mitigation Council, Washington, DC.
- Mysiak, J., Surminski, S., Thieken, A., Mechler, R., Aerts, J.C.J.H., 2015. Brief communication: Sendai framework for disaster risk reduction — success or warning sign for Paris? *Natural Hazards Earth Systems Science Discussions* 3(6), 3955-3966.
- National Research Council, 2011. Building Community Disaster Resilience through Private-Public Collaboration. National Research Council, Washington, D.C.
- Office of Public Works, 2009. The Planning System and Flood Risk Management. <http://www.opw.ie/media/Planning%20System%20and%20Flood%20Risk%20Management%20Guidelines.pdf>, [accessed 30 September 2016].
- Palliyaguru, R., Amaratunga, D., Baldry, D., 2014. Constructing a holistic approach to disaster riskreduction: the significance of focusing on vulnerability reduction. *Disasters* 38(1), 45-61.
- Papatheodorou, K., Klimisb, N., Margarisc, B., Ntoursa, K., Evangelidis, K., Konstantinidis, A., 2014. An Overview of the EU Actions towards Natural Hazard Prevention and Management: Current Status and Future Trends' *Journal of Environmental Protection and Ecology* 15(2), 433-444.
- Pescaroli, G., Alexander, D., 2016. Critical infrastructure, panarchies and the vulnerability paths of cascading disasters. *Natural*

- Hazards 82(1), 175-192.
- Quevauviller, P., Gemmer, M., 2015. EU and international policies for hydrometeorological risks: Operational aspects and link to climate action. *Advances in Climate Change Research* 6(1), 74-79.
- Ranghieri, F., Ishwatari, M., 2014. Learning from Megadisasters: Lessons from the Great East Japan Earthquake. World Bank.
- Schut, M., Leeuwis, C., Van Paassen, A., 2010. Room for the River — Room for Research? The case of depoldering De Noordwaard, the Netherlands. *Science and Public Policy* 37(8), 611-627.
- Stein, U., Özerol, G., Tröltzsch, J., Landgrebe, R., Szendrenyi, A., Vidaurre, R., 2016. European Drought and Water Scarcity Policies, In: Bressers, H., Bressers, N., Larrue, C., (Eds.), *Governance for Drought Resilience: Land and Water Drought Management in Europe*. Springer International Publishing, 17-43.
- Surminski, S., 2014. The Role of Insurance in Reducing Direct Risk — The Case of Flood Insurance. *International Review of Environmental and Resource Economics* 7(3-4), 241-278.
- Surminski, S., 2017. Fit for purpose and fit for the future? An evaluation of the UK's new flood reinsurance pool. *Resources for the Future Discussion Paper* 17-04.
- Surminski, S., Aerts, J.C.J.H., Botzen, W., Hudson, P., Mysiak, J., Perez-Blanco, D., 2015. Reflections on the current debate on how to link flood insurance and disaster risk reduction in the European Union. *Natural Hazards* 79(3), 1451-1479.
- Surminski, S., Leck, H., 2016. You never adapt alone — the role of MultiSectoral Partnerships in addressing urban climate risks, Grantham Research Institute on Climate Change and the Environment Working Paper No 232, London 2016, <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2016/03/Working-Paper-232-Surminski-and-Leck.pdf>. London School of Economics, London, [accessed 12 April, 2017].
- Surminski, S., Lopez, A., Birkmann, J., Welle, T., 2012. Current knowledge on relevant methodologies and data requirements as well as lessons learned and gaps identified at different levels, in assessing the risk of loss and damage associated with the adverse effects of climate change. unfccc.int/resource/docs/2012/tp/01.pdf, [accessed 12 April, 2017].
- Tanner, T., Surminski, S., 2016. Realising the 'Triple Dividend of Resilience: A New Business Case for Disaster Risk Management. Springer International Publishing, Switzerland, 176 pp.
- Tanner, T., Surminski, S., Wilkinson, E., Reid, R., Rentschler, J., Rajput, S., 2015. The Triple Dividend of Resilience. Realising development goals through the multiple benefits of disaster risk management. Overseas Development Institute, London. <https://www.odl.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/10103.pdf>, [accessed 12 April, 2017].
- Te Linde, A., Aerts, J.C.J.H., Kwadijk, J.C.J., 2010. Effectiveness of flood management measures on peak discharges in the Rhine basin under climate change. *Journal of Flood Risk Management* 3(4), 248-269.
- Thieken, A. H., Kienzler, S., Kreibich, H., Kuhlicke, C., Kunz, M., Mühr, B., Müller, M., Otto, A., Petrow, T., Pisi, S., Schröter, K., 2016. Review of the flood risk management system in Germany after the major flood in 2013. *Ecology and Society* 21(2):51.
- Thielen, J., Bartholmes, J., Ramos, M.H., de Roo, A., 2009. The European Flood Alert System — Part 1: Concept and development. *Hydrology Earth Systems Science* 13(2), 125-140.
- Tschakert, P., Dietrich, K.A., 2010. Anticipatory learning for climate change adaptation and resilience. *Ecology and Society* 15(2), article 11.
- TU Delft, Delft University of Technology, 2016. Jonkman, S.E. Research Projects Webpage. <http://www.citg.tudelft.nl/over-faculteit/afdelingen/hydraulic-engineering/sections/hydraulic-structures-and-flood-risk/staff/jonkman-sn/research-projects/>, [accessed 12 April, 2017].
- UK Government, 2012. Reducing Risks of Future Disasters Priorities for Decision Makers. Foresight Report. The Government Office for Science, London. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/286476/12-1289-reducing-risks-of-future-disasters-report.pdf, [accessed 30 September, 2016].
- UK Space Agency, 2016. National Flood Warning & Mitigation Service. Case Study. <https://www.gov.uk/government/case-studies/national-flood-warning-mitigation-service>, [accessed 30 September, 2016].
- UNISDR, 2007. Terminology on disaster risk reduction. <https://www.unisdr.org/we/inform/terminology>, [accessed 15 January, 2017].
- UNISDR, 2013. Global Assessment Report for Disaster Risk Reduction. <http://www.preventionweb.net/english/hyogo/gar/2013/en/home/index.html>, [accessed 15 January, 2017].
- UNISDR, 2015. Sendai Framework for Disaster Risk Reduction 2015-2030. United Nations International Strategy for Disaster Reduction, Geneva, 37 pp. http://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf, [accessed 15 January, 2017].
- UNISDR, 2016. Terminology on DRR. <https://www.unisdr.org/we/inform/terminology>, [accessed 15 January, 2017].
- UNISDR, n.d. Making Cities Resilient. <http://www.unisdr.org/we/campaign/cities>, [accessed 27 April, 2017].
- Van Rijswijk, H.F.M.W., Havekes, H.J.M., 2012. European and Dutch Water Law. Europa Law Publishing, Groningen 2012, 517 pp.
- Vorhies, F., 2012. The economics of investing in disaster risk reduction. Working paper based on a review of the current literature commissioned by the UN International Strategy for Disaster Reduction (UNISDR), Geneva.
- Vorhies, F., Wilkinson, E., 2016. Co-Benefits of Disaster Risk Management. World Bank Policy Research Working Paper 7633. World Bank, Washington D.C.
- Watkiss, P., Hunt, A., Blyth, W., Dyszynski, J., 2014. The use of new economic decision support tools for adaptation assessment: a review of methods and applications, towards guidance on applicability. *Climate Change* 132(3), 1-16.
- Wityorapong, N., Muttarak, R., Pothisiri, W., 2015. Social Participation and Disaster Risk Reduction Behaviours in Tsunami Prone Areas. *PLoS ONE* 10(7).
- World Energy Council, 2015. The road to resilience – managing and financing extreme weather risks. <https://www.worldenergy.org/wp-content/uploads/2015/09/The-Road-to-Resilience-Managing-and-Financing-Extreme-Weather-Risk.pdf>, [accessed 30 September, 2016].

5.2 Preparedness and response

- Adeola, F.O., Picou, J.S., 2014. Social capital and the mental health impacts of Hurricane Katrina: assessing long-term patterns of psychosocial distress. *International Journal of Mass Emergencies and Disasters* 32(1), 121-156.

- Airess, C.A., Li, W., Leong, K.J., Chen, A.C.C., Keith, V.M., 2008. Church-based social capital, networks and geographical scale: Katrina evacuation, relocations, and recovery in a New Orleans Vietnamese American community. *Geoforum* 39(3), 1333-1346.
- Aldrich, D.P., 2012. *Building Resilience: Social Capital in Post-Disaster Recovery*. University of Chicago Press, Chicago, 248 pp.
- Aldrich, D.P., Meyer, M.A., 2015. Social Capital and Community Resilience. *American Behavioral Scientist* 59(2), 254-269.
- Alexander, D., 2002. From civil defence to civil protection — and back again. *Disaster Prevention and Management: An International Journal* 11(3), 209-213.
- Alexander, D., 2010. The voluntary sector in emergency response and civil protection: review and recommendations. *International Journal of Emergency Management* 7(2), 151-166.
- Alexander, D., 2014. Communicating earthquake risk to the public: The trial of the 'L'Aquila Seven'. *Natural Hazards* 72(2), 1159-1173.
- Alfieri, L., Salamon, P., Pappenberger, F., Wetterhall, F., Thielen, J., 2012. Operational early warning systems for water-related hazards in Europe. *Environmental Science & Policy* 21, 35-49.
- Alvinus, A., Danielsson, E., Larsson, G., 2010. The inadequacy of an ordinary organisation: organisational adaptation to crisis through planned and spontaneous links. *International Journal of Organisational Behaviour* 15(1), 87-102.
- Ansell, C., Boin, A., Keller, A., 2010. Managing transboundary crises: identifying building blocks of an effective response system. *Journal of Contingencies and Crisis Management* 18(4), 205-217.
- Ansell, C., Keller, A., Boin, A., 2009. Managing Transboundary Crises: Requirements for a Dynamic Response. In: APSA 2009 Toronto Meeting Paper. 32 pp. URL: <https://ssrn.com/abstract=1450738>, [accessed 12 April, 2017].
- Balmer, A. S., Calvert, J., Marris, C., Molyneux-Hodgson, S., Frow, E., Kearnes, M., Bulpin, K., Schyfter, P., Mackenzie, A., Martin, P., 2016. Five rules of thumb for post-ELSI interdisciplinary collaborations. *Journal of Responsible Innovation* 3(1), 73-80.
- Bankoff, G., 2007. Dangers to going it alone: social capital and the origins of community resilience in the Philippines. *Continuity and Change* 22(2), 327-355.
- Barsky, L.E., Trainer, J.E., Torres, M.R., Aguirre, B.E., 2007. Managing volunteers: FEMA's Urban Search and Rescue program and interactions with unaffiliated responders in disaster response. *Disasters* 31(4), 495-507.
- Basher, R., 2006. Global early warning systems for natural hazards: systematic and people-centred. *Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences* 364, 2167-2182.
- Bharosa, N.I., Lee, J.K., Janssen, M., 2010. Challenges and obstacles in sharing and coordinating information during multi-agency disaster response: propositions from field exercises. *Information Systems Frontier* 12(1), 49-65.
- Boin, A., Busuioic, M., Groenleer, M., 2014a. Building European Union capacity to manage transboundary crises: Network or lead-agency model? *Regulation and Governance* 8(4), 418-436.
- Boin, A., Ekengren, M., 2009. Preparing for the World Risk Society: Towards a new security paradigm for the European Union. *Journal of Contingencies and Crisis Management* 17(4), 285-294. Published in: Campbell, T. (Ed.) 2012. *The Library of Essays on Emergency, Ethics, Law and Policy* 3, 4 Volume Set, Ashgate, Farnham, 3-12.
- Boin, A., Lagadec, P., 2000. Preparing for the future: Critical challenges in crisis management. *Journal of Contingencies and Crisis Management* 8(4), 185-191.
- Boin, A., Rhinard, M., Ekengren, M., 2014b. Managing transboundary crises: The emergence of European Union capacity. *Journal of Contingencies and Crisis Management* 22(3), 131-142.
- Brand, M.W., Kerby, D., Elledge, B., Burton, T., Coles, D., Dunn, A., 2008. Public health's response: citizens' thoughts on volunteering. *Disaster Prevention and Management* 17(1), 54-61.
- Brisley, R., Welstead, J., Hindle, R., Paaola, J., 2012. Socially Just Adaptation to Climate Change. Report by the Joseph Rowntree Foundation, York, United Kingdom, 118 pp. URL: https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/climate-change-adaptation-full_0.pdf, [accessed 12 April, 2017].
- Burns, R., 2015. Rethinking big data in digital humanitarianism: Practices, epistemologies and social relation. *GeoJournal* 80(4), 477-490.
- Campbell, T., 2012. *The Library of Essays on Emergency, Ethics, Law and Policy: 4 Volume Set*, Routledge, Ashgate, Farnham, 221 pp.
- Comfort, L.K., 1996. Self organization in disaster response: The great Hanshin, Japan, earthquake of January 17, 1995. *Natural Hazards Research and Information Center. Quick Response Report* 78, Boulder, University of Colorado. URL: https://www.researchgate.net/publication/228364362_Self-organization_in_Disaster_Response_The_Great_Hanshin_Japan_Earthquake_of_January_17_1995, [accessed 12 April, 2017].
- Cone, D.C., Weir, S.D., Bogucki, S., 2003. Convergent volunteerism. *Annals of Emergency Medicine* 41(4), 457-462.
- Crawford, K., Faleiros, G., Luers, A., Meier, P., Perlich, C., Thorp, J., 2013. Big Data, Communities and Ethical Resilience: A Framework for Action. Rockefeller Foundation, Bellagio Center, Italy, 13 pp. URL: <https://www.rockefellerfoundation.org/blog/big-data-communities-ethical/>, [accessed 28 September 2016].
- De Cort, M., Bogučarskis, K., Janssens, W., Constantinou, C., Jackson, K., Kockerols, P., Altitzoglou, T., Máté, B., Hermsmeyer, S., 2015. EC radiological/nuclear information exchange systems ECURIE and EURDEP: latest developments and international collaboration on EP&R. Presentation by the European Commission Joint Research Centre. IAEA International Conference on global EPR, 19.10.2015. URL: <https://nucleus.iaea.org/sites/iec/epr-conference-2015-docs/Conference%20Documents/Session%203%20%E2%80%93%20Emergency%20Management/1-182%20DE%20CORT.pdf>, [accessed 12 April, 2017].
- Deng, F., 2009. Volunteers and China's emerging civil society. *Social Science Research Network, Chongqing Technology and Business University*, 22 pp. URL: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1353061, [accessed 29 August 2016].
- Department for Environment, Food and Rural Affairs (DEFRA), 2004. *Making Space for Water: Consultation Report*, London, United Kingdom, 154 pp. URL: <http://www.look-up.org.uk/2013/wp-content/uploads/2014/02/Making-space-for-water.pdf>, [accessed 12 April, 2017].
- Drabek, T.E., McEntire, D.A., 2003. Emergent phenomena and the sociology of disaster: lessons, trends and opportunities from the research literature. *Disaster Prevention and Management* 12(3), 97-112.
- Dynes, R.R., 1994. Community emergency planning: False assumptions and inappropriate analogies. *International Journal of Mass Emergencies and Disasters* 12(2), 141-158.

- Dynes, R.R., 2002. The importance of social capital in disaster response. Disaster Research Center, Preliminary Paper #327, University of Delaware, 59 pp. URL: [http://udspace.udel.edu/bitstream/handle/19716/292/PP %20327.pdf?sequence=1](http://udspace.udel.edu/bitstream/handle/19716/292/PP%20327.pdf?sequence=1), [accessed 12 April, 2017].
- Dynes, R.R., 2005. Community social capital as the primary basis for resilience. Disaster Research Center, Preliminary Paper #344, University of Delaware, 49 pp. URL: [http://udspace.udel.edu/bitstream/handle/19716/1621/PP %20344.pdf?sequence=1&isAllowed=y](http://udspace.udel.edu/bitstream/handle/19716/1621/PP%20344.pdf?sequence=1&isAllowed=y), [accessed 12 April, 2017].
- Dynes, R.R., Quarantelli, E.L., Wenger, D., 1990. Individual and organisational response to the 1985 earthquake in Mexico City, Mexico, Disaster Research Center, Book and Monograph series # 24, University of Delaware, 200 pp. URL: <http://udspace.udel.edu/handle/19716/2259>, [accessed 29 August 2016].
- ECHO, 2017. ECHO Factsheet. The EU Civil Protection Mechanism. http://ec.europa.eu/echo/files/aid/countries/factsheets/thematic_civil_protection_en.pdf, [accessed 29 April, 2017].
- Engel, K., Kolen, B., van der Most, H., van Ruiten. K., 2012. The Dutch Delta: A mega-crisis waiting to happen? In: Helsloot, I., Boin, A., Jacobs. B., Comfort, L.K. (Eds.) *Mega-Crises: Understanding the Prospects, Nature, Characteristics and the Effects of Cataclysmic Events*, Charles C. Thomas Publisher, Ltd, Springfield, Illinois, 319-341. European Commission Humanitarian Aid and Civil Protection (ECHO), 2016. Disaster Risk Management Factsheet. http://ec.europa.eu/echo/files/aid/countries/factsheets/thematic_disaster_risk_management_en.pdf, [accessed 12 April, 2017].
- Fielding, J., 2007. Environmental injustice or just the lie of the land: an investigation of the socioeconomic class of those at risk from flooding in England and Wales. *Sociological Research Online* 12(4), 1-4.
- Flizikowski, A., Hołubowicz, W., Stachowicz, A., Hokkanen, L., Delavallade, T., 2014. Social media in crisis management — the ISAR + project survey. *Proceedings of the Information Systems for Crisis Response and Management (ISCRAM)*, 707–711. URL: <http://www.iscramlive.org/ISCRAM2014/papers/p68.pdf>, [accessed 12 April, 2017].
- Future Group, 2007. Public Security, Privacy and Technology in Europe: Moving Forward. Concept paper on the European strategy to transform Public security organizations in a Connected World. URL: <http://www.statewatch.org/news/2008/jul/eu-futures-dec-sec-privacy-2007.pdf>, [accessed 25 November, 2016].
- Ganapati, N.E., 2012a. In good company: why social capital matters for women during disaster recovery. *Public Administration Review* 72(3), 419–427.
- Ganapati, N.E., 2012b. Downsides of social capital for women during disaster recovery: Toward a more critical approach. *Administration & Society* 45(1), 72–96.
- Garcia, C., Fearnley, C.J., 2012. Evaluating critical links in early warning systems for natural hazards. *Environmental Hazards* 11(2), 123-137.
- Gordon, R., 2004. The social system as a site of disaster impact and resource for recovery. *Australian Journal of Emergency Management* 19(4), 16-22.
- Goudsblom, J., 2015. *Vuur en beschaving*, Van Oorschot, Amsterdam, 318 pp. [in Dutch].
- Helsloot, I., Ruitenbergh, A., 2004. Citizen response to disasters: a survey of the literature and some practical implications. *Journal of Contingencies and Crisis Management* 12(3), 98-111.
- IASC, 2006. Protecting Persons affected by Natural Disasters: Inter-Agency Standing Committee operational guidelines on human rights and natural disasters. Brookings-Bern Project on Internal Displacement, Washington D.C., 32 pp. URL: https://interagency-standingcommittee.org/system/files/legacy_files/2006_IASC_NaturalDisasterGuidelines.pdf, [accessed 12 April, 2017].
- IFRC and ICRC, 1994. The Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organisations (NGOs) in Disaster Relief. International Federation of Red Cross and Red Crescent Societies & International Committee of the Red Cross, Geneva. URL: <https://www.icrc.org/eng/resources/documents/publication/p1067.htm>, [accessed 12 April, 2017].
- IFRC, 2016. International Federation of Red Cross and Red Crescent Societies 'National Societies.'. URL: <http://www.ifrc.org/en/who-we-are/the-movement/national-societies/>, [accessed 12 April, 2017].
- International Committee of the Red Cross (ICRC), 2013. Professional Standards for Protection Work. URL: <https://www.icrc.org/eng/assets/files/other/icrc-002-0999.pdf>, [accessed 12 April, 2017].
- Introna, L.D., 2007. Maintaining the reversibility of foldings: making the ethics (politics) of information technology visible. *Ethics and Information Technology* 9(1), 11–25.
- Jalali, R., 2002. Civil society and the state: Turkey after the earthquake. *Disasters* 26(2), 120-139.
- Kaminska, K., Dawe, P., Forbes, K., Duncan, D., Becking, I., Rutten, B., O'Donnell, D., 2015. Digital Volunteer Supported Recovery Operations Experiment. Defence Research and Development Canada, Scientific Report, 82 pp. URL: http://cradpdf.drdc-rddc.gc.ca/PDFS/unc198/p801344_A1b.pdf, [accessed 5 May, 2016].
- Keller, R.C., 2015. *Fatal isolation: the devastating Paris heat wave of 2003*, University of Chicago Press, Chicago and London, 240 pp.
- Kendra, J., Wachtendorf, T., 2006. Improvisation, creativity and the art of emergency management. Disaster Research Center, University of Delaware, 13 pp. URL: <http://udspace.udel.edu/handle/19716/3054>, [accessed 29 August, 2016].
- Klinenberg, E., 2002. *Heat wave: a social autopsy of disaster in Chicago*, University of Chicago Press, Chicago, 328 pp.
- Ko, H., Cadigan, R., 2010. Disaster preparedness and social capital, In: Kawachi, I., Subramanian, S.V., Kim, D., (Eds.), 2010. *Social Capital and Health*, Springer Science, New York, 273-285.
- Krieger, K., 2013. The limits and variety of risk-based governance: the case of flood management in Germany and England. *Regulation & Governance* 7, 236–57.
- Liegl, M., Boden, A., Büscher, M., Oliphant, R., Kerasidou, X., 2016. Designing for ethical innovation: A case study on ELSI co-design in emergency. *International Journal of Human-Computer Studies* 95(C), 80–95. Lindley, S., O'Neill, J., Kandeh, J., Lawson, N., Christian, R., O'Neill, M., 2011. *Climate Change, Justice and Vulnerability*. Report by the Joseph Rowntree Foundation, York, United Kingdom, 180 pp. URL: <https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/climate-change-social-vulnerability-full.pdf>, [accessed 12 April, 2017].
- Linnell, M., 2014. Citizen response in crisis: individual and collective efforts to enhance community resilience. *Human Technology*

- 10(2), 68-94.
- Lüge, T., 2013. Social Media und Crowdsourcing in Katastropheneinsätzen — internationale Perspektiven. Fachtagung, Heidelberg, Web 2.0 und Social Media in Katastrophenschutz und Hochwassermanagement. URL: <http://kats20.leiner-wolff.de/vortraege-3/> [accessed 27 September, 2016] [in German].
- Majchrzak, A., Jarvenpaa, S., Hollingshead, A.B., 2007. Coordinating expertise among emergent groups responding to disasters. *Organization Science* 18(1), 147-161.
- Major, A.M., 1999. Gender differences in risk and communication behaviour: Responses to the New Madrid Earthquake Prediction. *International Journal of Mass Emergencies and Disasters* 17(3), 313-338.
- McEntire, D.A., 2002. Coordinating multi-organizational responses to disasters: lessons from the March 28, 2000, Fort Worth tornado. *Disaster Prevention and Management* 11(5), 369-379.
- Meier, P., 2015. *Digital humanitarians. How big data is changing the face of humanitarian response*. CRC Press, Boca Raton, Florida, 260 pp.
- Mendoza, M., Poblete, B., Castillo, C., 2010. Twitter Under Crisis: Can we trust what we RT? SOMA 10, Proceedings of the First Workshop on Social Media Analytics, 9 pp. URL: http://chato.cl/papers/mendoza_poblete_castillo_2010_twitter_terremoto.pdf, [accessed 12 April, 2017].
- Mildner, S., 2013. Bürgerbeteiligung beim Hochwasserkampf — Chancen und Risiken einer kollaborativen Internetplattform zur Koordination der Gefahrenabwehr. Fachtagung, Heidelberg: Web 2.0 und Social Media in Katastrophenschutz und Hochwassermanagement. URL: <http://kats20.leiner-wolff.de/vortraege-3/>, [accessed 27 September, 2016] [in German].
- Mimaki, J., Shaw, R., 2007. Enhancement of disaster preparedness with social capital and community capacity: A perspective from a comparative case study of rural communities in Kochi, Japan. *SUISUI Hydrological Research Letters* 1, 5-10.
- Minamoto, Y., 2010. Social capital and livelihood recovery: post-tsunami Sri Lanka as a case. *Disaster Prevention and Management* 19(5), 548-564.
- Morrow, B.H., 2008. Community resilience: a social justice perspective. Community and Regional Resilience Initiative, Research Report, Oak Ridge TN, 17 pp. URL: http://www.resilientus.org/wp-content/uploads/2013/03/FINAL_MORROW_9-25-08_1223482348.pdf, [accessed 12 April, 2017].
- Morsut, C., 2014. The EU's Community Mechanism for Civil Protection: Analysing its development. *Journal of Contingencies and Crisis Management* 22(3), 143-149.
- Mosley, S., 2009. A network of trust: Measuring and monitoring air pollution in British cities, 1912-1960. *Environment and History* 15(3), 273-302.
- Munro, R., 2013. Crowdsourcing and the crisis-affected community. Lessons learned and looking forward from Mission 4636. *Information Retrieval* 16(2), 210-266.
- Murphy, B.L., 2007. Locating social capital in resilient community-level emergency management. *Natural Hazards* 41(2), 297-315.
- Nakagawa, Y., Shaw, R., 2004. Social capital: a missing link to disaster recovery. *International Journal of Mass Emergencies and Disasters* 22(1), 5-34.
- Neal, R., Bell, S., Wilby, J., 2011. Emergent disaster response during the June 2007 floods in Kingston upon Hull, UK. *Journal of Flood Risk Management* 4(3), 260-269.
- Newberry, B., 2010. Katrina: Macro-ethical issues for engineers. *Science Engineering Ethics* 16, 535-571.
- Nowotny, H., Scott, P., Gibbons, M., 2001. *Rethinking Science: Knowledge and the Public*, Polity Press, Cambridge, 288 pp.
- O'Brien, G., 2008. UK emergency preparedness: a holistic response? *Disaster Prevention and Management: An International Journal* 17(2), 232-243.
- Ogg, J., 2005. Heatwave: implications of the 2003 French heatwave for the social care of older people. The Young Foundation, London, 49 pp. URL: <http://youngfoundation.org/wp-content/uploads/2013/04/Heatwave-October-2005.pdf>, [accessed 29 August, 2016].
- Palltala, P. C., Boana, C., Lund, R., Vos, M., 2012. Communication gaps in disaster management: perceptions by experts from governmental and non-governmental organizations. *Journal of Contingencies and Crisis Management* 20(1), 2-12.
- Papathodorou, K., Klimisb, N., Margarisc, B., Ntouroso, K., Evangelidisa, K., Konstantinidisa, A., 2014. An overview of the EU actions towards natural hazard prevention and management: Current status and future trends. *Journal of Environmental Protection and Ecology* 15(2), 433-444.
- Pardess, E., 2005. Training and mobilising volunteers for emergency response and long-term support. *Journal of Aggression, Mal-treatment and Trauma* 10(1-2), 609-620.
- Pescaroli, G., Alexander, D., 2015. A definition of cascading disasters and cascading effects: Going beyond the 'Toppling dominos' metaphor. *Global Risk Forum DAVOS Planet@Risk* 3(1), 58-67.
- Petersen, K., Oliphant, R., Büscher, M., 2016. Experimenting with Ethical Impact Assessment, In: ISCRAM 2016 Proceedings, 22-26.05.2016. 13th International Conference on Information Systems for Crisis Response and Management. Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, 6 pp. URL: http://idl.iscrum.org/files/katrinapetersen/2016/1364_KatrinaPetersen_et_al2016.pdf, [accessed 12 April, 2017].
- Prieur, M., 2012. Ethical Principles on Disaster Risk Reduction and People's Resilience. Council of Europe, Strasbourg, 38 pp. https://www.coe.int/t/dg4/majorhazards/ressources/pub/Ethical-Principles-Publication_EN.pdf, [accessed 12 April, 2017].
- Putnam, R.D., 2000. *Bowling Alone: the collapse and revival of American community*, Simon & Schuster, New York, 544 pp.
- Quarantelli, E.L., 1993. Organizational response to the Mexico City earthquake of 1985: Characteristics and implications. *Natural Hazards* 8(1), 19-38.
- Quarantelli, E.L., 1994. Emergent behaviors and groups in the crisis time periods of disasters. Disaster Research Center, Preliminary Paper #206, Delaware, 17 pp.
- Ritchie, L.A., Gill, D.A., 2007. Enough is enough: social capital in post-Katrina New Orleans. A study of neighbourhoods affected by the 2007 tornadoes. Natural Hazards Center, Quick Response Report #195, Boulder, Colorado.
- Rizza, C., Pereira, A. G., Curvelo, P., 2014. Do-it-yourself justice. *International Journal of Information Systems for Crisis Response and Management* 6(4), 42-59.

- Rodriguez, H., Trainor, J., Quarantelli, E.L., 2006. Rising to the challenges of a catastrophe: the emergent and prosocial behaviour following Hurricane Katrina. *Annals of the American Society of Political and Social Science* 604(1), 82-101.
- Romero-Lankao, P., Qin, H., Dickinson, K., 2012. Urban vulnerability to temperature-related hazards: a meta-analysis and meta-knowledge approach. *Global Environmental Change* 22(3), 670-683.
- Shaw, R., Goda, K., 2004. From disaster to sustainable civil society: the Kobe experience. *Disasters* 28(1), 16-40.
- Sorrell, T., 2002. Morality and Emergency. *Proceedings of the Aristotelian Society*. 103, 21-37, Published in: Campbell, T., 2012. *The Library of Essays on Emergency, Ethics, Law and Policy: 4 Volume Set, 1*, Farnham, Ashgate, 15-32.
- Sphere Project, 2011. *The Humanitarian Charter*. 4 pp. URL: <http://www.sphereproject.org/handbook/the-humanitarian-charter/>, [accessed 12 April, 2017].
- St. Denis, L.A., Hughes, A., Palen, L., 2012. Trial by Fire: The Deployment of Trusted Digital Volunteers in the 2011 Shadow Lake Fire. In: *Proceedings of the 9th International ISCRAM Conference — Vancouver, Canada*, 1-10.
- Stallings, R.A., Quarantelli, E.L., 1985. Emergent citizen groups and emergency management. *Public Administration Review* 45, 93-100.
- Starbird, K., Palen, L., 2011. Voluntweeters: Self-Organizing by Digital Volunteers in Times of Crisis. CHI, May 7-12, Vancouver, B.C., Canada, pp10. URL: <http://cmci.colorado.edu/~palen/voluntweetersStarbirdPalen.pdf>, [accessed 12 April, 2017].
- Stilgoe, J., 2015. *Experiment Earth: Responsible Innovation in Geoengineering*, Routledge, London, 258 pp.
- Tapia, A. H., LaLone, N. J., 2014. Crowdsourcing investigations: Crowd participation in identifying the bomb and bomber from the Boston marathon bombing. *International Journal of Information Systems for Crisis Response and Management* 6(4), 60-75.
- Technisches Hilfswerk (THW), 2016. Homepage. URL: https://www.thw.de/EN/Homepage/homepage_node.html, [accessed 25 August, 2016].
- Teets, J.C., 2009. Post-earthquake relief and reconstruction efforts: the emergence of civil society in China? *The China Quarterly* 198, 330-347.
- Thielen, J., Bartholmes, J., Ramos, M.-H., de Roo, A., 2009. The European Flood Alert System — Part 1: Concept and development. *Hydrological Earth Systems Science* 13, 125-140.
- Thrift, N., 2011. Lifeworld Inc—and what to do about it. *Environment and Planning D: Society and Space* 29(1), 5-26.
- Tierney, K.J., 1989. The Social and Community Contexts of Disaster, In: Gist, R., Lubin, R. (Eds.) *Psychosocial aspects of disaster*, John Wiley & Sons, New York, 11-39.
- Treaty of the Functioning of the European Union. Article 222. The Lisbon Treaty. 2007. URL: <http://www.lisbon-treaty.org/wcm/the-lisbon-treaty/treaty-on-the-functioning-of-the-european-union-and-comments/part-5-external-action-by-the-union/title-7-solidarity-clause/510-article-222.html>, [accessed 12 April, 2017].
- Twigg, J., 1999. The age of accountability? Future community involvement in disaster reduction. *Australian Journal of Emergency Management* 14(4), 51-58.
- Twigg, J., 2003. *The right to safety: some conceptual and practical issues*. Aon Benfield UCL Hazard Centre, Disaster Studies Working Paper 9, London.
- Uhr, C., Johansson, H., Fredholm L., 2008. Analysing emergency response systems. *Journal of Contingencies and Crisis Management* 16(2), 80-90.
- UNECE, 1998. *Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters*. United Nations Economic Commission for Europe, Geneva. URL: <http://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf>, [accessed 12 April, 2017].
- UNISDR, 2015. *Sendai Framework for Disaster Risk Reduction 2015-2030: Building the Resilience of Nations and Communities to Disasters*. http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf, [accessed 16 December, 2016]
- United Nations, 2006. *Global Survey of Early Warning Systems. Final Version*. 46 pp. URL: <http://www.unisdr.org/2006/ppew/info-resources/ewc3/Global-Survey-of-Early-Warning-Systems.pdf>, [accessed 8 September, 2016]
- Van der Boom, B., 2000. *Atoomgevaar? Dan zeker B.B. — de geschiedenis van de Bescherming Bevolking*, Sdu Uitgevers, Den Haag, 400 pp. [in Dutch].
- Veiligheidsberaad, 2014. *Bevolkingszorg op orde 2.0*. 95 pp. URL: <http://crisislab.nl/wordpress/wp-content/uploads/Commissie-Bevolkingszorg-op-orde.pdf> [in Dutch], [accessed 12 April, 2017].
- Von Schomberg, R., 2013. A vision of responsible research and innovation, In: Owen, R., Heintz, M., Bessant, J., (Eds.) *Responsible Innovation, Managing the Responsible Emergence of Science and Innovation in Society*. John Wiley & Sons, London, 51-74.
- Wallace, D., Wallace, R., 2008. Urban systems during disasters: factors for resilience. *Ecology and Society* 13(1). URL: <http://www.ecologyandsociety.org/vol13/iss1/art18/>, [accessed 12 April, 2017].
- Watson, H., Finn, R. L., 2014. Ethical and privacy implications of the use of social media during the Eyjafjallajökull eruption crisis. *International Journal of Information Systems for Crisis Response and Management* 6(4), 29-41.
- Whittaker, J., McLennan, B., Handmer, J., 2015. A review of informal volunteerism in emergencies and disasters: definitions, opportunities and challenges. *International Journal of Disaster Risk Reduction* 13, 358-368.
- Wind, T.R., Fordham, M., Komproue, I.H., 2011. Social capital and post-disaster mental health. *Global Health Action* 4, 6351.
- Wind, T.R., Komproue I.H., 2012. The mechanisms that associate community social capital with post-disaster mental health: a multilevel model. *Social Science and Medicine* 75(9), 1715-1720.
- Wisner, B., Blaikie, P., Cannon, T., Davis, I., 2004. *At Risk: Natural Hazards, People's Vulnerability and Disasters*. Routledge, London, 496 pp.
- Yamamura, E., 2010. Effects of interactions among social capital, income and learning from experiences of natural disasters: a case study from Japan. *Regional Studies* 44(8), 1019-1032.
- Zipf, A., 2013. *Nutzergenerierte Geodaten im Crisis Mapping. Stand der Forschung & Perspektiven*. Fachtagung, Heidelberg, Web 2.0 und Social Media in Katastrophenschutz und Hochwassermanagement. <http://kats20.leiner-wolff.de/vortraege-3/>, [accessed 27 September, 2016] [in German].

5.3 Recovery and avoiding risk creation

- Adger, W.N., Kelly, P.M., Winkels, A., Huy, L.Q., Locke, C., 2002. Migration, Remittances, Livelihood Trajectories, and Social Resilience. *AMBIO A Journal of the Human Environment* 31, 358–366.
- Alderman, H., Hoddinott, J., Kinsey, B., 2006. Long Term Consequences of Early Childhood Malnutrition. *Oxford Economic Papers* 583, 450–474.
- Alesch, D.J., Arendt, L.A.H., Holly, J.N., 2009. Managing for Long-Term Community Recovery in the Aftermath of Disaster. Public Entity Risk Institute, Fairfax VA.
- Alesch, D.J., Holly, J.N., Mittler, E.N., Nagy, R., 2001. Organizations at Risk: What Happens When Small Businesses and Not-for-Profits Encounter Natural Disasters. Public Entity Risk Institute, Fairfax, VA.
- Alexander, D.E., 2004. Planning for post-disaster reconstruction. Presented at the I-Rec 2004 International Conference Improving Post-Disaster Reconstruction in Developing Countries, Centre for Disaster Management and Hazards Research, Coventry.
- Alexander, D.E., 2016. The game changes: 'Disaster Prevention and Management' after a quarter of a century. *Disaster Prevention and Management: an international journal*, 25 (1), 2–10.
- Aloudat, T., Christensen, L., 2012. Psycho-social recovery. In: Wisner, B., Gaillard, J.C., Kelman, I., (eds.), 2012. *The Routledge Handbook of Hazards and Disaster Risk Reduction*. Routledge, London, 569–579.
- Balaouras, S., 2015. The State of Enterprise Risk Management. *Disaster Recovery Journal*, winter 2016. http://drj.com/images/surveys_pdf/forrester/2015-Forrester-Survey.pdf, [accessed 12 April, 2017].
- BBC News, 2010. International Air Transport Association, BBC News, 21 April 2010, retrieved 24 May 2011.
- Beegle, K., Dehejia, R., Gatti, R., 2006. Child Labor and Agricultural Shocks. *Journal of Development Economics* 811, 80–96.
- Berke, P.R., Campanella, T.J., 2006. Planning for Postdisaster Resiliency. *The ANNALS of the American Academy of Political and Social Science* 604, 192–207.
- Berke, P.R., Kartez J., Wenger, D., 1993. Recovery after disasters: Achieving sustainable development, mitigation and equity. *Disasters* 17(2), 93–109.
- Bierkandt, R., Wenz, L., Willner, S.N., Levermann, A., 2014. Acclimate — a model for economic damage-propagation: Part 1: basic formulation of damage transfer within a global supply network and damage conserving dynamics. *Environment, Systems and Decisions* 34, 507–524.
- Bolin, R.C., 2007. Race, Class, Ethnicity and Disaster Vulnerability. In: Rodriguez, H., Quarantelli, E.L., Dynes, R.R., (Edit.), 2007. *Handbook of Disaster Research*. Springer Science, New York, 113–129.
- Bryant, R.A., Nickerson, A., Creamer, M., O'Donnell, M., Forbes, D., Galatzer-Levy, I., McFarlane, A.C., Silove, D., 2015. Trajectory of post-traumatic stress following traumatic injury: 6-year follow-up. *The British Journal of Psychiatry* 5–417.
- Bulletin of Acts, Orders and Decrees of the Kingdom of the Netherlands, (Stb) 1958, p, 246.
- Carter, H., Drury, J., Rubin, G.J., Williams, R., Amlôt, R., 2013. Communication during mass casualty decontamination: Highlighting the gaps. *International Journal of Emergency Services* 2(1), 29–48.
- Cerullo V., Cerullo M.J., 2004. Business continuity planning: A comprehensive approach. *Information Systems Management (Summer)*, 70–78.
- Chang, S.E., 2003. Evaluating disaster mitigations: methodology for urban infrastructure systems. *Natural Hazards Review* 44, 186–196.
- Chang, S.E., 2010. Urban Disaster Recovery: A Measurement Framework with Application to the 1995 Kobe Earthquake. *Disasters* 342, 303–327.
- Chang, S.E., Rose, A.Z., 2012. Towards a Theory of Economic Recovery from Disasters. *International Journal of Mass Emergencies and Disasters*, August 2012, 32 (2), 171–181.
- Chern, J.-C., 2012. Social Recovery from 2009 Typhoon Marakot in Taiwan. *Journal SUR — Sustainable Urban Regeneration* 10, 12–17.
- Christiaensen, L., Hofmann, V., Sarris, A., 2007. Gauging the welfare effects of shocks in rural Tanzania. *World Bank Policy Research Working Paper 4406*, World Bank, Washington D.C., 44 pp.
- Cochrane, H., 2004. Economic Loss: Myth and Measurement. *Disaster Prevention and Management* 134, 290–296.
- Costruttori ForCase, 2010. *L'Aquila: il Progetto C.A.S.E.* IUSS Press.
- Cutter, S.L., Emrich, C.T., Mitchell, J.T., Boruff, B.J., Gall, M., Schmidtlein, M.C., Burton, C.G., Melton, G., 2006. The Long Road Home: Race, Class, and Recovery from Hurricane Katrina. *Environment: Science and Policy for Sustainable Development* 48, 8–20.
- Davis, I., 2006. Learning from disaster recovery: Guidance for decision-makers. *International recovery platform IRP, Kobe*.
- De Tura, N., Reilly, S.M., Narasimhan, S., Yin, Z.J., 2004. Disaster recovery preparedness through continuous process optimization. *Bell Labs Technical Journal* 9, 147–162.
- De Ville de Goyet, C., Morinière, L.C., 2006. The role of needs assessment in the tsunami response. *International Centre for Migration and Health (ICMH)*, Report Published by the Tsunami Evaluation Coalition (TEC).
- Dercon, S., Christiaensen, L., 2011. Consumption risk, technology adoption and poverty traps: Evidence from Ethiopia. *Journal of Development Economics* 96, 159–173.
- DFID, 2011. *Defining Disaster Resilience: A DFID Approach Paper*. DFID, UK Department for International Development, London.
- Dolce, M., Bucci, D.D., 2017. Comparing recent Italian earthquakes. *Bull Earthquake Eng* 15, 497–533.
- Ebeke, C., Combes, J., 2013. Do remittances dampen the effect of natural disasters on output growth volatility in developing countries? *Applied Economy* 4516, 2241–2254.
- ECHO, European Commission Humanitarian Aid and Civil Protection department, 2016. Disaster risk reduction. Website: http://ec.europa.eu/echo/what/humanitarian-aid/risk-reduction_en, [accessed 16 December, 2016].
- EN 1998-3, 2005. Eurocode 8: Design of structures for earthquake resistance — Part 3: Assessing and retrofitting of buildings. CEN, Brussels.
- European Parliament and Council, 2007. Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks, *Official Journal of the European Union*.

- EUSF, 2017. EU Solidarity Fund Interventions since 2002. last updated in January 2017. http://ec.europa.eu/regional_policy/sources/thefunds/doc/interventions_since_2002.pdf, [accessed 01 May, 2017].
- Eyre, A., 2006. Literature and best practice review and assessment: identifying people's needs in major emergencies and best practice in humanitarian response. Department of Culture, Media and Support, London.
- Eyre, A., Dix, P., 2014. *Collective Conviction: The Story of Disaster Action*. Liverpool University Press, Liverpool, 284 pp.
- FEMA, Federal Emergency Management Agency, 2016. FEMA website: <https://www.fema.gov/>, [accessed 20 December 2016].
- Fink, D.S., Lowe, S., Cohen, G.H., Sampson, L.A., Ursano, R.J., Gifford, R.K., Fullerton, C.S., Galea, S., 2016. Trajectories of Posttraumatic Stress Symptoms After Civilian or Deployment Traumatic Event Experiences. *Psychological Trauma: Theory, Research, Practice, and Policy* 9(2), 138-146.
- Fothergill, A., 1996. Gender, risk and disaster. *International Journal of Mass Emergencies and Disasters* 14, 33-56.
- Fothergill, A., Peek, L.A., 2004. Poverty and Disasters in the United States: A Review of Recent Sociological Findings. *Natural Hazards* 32, 89-110.
- Gaillard, J.-C., Le Masson, V., 2007. Traditional Societies' Response to Volcanic Hazards in the Philippines. *Mountain Research and Development* 27, 313-317.
- GFDRR, 2013. *Managing Disaster Risks for a Resilient Future*. World Bank, Washington D.C., 101 pp.
- GFDRR, 2015. *Resilient Recovery: An imperative for sustainable Development*. World Bank, Washington D.C., 80 pp.
- Gouveia-Reis, D., Guerreiro Lopes, L., Mendonça, S., 2016. A dependence modelling study of extreme rainfall in Madeira Island. *Physics and Chemistry of the Earth, Parts A/B/C, 3rd International Conference on Ecohydrology, Soil and Climate Change, EcoHCC'14* 94, 85-93.
- Haworth, A., Frandon-Martinez, C., Virginie, F., Simonet, C., 2016. *Climate Resilience and Financial Services*. BRACED Working Paper, Overseas Development Institute, London, 110 pp.
- Horwitz, S., 2009. Wal-Mart to the rescue: Private enterprise's response to Hurricane Katrina. *Independent Review* 13(4), 511-528.
- IASC, Inter-Agency Standing Committee, 2008. *IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings. Checklist for Field Use*. IASC, Geneva, 99 pp.
- Ieda, H., 2012. Vulnerability and Toughness in Regeneration from Natural Disasters. *Journal SUR — Sustainable Urban Regeneration* 10, 2-5.
- IFRC, 2009. *Community-based psychosocial support. A training kit*. Denmark: International Red Cross and International Federation Reference Centre for Psychosocial Support. International Federation of Red Cross and Red Crescent Societies, Geneva, 134 pp.
- Ingram, J.C., Franco, G., Rumbaitis-del Rio, C., Khazai, B., 2006. Post-disaster recovery dilemmas: challenges in balancing short-term and long-term needs for vulnerability reduction. *Environmental Science and Policy* 97, 607-613.
- IPCC, 2014. *Summary for policymakers*. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge and New York, 1132 pp.
- Ishikawa, M., 2012. Regeneration of City and Country from the Great Sichuan Earthquake in 2008. *Journal SUR — Sustainable Urban Regeneration* 10, 8-11.
- Johnson, L.A., Hayashi, H., 2012. Synthesis Efforts in Disaster Recovery Research. *International Journal of Mass Emergencies and Disasters*. 30(2), 212-238.
- Johnston, D., Becker, J., Paton, D., 2012. Multi-agency community engagement during disaster recovery: Lessons from two New Zealand earthquake events. *Disaster Prevention and Management* 21, 252-268.
- Kweit, M.G., Kweit, R.W., 2004. Citizen participation and citizen evaluation in disaster recovery. *The American Review of Public Administration* 344, 354-373.
- Labadie, J.R., 2008. Auditing of post-disaster recovery and reconstruction activities. *Disaster Prev and Management* 17, 575-586.
- Lindell, M.K., Prater, C.S., 2003. Assessing community impacts of natural disasters. *Natural hazards review* 44, 176-185.
- Lu, Y., Xu, J., 2014. Comparative study on the key issues of Post-earthquake recovery and reconstruction planning: Lessons from the United States, Japan, Iran, and China. *Natural Hazards Review* 16(3).
- Lucas, A., Oliveira, C.S., Guedes, J.H.C., 1992. Quantificação dos danos Observados no parque habitacional e do processo de reconstrução, in *10 Anos após o sismo dos Açores de 1 de Janeiro de 1980 (No 2)*. SRHOP, Governo dos Açores/LNEC, Terceira, 829 pp.
- McFarlane, A., Williams, R., 2012. Mental health services required after disasters: learning from the lasting effects of disasters. *Depression Research and Treatment*, 13 pp.
- Meng, Y., Yang, S., Shi, P., Jeager, C.C., 2015. The asymmetric impact of natural disasters on China's bilateral trade. *Nat. Hazards Earth Syst. Sci.* 15, 2273-2281.
- Mitchell, J.K., 2006. *The Primacy of Partnership: Scoping a New National Disaster Recovery Policy*. *The ANNALS of the American Academy of Political and Social Science* 604, 228-255.
- MLIT, Ministry of Land, Infrastructure, Transport and Tourism, 2013. *A Glance at recovery projects after the 2011 Great East Japan Earthquake and Tsunami [WWW Document]*. URL <http://www.mlit.go.jp/report/fukkou-index.html>, [accessed 26 September 2013].
- Morris, S.S., Neidecker-Gonzales, O., Carletto, C., Munguiá, M., Medina, J.M., Wodon, Q., 2002. Hurricane Mitch and the Livelihoods of the Rural Poor in Honduras. *World Development* 30, 49-60.
- Mota de Sá, F., Oliveira, C.S., Ferreira, M.A., 2013. SIRIUS, Seismic risk indicator in urban space. *Earthquake Spectra* 29, 573-595.
- Murao, O., Mitsuda, Y., Miyamoto, A., Sasaki, T., Nakazato, H., Hayashi, T., 2007. Recovery curves and digital city of Chi-Chi as urban recovery digital archives, In: *Proceedings of the 2nd International Conference on Urban Disaster Reduction CD-ROM*. Taipei, Taiwan.
- Nationwide Insurance, 2016. *National Insurance website*. <https://www.nationwide.com/about-us/083115-small-biz-survey.jsp?NWOSS=business+owners%20survey&NWOSSPos=1>, [accessed 16 December, 2016].
- NATO, North Atlantic Treaty Organisation, 2009. Annex 1 to EAPC/MCN20080038 *Psychosocial care for people affected by disasters and major incidents: a model for designing, delivering and managing psychosocial services for people involved in major*

- incidents, conflict, disasters and terrorism. NATO, Brussels.
- NGA — National Governors' Association, 1979. Comprehensive emergency management : a Governor's guide. [Dept. of Defense], Defense Civil Preparedness Agency, Washington, 64 pp.
- Nigg, J., 1995. Disaster recovery as a social process. University of Delaware: Disaster Research Center, 31 pp.
- Norris, F.H., Tracy, M., Galea, S., 2009. Looking for resilience: understanding the longitudinal trajectories of responses to stress. *Society of Scientific Medicine* 68, 2190–8.
- OECD, 2015. Beyond the Millennium Development Goals: Towards an OECD contribution to the post-2015 agenda. Organisation for Economic Cooperation and Development, Paris.
- OECD, 2016. OECD Factbook 2015-2016. Organisation for Economic Cooperation and Development, Paris.
- Oliveira, C.S., 2012. Lessons from the review of the 1755 Lisbon Earthquake, based on the Historical Observations of Different Physical Phenomena. *Journal SUR — Sustainable Urban Regeneration* 10, 38–45.
- Oliveira, C.S., Costa, A., Nunes, J.C., 2008. (Eds.). *Sismo de 1998-Uma Década Depois*. SPRHI-Sa, Governo dos Açores, Horta, 756 pp.
- Olshansky, R.B., 2006. Planning after Hurricane Katrina. *Journal American Planning Association* 72, 147–153.
- Olshansky, R.B., Hopkins, L.D., Johnson, L.A., 2012. Disaster and recovery: Processes compressed in time. *Natural Hazards Review* 133, 173–178.
- Olsson, O., 2009. On the democratic legacy of colonialism. *Journal of Comparative Economics* 37(4), 534–551.
- OPSSIC, 2015 Comprehensive Guideline Deliverable D2.2, D3.3, D4.3, <http://mhpps.net/?get=81/Comprehensive-Guideline-on-MHPSS-in-Disaster-Settings.pdf>, [accessed 12 April, 2017].
- Patel, V., 2014. Rethinking mental healthcare: bridging the credibility gap. *Intervention* 12 (1), 15 — 20.
- Pomonis, A., 2002. The Mount Parnitha (Athens) earthquake of September 7, 1999: a disaster management perspective. *Natural Hazards* 27, 171–199.
- Priestley, M., Hemingway, L., 2006. Disability and disaster recovery: a tale of two cities? *J. Soc Work Disabil Rehabil* 5, 23–42.
- Raghuram, G.R., Subramanian, A., 2008. Aid and Growth: What Does the Cross-Country Evidence Really Show? *Review of Economics and Statistics* 90, 643–665.
- Rubin, C.B., Barbee, D.G., 1985. Disaster recovery and hazard mitigation: Bridging the intergovernmental gap. *Public administration review* 45, 57–63.
- Savage, K., Harvey, P., 2007. Remittances during crises Implications for humanitarian response. HPG Briefing Paper, Overseas Development Institute, London, 4 pp.
- Schanz, K.-U., Wang, S., 2015. Insuring Flood Risk in Asia's High-Growth Markets. A Geneva Association Research Report, 52 pp.
- Simonet, C., Comba, E., Wilkinson, 2016. A retrospective analysis of national-level economic resilience in DFID 'BRACED' countries, Working Paper, Overseas Development Institute, London.
- Skoufias, E., Rabassa, M., Oliveri, S., Brahmabhatt, M., 2011. The poverty impacts of climate change. *World Bank Economic Premise* March 51, 5 pp.
- SM Working Group, 2015. Guidelines for Seismic Microzonation. Civil Protection Department, Rome.
- Smith, G., Wenger, D., 2006. Sustainable disaster recovery: Operationalizing an existing agenda. In: H. Rodriguez, E. Quarantelli, E. Dynes, R., (Eds.), 2006. *Handbook of Disaster Research*. Springer, New York, 234-257.
- Stevenson, J., Noy, I., McDonald, G., Seville, E., Vargo, J., 2016. Economic and Business Recovery. *Natural Hazard Science: Oxford Research Encyclopedias*, Online Publication Date: Jul 2016.
- TENTS, The European Network for Traumatic Stress, 2008. The TENTS guidelines for psychosocial care following disasters and major incidents. Cardiff University, Wales, 8 pp.
- Thaler, T., Hartmann, T., 2016. Justice and Flood Risk Management: Reflecting on Difference Approaches to distribute and allocate flood Risk Management in Europe. *Natural Hazards* 83 (129).
- Thieken, A. H., Kienzler, S., Kreibich, H., Kuhlicke, C., Kunz, M., Mühr, B., Müller, M., Otto, A., Petrow, T., Pisi, S., Schröter, K., 2016a. Review of the flood risk management system in Germany after the major flood in 2013. *Ecology and Society* 21(2), 51 pp.
- Thieken, A.H., Bessel, T., Kienzler, S., Kreibich, H., Müller, M., Pisi, S., Schröter, K., 2016b. The flood of June 2013 in Germany: how much do we know about its impacts? *Natural Hazards and Earth System Sciences* 16, 1519-1540.
- Thorvaldsdóttir, S., Sigbjörnsson, R., 2014. Disaster-Function Management: Basic Principles. *Natural Hazards Review* 15, 48–57.
- Tierney, K., Oliver-Smith, A., 2012. Social dimensions of disaster recovery. *International Journal of Mass Emergencies and Disasters* 30, 123–146.
- Twigg, J., 2015. Disaster Risk Reduction, Good Practice Review 9. Humanitarian Practice Network, Overseas Development Institute, London, 382 pp.
- USGS, 2009. USGS. M6.3 — central Italy. United States Geological Survey.
- Webb, G.R., Tierney, K.J., Dahlhamer, J.M., 2002. Predicting long-term business recovery from disaster: a comparison of the Loma Prieta earthquake and Hurricane Andrew. *Global Environmental Change Part B: Environmental Hazards* 4, 45–58.
- Wein, A., Johnson, L., Bernknopf, R., 2011. Recovering from the ShakeOut earthquake. *Earthquake Spectra* 27, 521–538.
- WHO, World Health Organization, 2013. Guidelines for the management of conditions specifically related to stress. WHO, Geneva, 273 pp.
- WHO, World Health Organization, War Trauma Foundation, World Vision International, 2011. Psychological first aid: Guide for field workers. WHO, Geneva, 66 pp.
- Williams, R., Bisson, J., Kemp, V., 2014b. OP 94 Principles for responding to the psychosocial and mental health needs of people affected by disasters or major incidents. *Royal College of Psychiatrists Occasional Paper*, 38 pp.
- Williams, R., Bisson, J.I., Kemp, V., (in press). Designing, planning and delivering psychosocial and mental healthcare for communities affected by disasters. In: Ursano, R.J., Fullerton, C.S., Weisaeth, L., Raphael, B., (Eds.), 2007. *Textbook of Disaster Psychiatry*, 2nd ed. Cambridge University Press, Cambridge, 311-327.
- Williams, R., Kemp, V., 2016. Psychosocial and Mental Health Care Before, During and After Emergencies, Disasters and Major Incidents. In: Sellwood, C., Wapling, A., (Eds.), 2016. *Health Emergency Preparedness and Response*, Wallingford, Oxfordshire.
- Williams, R., Kemp, V.J., Alexander, D.A., 2014a. The psychosocial and mental health of people who are affected by conflict, catastro-

- phes, terrorism, adversity and displacement. In: Ryan, J., Hopperus Buma, A., Beadling, C., Mozumder, A., Nott, D.M., (Eds.), 2014. *Conflict and Catastrophe Medicine*. Springer, London, 805–849.
- World Bank, 2012. *Social resilience and climate change. Financial innovations for social and climate resilience: Establishing an evidence base*. World Bank, Washington D.C., 2 pp.
- World Bank, 2016. *Shock Waves: Managing the impacts of climate change on poverty*. World Bank, Washington, D.C., 227 pp.
- Xiao, Y., Peacock, W.G., 2014. Do Hazard Mitigation and Preparedness Reduce Physical Damage to Businesses in Disasters: The Critical Role of Business Disaster Planning. *Natural Hazards Review* 15(3).

5.4 Risk transfer and financing

- Bacani, B., McDaniels, J., Robins, N., 2015. *Insurance 2030 — Harnessing insurance for sustainable development*. UNEP Inquiry-PSI working paper 15/01, 39 pp.
- Ball, T., Werritty, A., Geddes, A., 2013. Insurance and sustainability in flood-risk management: the UK in a transitional state. *Area*, 45, 266–272.
- Bardají, I., Garrido, A., Blanco, I., Felis, A., Sumpsi, J. M., García-Azcárate, T., Enjolras, G., Capitanio, F., 2016. State of play of risk management tools implemented by Member States during the period 2014–2020: national and European Frameworks. European Parliament, Directorate-General for internal policies policy department B: Structural And Cohesion Policies — Agriculture And Rural Development. Brussels, 146 pp.
- Barredo, J. I., Saurí, D., Llasat, M. C., 2012. Assessing trends in insured losses from floods in Spain 1971–2008. *Nat. Hazards Earth Syst. Sci.* 12(5), 1723–1729.
- Best, A.M., 2016. *Catastrophe Schemes - Issue Review - Future Proofing: The Value of Natural Catastrophe Schemes* in Bielza, M., Conte, C., Gallego, F., Stroblmair, J., Catenaro, R., Dittman, C., 2009. *Risk Management and Agricultural Insurance Schemes in Europe* (JRC Reference Reports No EUR 23943 EN). Ispra (Italy): Joint Research Centre.
- Botzen, W. J. W., van den Bergh, J. C. J. M., 2009. Bounded Rationality, Climate Risks, and Insurance: Is There a Market for Natural Disasters? *Land Economics* 85 (2), 265–278.
- Bräuninger, M., Butzengeiger-Geyer, S., Dlugolecki, A., Hochrainer, S., Köhler, M., Linnerooth-Bayer, J., Mechler, R., Michaelowa, A., Schulze, S. (2011). *Application of economic instruments for adaptation to climate change. Final report. perspectives GmbH, Hamburg, Germany*, 326 pp.
- Capitanio, F., Bielza, M., Cafiero, C., Andolfini, F., 2011. Crop insurance and public intervention in the risk management in agriculture: do farmers really benefit? *Applied Economics* 43, 4149–4159.
- CCS, 2008. *Natural catastrophes insurance cover. A diversity of systems*. Madrid: Consorcio de Compensación de de seguros.
- CCS, 2016. *Consorcio de Compensación de Seguros: an overview*. Retrieved from http://www.conorseguros.es/web/documents/10184/48069/CCS2016_EN.pdf/b7ed4f5e-6400-41f5-a1fb-d98e5f6a3778, [accessed 12 April, 2017].
- CEA, 2011. *Insurance of Natural Catastrophes in Europe* (Report). European insurance and reinsurance federation.
- Charpentier, A., 2008. Insurability of Climate Risks. *The Geneva Papers on Risk and Insurance Issues and Practice* 33(1), 91–109.
- Collier, B., Skees, J., Barnett, B., 2009. Weather Index Insurance and Climate Change: Opportunities and Challenges in Lower Income Countries. *The Geneva Papers on Risk and Insurance Issues and Practice* 34(3), 401–424.
- Crichton, D., 2008. Role of Insurance in Reducing Flood Risk. *The Geneva Papers on Risk and Insurance — Issues and Practice* 33(1), 117–132.
- Cummins, D. J., Mahul, O., 2009. *Catastrophe Risk Financing in Developing Countries*. The International Bank for Reconstruction and Development, The World Bank, Washington D.C., 299 pp.
- EC, 2004a. Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage.
- EC, 2004b. Green paper on public-private partnerships and community law on public contracts and concessions. COM(2004) 327 final.
- EC, 2013a. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions An EU Strategy on Adaptation to climate COM(2013) 216 final change.
- EC, 2013b. Green Paper on the insurance of natural and man-made disasters. COM(2013) 213 final.
- EC, 2013c. Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 2. Retrieved from <http://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32013R1308>, [accessed 12 April, 2017].
- EC, 2014. Summary: Responses received to the European Commission's Green Paper on the insurance of natural and man-made disasters. European Commission, Directorate General Internal Market and Services; Financial Institutions.
- EC, 2015a. State aid SA.38535 (2014/N) — United Kingdom. State support to the flood reinsurance scheme — United Kingdom. C(2015) 332 final. Brussels, 29.01.2015.
- EC, 2015b. Towards an EU Research and Innovation policy agenda for Nature-Based Solutions & Re-Naturing Cities. Final Report of the Horizon 2020 Expert Group on 'Nature-Based Solutions and Re-Naturing Cities'. European Commission, Directorate-General for Research and Innovation.
- EC, 2016. *Fiscal Sustainability Report*. European Economy Institutional Papers 018, January 2016. European Commission Directorate-General for Economic and Financial Affairs.
- ECA, 2009. *Shaping climate-resilient development — a framework for decision-making*. Economics of Climate Adaptation Working Group.
- EEA, 2015. *Damages from weather and climate-related events EEA CLIM039 indicator*. Technical paper.
- EP, 2014. European Parliament resolution of 5 February 2014 on the insurance of natural and man-made disasters (2013/2174(INI)).
- Espejo Gil, F., 2016. Climate change and insurance: a many-sided interrelationship. *Conorseguros, Revista Digital*, (4). Retrieved from <http://www.conorsegurosdigital.com/en/numero-04/front-page/climate-change-and-insurance-a-many-sided-interrelationship>, [accessed 12 April, 2017].

- Europe. Best's Special Report, April 2016. Inc. Retrieved from <http://www.ambest.com/>, [accessed 12 April, 2017].
- FFA, 2016a. Climate risks : Impact on natural hazards insurance between now and 2040. Paris: Fédération Française de l'Assurance. Retrieved from <http://www.ffa-assurance.fr/content/climate-risks-impact-natural-hazards-insurance-between-now-and-2040>, [accessed 12 April, 2017].
- FFA, 2016b. Toward better prevention of and protection against natural hazards. Paris: Fédération Française de l'Assurance. Retrieved from <http://www.ffa-assurance.fr/content/strategic-review-document-toward-better-prevention-and-protection-against-natural-hazards>, [accessed 12 April, 2017].
- Flood Re, n.d. www.floodre.co.uk, [accessed 01 May, 2017].
- FR Regulation, 2016. No 1902 INSURANCE The Flood Reinsurance (Scheme Funding and Administration) Regulations 2015.
- G20, 2016. G20 Green Finance Synthesis Report 15 July 2016 G20 Green Finance Study Group.
- GFDRR, 2014. Understanding risk in an evolving world — Emerging Best Practices in Natural Disaster Risk Assessment. Global Facility for Disaster Reduction and Recovery (GFDRR), World Bank, Washington D.C., 224 pp.
- Grant, E., 2012. The Social and Economic Value of Insurance: A Geneva Association Paper, 40 pp.
- Grislain-Létrémy, C., Lahidji, R., Mongin, P., 2012. Les risques majeurs et l'action publique. (C. d'analyse Économique, Ed.). Paris: La Documentation française. Retrieved from <http://www.cae-eco.fr/Les-risques-majeurs-et-l-action-publique-230.html>, [accessed 12 April, 2017].
- Hazell, P., Anderson, J., Balzer, N., Hastrup-Clemmensen, A., Hess, U., Rispoli, F., 2010. The Potential for Scale and Sustainability in Weather Index Insurance. Rome (Italy). Retrieved from <http://www.ifad.org/ruralfinance/pub/weather.pdf>, [accessed 12 April, 2017].
- HM Treasury, 2013. Green paper on the Insurance of National and Man-Made disasters. Letter to the Internal Market & Services Directorate General, European Commission, on 30th July 2013.
- Hudson, P., Wouter, B. W. J., Czajkowski, J., Kreibich, K., 2014. Risk Selection and Moral Hazard in Natural Disaster Insurance Markets: Empirical evidence from Germany and the United States. Working Paper # 2014-07. Risk Management and Decision Processes Center The Wharton School, University of Pennsylvania.
- IFAD, & WFP, 2011. Weather Index-based Insurance Guide — Climate Change Policy & Practice. Retrieved from <http://climate-liiisid.org/news/ifad-wfp-issue-weather-index-based-insurance-guide/>, [accessed 12 April, 2017].
- Insurance Europe, 2016. European Insurance — Key Facts August 2016.
- IPCC, 2012. Summary for policymakers — Special report on managing the risk of extreme events and disasters to advance climate change adaptation (SREX). Intergovernmental Panel on Climate Change.
- IPCC, 2014. IPCC Fifth Assessment Report (AR5) (No WGII). Geneva (Switzerland): Intergovernmental Panel on Climate Change.
- Iturrioz, R., 2009. Agricultural Insurance. Primer series on insurance. Issue 12, November 2009. The World Bank, Washington D.C., 35 pp.
- Jemli, R., Chtourou, N., Feki, R., 2010. Insurability Challenges Under Uncertainty: An Attempt to Use the Artificial Neural Network for the Prediction of Losses from Natural Disasters. *Panoeconomicus* 57(1), 43–60.
- Johansen, E. B., 2006. Between Public and Private — Insurance Solutions for a Changing Society. *Scandinavian Insurance Quarterly*, (2). Retrieved from <http://www.nft.nu/en/between-public-and-private-insurance-solutions-changing-society>, [accessed 12 April, 2017].
- Kunreuther, H. C., Michel-Kerjan, E. O., 2007. Climate Change, Insurability of Large-Scale Disasters, and the Emerging Liability Challenge. *University of Pennsylvania Law Review* 155(6), 1795–1842.
- Kunreuther, H., Michel-Kerjan, E., Ranger, N., 2011. Insuring Climate Catastrophes in Florida: An Analysis of Insurance Pricing and Capacity under Various Scenarios of Climate Change and Adaptation Measures. Working Paper # 2011-07. Risk Management and Decision Processes Center The Wharton School, University of Pennsylvania.
- Lamond, J. E., Proverbs, D. G., Hammond, F. N., 2009. Accessibility of flood risk insurance in the UK: confusion, competition and complacency. *Journal of Risk Research* 12(6), 825–841.
- Louaas, A., Goussebaile, A., 2016. Insurability of low-probability risks. 65th annual meeting of the French Economic Association, nancy June 27–29.
- Maccaferri, S., Carboni, J., Campolongo, F., 2012. Natural Catastrophes: Risk Relevance and Insurance Coverage in the EU (EUR — Scientific and Technical Reports No JRC67329). Ispra (Italy): Joint Research Centre.
- Magnan, S., 1995. Catastrophe Insurance System in France. *The Genova Papers on Risk and Insurance* 20(77), 475–480.
- Mahul, O., Ghesquiere, F., 2007. Sovereign Natural Disaster Insurance for Developing Countries: A Paradigm Shift in Catastrophe Risk Financing (September 1, 2007). World Bank Policy Research Working Paper No 4345. <http://ssrn.com/abstract=1013923>, [accessed 12 April, 2017].
- MCII, 2009. Adaptation to Climate Change: Linking Disaster Risk Reduction and Insurance — paper submitted to the UNFCCC for the 6th session of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA 6) from 1 until 12 June in Bonn.
- MCII, 2013. Climate risk adaptation and insurance. Reducing vulnerability and sustaining the livelihoods of low-income communities. Report No 13. Munich Climate Insurance Initiative; United Nations University Institute for Environment and Human Security (UNU-EHS).
- Mechler, R., Bouwer, L. M., Linnerooth-Bayer, J., Hochrainer-Stigler, S., Aerts, J. C. J. H., Surminski, S., Williges, K., 2014. COMMENTARY: Managing unnatural disaster risk from climate extremes. *Nature Climate Change* 4, 235–237.
- Michel-Kerjan, E., Kunreuther, H., 2011. Redesigning flood insurance. *Science* 333(6041), 408–409.
- Mills, E., 2009. From Risk to Opportunity: Insurer Responses to Climate Change [online]. Ceres: Boston. CERES report. Retrieved from <https://www.ceres.org/resources/reports/insurer-responses-to-climate-change-2009>, [accessed 12 April, 2017].
- Mills, E., 2012. The Greening of Insurance. *Science* 338(6113), 1424–1425.
- Minoli, D. M., Bell, J.N.B., 2003. Insurance as an alternative environmental regulator: findings from a retrospective pollution claims survey. *Business Strategy and the Environment* 12(2), 107–117.
- Mysiak, J., Pérez-Blanco, C. D., 2016. Partnerships for disaster risk insurance in the EU. *Nat. Hazards Earth Syst. Sci.* 16(11),

2403–2419.

- OECD, 2003. Environmental Risks and Insurance: A Comparative Analysis of the Role of Insurance in the Management of Environment-Related Risks. Policy Issues in Insurance No. 6.
- OECD, 2012. Disaster Risk Assessment and Risk Financing A G20 / OECD METHODOLOGICAL FRAMEWORK.
- OECD, 2014. Seine Basin, Île-de-France: Resilience to Major Floods. OECD Publishing.
- OECD, 2015. Disaster Risk Financing. A global survey of practices and challenges. Paris: OECD Publishing.
- Okuyama, Y., 2010. Globalization and Localization of Disaster Impacts: An Empirical Examination. In CEFifo Forum 11, 56–66.
- Paudel, Y., Botzen, W. J. W., Aerts, J. C. J. H., 2012. A Comparative Study of Public—Private Catastrophe Insurance Systems: Lessons from Current Practices. The Geneva Papers 37, 257–285.
- Penning-Rowsell, E. C., Priest, S., Johnson, C., 2014. The evolution of UK flood insurance: incremental change over six decades. International Journal of Water Resources Development 30, 694–713.
- Penning-Rowsell, E., Priest, S., 2015. Sharing the burden of increasing flood risk: who pays for flood insurance and flood risk management in the United Kingdom. Mitigation and Adaptation Strategies for Global Change 20(6), 991–1009.
- Pérez-Blanco, C. D., Gómez, C. M., 2014. Insuring water: a practical risk management option in water-scarce and drought-prone regions? Water Policy 16(2), 244.
- Porth, L., Seng Tan, K., 2015. Agricultural Insurance—More Room to Grow? The Actuary Magazine 12(2), 36–40.
- Poussin, J. K., Botzen, W. J. W., Aerts, J. C. J. H., 2013. Stimulating flood damage mitigation through insurance: an assessment of the French CatNat system. Environmental Hazards 12(3–4), 258–277.
- Poussin, J. K., Wouter Botzen, W. J., Aerts, J. C. J. H., 2015. Effectiveness of flood damage mitigation measures: Empirical evidence from French flood disasters. Global Environmental Change 31, 74–84.
- PRA, 2015. The impact of climate change on the UK insurance sector -A Climate Change Adaptation Report by the Prudential Regulation Authority. Bank of England, London, 87 pp.
- S&P, 2015. The Heat Is On: How Climate Change Can Impact Sovereign Ratings (Report), RatingsDirect. Standard & Poors, 23 pp.
- Solana, M., 2015. Making public–private partnerships work in insurance. International Labour Office Geneva: ILO, Paper no. 40. Retrieved from http://www.impactinsurance.org/sites/default/files/mp40_finalv.pdf, [accessed 12 April, 2017].
- Surminski, S., 2009. How Can the Insurance Industry Promote Climate Change Adaptation? A Case Study from the UK (Report No 18). Association of British Insurers, 7 pp.
- Surminski, S., 2014. The Role of Insurance in Reducing Direct Risk — The Case of Flood Insurance. International Review of Environmental and Resource Economics 7(3–4), 241–278.
- Surminski, S., 2015. The role of insurance risk transfer in encouraging climate investment in developing countries. In J. E. Dupuy, P-M., Viñuales (Ed.), Harnessing foreign investment to promote environmental protection, 228–250. Cambridge: Cambridge University Press.
- Surminski, S., Aerts, J. C. J. H., Botzen, W. J. W., Hudson, P., Mysiak, J., Pérez-Blanco, C. D., 2015. Reflections on the current debate on how to link flood insurance and disaster risk reduction in the European Union. Natural Hazard.
- Surminski, S., Eldridge, J., 2015. Flood insurance in England — an assessment of the current and newly proposed insurance scheme in the context of rising flood risk. Journal of Flood Risk Management, n/a–n/a.
- Surminski, S., Oramas-Dorta, D., 2011. Building effective and sustainable risk transfer initiatives in low- and middle-income economies: what can we learn from existing insurance schemes? Centre for Climate Change Economics and Policy Grantham Research Institute on Climate Change and the Environment.
- Surminski, S., Oramas-Dorta, D., 2013. Flood insurance schemes and climate adaptation in developing countries. International Journal of Disaster Risk Reduction 7, 154–164.
- Surminski, S., Oramas-Dorta, D., 2014. Flood insurance schemes and climate adaptation in developing countries. International Journal of Disaster Risk Reduction 7, 154–164.
- Talesh, S., 2012. Insurance law as public interest law. UC Irvine Law Review 2, 985–1009.
- TCFD, 2016. Recommendations of the Task Force on Climate-related Financial Disclosures. Retrieved from <https://www.fsb-tcfd.org/publications/recommendations-report/#>, [accessed 12 April, 2017].
- TCFD, n.d. Task Force on Climate-related Financial Disclosures. www.fsb-tcfd.org, [accessed 01 May, 2017].
- Thieken, A. H., Petrow, T., Kreibich, H., Merz, B., 2006. Insurability and Mitigation of Flood Losses in Private Households in Germany. Risk Analysis 26(2), 383–395.
- UFCCCC, 2016. Best practices, challenges and lessons learned from existing financial instruments at all levels that address the risk of loss and damage associated with the adverse effects of climate change. Information paper April 2016. A summary based upon submissions. Executive Committee of the Warsaw International Mechanism for Loss and Damage, 24 pp.
- UN, 2015a. Sendai Framework for Disaster Risk Reduction 2015–2030. A/CONF.224/CRP.1. 18 March 2015.
- UN, 2015b. Transforming our world: the 2030 Agenda for Sustainable Development. Resolution adopted by the UN General Assembly on 25 September 2015.
- UN-FI, 2012. Principles for Sustainable Insurance; A global sustainability framework and initiative of the United Nations Environment Programme Finance Initiative. Geneva, 12pp, <http://www.unepfi.org/psi/wp-content/uploads/2012/06/PSI-document.pdf>, [accessed 12 April, 2017].
- UNISDR, 2015. Making Development Sustainable: The Future of Disaster Risk Management. Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: United Nations Office for Disaster Risk Reduction (UNISDR).
- van der Vegt, G. S., Essens, P., Wahlström, M., George, G., 2015. Managing risk and resilience. Academy of Management Journal 58, 971–980.
- von Ungern-Sternberg, T., 2004. Efficient Monopolies. The Limits of Competition in the European Property Insurance Market. Oxford: Oxford University Press.
- Wahlström, M., 2015. New Sendai Framework Strengthens Focus on Reducing Disaster Risk. International Journal of Disaster Risk Science 6(2), 200–201.
- Warner, K., N. Ranger, Surminski, S., Arnold, M., Linnerooth-Bayer, J., Michel-Kerjan, E., Kovacs, P., Herweijer, C. (2009). Adaptation to

- Climate Change: Linking Disaster Risk Reduction and Insurance. Bonn (Germany).
- World Bank, 2012. Disaster risks to strengthen financial resilience A Special Joint G20 Publication by the Government of Mexico and the World Bank. International Bank for Reconstruction and Development / International Development, Washington D.C.
- World Bank, 2013. Risk and Opportunity. Managing Risk for Development. Washington D.C. (US): International Bank for Reconstruction and Development / The World Bank, Washington D.C.
- World Bank, 2014. Financial protection against natural disasters An Operational Framework for Disaster Risk Financing and Insurance. International Bank for Reconstruction and Development / International Development Association or The World Bank, Washington D.C.
- Yin, H., Pfaff, A., Kunreuther, H., 2011. Can Environmental Insurance Succeed Where Other Strategies Fail? The Case of Underground Storage Tanks. *Risk Analysis* 31(1), 12–24.