

# *Curriculum Vitae*

## **Stefan Hochrainer-Stigler**

### ***Key Qualifications***

Stefan Hochrainer-Stigler studied statistics at the University of Vienna, Department of Statistics and Decision Support Systems, where he received a master's degree in 2002 and a PhD in 2006. Furthermore, he received a master's degree in Sociology (empirical branch) in 2004 at the same University. From 2002 to 2006 he was a research assistant at the Department of Statistics and Decision Support Systems at the University of Vienna. Since 2006 he is a research scholar at the International Institute for Applied System Analysis (IIASA) in Laxenburg, Austria and lecturer at the University of Vienna, the Karlsruhe Institute of Technology and the UME Graduate School.

His main research interests include risk management of extremes, statistical (stochastic) modeling of rare events, extreme value theory, poverty trap analysis, econometrics, as well as multivariate analysis and probability theory. He has published widely in peer reviewed journals and book chapters. Furthermore, he has held invited presentations in major scientific conferences and (re)insurance meetings. He also has contributed and facilitated workshops (also as a consultant) in Caribbean countries, Madagascar, Turkey, Philippines, India, Nepal, and Mexico.

### ***Professional Experience***

- ❑ Research assistant and lecturer at the University of Vienna, Department of Statistics and Decision Support Systems from 2003 till 2006.
- ❑ Lecturer at the University of Vienna since 2006.
- ❑ Lecturer at the Karlsruhe Institute for Technology since 2010.
- ❑ Lecturer at the UME Graduate School since 2011.
- ❑ Research scholar at the International Institute for Applied System Analysis (IIASA), Laxenburg, Austria since 2006.

### ***Research Interests***

- ❑ Quantitative risk management
- ❑ Multivariate analysis
- ❑ Rare events estimation
- ❑ Probability theory
- ❑ Extreme value theory
- ❑ Time series
- ❑ Econometric analysis

## ***Education***

- Doctoral degree (PhD) in Statistics. University of Vienna 3/2006. Thesis title: "Macroeconomic Risk Management against Natural Disasters". Excellence Award.
- Magister (Masters) in Statistics, University of Vienna, October 2002, Diploma thesis: "Stochastic Processes and Performance Measures in Queuing systems". Excellence Award.
- Magister (Masters) in Sociology (Empirical branch), University of Vienna, January 2004, Diploma thesis: "Risk Perception and Prevention Measures. An Empirical Study in Schwertberg of the Flooding in August 2002". Excellence Award.
- Academic year, University of Linz, 1997-1998.
- Academic (1/2) year, University of Strathclyde, Glasgow, September 2000- February 2001.

## ***Other Skills***

- Languages: English, French,
- Computer: S-Plus, R, SPSS, SAS, LISREL, Matlab, Maple, Mathematica, Enterprise Miner, Statistix, GLIM4, GAMS, Minitab, C++, Modula II, Fortran, SQL, Powersim Constructor, Latex, HTML.

## ***Personal Information***

Born August 6<sup>th</sup> 1977 in Vöcklabruck (Upper Austria), Austria. Name change to Hochrainer-Stigler in July 2010.

## ***Publications***

### **Peer-reviewed**

Books:

1. Hochrainer, S. (2006). Macroeconomic Risk Management against Natural Disasters. *German University Press (DUV)*, Wiesbaden, Germany.

Papers:

### ***Submitted***

47. Hochrainer, S., Luger, N., and Radziejewski, M. (2011). Up-scaling of Impact Dependent Loss Distributions: A Hybrid-Convolution Approach (submitted).
46. Markus Wrobel, H.A. Aaheim, J. Hinkel, S. Hochrainer, M.E. Hofmann, K. Lonsdale, N. Luger, P. Matczak, R. Mechler, D. Mcevoy, and Moriondo, M. (2011). Knowledge for Adaptation: The ADAM Digital Compendium (submitted).
45. Sharma, R.B., Hochrainer-Stigler, S. and Mechler, R. (2011). Disaster Microinsurance in South Asia. (submitted).
44. Sharma, R.B., Hochrainer-Stigler, S. and Mechler, R. (2011). Impact Assessment of Disaster Microinsurance for Pro-Poor Risk Management: Evidence from South Asia (submitted).

42. Yazdanpanah, M., Zamani, Gh.H., Hochrainer-Stigler, S., Monfared, N. and Yaghoubi, J. (2011). Measuring Satisfaction with Crop Insurance: A Modified American Customer Satisfaction Model Approach Applied to Iranian Farmers (submitted).
41. Hochrainer-Stigler, S. (2011). Macroeconomic Impacts of Natural Disaster Events: An Econometric ARIMA Modeling Approach (submitted).
40. Monfared, N., Yazdanpanah, M, and Hochrainer-Stigler, S. (2011). Inter-Related Effects due to Droughts for Rural Populations: A Qualitative Field Study for Farmers in Iran. (submitted)

*Accepted*

39. Chen, W., Hochrainer-Stigler, S., Xu, W. and Shi, P. (2011). Modeling of county-level extreme typhoon wind speeds in the Yangtze River Delta, China. *NHESS* (accepted).
38. Hochrainer-Stigler, S., Kunreuther, H., Linnerooth-Bayer, Mechler, R., Michel-Kerjan, E., Muir-Wood, R., Ranger, N., Vaziri, P., and Young, M. (2011). The Costs and Benefits of Reducing Risk from Natural Hazards to Residential Structures in Developing Countries. *Risk Analysis* (accepted).
37. Hochrainer, S. and Mechler, R. (2011). Assessing Financial Adaptation Strategies to Extreme Events in Europe. *Routledge* (accepted).
36. Kull, D., Mechler, R., and Hochrainer, S. (2011) Probabilistic Cost-Benefit Analysis of Disaster Risk Management in the Development Context. *Disasters* (accepted)
35. Mechler, R., Hochrainer, S., Linnerooth-Bayer, J. and Pflug, G. (2011). Public Sector Financial Vulnerability to Disasters. The IIASA-CatSim Model. Second Edition. *United Nations University Press* (accepted)
34. Hochrainer, S. and Mechler, R. (2011). Economic Considerations of Adapting to Climate Change in Hungary and the Tisza region. *Advances in Natural and Technological Hazards Research, Springer* (accepted)
33. Vari, A., Ferencz, Z., and Hochrainer, S. (2011). Social Indicators of Vulnerability to Floods. An Empirical Case Study in the two Upper Tisza flood basins. *Advances in Natural and Technological Hazards Research, Springer* (accepted)
32. Mechler, R., Hochrainer-Stigler, S. and Nakano, K. (2011). Modelling the Economic Effects of Disaster Risk in Nepal. *Advances in Natural and Technological Hazards Research, Springer* (accepted)
31. Mechler, R., Hochrainer-Stigler, S. and Pflug, G. (2011). The CATSIM Model for Assessing Policy Responses to Disasters on the Country Level. *Advances in Natural and Technological Hazards Research, Springer* (accepted)
30. Hochrainer, S., Mechler, R. and Pflug, G. (2011). Assessing Current and Future Risks due to Climate-related Extreme Events and Global Change: The Case of Bangladesh. *Risk Analysis* (accepted).

*Published*

29. Linnerooth-Bayer, J., Mechler, R., and Hochrainer-Stigler, S. (2011). Insurance against Losses from Natural Disasters in Developing Countries. Evidence, Gaps and the Way Forward. *Journal of Integrated Disaster Risk Management*, 1(1): 1:23.
28. Hochrainer, S., Kull, D., Patnaik, U., Praveen, S., and Shiraz, W. (2011). Disaster Financing and Poverty Traps for Poor Households: Realities in Northern India. *International Journal of Mass Emergencies and Disasters*, 29(1): 57-82.

27. Hochrainer, S. and Mechler, R. (2011). Natural Disaster Risk in Asian Megacities: A Case for Risk Pooling? *Cities*, 28 (1): 53-61.
26. Hochrainer-Stigler, S., Kunreuther, H., Linnerooth-Bayer, Mechler, R., Michel-Kerjan, E., Muir-Wood, R., Ranger, N., Vaziri, P., and Young, M., (2011). The Costs and Benefits of Reducing Risk from Natural Hazards to Residential Structures in Developing Countries. *Wharton Risk Center Working Paper Series*, WP2011-01, Wharton School, Pennsylvania.
25. Mechler, R., Hochrainer, S. Aaheim, A., Salen H., and Wreford, A. (2010). Modelling Economic Impacts and Adaptation to Extreme Events. Insights from European Case Studies. *Mitig. Adapt. Strat. Glob. Change*, 15(7): 737-762
24. Hochrainer, S., Mechler, R. and Kull, D. (2010). Micro-Insurance against Drought Risk in a Changing Climate: Assessing Demand and Supply Considerations. *International Journal of Climate Change Strategies and Management (IJCCSM)*, 2(2): 148-166.
23. Kundzewicz, Z.B., Luger, B., Dankers, R., Hirabayashi, Y., Doell, P., Pinskiwar, I., Dysarz, T., Hochrainer, S. and Matczak, P. (2010). Assessing River Flood Risk and Adaptation in Europe – Review of Projections for the Future. *Mitig. Adapt. Strat. Glob. Change*, 15 (7): 641-656.
22. Luger, N., Kundzewicz, Z.B., Genovese, E., Hochrainer, S., and Radziejewski, M. (2010). River Flood Risk and Adaptation in Europe – Assessment of the Present Status. *Mitig. Adapt. Strat. Glob. Change*, 15(7): 621-639.
21. Hochrainer, S., Linnerooth-Bayer, J. and Mechler, R. (2010). The European Union Solidarity Fund: Its Legitimacy, Viability and Efficiency. *Mitig. Adapt. Strat. Glob. Change*, 15(7): 797-810.
20. Hochrainer, S. and Pflug, G. (2009). Natural Disaster Risk Bearing Ability of Governments: Consequences of Kinked Utility. *Journal of Natural Disaster Science*, 31(1): 11-21.
19. Mechler, R., Hochrainer, S. Aaheim, A., Kundzewicz, Z., Luger, N, and Moriondo, M. (2009). A Risk Management Approach for Assessing Adaptation to Changing Flood and Drought Risks in Europe. In: Hulme, M. and Neufeldt, H. (eds.): *Making Climate Change Work for Us: European Perspectives on Adaptation and Mitigation Strategies*. Cambridge, Cambridge University Press: 200-229.
18. Aaheim, A., Dokken, T., Hochrainer, S., Hof, A., Jochem, E., Mechler, R., and D. P. van Vurren (2009). National Responsibilities for Adaptations Strategies. Lessons from four modelling frameworks. In: Hulme, M. and Neufeldt, H. (eds.): *Making Climate Change Work for Us: European Perspectives on Adaptation and Mitigation Strategies*. Cambridge, Cambridge University Press: 87-112.
17. Mechler, R., Hochrainer, S., Pflug, G., Lotsch, A. with Williges, K. (2009). Assessing the Financial Vulnerability to Climate-Related Natural Hazards. *Policy Research Working Paper*, 5232 (Background Paper for the Development and Climate Change World Development Report 2010), Washington, DC, World Bank.
16. Hochrainer, S. (2009). The European Union Solidarity Fund: Assessing its Risk of Depletion due to Catastrophe Flood Events. *Annals. Economic Science Series*, 15(1): 35-41.
15. Hochrainer, S. (2009). Assessing Macroeconomic Impacts of Natural Disasters: Are There Any? *Policy Research Working Paper*, 4968. Washington DC, World Bank.
14. Hochrainer, S., Mechler, R., Kull, D., Singh, P, Chopde, S., and Wajih, S. (2009). Combining Innovative Strategies for Effective Drought Risk Management: Costs and Benefits of Insurance and Irrigation in Uttar Pradesh, India. In: Moench, M., Fajber, E., Dixit, A., Caspari, E., and Anil Pokhrel (eds.): *Catalyzing Climate and Disaster Resilience*. Kathmandu, ISET: 223-250.

13. Moench, M., Hochrainer, S., Mechler, R., Kull, D., Linnerooth-Bayer, J., Patnaik, U., Mustafa, D., Opitz-Stapleton, S., Khan, F., Rehman, A., Dixit, A., Pokhrel, A., Upadhy, M., Chopde, S., Singh, P., Tiwari, S., Borgoyary, M., Bose, S., Wajih, S.A., Srivastav, A., and Singh, G. (2009). Rethinking the Costs and Benefits of Disaster Risk Reduction under Changing Climate Conditions. In: Moench, M., Fajber, E., Dixit, A., Caspari, E., and Anil Pokhrel (eds.): *Catalyzing Climate and Disaster Resilience*. Kathmandu, ISET: 1-34.
12. Luger, N., Hochrainer, S. and Mechler, R. (2009). Going to Extremes. *European Research and Innovation Review*, 8: 22-23.
11. Hochrainer, S., and Mechler, R. (2009). Assessing Financial and Economic Vulnerability to Natural Hazards: Bridging the Gap between Scientific Assessment and the Implementation of Disaster Risk Management with the CatSim Model. In: Patt, A., Schröter, D., Klein, R., and de la Vega-Leinert, A. (eds.): *Assessing Vulnerability to Global Environmental Change*. London, Earthscan: 173-194.
10. Hochrainer, S., Mechler, R., and Pflug, G. (2009). Climate Change and Financial Adaptation in Africa. Investigating the Impact of Climate Change on the Robustness of Index-based Microinsurance in Malawi. *Mitig. Adapt. Strat. Glob. Change*, 14(3): 231-250.
9. Hochrainer, S. (2008). Reservefonds gegen Naturkatastrophen auf Nationaler und Europäischer Ebene. *Vierteljahrshefte für Wirtschaftsforschung*, 77(4): 69-79.
8. Mechler, R., Hochrainer, S. and Williges, K. (2008). The Special Nature of Natural Disaster Risk in Asian Megacities. A Case for Megacity Risk Pooling? Proceedings of the ADB Conference on Natural Catastrophe Risk Insurance Mechanisms for Asia and the Pacific, 4-5 November, 2008, Tokyo, Japan.
7. Hochrainer, S., Mechler, R., Pflug, G. and Lotsch, A. (2008). Investigating the Impact of Climate Change on the Robustness of Index-based Microinsurance in Malawi. Policy Research Working Paper 4631. Washington, DC, World Bank.
6. Hochrainer, S. and Mechler, R. (2008). Assessing Long-term Adaptation Strategies to Extreme Events in Europe. Proceedings of the Berlin Conference on the Human Dimensions of Global Environmental Change. Long-Term Policies: Governing Social-Ecological Change, 22-23 February, 2008, Berlin, Germany.
5. Cardenas, V, Hochrainer, S. Mechler, R., Pflug, G. and Linnerooth-Bayer, J. (2007). Sovereign Financial Disaster Risk Management: The Case of Mexico. *Environmental Hazards*, 7(1): 40-53.
4. Hochrainer, S. and Mechler, R. (2006). Naturkatastrophen: Auswirkungen, Lösungsansätze und Rollen für die Wissenschaft, Staat und Wirtschaft. *Wirtschaftspolitische Blätter*, 53(4): 561-579.
3. Mechler, R., Hochrainer, S., Linnerooth-Bayer, J. and Pflug, G. (2006). Public Sector Financial Vulnerability to Disasters. The IIASA-CatSim Model. In: Birkmann, J. (eds.): *Measuring Vulnerability to Natural Hazards. Towards Disaster Resilient Societies*. Tokyo, United Nations University Press: 380-398.
2. Hochrainer, S. (2005). Naturkatastrophen: Risikowahrnehmung und Vorsorgestrategien - Eine Empirische Untersuchung in Schwertberg. *Sozialwissenschaftliche Rundschau (SWS)*, 45(1): 63-85.
1. Hochrainer, S., Hochreiter, R., and Pflug, G. (2005). An Algorithm for Calculating Steady State Probabilities of M/E<sub>r</sub>/c/K Queueing Systems. *Cent. Eur. J. Oper. Res. (CEJOR)*, 13(1): 1-13.

## Conference Presentations/Proceedings

30. Hochrainer-Stigler, S. (2011). Future Flood Risk and Adaptation Strategies in the Tisza Region: A dynamic risk-layer approach. 2nd IDReM Conference: Reframing Disasters and Reflecting on Risk Governance Deficits, July 14-16, 2011, Los Angeles.
29. Hochrainer-Stigler, S., Mechler, R., and K. Nakano (2011). Modelling the Economic Effects of Disaster Risk in Nepal. 2nd IDReM Conference: Reframing Disasters and Reflecting on Risk Governance Deficits, July 14-16, 2011, Los Angeles.
28. Hochrainer-Stigler, S., Yazdanpanah, M. and Monfared, N. (2011). Interrelated Effects due to Droughts for Rural Populations: A qualitative Field Study for Farmers in Iran. 2nd IDReM Conference: Reframing Disasters and Reflecting on Risk Governance Deficits, July 14-16, 2011, Los Angeles.
27. Hochrainer, S., Luger, N. and Radziejewski, M (2010). Upscaling of Impact Dependent Loss Distributions. A Hybrid Convolution Approach for Flood Risk. Integrated Disaster Risk Management Conference, September 1- 3, 2010, Vienna, Austria.
26. Mechler, R. and Hochrainer, S. (2010). Modeling Economic Risk and Adaptation. ISEE 2010, Advancing Sustainability in a Time of Crisis, August, 22-25, 2010, Oldenburg, Germany.
25. Hochrainer, S., Mechler, R. and Pflug, G. (2010). Assessing the Financial Vulnerability to Climate-Related Natural Hazards at the Global Scale. International Disaster and Risk Conference IDRC, May 30 –June 3, 2010, Davos, Switzerland.
24. Hochrainer, S. (2009). Long Lasting Macroeconomic Impacts of Natural Disaster Events: An Econometric ARIMA Modeling Approach. International IIASA-DPRI Conference: Integrated Disaster Risk Management, 12-16 October, 2009, Kyoto, Japan.
23. Hochrainer, S., Mechler, R., Pflug, G. and Williges, K. (2009). Estimating Financial Vulnerability to Climate Related Natural Hazards on the Global Scale. International IIASA-DPRI Conference: Integrated Disaster Risk Management, 12-16 October, 2009, Kyoto, Japan.
22. Hochrainer, S., Mechler, R., and Pflug, G. (2009). Assessing current and future impacts due to climate-related extreme events and global change. The case of Bangladesh. International IIASA-DPRI Conference: Integrated Disaster Risk Management, 12-16 October, 2009, Kyoto, Japan.
21. Mechler, R., Hochrainer, S. and Linnerooth-Bayer (2009). Legitimacy, Viability and Efficiency of the EU Solidarity Fund. 8th International Conference of the European Society of Ecological Economics. University of Ljubljana, Slovenia, 29 June – 2 July, Ljubljana, Slovenia.
20. Hochrainer, S. (2009). The EU Solidarity Fund: Assessing its risk of depletion due to catastrophe flood events. International Conference: The Knowledge in the Space of United Europe, Timisoara, 29-30 May, Romania.
19. Mechler, R. Lavalle, C. Luger, N., Moriondo, M., Hochrainer, S. and Kundzewicz, Z. (2009). Mapping Europe's current and future flood and drought risks. ADAM Final Policy Conference: Deciding on Climate Change: Europe's Role and Policies. Hosted by CEPS, 12-14 May, 2009, Brussels, Belgium.
18. Mechler, R., and Hochrainer, S. (2009). Index-based insurance as a Risk Management Instrument. Climate Change Conference: Global Risks, Challenges and Decisions, Copenhagen, 10-12 March, 2009, Denmark.

17. Hochrainer, S. and Linnerooth-Bayer, J. (2009). The MCII Proposal: Questions Related to Coping Capacities and Resource Gap Estimations on the Global Scale. Climate Change Conference: Global Risks, Challenges and Decisions, Copenhagen, 10-12 March, 2009, Denmark.
16. Hochrainer, S., Mechler, R., Pflug, G., Linnerooth-Bayer, J. and Suarez, P. (2008). Feasibility of Risk Financing Schemes for Climate Adaptation. IDRC International Disaster and Risk Conference, 25-29 August, 2008, Davos, Switzerland.
15. Luger, N., Hochrainer, S., Mechler, R., Bindi, M., Moriondo, M., Orioli, L., Genovese, E., Lavallo, C., Barredo, J. (2008). Assessing extreme event risks and consequences over Europe. ADAM General Assembly, 10-14 March, 2008, Budapest.
14. Hochrainer, S., Mechler, R. and Pflug, G. (2007). Catastrophe Modeling: Assessing current and future impacts due to climate-related extreme events and global change. The case of Bangladesh. IFIP/IIASA/GAMM Workshop on Coping with Uncertainty (CwU): Robust Decisions, 10-12, December, 2007, IIASA, Laxenburg, Austria
13. Patt, A., Hochrainer, S., Mechler, R., Linnerooth-Bayer, J., and Pflug, G. (2007) Managing climate risks for security and development. Background paper for IIASAs 35<sup>th</sup> Anniversary Conference.
12. Mechler, S and Hochrainer, S. (2007). Estimating the economic vulnerability and risk to extreme events for Europe: Insights from the ADAM (Adaptation and Mitigation) project. SHIFT 07 Conference. Perspectives of Vulnerability and Hazard Assessment, Potsdam, Germany 04-05 October, 2007.
11. Hochrainer, S., Mechler, R. and Pflug, G. (2007). Impact of Climate Change on the Robustness of Index-Based Microinsurance in Malawi. 7<sup>th</sup> IIASA-DPRI Conference on Integrated Disaster Risk Management, Stresa, Italy, 19-21 September, 2007.
10. Hochrainer, S. and Mechler, R. (2007). Estimating Economic Vulnerability and Risk to Extreme Events for Europe. Insights from the Adam (Adaptation and Mitigation) project. 7<sup>th</sup> IIASA-DPRI Conference on Integrated Disaster Risk Management, Stresa, Italy, 19-21 September, 2007.
9. Hochrainer, S. (2007). Drought Risk Management and Climate Change Uncertainties. 11<sup>th</sup> Conference on Stochastic Programming, Vienna, Austria, 27-31 August, 2007.
8. Bach, D., Mechler, R., Hochrainer, S., Lerner-Lam, A. (2006). Dynamic Natural Disaster Risk Assessment: A case study for Jamaica. American Geophysical Union, Fall Meeting 2006.
7. Mechler, R., Hochrainer, S., Pflug, G. and Linnerooth-Bayer, J. (2006). Financial Preparations in the Caribbean for the Hurricane Season: An application of IIASA's CatSim Model. Paper presented at the sixth DPRI-IIASA forum on integrated Disaster Risk Management, 13-17 August, Istanbul.
6. Cardenas, V., Hochrainer, S., Mechler, R. and Pflug, G. (2005). Assessing the Financial Management of Public Sector Disaster Risk: The Mexican Case. Paper presented at the fifth annual IIASA-DPRI Conference, 14-18 September, Beijing, China.
5. Linnerooth-Bayer, J., Hochrainer, S., Mechler, R. and Pflug G. (2005). Disaster Risk Transfer for Developing Countries. American Geophysical Union, Fall Meeting 2005.
4. Hochrainer, S. and Pflug, G. (2005). Optimizing Financial Strategies for Governments against the Economic Impacts of Natural Disasters in Developing Countries. Paper presented at the fifth annual IIASA-DPRI Conference, 14-18 September, Beijing, China.
3. Hochrainer, S., Mechler, R. and Pflug, G. (2004). Financial natural disaster risk management for developing countries. Proceedings of the EAERE conference, 26-28 Juni 2004, Budapest.

2. Hochrainer, S, Mechler, R. and Pflug, G.(2004). Financial Strategies in Disaster Risk Management for Developing Countries. Paper presented at the 4rd international symposium on integrated disaster risk Management, IDRM-2004, 2-9 July 2004, Ravello, Italy.
1. Hochrainer, S., Mechler, R. and Pflug, G. (2003) Optimal Financial Disaster Risk Management for Developing Countries. Paper presented at the 3rd international symposium on integrated disaster risk management, IDRM-2003, 3-5 July 2003, Kyoto, Japan.

## Workshops

13. International Workshop on Governance of Climate-Related Risks in Europe. The need for policy oriented research. September, 8-9, 2011, European Commission, DG ENV/CLIMA/ECHO, Brussels, Belgium.
12. Workshop on Application of economic instruments for adaptation to climate change. June, 6-7, 2011, European Commission, Brussels, Belgium.
11. International Workshop on Mainstreaming Disaster Risk Reduction into Development Strategies. The Case of Gujarat. January, 20-21, 2011, Sardar Patel Institute of Economic and Social Research, Ahmedabad, India.
10. Asian Disaster Preparedness Workshop: Catastrophe Modelling Approaches for Assessing Economic Risk. October, 17-18, 2009, Asian Institute of Technology (AIT), Bangkok, Thailand.
9. Adam Policy Workshop: The EU Solidarity Fund. Its legitimacy, viability and robustness. May 14-15, 2009, Brussels, Belgium.
8. ProVention, World Bank Workshop: Protection financière de l'Etat face au Risque de catastrophes. September 03-04, 2008, Antananarivo, Madagascar.
7. ProVention Consortium. Workshop on Assessing and Managing Disaster Risk in Madagascar. February 26-29, 2008, IIASA, Laxenburg, Austria. Webpage: <http://www.iiasa.ac.at/docs/HOTP/Feb08/madagascar-agenda.pdf>
6. IFIP/IIASA/GAMM Workshop on Coping with Uncertainty (CwU): Robust Decisions. December, 10-12, 2007, IIASA, Laxenburg, Austria.
5. Expert Meeting on Insurance Instruments for Adaptation to Climate Risks. September, 24-25, 2007, IIASA, Laxenburg, Austria. Webpage: <http://www.iiasa.ac.at/Research/RAV/conf/ICR-07/icr-agenda.pdf>
4. World Bank Workshop: Fiscal Management against Cyclone Risk for Madagascar. July, 12-13, 2007, Antananarivo, Madagascar. Webpage: <http://www.iiasa.ac.at/~hochrain/Madagascar>
3. Technical Workshop: Management of Disaster Risk through Fiscal and Budget Planning. June 26-27, 2006, Barbados. Webpage: [http://www.iadb.org/sds/ENV/publication/gen\\_2530\\_4458\\_e.htm](http://www.iadb.org/sds/ENV/publication/gen_2530_4458_e.htm).
2. IFIP/IIASA/GAMM Workshop on Coping with Uncertainty. December 13-16, 2004, IIASA, Laxenburg, Austria. Webpage: <http://www.iiasa.ac.at/~marek/wrksp/cwu04/>
1. ProVention Consortium Workshop: Financial Management of Disaster Risks. April 21-23, 2004, Laxenburg, Austria. Webpage: [http://www.iiasa.ac.at/Research/RAV/Projects/Risk\\_Management.html?sb=6](http://www.iiasa.ac.at/Research/RAV/Projects/Risk_Management.html?sb=6)

## Other Presentations

16. Hochrainer-Stigler, S. (2011). Effective decision-making on climate change impacts and adaptation. International Workshop on Governance of Climate-Related Risks in Europe. The need for policy oriented research. September, 8-9, 2011, European Commission, DG ENV/CLIMA/ECHO, Brussels, Belgium.
15. Hochrainer-Stigler, S. (2011). Natural Catastrophe Insurance Markets. Workshop on Risk Financing Instruments for Adaptation in the EU. June 6, 2011, Brussels, Belgium.
14. Hochrainer-Stigler, S. (2011) Urban Risk Management against Disaster Risk. International Workshop on Mainstreaming Disaster Risk Reduction into Development Strategies, 20-21 January, Ahmedabad, India.
13. Hochrainer-Stigler, S. (2011) Financial Risk Management against Extreme Risks. International Workshop on Mainstreaming Disaster Risk Reduction into Development Strategies, 20-21 January, Ahmedabad, India.
12. Integrating Natural Disaster Risk into National Development Planning: New issues and rising paradigms for flood risks. Presentation at Meeting with Asian countries Flood Risk decision makers. 19 October, 2009, Bangkok, Thailand.
11. Assessing and Managing Europe's current and future flood and drought risks. Vulnerability and disaster risk mapping workshop, EEA, Copenhagen, 2 July, 2009.
10. Cost Benefit Analysis of Flood risks on the Household level. Wharton-IIASA-RMS Meeting, 21-23 April, 2009, Wharton School, Philadelphia.
9. Estimation of future catastrophe losses with and without Earth-observation data. Geo-Bene Meeting, 23-24 June 2008, IIASA, Laxenburg.
8. Value of Information of Improved Weather Data and Land Use for Index-based Insurance Schemes. Geo-Bene Meeting Benefit Area –Disasters. November, 2007, IIASA, Laxenburg.
7. Rare events estimation and Catastrophe risk management: Comparing time-series analysis with Earth-observation based engineering approaches. 1st Annual Geo-Bene Meeting , 19-20 June 2007, IIASA, Laxenburg.
6. Economic vulnerability and direct risk assessment. Adam Meeting, 11-13 September 2007, Potsdam Institute for Climate Change Research (PIK), Germany
5. From Direct Risk to Financial Vulnerability. Presentation, Adam A.2. Workpackage Meeting, 24. July 2007, Joint Research Centre (JRC) of the EU Commission, Ispra, Italy.
4. Risk maps and Probability concepts, Value of Improved Geo-and Weather Information, Case Study Malawi. Presentation, GeoBene Meeting, 3-6, June, 2007, International Institute for Applied System Analysis (IIASA), Laxenburg, Austria.
3. Risikomanagement von Naturgefahren auf nationaler Ebene. Presentation, Benfield Re Day „Naturgefahren und Ratings“, 3. Mai 2007, Zürich, Swiss.
2. Catastrophe Modeling and Risk Management. Presentation, DFID Methodology Meeting (Department for International Development), 12-18 February 2007. Nepal, Kathmandu.
1. The Stern review and the economics of risk. Presentation with R. Mechler. Adam (Adaptation and Mitigation) Assembly, 19-23 March 2007. Barcelona, Spain.

## Technical Reports and Working Papers

19. Suarez, P. Linnerooth-Bayer, J. Syroka, J., Brans, V., Mechler, R. and Hochrainer-Stigler, S. (2011). Insurance-related instruments for disaster risk reduction. Global Assessment Report on Disaster Risk Reduction, UNISDR, Geneva, Switzerland.

18. Hochrainer-Stigler, S. (2011) Book Review: Vulnerable India: A Geographical Study of Disasters. *International Society for Integrated Disaster Risk Management NWS*, 1(2): 40-43.
17. Hochrainer, S., Mechler, R. and Kazuyoshi, N. (Risk Assessment Part) (2010) Nepal Hazard Risk Assessment. Part II: Exposure, Vulnerability and Risk Assessment. Asian Disaster Preparedness Center (ADPC), NGI, Centre for International Studies and Cooperation (CECI). [http://www.gfdrr.org/gfdrr/sites/gfdrr.org/files/documents/Nepal\\_HazardAssessment\\_Part2.pdf](http://www.gfdrr.org/gfdrr/sites/gfdrr.org/files/documents/Nepal_HazardAssessment_Part2.pdf).
16. Hochrainer, S., Mechler, R. and Pflug, G. (2009). Assessing current and future impacts of climate-related extreme events. The case of Bangladesh. IIASA Interim Report, IR-09-030, Laxenburg, Austria.
15. Lugeri, N., Lavalle, C., Hochrainer, S., Bindi, M., Moriondo, M. (2009) An assessment of weather-related risks in Europe, A.2.1. final deliverable, ADAM, Brussel, Belgium.
14. Kundzewics, Z., Lugeri, N., Hochrainer, S., Moriondo, M., Schelhaas, M-J., Radziejewski, M., Kedziora, A., Bindi, M., Matczak, P., Szwed, M., Pinskiwar, I., Graczyk, D. and Dysarz, T. (2009). Risk and economic damage assessment for 2025 and 2100 with and without adaptation. A.2.2 final deliverable, ADAM, Brussel, Belgium.
13. Hochrainer, S. and Mechler, R. (2009). Report on Europe's financial and economic vulnerability to meteorological extremes. A.2.3. final deliverable, ADAM, Brussel, Belgium.
12. Hochrainer, S., Mechler, R., Linnerooth-Bayer, J. and Suarez, P. (2009). Report on identified developing country regions for study of novel development assistance options, and characterization of risk profiles. A.2.6 Final deliverable, ADAM, Brussel, Belgium
11. Mechler, R., Hochrainer, S., Kull, D., Khan, F., Patnaik, U., and Linnerooth-Bayer, J. (2009). Natural Hazards. Increasing Resilience to Extreme events. Options 2009, IIASA, Laxenburg.
10. Hochrainer, S., Mechler, R., Kull, D., Singh, P, Chopde, S., and Wajih, S. (2008). Uttar Pradesh Drought Cost-Benefit Analysis, India. In: Moench, M., Caspari, E., and Pokhrel, A. (eds.) *From Risk to Resilience* Working Paper Number 5, ISET, and ProVention, Kathmandu, Nepal.
9. Moench, M., Hochrainer, S. et al. (2008) Understanding the Costs and Benefits of Disaster Risk Reduction under Changing Climate Conditions. In: Moench, M., Caspari, E., and Pokhrel, A. (eds.) *From Risk to Resilience* Working Paper Number 5, ISET, and ProVention, Kathmandu, Nepal.
8. Hochrainer, S. (2008). Cyclones Fame, Ivan and Jokwe in Madagascar. Recommendations from a catastrophe modeling perspective. World Bank Unit, Antananarivo, Madagascar.
7. Hochrainer, S. and Mechler, R. (2008). Preparing Madagascar for cyclones. Reducing the impact of natural disasters on the Malagasy economy. In: *Options: Directions for Africa. The paths research reveals*. Summer 2008, IIASA, Laxenburg.
6. Hochrainer, S., Mechler, R. and Linnerooth-Bayer, J. (2007). Report on identified developing country regions for study of novel development assistance options, and characterization of risk profiles. ADAM Project: Adaptation and Mitigation Strategies: Supporting European Climate Policy. 18-month deliverable report.
5. Hochrainer, S., Mechler, R., Linnerooth-Bayer, J., Pflug, G., Aaheim, A., and Mestl, H. (2007). Europe's financial and economic vulnerability to meteorological extremes. ADAM Project: Adaptation and Mitigation Strategies: Supporting European Climate Policy. 18-month deliverable report.
4. Hochrainer, S. and Mechler, R. (2007). Financial and economic disaster risk profile: Madagascar. Background document prepared for a workshop on "Mainstreaming hazard risk management, disaster risk financing and climate adaptation in Madagascar", Antananarivo, Madagascar, July 12, 2007.

3. Hochrainer, S., Mechler, R. and Linnerooth-Bayer, J. (2006). National Disaster Risk Profile for Bahamas. Paper prepared for a workshop on “Mainstreaming disaster risk management into fiscal and budget planning”, Barbados, June 26-27, 2006.
2. Hochrainer, S., Mechler, R. and Linnerooth-Bayer, J. (2006). National Disaster Risk Profile for Jamaica. Paper prepared for a technical workshop on “Mainstreaming disaster risk management into fiscal and budget planning”, Barbados, June 26-27, 2006.
1. Hochrainer, S., Mechler, R. and Linnerooth-Bayer, J. (2006). National Disaster Risk Profile for Grenada. Paper prepared for a technical workshop on “Mainstreaming disaster risk management into fiscal and budget planning”, Barbados, June 26-27, 2006.

## **Teaching Experience**

### *Supervisor for Young Summer Scientist Program at IIASA:*

- Javeria, Ashraf (2011) Vulnerability of Pakistan’s agriculture sector to climate extremes.  
 Xilei, Pang (2011) Risk analysis of typhoon induced flooding. A case study of Guang Zhou.  
 Wenfang, Chen (2010) Modelling of Typhoon Wind Speeds on the Local Level.  
 Samrat, Chatterjee (2009) Extreme events modelling based on an all hazard approach.  
 Vicarelli, Marta (2008) Rainfall distribution and El-Nino Effects on Index-based insurance.  
 Jing, Liu (2007) Assessment Modeling of Regional Flood Disaster Resilience.  
 Dalia, Bach (2006) Dynamic Natural Disaster Risk Assessment: A Case Study for Jamaica.

### *University Vienna:*

- Seminar, 2009: Extreme Value Theory (2 hours/week).  
 Seminar, 2008: Rare Events and Catastrophe Risk Management (2 hours/week).  
 Seminar, 2007: Rare Events and Catastrophe Risk Management (2 hours/week).  
 Seminar, 2005: Mathematics, Logics and System Theory (2 hours/week).  
 Seminar, 2004: Statistics I (2 hours/week) and Statistics II (2 hours/week).  
 Tutorial, 2003: Statistics in Economics (2 hours/week).

### *University Karlsruhe:*

- Seminar/Lecture: 2011: Public Sector Risk Management (2 hours/week)  
 Seminar/Lecture: 2010: Public Sector Risk Management (2 hours/week)  
 Seminar, 2009: Extreme Value Theory (2 hours/week).

## **Activities**

- \* Member of the Board of Directors of the Integrated Disaster Risk Management (IDRiM) Society.
- \* Member of the IIASA Peccei and Mikhalevich Award Committee
- \* Member of the IIASA Internal Research Council for YSSP selection
- \* Organization committee member in various scientific conferences (2007, 2008, 2009, 2010, and 2011)
- \* Presentations for first year students on the use of extreme value theory in research and practice. University of Vienna, Statistics and Decision Support Department.
- \* Naturkatastrophen-Risikomanagement und Finanzierung. Science Week, Vienna.
- \* Head of the Integrated Disaster Risk Management Society Newsletter Issue.

### **Active Referee-Scientific Journals**

Risk Analysis, OR Spektrum, Regional Environmental Change, Journal of Risk Research, Natural Hazards, Disasters, World Development, Journal of Natural Disaster Science, Journal of Risk and Insurance, Risk Management and Insurance Review, Journal of Risk and Uncertainty, Environmental Hazard, The Geneva Papers on Risk and Insurance, Geneva Risk and Insurance Review, Global Environmental Change, Habitat International.

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