International Society for Integrated Disaster Risk Management



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1. IDRIM NEWS

6th Annual Conference of the International Society for Integrated Disaster Risk Management (IDRiM 2015)



International Conference on Disaster Risk Reduction: Challenges and Opportunities for Sustainable Growth

IDRIM - TIFAC 2015

28-30 October 2015, New Delhi, India

We are pleased to announce that the 6th Conference of the International Society for Integrated Disaster Risk Management (IDRiM 2015) will be hosted by TIFAC (Technology Information, Forecasting and Assessment Council), in New Delhi, India, from 28 October to 30 October 2015. The conference is being supported by several national and international organizations including the School of Planning and Architecture (New Delhi), the Disaster Prevention Research Institute (DPRI) (Japan), and the International Institute for Applied Systems Analysis (IIASA) (Austria).

Website: http://idrim2015.org/

In more detail, TIFAC in partnership with IDRiM is organizing the 6th Annual Conference on Disaster Risk Reduction: Challenges and Opportunities for Sustainable Growth during October, 28-30, 2015 at Scope Convention Centre, Scope Complex, Lodhi Road, New Delhi, India.

Technology Information, Forecasting and Assessment Council (TIFAC) is an autonomous body set up under the Department of Science and Technology in 1988 as

This collaborative three-day conference aims to develop a comprehensive roadmap on a regional framework for earthquake, flood, extreme weather and other natural hazard triggered disaster risk management. India is going through a period of economic growth, with its many benefits as well as challenges. This is also a period that presents opportunities to introduce DRR practices in support of sustainable growth. The conference will endorse mechanisms for strengthening collaboration between research and knowledge-based institutions as well as practitioners in the region. The conference also evolves strategy for training, capacity development on the importance of disaster countermeasures and response preparedness in the region leading to effective disaster risk reduction (DRR) strategies and implementation of related projects at regional levels.

This event will have multiple tracks including plenary talks, panel discussions, parallel sessions, and poster/oral presentations during the annual 'Young Scientists Session (YSS). The conference provides recognition to the best YSS oral and poster presentation. The Award Ceremony will be held during the conference. A full set of double blind peer reviewed proceedings will be produced with special editions of journals. The main themes and subthemes of the conference include:

1. Natural and Technological Hazards: Forecasting & Early Warning Systems

- Earthquake Hazard Assessment & Microzonation
- · Cyclones & Track Predictions
- Flood and Draught Estimation
- Effects & impacts of Climate Change
- Hazard Modeling and Forecasting
- Weather & climate extreme Forecasting
- Storm Surge Modeling
- Landslide Hazard Zonation
- · Snow Hydrology
- Natech Hazards: Modeling and Analysis

2. Growth, Environment and Disasters

- Development and Disasters
- Water resource management
- · Growth and Gaps in Infrastructure Development
- Industrialization, Land use and Technological Hazards
- · Integrated risk governance
- Climate change: vulnerability to extreme weather events
- Natechs and Community: Area-wide risk management

3. Disaster Preparedness: Anticipating and minimizing impacts

- Structured mitigation measures for various hazards: Scenario development
- · Socio-economic impacts of disaster
- Adaptive management and coping initiatives

- Disaster safety nets and financial risk transfer mechanisms
- Rapid damage assessment systems
- · Innovative technology options for the future
- Lessons from South Asian disasters

4. Education and Communication strategies

- Capacity Building for DRR (e.g., training, safety and culture, etc.)
- Technology tools for assessment and communication including- ICT and satellite technology
- Technology tools including ICT and space technology
- Resilient communication technologies
- · Smart sensors

5. **Post Disaster Recovery& Management**

- · Governance issues related to post disaster relief & rescue
- · Reconstruction & rehabilitation strategies
- · Societal response & resilience building

Abstracts addressing other topics relevant to integrated disaster risk management will also be considered. We are pleased to announce the call for special session proposals, general session, and YSS abstract submission. For more information and to submit your special session proposals, and general session and YSS abstracts please visit the conference website at: www.idrim2015.org

Important Deadlines:

Note: Full/Extended abstract deadline with spell check was extended to July 31,2015

April 15, 2015	Session proposals closing
April 30, 2015	Abstract submission closing for General/Invited/Young Scientist
May 15, 2015	Notification of abstract acceptance
May 31, 2015	Call for papers and session proposals. Submit at conference@tifac.org.in
July 15, 2015	Full paper submission closes
August 15, 2015	Early Bird registration closes
September 1, 2015	Announcement of conference programme
September 30, 2015	Final registration and payment
October 10, 2015	Final programme online now!
October 28, 2015	Conference Starts

Objectives and scope

India has a highly diversified range of natural features. Its unique geo-climatic conditions make the country among the most vulnerable to natural disasters in the world. Disasters occur with amazing frequency in India and while the society at large has adapted itself to these regular occurrences, the economic and social costs continue to mount year after year. It is highly vulnerable to floods, drought, cyclones, earthquakes, landslides, volcanoes, etc. Increasing conflict between human activity and the ecosystem has been quite alarming to global environment causing climatic change, thus leading to increased natural and man-made disasters. This has raised challenging issues for disaster management strategies for future.

The conference will build on opportunities through science and technology to address current issues and reduce risks for future generations. The conference would discuss the linkages among governance issues, decision making and disaster risk reduction policies for mainstreaming DRR into development policy and would identify effective ways of cooperation between the disaster, environment, water and health sectors, and explore examples of networks, cooperation, processes and partnerships. Driven by common objectives of survivability, there is a need to bridge gaps between disaster reduction and development through varied types of science (natural, social and others), technologies and people centric actions. It intends to stimulate a next generation of ideas and actions for disaster management. Whilst the event is focused on three days of intensive internationally supported debates, the event will mark prior and subsequent collaboration between multiple partners.

In addition, lessons learned, best practices and tips would be shared on how to harness the technological power before, during and after disasters.. This conference is hoped to go beyond the awareness and the need to plan the individual components required todevelop and implement an effective disaster management plan. It is hoped that at the end of this Conference participants will take home the seriousness, awareness and importance of participative joint efforts needed in situations arising out of calamities caused by natural disasters.

Who should attend the conference:

- Scientists
- Teaching Faculty
- Research Scholar
- UG/PG Students
- Planners
- Government officials
- National and State level Disaster Management Authorities
- Industry experts
- Business officials
- Policy Makers
- Non Governmental Organizations

More conference details are available on:

Website: http://idrim2015.org/

We look forward to your kind confirmation and participation.

Announcement of new Newsletter section

Based on discussions during last year's Board of Directors meeting and the General Assembly held in Ontario, Canada during the IDRiM 2014 Conference, we have decided to promote the research of the IDRiM members by including a list of peer reviewed journal articles and books or book chapters published in 2014 (or onwards) by IDRiM Society members in this and upcoming newsletters.

Thus, we invite all members of the IDRiM Society to submit the references for unto two publications related to integrated disaster risk management and published in 2014 to 2015 as follows:

- (i) Peer reviewed Journal articles and/or
- (ii) Books or book chapters

Please provide information in the following format:

Articles

Author(s), Year, Title, Journal, Volume, Issue.

Example:

Folke, C., Carpenter, S.R., Walker, B., Scheffer, M., Chapin, T., Rockström, J. (2014). Resilience thinking: Integrating resilience, adaptability and transformability, Ecology and Society, 15 (4).

Book chapters:

Authors, Year, Title. In: Editor(s): Book, Publisher, pages Mechler, R., Hochrainer-Stigler, S. and Nakano, K. (2013). Managing Indirect Economic Consequences of Disaster Risk: The Case of Nepal.

Modelling the Economic Effects of Disaster Risk in Nepal. In: Amendola et al. (eds.): Integrated Catastrophe Risk Modeling. Supporting Policy Processes. Advances in Natural and Technological Hazards Research, New York, Springer, pp. 145-169

At most two references from a single author will be included in each newsletter. If we receive more than 25 references for each newsletter, we will select them randomly based on an algorithm (e.g. each reference is assigned a number and a random number generator selects from the pool).

References not included in the Newsletter (once we confirm that a member of the IDRiM Society is an author) will be uploaded on the IDRiM Society website. If your article is open access you can hyperlink the title of the article for easy access.

We would like to inform you that this is still in the test (trial) phase and therefore not all references provided may be incorporated. Furthermore, we limit the number to 25 references at most which is drawn from a pool and selected randomly. We will further discuss this idea, and any suggestions at the next IDRiM General Assembly this year in Delhi. Thank you very much for your continued support to the IDRiM Society.

2. Other NEWS

Global Assessment Report 2015 Published

From the Foreword: The 2015 Global Assessment Report on Disaster Risk Reduction (GAR15), *Making Development Sustainable: The Future of Disaster Risk Management,* is the fourth in the series coordinated by the United Nations Office for Disaster Risk Reduction (UNISDR) in the context of the *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters* (HFA). The HFA is an international framework adopted by 168 UN member States in Kobe, Japan in January 2005 to achieve an expected outcome of: *The substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and societies.* Every biennium governments have self-assessed their progress towards the achievement of this outcome using the online HFA Monitor.

Each GAR produced detailed sets of recommendations (see previous newsletters). While these were specific to the theme of each report, they can be summarized as two mutually supportive streams, brought into increasing focus as they flowed through the three reports: (1) address the underlying drivers of disaster risk to avoid risk generation and accumulation, and (2) strengthen the governance of disaster risk in order to be able to do so. GAR15 focuses on the second of these streams and presents the case for a broad reinterpretation of disaster risk reduction. As the HFA draws to a close, GAR15 questions whether the way in which disaster risk reduction has been approached under the HFA is really *fit for purpose* in a world now threatened by catastrophic increases in disaster risk.

Rather than a *programme* or *framework* for action, GAR15 presents a discussion on the future of disaster risk management that recognizes ongoing innovation. Its purpose is to stimulate further reflection, debate and improved practice as countries begin to address the challenges posed by the new international agreements on disaster risk reduction, climate change and sustainable development in 2015 and beyond.

From GAR 2015 at a Glance:

Through changing temperatures, precipitation and sea levels, amongst other factors, **global climate change is already modifying hazard levels and exacerbating disaster risks.** By 2050, it is estimated that **40 per cent of the global population will be living in river basins that experience severe water stress,** particularly in Africa and Asia. In the Caribbean basin, climate change will contribute an additional US\$1.4bn to the expected annual losses from cyclone wind damage alone.

The richest 2 per cent of the world's adult population now own over 50 per cent of global wealth, whereas the bottom 50 per cent own less than 1 per cent of global wealth. An increasing concentration of wealth, accompanied by depressed real wages and cuts in spending on social welfare and safety nets, is expected to lead to **growing risk inequality** across territories and social groups.

An enormous volume of capital is expected to flow into urban development in the coming decades, particularly in South Asia and sub-Saharan Africa. Some 60 per cent of the area expected to be urbanized by 2030 remains to be built. Much of the growth will occur in countries with weak capacities to ensure risk-sensitive urban development.

Managing risk, rather than managing disasters as indicators of unmanaged risk, **now has to become inherent to the art of development;** not an add-on to development, but a set of practices embedded in its very DNA. Managing the risks inherent in social and economic activity requires a combination of three approaches:

- 1. prospective risk management, which aims to avoid the accumulation of new risks;
- 2. corrective risk management, which seeks to reduce existing risks;
- 3. **compensatory risk management** to support the resilience of individuals and societies in the face of residual risk that cannot be effectively reduced.

Global average annual loss is estimated to increase up to **US\$415 billion by 2030** due to investment requirements in urban infrastructure alone. However, **this growth in expected losses is not inevitable**, as annual investments of US\$6 billion in appropriate disaster risk management strategies could generate benefits in terms of risk reduction of US\$360 billion. This is equivalent to an annual reduction of new and additional expected losses by more than 20 per cent.

Such an annual investment in disaster risk reduction represents only 0.1 per cent of the US\$6 trillion per year that will have to be invested in infrastructure over the next 15 years. But for many countries, that small additional investment could make a crucial difference in achieving the national and international goals of ending poverty, improving health and education, and ensuring sustainable and equitable growth.

Full report in different languages available at

Website: http://www.preventionweb.net/english/hyogo/gar/2015/en/home/

GAR 2015 Contributing/Background/Input Papers

Below is the list of contributing papers as well as background and input articles for the GAR 2015. To take a look at a specific paper simply click on the title below. The list can also be found at:

http://www.preventionweb.net/english/hyogo/gar/2015/en/home/documents.html

- WMO, 2014a <u>WMO (World Meteorological Organization).</u> 2014a. Synthesis of the Status and <u>Trends With the Development of Early Warning Systems. Background Paper prepared for the</u> 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.
- Williges et al., 2014 <u>Williges, Keith, Stefan Hochrainer-Stigler, Junko Mochizuki and Reinhard</u> <u>Mechler. 2014. Modeling the indirect and fiscal risks from natural disasters: Emphasizing</u> <u>resilience and "building back better". Background Paper prepared for the 2015 Global</u> <u>Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- Wamsler and Brink, 2014 <u>Wamsler, Christine and Ebba Brink. 2014. The Urban Domino Effect: A</u> <u>Conceptualization of Cities' Interconnectedness of Risk. Input Paper prepared for the 2015 Global</u> <u>Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- van Niekerk, 2014 <u>van Niekerk, Dewald. 2014. Retrospective Assessment of Progress in Disaster</u> <u>Risk Governance against the HFA. Input Paper prepared for the 2015 Global Assessment Report</u> <u>on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- University of South Carolina, 2014 <u>University of South Carolina. 2014. Who needs loss data?</u> <u>Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction.</u> <u>Geneva, Switzerland: UNISDR.</u>
- UNISDR, 2014c <u>UNISDR. 2014c. HFA Thematic Review: Research Area 2. Priority for Action 3 -</u> <u>Core Indicator 1: Relevant information on disasters is available and accessible at all levels, to all</u> <u>stakeholders (through networks, development of information sharing systems etc.). Background</u> <u>Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva,</u> <u>Switzerland: UNISDR.</u>
- UNICEF and UNESCO, 2014 <u>UNICEF (United Nations Children Fund) and UNESCO (United Nations</u> <u>Educational, Scientific and Cultural Organization). 2014. Advances and continuing challenges</u> <u>towards HFA2 AND Post-2015: Background chapter. Background Paper prepared for the 2015</u> <u>Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- UN-HABITAT, 2014a <u>UN-HABITAT (United Nations Human Settlements Programme). 2014a. From</u> <u>Disaster Risk Reduction to Resilience. A New Urban Agenda for the 21st Century. Background</u> <u>Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva,</u> <u>Switzerland: UNISDR.</u>
- UNEP, 2014 <u>UNEP (United Nations Environment Programme).</u> 2014. Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change. Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.
- UNECE, 2014 <u>UNECE</u> (United Nations Economic Commission for Europe). 2014. Standards and Normative Mechanisms for Disaster Risk Management. Background Paper prepared for the 2015 <u>Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>

- UNDP, 2014a <u>UNDP</u> (United Nations Development Programme). 2014a. Disaster Risk Governance During the HFA Implementation Period. Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.
- SEI, 2014 <u>SEI (Stockholm Environment Institute). 2014. Climate Change and Disaster Risk</u> <u>Reduction. Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk</u> <u>Reduction. Geneva, Switzerland: UNISDR.</u>
- SCI, 2014 <u>SCI (Save the Children International). 2014. The cultural dimension of Disaster Risk</u> <u>Reduction. Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk</u> <u>Reduction. Geneva, Switzerland: UNISDR.</u>
- Ray-Bennett et al., 2014 <u>Ray-Bennett, N.S., A.J. Masys, H. Shiroshita and P. Jackson. 2014. Hyperrisks in a hyper connected world: A call for critical 'reflective response' to develop organisational resilience. Input Paper prepared for the 2015 Global Assessment Report on Disaster Risk <u>Reduction. Geneva, Switzerland: UNISDR.</u></u>
- Pelling, 2014 <u>Pelling, Mark (ed.). 2014. Pathways for Transformation: Disaster risk management</u> to enhance development goals. Background Paper prepared for the 2015 Global Assessment <u>Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- Otoni de Araujo et al., 2013 <u>Otoni de Araújo, Raquel, Teresa Da Silva Rosa, Maria da Penha</u> <u>Smarzaro Siqueira, Márcio Reis, Camila Réboli and Arthur Aquilar. 2013. Communicability</u> <u>between the National, State and Municipal Governments in the Integration of the Principles of</u> <u>the Hyoqo Framework for Action to Reduce Risks and Disasters. Input Paper prepared for the</u> <u>2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- OECD, 2014b <u>OECD (Organisation for Economic Co-operation and Development). 2014b.</u> <u>Disasters Derail Development. So why aren't we doing more about them? How better incentives</u> <u>could help overcome barriers to disaster risk reduction in development programming.</u> <u>Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction.</u> <u>Geneva, Switzerland: UNISDR.</u>
- OECD, 2014a <u>OECD (Organisation for Economic Co-operation and Development). 2014a.</u> <u>Interconnected, Interdependent Risks. Background Paper prepared for the 2015 Global</u> <u>Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- Noy, 2015 <u>Noy, Ilan. 2015. A New Non-Monetary Global Measure of the Direct Impact of Natural</u> <u>Disasters: country case studies. Input Paper prepared for the 2015 Global Assessment Report on</u> <u>Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- Noy, 2014 <u>Noy, Ilan. 2014. A New Non-Monetary Global Measure of the Direct Impact of Natural</u> <u>Disasters. Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk</u> <u>Reduction. Geneva, Switzerland: UNISDR.</u>
- Molinari et al., 2013 <u>Molinari, Daniela, Francesco Ballio, Nicola Berni and Claudia Pandolfo.</u> 2013. Towards more effective Early Warning Systems: The Italian Experience. Input Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.
- McGee et al., 2014 <u>McGee, Sibel, Jaime Frittman, Seongjin "James" Ahn and Susan Murray.</u> 2014. Risk Relationships and Cascading Effects in Critical Infrastructures: Implications for the Hyogo Framework for Action. Input Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- Løvholt et al., 2014 Løvholt, Finn, Carl B. Harbitz, Farrokh Nadim, Joern Birkmann, Neysa Setiadi, Claudia Bach and Fernando Nishara. 2014. Tsunami Risk Reduction: Are we better prepared today than in 2004? Input Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.

- Jayanthi, 2014 <u>Jayanthi, Harikishan. 2014. Assessing the agricultural drought risks for principal</u> rainfed crops due to changing climate scenarios using satellite estimated rainfall in Africa. Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction.
- IRP, 2014 <u>IRP (International Recovery Platform). 2014. Thematic Summary Report. Background</u> <u>Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva,</u> <u>Switzerland: UNISDR.</u>
- Ingirige et al., 2014 <u>Ingirige, Bingunath, Dilanthi Amaratunga, Mohan Kumaraswamy, Champika</u> <u>Liyanage, Aslam Perwaiz, Peeranan Towashiraporn and Gayan Wedawatta. 2014. Private</u> <u>investment in Disaster Risk Management. Background Paper prepared for the 2015 Global</u> <u>Assessment Report on Disaster Risk Reduction. Geneva, Switzerland</u>
- IASC-WFP, 2014 <u>IASC-WFP (Inter-Agency Standing Committee and World Food Programme).</u> 2014. Preparedness action in present and future context, lessons learned and to be learned. Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. <u>Geneva, Switzerland: UNISDR.</u>
- Holloway, 2014 <u>Holloway, Ailsa. 2014. Strategic mobilization of higher education institutions in</u> <u>disaster risk reduction capacity-building: Experience of Periperi U. Input Paper prepared for the</u> 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.
- Haraguchi and Kim, 2014 <u>Haraguchi, Masahiko and Kim, Soojun. 2014. Critical Infrastructure</u> Systems: A case study of the interconnectedness of risks posed by Hurricane Sandy for New York City. Input Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. <u>Geneva, Switzerland: UNISDR.</u>
- GVM, 2014b <u>GVM (Global Volcano Model). 2014b. Global Volcanic Hazards and Risk. Technical background paper. Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- GVM, 2014a <u>GVM (Global Volcano Model). 2014a. Global Volcanic Hazards and Risk. Summary</u> <u>background paper. Background Paper prepared for the 2015 Global Assessment Report on</u> <u>Disaster Risk Reduction. Geneva, Switzerland: UNISDR</u>
- Gordy, 2015 Gordy, 201. Interpretive distillation of GARs 2009, 2011 and 2013
- Gibson, 2014 <u>Gibson, Terry. 2014. Local level Monitoring: 'Front-line' building on the</u> <u>experience of Views from the Frontline. Input Paper prepared for the 2015 Global Assessment</u> <u>Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- GFDRR, 2014d <u>GFDRR (Global Facility for Disaster Reduction and Recovery). 2014d. Building</u> <u>Social Resilience of the Poor: Protecting and Empowering Those Most at Risk. Background Paper</u> <u>prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva,</u> <u>Switzerland: UNISDR.</u>
- GFDRR, 2014c <u>GFDRR (Global Facility for Disaster Reduction and Recovery). 2014c. Resilient</u> <u>Recovery: An Imperative for Resilient Development. Background Paper prepared for the 2015</u> <u>Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- GFDRR, 2014b <u>GFDRR (Global Facility for Disaster Reduction and Recovery). 2014b. Financial</u> <u>Protection Against Natural Disasters. Background Paper prepared for the 2015 Global</u> <u>Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- GFDRR, 2014a <u>GFDRR (Global Facility for Disaster Reduction and Recovery). 2014a.</u> <u>Understanding Risk: The Evolution of Disaster Risk Assessment since 2005. Background Paper</u> <u>prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva,</u> <u>Switzerland: UNISDR.</u>
- GAR13/Johnson et al, 2012 Johnson, C., I. Adelekan, F. Arefian, L. Bosher, H. Jabeen, S. Kataria, W.A. Marome and B. Zerjav. 2012. Private Sector Investment Decisions in Building and

<u>Construction: Increasing, Managing and Transferring Risks. Background Paper prepared for the</u> <u>2013 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>

- GAR13/Erian et al., 2012 <u>Erian, W., B. Katlan, B. Ouldbedy, H. Awad, E. Zaghtity and S. Ibrahim.</u> 2012. Agriculture Drought in Africa and Mediterranean. Background paper prepared for the 2013 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.
- GAR13/Chatenoux and Peduzzi, 2013 <u>Chatenoux, B. and P. Peduzzi. 2013. Biomass fires:</u> preliminary estimation of ecosystems global economic losses. Background Paper prepared for the 2013 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.
- Scott & Tarazona, 2011 <u>Scott, Zoë and Marcela Tarazona. 2011. Study on Disaster Risk</u> <u>Reduction, Decentralization and Political Economy. Background Paper prepared for the 2011</u> <u>Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- GAR11/PEDRR, 2010 <u>PEDRR (Partnership for Environment and Disaster Risk Reduction). 2010.</u> <u>Demonstrating the Role of Ecosystems-based Management for Disaster Risk Reduction.</u> <u>Background Paper prepared for the 2011 Global Assessment Report on Disaster Risk Reduction.</u> <u>Geneva, Switzerland: UNISDR.</u>
- GAR11/Kent, 2011 <u>Kent, Randolph. 2011. Disaster risk reduction and changing dimensions and dynamics of future drivers. Background Paper prepared for the 2011 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- GAR11/Johnson, 2011 Johnson, Cassidy. 2011. Creating an enabling environment for reducing disaster risk: Recent experience of regulatory frameworks for land, planning and building in low and middle-income countries. Background Paper prepared for the 2011 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.
- Ferreira et al., 2013 <u>Ferreira Pedroso, Federico, Joel Teo, Erica Seville, Sonya Giovanazzi and John</u> Vargo. 2013. Post-Disaster Challenges and Opportunities: Lessons from the 2011 Christchurch Earthquake and Great Eastern Japan Earthquake and Tsunami. Input Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.
- Erian et al., 2014 <u>Erian, Wadid, Bassem Katlan, Naji Assad and Sanaa Ibrahim. 2014. Effects of</u> <u>Drought and Land Degradation on Crop Losses in Africa and the Arab Region with Special Case</u> <u>Study on: drought and conflict in Syria. Background Paper prepared for the 2015 Global</u> <u>Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- Coskun, 2013 <u>Coskun, Arife. 2013. The expansion of accountability framework and the contribution of supreme audit institutions. Input Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- Cools and Innocenti, 2014 <u>Cools, Jan and Demetrio Innocenti. 2014. Flood early warning in</u> <u>practice: Lessons learned from a comparative analysis. Input Paper prepared for the 2015 Global</u> <u>Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.</u>
- CIMNE-INGENIAR, 2014b <u>CIMNE-INGENIAR</u> (International Centre for Numerical Methods in Engineering and INGENIAR Ltda.). 2014b. Selection of Local Case Studies With Fully Probabilistic Hazard and Risk Assessments. Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva, Switzerland: UNISDR.
- CIMNE-INGENIAR, 2014a <u>CIMNE-INGENIAR</u> (International Centre for Numerical Methods in <u>Engineering and INGENIAR Ltda.</u>). 2014a. Update on the Probabilistic Modelling of Natural Risks at Global Level: Global Risk Model. Global earthquake and tropical cyclone hazard assessment. <u>Disaster risk assessment of countries for seismic, cyclonic (wind and storm surge) and flood.</u> <u>Background Paper prepared for the 2015 Global Assessment Report on Disaster Risk Reduction.</u> <u>Geneva, Switzerland: UNISDR.</u>

- Chelidze, 2013 <u>Chelidze, T. 2013. Real Time Telemetric Monitoring/Early Warning System of</u> <u>Large Dams. Input Paper prepared for the 2015 Global Assessment Report on Disaster Risk</u> <u>Reduction. Geneva, Switzerland: UNISDR.</u>
- Cavallo and Ireland, 2014 <u>Cavallo, Antonella and Vernon Ireland. 2014</u>. <u>Preparing for Complex</u> <u>Independent Risks: A System of Systems Approach to Building Disaster Resilience. Input Paper</u> <u>prepared for the 2015 Global Assessment Report on Disaster Risk Reduction. Geneva,</u> <u>Switzerland: UNISDR.</u>

GAR 2015 Background Papers for Global Risk Assessment

- CIMA Foundation CIMA Foundation, Improvement of the Global Flood Model for the GAR15
- CIMNE and INGENIAR, 2015 <u>CIMNE and INGENIAR, 2015</u>. World Summarized Catastrophe Risk <u>Profiles. Summary by Country on the Results from the Global Risk Model</u>
- De Bono, Andrea, Bruno Chatenoux. 2015 <u>De Bono, Andrea, Bruno Chatenoux. 2015. A Global</u> <u>Exposure Model for GAR 2015, UNEP-GRID</u>
- Geoscience Australia (GA) <u>Geoscience Australia (GA), GAR15 Regional Vulnerability Functions</u> <u>Reporting on the Asian Regional Workshop</u>
- Geoscience Australia (GA) <u>Geoscience Australia (GA), Emulating volcanic ash fall for multi-scale</u> <u>analysis - Development of the VAPAHR tool and application to the Asia-Pacific region</u>
- GVM (Global Volcano Model). 2014c <u>Global Volcanic Hazards and Risk Technical background</u> paper on volcanic ash fall hazard and risk.
- GVM (Global Volcano Model). 2014d. <u>Global Volcanic Hazards and Risk Country volcanic hazard</u> and risk profiles.
- Norwegian Geolotechnical Institute (NGI) and Geoscience Australia (GA) <u>Norwegian</u> <u>Geolotechnical Institute (NGI) and Geoscience Australia (GA), Tsunami Methodology and Result</u> <u>Overview</u>
- Pesaresi, Martino, Sérgio Freire. 2014. BUREF <u>Pesaresi, Martino, Sérgio Freire. 2014. BUREF</u> <u>Producing a Global Reference Layer of Built-up by Integrating Population and Remote Sensing</u> <u>Data.</u>
- Tolis, S, Rosset, P., Wyss, M. 2013 <u>Tolis, S, Rosset, P., Wyss, M. 2013. Detailed Building Stock at</u> <u>Regional Scale in Three Size Categories of Settlements for 18 Countries Worldwide. WAPMERR</u>

GAR 2015 Input Papers

- Amaratunga et al, 2014 <u>Amaratunga et al, 2014. Academic network for disaster resilience to</u> <u>optimise educational development (android)</u>
- Arbon et al., 2013 <u>Arbon et al., 2013. How do we measure and build resilience against disaster in</u> <u>communities and households</u>
- Attolico et al. <u>Attolico et al., 2014. Implementationo of The "Resilience of Communities" Policy in</u> <u>Land Use Planning</u>
- Atun and Kundak, 2014 <u>Atun and Kundak, 2014. Before and After HFA Retrospective View of</u> <u>Progress in Disaster Risk Reduction System in Turkey</u>
- Baba, 2014 <u>Baba, 2014. Area Wide Scale Participation Of All Private And Public Sectors In</u> <u>Disaster Risk Management</u>
- Bachofen, C., Falk, K., Dulce, C.B.Jr., Kaushik, M., Lagdameo, D.M.D., McNaught, R., Monasso, F., Prag, A. and Widyasari, 2014 <u>Bachofen, C., Falk, K., Dulce, C.B.Jr., Kaushik, M., Lagdameo,</u>

D.M.D., McNaught, R., Monasso, F., Prag, A. and Widyasari, 2014. Minimum Standards for local Climate-Smart Disaster Risk Reduction: informing the development of the post-2015 HFA

- Bamforth, T., Mackay, P. and Cox, J., 2014 <u>Bamforth, T., Mackay, P. and Cox, J. 2014. "Building</u> <u>local capacity for DRR and climate change adaptation in the Pacific – a Red Cross perspective"</u>
- Balgos et al., 2014 <u>Balgos et al., 2014. Preparing metro manila toward urban resiliency</u> -<u>Prospects and retrospects</u>
- Balikuddembe and Ardalan, 2014 <u>Balikuddembe and Ardalan, 2014. Disaster risk management</u> <u>and oil production in Uganda</u>
- Barnard, 2013 <u>Barnard, 2013. Four impediments to HFA success</u>
- Black et al. <u>Black et al., 2013. Disasters And Climate Change Adaptation Management A Guide</u> <u>For Local Government</u>
- Ćalić et al. <u>Ćalić et al., 2013. Non-systematic inclusion of DRR concepts and practices in the</u> <u>compulsory education network</u>
- Calic, J., Kovacevic-Majkic, J., Panic, M., Milosevic, M. V., Miljanovic, D., 2013 <u>Calic, J., Kovacevic-Majkic, J., Panic, M., Milosevic, M. V., Miljanovic, D. (2013). Nonsystematic inclusion of DRR concepts and practices in the compulsory education network, prior to formal inclusion into school curricula: Case study of Serbia.</u>
- Carvalho and Burnside-Lawry, 2013 <u>Carvalho and Burnside-Lawry, 2013. Leadership at the local</u>
 <u>level</u>
- Carvalho, L., Leitao, N., 2014 <u>Carvalho, L., Leitao, N. (2014). The importance of schools in disaster</u> <u>risk reduction: Encouraging results in the Municipality of Amadora Portugal.</u>
- Chang-Richards et al, 2014 <u>Chang-Richards et al, 2014</u>. <u>Addressing inter-sectoral linkages and</u> <u>interdependencies</u>
- Chakrabarti, 2013a <u>Chakrabarti, 2013a. Developing indicators for Measuring Progress of Disaster</u> <u>Risk Reduction</u>
- Chakrabarti, 2013b <u>Chakrabarti, 2013b. Tracking Public Investments For Disaster Reduction And</u> <u>Recovery</u>
- Cheong, T.S, 2014. <u>Cheong, T.S, 2014. Priority setting for disaster risk reduction on the small</u> <u>stream watershed regions to adapt climate change</u>
- Christoplos, Friis-Hansen, Funder, Pain, and Lindegaard, 2013 <u>Christoplos, Friis-Hansen, Funder,</u> <u>Pain, and Lindegaard, 2013. What Drives Transformations in Meso-Level Disaster Risk</u> <u>Governance? Emerging lessons from Zambia, Nepal, Viet Nam and Uganda. Danish Institute for</u> <u>International Studies.</u>
- Chub, 2013 <u>Chub, 2013. Systems Of Early Warning Of The Main Nature Disasters With Public</u> <u>Notification in Uzbekistan</u>
- Coughlan de Perez et Al, 2014 <u>Coughlan de Perez et Al, 2014</u>. <u>Managing the risk of extreme</u> <u>events in a changing climate Trends and opportunities in the disaster-related funding landscape</u>
- Da Costa, K. and Pospieszna, P., 2014 <u>Da Costa, K. and Pospieszna, P. 2014. Finding the missing</u> <u>thread: The inclusion of a Human Rights-Based Approach in tackling climate change mitigation,</u> <u>adaptation and disaster risk reduction.</u>
- Dufty, 2014 <u>Dufty, 2014. A Review Of The Value Of Social Media In Countrywide Disaster Risk</u> <u>Reduction Public Awareness Strategies</u>
- Dufty, 2014 <u>Dufty, N., 2014. A review of progress in the integration of disaster risk reduction into</u> <u>Australian school curricula programs and materials.</u>
- Emid, 2014 Emid, 2014. Breakwater wave energy converter
- Fassina, 2013 <u>Fassina, 2013. Cost-Benefit Analysis Of Livestock Protection In Disaster Risk</u> <u>Management</u>

- Fitzgibbon et al, 2014 <u>Fitzgibbon et al, 2014. Building Disaster Resilience for Sustainable Human</u> <u>Development</u>
- Florin and Xu, 2014 *Florin and Xu, 2014. Risk Governance An Overview Of Drivers And Success* <u>Factors</u>
- Gaetani et al., 2014 Gaetani et al., 2014. GEO DISASTER TASK DI-01
- Girot, 2014 <u>Girot, P. 2014. Integrating community-based adaptation and drr approaches into</u> <u>ecosystem-based approaches to adaptation; Experiences from the field.</u>
- Giupponi, C., Mojtahed, V., Gain, A.K., Balbi, S. and Biscario, C., 2014 <u>Giupponi, C., Mojtahed, V.,</u> <u>Gain, A.K., Balbi, S. and Biscario, C. 2014. An integrated approach for including social capacities,</u> <u>and economic valuation in risk assessment of water related hazards in uncertain scenarios.</u>
- Guru and Santha, 2013 <u>Guru and Santha, 2013. People-Centred Early Warning Systems And</u> <u>Disaster Risk Reduction</u>
- Hamdan, 2014a <u>Hamdan, 2014a. The Need For An Integrated Multi-Faceted Approach To</u> <u>Develop Public Awareness Strategies On DRR</u>
- Hamdan, 2014b <u>Hamdan, 2014b. Effects Of Governance Systems And Development Situations On</u> <u>Progress In Achieving Sustainable DRM Change</u>
- Hamdan, 2014c Hamdan, 2014c. Ability of Awareness Campaigns to Effect Change in DRR
- Hardjosuwarno et al, 2014 <u>Hardjosuwarno et al., 2014. Early Warning System for Lahar in</u> <u>Merapi</u>
- Hayashi and Harada, 2014 Hayashi and Harada, 2014. Public Health...
- Huertas and Morales, 2014a <u>Huertas and Morales, 2014a. Costa Rica Emergency Fund For</u> <u>Animals In Disasters</u>
- Huertas and Morales, 2014b <u>Huertas and Morales, 2014b. Online riskland game in spanish for</u> <u>school children</u>
- International Electrotechnical Commission, 2013 <u>International Electrotechnical Commission</u>, 2013. Disaster impact mitigation through international standards
- Iwama et al., 2013 *Iwama et al., 2013. Interconnected, inter-dependent technological and environmental risks in the context of climate change*
- Izadkhah and Hosseini, 2014 <u>Izadkhah and Hosseini, 2014. The Evolution of School Earthquake</u> <u>Education in Iran</u>
- Kagawa and Selby, 2014 <u>Kagawa and Selby, 2014. Disaster risk reduction in the school</u> <u>curriculum, the present and potential role of development agencies and the implications for the</u> <u>hyogo framework for action 2005-2015 successor</u>
- Kellett et al., 2013 <u>Kellett et al., 2013. Financing disaster risk reduction Towards a coherent and comprehensive approach</u>
- King et al., 2013 <u>King et al., 2013. Land Use Planning For Disaster Risk Reduction And Climate</u> <u>Change Adaptation</u>
- Kinn and Abbott, 2014 <u>Kinn and Abbott, 2014. The use of direct current voltage systems to</u> <u>increase a city's resilience</u>
- Kreiblich and Bubeck, 2013 <u>Kreiblich and Bubeck, 2013. Natural Hazards Direct Costs and</u> <u>Losses Due to the Disruption of Production Processes</u>
- Kuterdem et al., 2014 <u>Kuterdem et al., 2014. National Framework in order to reduce earthquakes</u> by multi-stakeholder participation in Turkey
- Lee et al., 2014 <u>Lee et al., 2014. Establishing a Web-based Platform to Share Technology and</u> <u>Information</u>
- Liu et al, 2014 Liu et al, 2014. Investing in business continuity plans
- Liu and Huang, 2014 <u>Liu and Huang, 2014. Compound disasters and compounding processes -</u> <u>Implications for Disaster Risk Management</u>

- Menoni et al., 2014b <u>Menoni et al., 2014b. Enabling knowledge for disaster risk reduction and its</u> <u>integration into climate change adaptation</u>
- Mihir et al, 2014 Mihir et al, 2014. Risk tranfer through microinsurance
- Miyan, M.A., 2014 <u>Miyan, M.A. 2014. Challenge of Mainstreaming Disaster Risk Reduction in</u> <u>Development Initiatives with Special Reference to Bangladesh.</u>
- Muhari and Imamura, 2014 Muhari and Imamura, 2014. When to cancel a tsunami warning
- Myeong, S., 2014 <u>Myeong, S. 2014. Flood Vulnerability and Deforestation: a case study of North</u> <u>Korea.</u>
- Neira, S.P., 2014 <u>Neira, S.P. 2014</u>. <u>Disasters and the international law: Human rights and its</u> <u>application after disasters, cases studies based earthquakes, tsunamies and volcano eruptions.</u>
- Nyberg et al., 2014 <u>Nyberg et al., 2014. Using innovative university didactics for flood risk</u> <u>reduction and transfer of risk knowledge</u>
- Ochoa, 2013 <u>Ochoa, 2013. Incidencia de la inversión gubernamental en la reducción del riesgo de</u> <u>inundación en el periodo 2008-2012</u>
- Odongo, 2013 <u>Odongo, 2013. From first and fast emergency responders to resilience leaders</u>
- Olu et al., 2013a <u>Olu et al., 2013a. Post-conflict recovery as an impetus for strengthening health</u> <u>system resilience in Africa</u>
- Olu et al., 2013b <u>Olu et al., 2013b. From framework to action Operationalizing the Hyogo</u> <u>Framework of Action in the health sector</u>
- Pathak, V. and Halani, K., 2014 <u>Pathak, V. and Halani, K. 2014. Institutionalising climate smart</u> <u>disaster risk management approach.</u>
- Pathirage et al., 2014 <u>Pathirage et al., 2014. Knowledge factors and associated challenges for</u> <u>successful disaster knowledge sharing</u>
- Pittore et al., 2014 <u>Pittore et al., 2014. Perspectives of a global, dynamic exposure model for geo-</u> <u>risk assessment</u>
- Rahimi, M., 2014 <u>Rahimi, M. 2014. Climate Change related Disaster Risk Reduction in Developing</u> <u>Countries.</u>
- Renschler, 2013 <u>Renschler, 2013. The PEOPLES Resilience Framework</u>
- Roberts, 2014 <u>Roberts, 2014. Addressing Loss and Damage at the National Level Lessons from</u> <u>Bangladesh</u>
- Santha, 2014 Santha, 2014. Coastal Resources, Ecosystem Services And Disaster Risk Reduction
- Scolobig et al., 2013 <u>Scolobig et al., 2013. From Multi-Risk Assessment to Multi-Risk Governance</u> <u>- Recommendations for Future Directions</u>
- Sinkamba and Maripe, 2014 <u>Sinkamba and Maripe, 2014</u>. <u>Mainstreaming disaster risk reduction</u> <u>in the social work curricular</u>
- Skelton, 2014 <u>Skelton, 2014. How regulations are helping the UK be more Resilient</u>
- Stal, 2014 <u>Stal, 2014</u>. Disaster and crisis communication trend analysis of technologies and <u>approaches</u>
- Suarez, P., Otto, F.T., Karla, N., Bachofen, C., Gordon, E. and Mudenda, W., 2014 <u>Suarez, P., Otto,</u> <u>F.T., Karla, N., Bachofen, C., Gordon, E. and Mudenda, W. 2014. Loss and damage in a changing</u> <u>climate: Games for learning and dialogue that link HFA and UNFCCC.</u>
- Suk et al., 2014 <u>Suk et al., 2014. The interconnected and cross-border nature of risks posed by</u> <u>infectious diseases</u>
- Tall, A., Patt, T.G. and Fritz, S., 2013 <u>Tall, A., Patt, T.G. and Fritz, S. 2013. Accounting for</u> <u>heterogeneity: A quality assessment of national climate disaster management policies in Africa.</u>

- Tabacaru and Curosu, 2014 <u>Tabacaru and Curosu, 2014</u>. The improvements achieved by civil protection and emergency situations service
- Trujillo et al., 2014 Trujillo et al., 2014. Mainstreaming DRR in Agriculture
- Van der Geest, K., Warner, K. and Kreft S., 2014 <u>Van der Geest, K., Warner, K. and Kreft S. 2014.</u> Loss and damage, vulnerability and constraints to adaptation: case study findings.
- Verma, N. M., 2014 <u>Verma, N. M. 2014</u>. <u>Dynamism of building people led and people owned</u> adaptation mechanisms for climate change - A bottom upward momentum.</u>
- Visconti, 2014 Visconti, 2014. Governmental and institutional fortress (GIT)
- Walch, 2013 <u>Walch, 2013. Disaster risk reduction and local ownership</u>
- Wilkinson et al., 2014 <u>Wilkinson et al., 2014</u>. Investment in the construction sector to reduce <u>disaster risk management</u>

UNISDR Working Paper on Public Investment Planning and Financing Strategy for Disaster Risk Reduction

- UNISDR Working Papers on Public Investment Planning and Financing Strategy for Disaster Risk <u>Reduction</u> *Review of Mauritius*
- UNISDR Working Papers on Public Investment Planning and Financing Strategy for Disaster Risk Reduction Review of Madagascar
- UNISDR Working Papers on Public Investment Planning and Financing Strategy for Disaster Risk Reduction
 - Review of Seychelles
- UNISDR Working Papers on Public Investment Planning and Financing Strategy for Disaster Risk <u>Reduction</u>
 - Review of Union des Comores
- UNISDR Working Papers on Public Investment Planning and Financing Strategy for Disaster Risk <u>Reduction</u>
 - <u>Review of Zanzibar</u>
- UNISDR Working Papers on Public Investment Planning and Financing Strategy for Disaster Risk
 Reduction
 - Review of South West Indian Ocean Region
- UNISDR Working Papers on Public Investment Planning and Financing Strategy for Disaster Risk <u>Reduction</u> <u>Review of Party (Interim Papert)</u>

Review of Peru (Interim Report)

Sendai Framework for Disaster Risk Reduction 2015-2030 Released

From the Foreword: The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted at the Third UN World Conference in Sendai, Japan, on March 18, 2015. It is the outcome of stakeholder consultations initiated in March 2012 and intergovernmental negotiations from July 2014 to March 2015, supported by the United Nations Office for Disaster Risk Reduction at the request of the UN General Assembly.

The Sendai Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters. The HFA was conceived to give further impetus to the global work under the International Framework for Action for the International Decade for Natural Disaster Reduction of 1989, and the Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation and its Plan of Action, adopted in 1994 and the International Strategy for Disaster Reduction of 1989.

The Sendai Framework is built on elements which ensure continuity with the work done by States and other stakeholders under the HFA and introduces a number of innovations as called for during the consultations and negotiations. Many commentators have identified the most significant shifts as a strong emphasis on disaster risk management as opposed to disaster management, the definition of seven global targets, the reduction of disaster risk as an expected outcome, a goal focused on preventing new risk, reducing existing risk and strengthening resilience, as well as a set of guiding principles, including primary responsibility of states to prevent and reduce disaster risk, all-of-society and all-of-State institutions engagement. In addition, the scope of disaster risk reduction has been broadened significantly to focus on both natural and man-made hazards and related environmental, technological and biological hazards and risks. Health resilience is strongly promoted throughout.

The Sendai Framework also articulates the following: the need for improved understanding of disaster risk in all its dimensions of exposure, vulnerability and hazard characteristics; the strengthening of disaster risk governance, including national platforms; accountability for disaster risk management; preparedness to "Build Back Better"; recognition of stakeholders and their roles; mobilization of risk-sensitive investment to avoid the creation of new risk; resilience of health infrastructure, cultural heritage and work-places; strengthening of international cooperation and global partnership, and risk-informed donor policies and programs, including financial support and loans from international financial institutions. There is also clear recognition of the Global Platform for Disaster Risk Reduction and the regional platforms for disaster risk reduction as mechanisms for coherence across agendas, monitoring and periodic reviews in support of UN Governance bodies.

From Sendai Framework at a Glance:

Expected Outcome: Building on the Hyogo Framework for Action, the Sendai Framework aims to achieve the following outcome over the next 15 years: The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries.

Expected Goal: To attain the expected outcome, the following goal must be pursued: Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience.

Priorities for action: Taking into account the experience gained through the implementation of the Hyogo Framework for Action, and in pursuance of the expected outcome and goal, there is a need for focused action within and across sectors by States at local, national, regional and global levels in the following four priority areas:

- Understanding disaster risk.
- Strengthening disaster risk governance to manage disaster risk.
- Investing in disaster risk reduction for resilience.
- Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

Role of stakeholders: While States have the overall responsibility for reducing disaster risk, it is a shared responsibility between Governments and relevant stakeholders. In particular, non-State stakeholders play an important role as enablers in providing support to States, in accordance with national policies, laws and regulations, in the implementation of the present Framework at local, national, regional and global levels. Their commitment, goodwill, knowledge, experience and resources will be required.

International cooperation and global partnership:

Developing countries require an enhanced provision of means of implementation, including adequate, sustainable and timely resources, through international cooperation and global partnerships for development, and continued international support, so as to strengthen their efforts to reduce disaster risk.

International cooperation for disaster risk reduction includes a variety of sources and is a critical element in supporting the efforts of developing countries to reduce disaster risk.

In addressing economic disparity and disparity in technological innovation and research capacity among countries, it is crucial to enhance technology transfer, involving a process of enabling and facilitating flows of skill, knowledge, ideas, know-how and



technology from developed to developing countries in the implementation of the present Framework.

Financing from a variety of international sources, public and private transfer of reliable, affordable, appropriate and modern environmentally sound technology, on concessional and preferential terms, as mutually agreed, capacity-building assistance for developing countries and enabling institutional and policy environments at all levels are critically important means of reducing disaster risk.

Full publication in English available at

Website: http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf

3. Conference Announcements

• 28 October –30 October 2015 IDRiM 2015

The 6th Conference of the International Society for Integrated Disaster Risk Management (IDRiM 2015) will be hosted by TIFAC (Technology Information, Forecasting and Assessment Council), in New Delhi, India, from 28 October to 30 October 2015. This year's theme is about "Disaster Risk Reduction: Challenges and Opportunities for Sustainable Growth._For more information, see IDRiM new section.

Website: http://idrim2015.org/

• **1 September – 3 September 2015** Sustainable City

The 10th International Conference on Urban Regeneration and Sustainability (Sustainable City) will be held at the Universidad Pontificia Bolivariana in Medellin, Colombia. The University is named in honour of the South American Liberator Simon Bolivar. This Sustainable City meeting follows a series of successful conferences starting in Rio de Janeiro in 2000 and regularly held since then in different locations throughout Europe and Asia. The meetings always attract a substantial number of contributions from participants from different backgrounds and countries. The variety of topics and experiences is one of the main reasons behind the success of the series. The dynamic growth of Colombia and in particular the rapid development of Medellin, which has recently been designated the most innovative city in the world, led to its choice as the venue for the Sustainable City 2015 conference. Urban areas result in a series of environmental challenges varying from the consumption of natural resources and the subsequent generation of waste and pollution, contributing to the development of social and economic imbalances. As cities continue to grow all over the world, these problems tend to become more acute and require the development of new solutions. The challenge of planning sustainable contemporary cities lies in considering the dynamics of urban systems, exchange of energy and matter, and the function and maintenance of ordered structures directly or indirectly supplied and maintained by natural systems. The task of researchers, aware of the complexity of the contemporary city, is to improve the capacity to manage human activities, pursuing welfare and prosperity in the urban environment. Any investigation or planning on a city ought to consider the relationships between the parts and their connections with the living world. The dynamics of its networks (flows of energy matter, people, goods, information and other resources) are fundamental for an understanding of the evolving nature of today's cities. The Sustainable City Conference addresses the multidisciplinary components of urban planning, the challenges presented by the increasing size of the cities, the amount of resources and sources required and the complexity of modern society.

Website: http://www.wessex.ac.uk/15-conferences/sustainable-city-2015.html

• **10 May –13 May 2016** Adaptation Futures

Adaptation Futures 2016 is the fourth PROVIA worldwide adaptation conference. It will be held in Rotterdam from 10 to 13 May 2016. The conference aims to move climate change adaptation forward by promoting solutions across sectors, borders and communities. It is for scholars, practitioners, policymakers and business people from all around the world. Adaptation Futures 2016 offers a platform to exchange new and practical ideas, experiences and insights for climate change adaptation. Participants are invited to share their research findings, public and commercial solutions, and policy issues. They are asked to demonstrate how their findings might be applicable to other communities, countries or sectors. Over four days, there will be opportunities to meet, mingle, inspire and develop partnerships. Adaptation Futures 2016 comprises conference and workshop sessions on science, practice and policy. Participants can show and explain their solutions in an exhibition, make commercial contacts in a business fair and connect with their peers in field excursions to adaptation projects. Three types of sessions will be offered: science sessions, practice sessions (including policy practice) and combined science-practice sessions. We invite proposals for full sessions that fit one of the three categories, as well as abstracts for individual presentations in the science sessions. We are particularly interested in combined science-practice sessions.

Website: http://www.adaptationfutures2016.org/

• 23 June – 4 June 2016

Disaster Risk Reduction, Response and Sustainable Reconstruction: Capacity Building for Equitable Planning and Development

Capacity building is critical to disaster preparedness, response and sustainable post-disaster reconstruction programs. Hence, the central aim of this conference is to provide a forum for a critical examination of the efficacy of national strategies for capacity building measures globally with a focus on cross- and multi-disciplinary training efforts, education (at all levels), and professional development. The conference will also explore what capacity building means since there is currently no agreed definition of the term. Conference outcomes

should include policy and practical recommendations that would inform the development of long-term national strategies and approaches that address capacity building needs assessment and development for all the phases of disaster management.

The conference would welcome presentations that address the following themes: Capacity building and investment in public health care systems around the world -- with a focus on Management Capacity in Ebola-Impacted Region. Capacity Building Concepts. Capacity Building for Risk and Disaster Management Systems Through the Use of Information and Communications Technologies. Local and National Programs for Capacity Building of Architects, Engineers, Planners and Scientists in Natural Disaster Risk Management. The roles of various agencies (multilateral, national, public, private, local government and communities, non-governmental) in capacity building for disaster management. Capacity Building to Support Post-disaster Recovery and Reconstruction. Case Studies of Capacity Building for Homeland Security and Emergency Management in the Curricula of Colleges and Universities. Public Education and Disaster Management. International cooperation in Capacity Building for disaster management. Planning, Policies and Practical Programs Which Propel Change Toward Energy Efficiency Projects. Innovative Research and Development to Abate Greenhouse Gases and Global Warming

Website: https://www.umb.edu/crscad/events/equitable_development/

4. Internet Resource List

- Tangible Earth, including ipad android version. http://www.tangible-earth.com/en/
- Disaster Resilient Australia Knowledge Hub http://www.emknowledge.gov.au/
- Global Disaster Watch http://globaldisasterwatch.blogspot.co.at/
- RSOE EDIS Emergency and Disaster Information Service http://hisz.rsoe.hu/alertmap/index2.php
- GDACS Global Disaster Alert and Coordination System http://www.gdacs.org/
- Pacific Disaster Center http://www.pdc.org/
- Global Assessment Report on Disaster Risk Reduction 2013: http://www.preventionweb.net/english/hyogo/gar/2013/en/home/index.html
- United Nations Office for Disaster Risk Reduction. Global Assessment Report (GAR): http://www.unisdr.org/we/inform/gar
- PreventionWeb: Serving the information needs of the disaster reduction community: http://www.preventionweb.net/english/.
- Disaster Reduction Hyper base: Web based facility to compile appropriate disaster reduction technologies and knowledge. http://drh.edm.bosai.go.jp/
- MCEER: Collection of disaster management resources, including international, federal, state, local and non-profit organizations: http://mceer.buffalo.edu/infoservice/reference_services/disasterManagementRes ources.asp

- Staffordshire Raynet: Disaster and Emergency Management on the Internet. Long list of websites for various disasters and databases. http://www.keele.ac.uk/depts/por/disaster.htm
- Internet Resources for Disaster Studies: University of Delaware Library http://www2.lib.udel.edu/subj/disasters/internet.htm
- FEMA" Federal Emergency Management Agency: Focus is on the US http://www.fema.gov/index.shtm
- EDEN Extension Disaster Education Network: Reducing the Impact of Disasters Through Education http://eden.lsu.edu/EDENCourses/Pages/default.aspx
- Disaster Handbook: University of Florida. http://disaster.ifas.ufl.edu/links.htm
- Disaster Management: Royal Roads University. http://libguides.royalroads.ca/content.php?pid=64941&sid=480216
- Natural Hazards and Disaster Information Resources: University of Colorado at Boulder (including newsletter). http://www.colorado.edu/hazards/resources/

5. (New) Journals

• Journal of Integrated Disaster Risk Management, IDRIM Journal:

- **Objective:** The main objective of IDRiM is to provide an integrated and implementable approach to the growing demand for disaster risk reduction and management by offering reliable, affordable and effective solutions for minimizing the loss of life, property damage, and social and economic disruption. IDRiM also explores implementation science for disaster reduction. IDRiM intends to provide a set of solutions for the all types of: environmental and natural hazards (earthquakes, flood, drought, windstorms, landslides, etc.) and manmade hazards. It also includes the development of methods and tools for modeling and assessment of disaster risks, hazard zonation and hazard mapping; geotechnical zonation, vulnerability analysis, strengthening design of structures, disaster risk evaluation and mapping; and various types of risk management methods such as innovative risk transfer, risk reduction policy; socio-economic studies, human and economic loss estimation, practical loss-control measures, catastrophic risk insurance, public awareness, programming; and solutions for risk reduction in buildings, lifelines, infrastructures, industry, oil-chemical facilities, offshore structures and urban system. IDRiM also covers the governance of disaster risks, design of institutional schemes, participatory approach, etc.
- Website: http://idrimjournal.com/index.php/idrim

• Journal of Extreme Events:

- **Objective:** The objective of the Journal of Extreme Events is to provide a forum for analysis of the occurrence, impact, and significance of extreme events on natural and human systems. The Journal will provide a range of opportunities for manuscripts including original research papers, review assessments, and science-policy statements. Readership for the journal will come from a range of academic disciplines as well as research-oriented practitioner and stakeholder professions.

Journal content, although not exclusively, will focus on extreme weather and climate events and their connections with natural and human system processes. The study of other types of extreme events will be examined as they relate to and inform understanding of local and global environmental changes and their implications. Main thematic areas of the Journal will include: Conditions, drivers and impacts of extreme events on the natural systems and human systems; Conditions, drivers and impacts of extreme events on coupled human and natural systems; Extreme events as surprises and associated uncertainty; Indicators and monitoring of extreme events and early warning systems; Scalar aspects of extreme events - local, regional, and global dimensions; Risk analysis and social learning from extreme events in the context of climate non-stationarity; Exposure and vulnerability to extreme events; Extreme events and system transitions; and, Resilience to extreme events, and sustainability and transformation.

- Website: http://www.worldscientific.com/worldscinet/joee

• Weather and Climate Extremes

- Objective: Weather and Climate Extremes provides academics, decision makers. international development agencies, nongovernmental organizations and civil society with publications on different aspects of research in weather and climate extremes, monitoring and early warning systems, assessment of vulnerability and impacts, developing and implementing intervention policies, effective risk management and adaptation practices to address local and regional needs and circumstances, engagement of local communities in the adoption of these practices to cope with extremes, and information and communication strategies. The journal encourages the submission of original research papers, comprehensive review articles, and short communications which address the following: Weather and Climate Extremes •Types of extremes •Quality and quantity of data and data analysis •Frequency, intensity, spatial extent, duration, and timing of extreme events •Observed and projected changes in weather and extremes Research Approaches •Atmospheric science climate (processes and modeling) •Short- and medium-range forecasts of weather extremes •Seasonal forecasts of climate extremes •Monitoring and early warning systems •Modelling impacts of weather and climate extremes •Statistical aspects of extremes Vulnerability and Impacts of Weather and Climate Extremes •Natural physical environment •Human systems eg., coastal settlements, mountain settlements, urbanization etc., •Ecosystems •Temporal and spatial dynamics of exposure and vulnerability •Observed and projected impacts in different socioeconomic sectors Managing Weather and Climate Extremes •Traditional knowledge •Preparedness planning •Risk Management •Information and communication strategies •Policies and practices for adaptation to weather and climate extremes •Resilience to adverse

impacts of extremes •Issues and opportunities at the local, national and international levels •Technological innovations and improved practices •Reducing societal vulnerability to weather and climate extremes •Case Studies

- Website: http://www.journals.elsevier.com/weather-and-climate-extremes/

Climate Risk Management

- Objective: Welcome to the online submission and editorial system for Climate Risk Management. Climate Risk Management publishes original scientific contributions, state-of-the-art reviews and reports of practical experience on all aspects of the production and use of climate and climate-related information in decision and policy making from the near- to long-term. Therefore, the scope of the journal covers: Historical, current, and future climate conditions across multiple space and time scales; Risk assessment and risk management approaches for climate-sensitive sectors such as agriculture, forestry and fire management, health, mining, natural resources management, water management, the built environment, and tourism; and Analysis of relevant institutional developments and arrangements. Topics of interest include, but are not limited to: The application of seasonal forecasting and regional climate change projections; Capacity Infrastructure design; Management and systematic building; reduction of climate-induced hazards and disasters; Protection of lives, livelihoods and property; Mitigation of environmental damage; Sustainable resource use and production; Impacts, vulnerability and adaptation at individual, community and institutional levels: Regulatory risks associated with climate change; and Climatesensitive interactions between economic, environmental and social systems. Research papers should consider the practical application of the thesis advanced through case studies, experiments, or systematic comparisons with existing approaches. Special issues devoted to topics of particular interest will be published on an occasional basis, and proposals for such issues are invited. Submission of multi- and interdisciplinary studies, particularly those involving economics and the social sciences, is encouraged.
- Website: http://ees.elsevier.com/clrm/

• Journal of Geography & Natural Disasters

- **Objective:** Geography is the study of earth and its land and water features, inhabitants and phenomena. Geography has been called "the world discipline". Geography is divided into two main branches-Human



- **Website**: http://www.omicsgroup.org/journals/jgndhome.php

• Disaster Health

Objective: Disaster Health focuses on the intersection of disaster mental and behavioral health and disaster public health. As a rapidpublication, peer-reviewed scientific journal, Disaster Health prioritizes the publication of well-designed and well-executed studies, around the globe, across the complete spectrum of natural, human-generated and hybrid disasters as well as humanitarian crises and complex emergencies (including exposure to terrorism and military conflicts). Disaster Health seeks manuscripts that contain strong research designs and demonstrate the effectiveness and efficacy of programs and interventions. Disaster Health examines the linkage between exposure to physical forces of harm in a disaster and the unique "signature" of mental and physical health impact. Disaster Health solicits articles that also focus on disaster responders, including dimensions of personal, team and organizational preparedness and execution of disaster response duties. Regarding individual response to disaster threat and impact, Disaster Health examines the full range of human response from personal mental health, wellness and resilience to psychological distress and psychopathology. At the community level, Disaster Health explores community disaster

prevention, risk reduction and resilience. Across all themes, Disaster Health champions the evolution of the scientific evidence base.

- Website: http://www.landesbioscience.com/journals/disasterhealth/

• International Journal of Disaster Risk Reduction (IJDRR)

- Objective: The International Journal of Disaster Risk Reduction (IJDRR) is the journal for researchers, policymakers and practitioners across diverse disciplines: Earth Sciences in its entirety; Environmental Sciences; Civil Engineering; Urban Studies; Geography; and Sociology. The International Journal of Disaster Risk Reduction (IJDRR) publishes fundamental and applied research, critical reviews, policy papers and case studies focusing on multidisciplinary research aiming to reduce the impact of natural and technological disasters. The International Journal of Disaster Risk Reduction (IJDRR) stimulates exchange of ideas and knowledge transfer on disaster research, mitigation and risk reduction at all geographic scales: local, national and international. Key topics: Multifaceted disaster and cascade disasters . The spatial and temporal monitoring, analysis and zoning of regional hazard risk. The development of disaster risk reduction strategies and techniques. Discussion and development of effective warning and educational systems for risk resilience at all levels. Climate Change and its implications in sudden disasters . The journal particularly encourages papers which approach risk from a multidisciplinary perspective.
- Website:

http://www.elsevier.com/wps/find/journaldescription.cws_home/727506 /description#description

Already listed journals in back issues:

- Journal of Contingencies and Crisis Management http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291468-5973
- Australasian Journal of Disaster and Trauma Studies http://www.massey.ac.nz/~trauma/welcome.shtml
- Jàmbá: Journal of Disaster Risk Studies: http://www.jamba.org.za/index.php/jamba/index
- Georisk: Assessment and Management of Risk for Engineered Systems and Geohazards:

http://www.tandf.co.uk/journals/journal.asp?issn=17499518&linktype=1

- International Journal of Risk Management (IJRM): http://www.serialspublications.com/journals1.asp?jid=583
- International Journal of Safety and Security Engineering: http://journals.witpress.com/jsse.asp
- Global Environmental Change: http://www.elsevier.com/wps/find/journaldescription.cws_home/30425/description#descr iption
- Journal of Homeland Security and Emergency Management: http://www.bepress.com/jhsem/about.html
- Journal of Emergency Management: http://www.pnpco.com/pn06001.html
- International Journal of Disaster Resilience in the Built Environment: http://www.emeraldinsight.com/products/journals/journals.htm?id=IJDRBE
- **Regional Environmental Change:** http://www.springer.com/environment/global+change+-+climate+change/journal/10113
- Natural Hazards Review: http://ascelibrary.org/nho/
- Journal of Risk Analysis and Crisis Response http://www.atlantis-press.com/publications/jracr/index.html
- Environmental Hazards: http://www.earthscan.co.uk/?tabid=37213
- International Journal of Climate Change Strategies and Management (IJCCSM): www.emeraldinsight.com/products/journals/journals.htm?id=ijccsm
- Journal of Natural Disaster Science: http://www.soc.nii.ac.jp/jsnds/contents/jnds/about.html
- **Disasters:** http://www.wiley.com/bw/journal.asp?ref=0361-3666&site=1
- Environmental Hazards: http://www.earthscan.co.uk/?tabid=37213

- Natural Hazards: www.springer.com/earth+sciences+and+geography/hydrogeology/journal/11069
- Mitigation and Adaptation Strategies for Global Environmental Change http://www.springer.com/earth+sciences+and+geography/meteorology+%26+climatolog y/journal/11027
- Extremes http://www.springer.com/statistics/journal/10687
- International Journal of Disaster Resilience in the Built Environment http://www.disaster-resilience.salford.ac.uk/international-journal-of-disaster-resilience
- Journal of Disaster Research http://www.fujipress.jp/JDR/JDR_about.html
- Asian Journal of Environment and Disaster Management (AJEDM) http://rpsonline.com.sg/journals/101-ajedm/ajedm.html
- International Journal of Disaster Risk Science http://www.springer.com/13753
- **Disaster Advances** http://www.disasterjournal.net/
- International Journal of Mass Emergencies & Disasters http://www.ijmed.org/
- International Journal of Disaster Recovery and Business Continuity http://www.sersc.org/journals/IJDRBC/
- **Disaster Prevention and Management** http://www.emeraldinsight.com/products/journals/journals.htm?id=dpm
- **Risk Analysis** http://www.blackwellpublishing.com/journal.asp?ref=0272-4332&site=1
- Journal of Risk Research http://www.tandf.co.uk/journals/journal.asp?issn=13669877&linktype=1
- International Journal of Risk Assessment and Management (IJRAM) http://www.inderscience.com/browse/index.php?journalID=24

6. New Books

Designing Water Disaster Management Policies

Authors: Chennat Gopalakrishnan (Editor) Year: 2015 Publisher: Routledge ISBN: 978-1-13-893079-7

Content: This book represents a landmark effort to probe and analyze the theory and empirics of designing water disaster management policies. The chapters include historical surveys, institutional analysis, econometric investigations, empirical case studies, and conceptual-theoretical discussions to clarify and illuminate the complex policy process. A unique feature of this book is its analysis of the causes and consequences of water disasters and efforts to address them successfully through policy-rich, cross- disciplinary and transnational papers.

Global Volcanic Hazards and Risk

Authors: Susan Loughlin et al. (Editors) Year: 2015 Publisher: Cambridge University Press ISBN: 1107111757

Content: Originally prepared for the United Nations Office for Disaster Risk Reduction, this is the first comprehensive assessment of global volcanic hazards and risk, presenting the state of the art in our understanding of global volcanic activity. It examines our assessment and management capabilities, and considers the preparedness of the global scientific community and government agencies to manage volcanic hazards and risk. Particular attention is paid to volcanic ash, the most frequent and wide-ranging volcanic hazard. Of interest to government officials, the private sector, students and researchers, this book is a key resource for the disaster risk reduction community and for those interested in volcanology and natural hazards. A non-technical summary report is included for policy makers and general interest readers. An open access eBook and additional regional volcanic hazard profiles, with invaluable information on volcanic hazards and risk at the local, national and global scale, are available at www.cambridge.org/volcano.

Hydrometeorological Disasters and Climate Change

Authors: Amarnath Giriraj et al. (Editors) Year: 2015 Publisher: CRC Press ISBN: 0415621321 Content: This volume reflects and informs on bazards and disaster research. It covers a wide

Content: This volume reflects and informs on space-based technologies for hazards and disaster research. It covers a wide range of aspects to take into account, and demonstrates the great potential of space-based technologies in

supplying information in near real-time and in the application of data in detection and early warning. A wealth of case studies on various natural disasters in countries around the world further illustrates the content. For researchers, practitioners, policy-makers and advanced students in disaster or disaster-related disciplines, such as Geoinformation, Earth Sciences, Water and Environmental Sciences, Space Sciences, Disaster Management and Prevention.

Uncertainty and Catastrophe Management: The 2011 Great East Japan Earthquake and Beyond

Authors: Akira Ishikawa (Author, Editor), Atsushi Tsujimoto (Editor) Year: 2015 Publisher: World Scientific Publishing Co ISBN: 9814644951

Content: Natural disasters, instability in the finance and banking sector, widespread social protests, and other crisis situations have increasingly become the focus of public attention. With the growing visibility of such events, accelerated by the rise and proliferation of social media, the study of risk and crisis management in the Internet age is of vital importance. Uncertainty and Catastrophe Management is a clear and comprehensive guide to a variety of crises, and seeks to offer practical advice on how best to avoid them, minimize loss and damage once they have occurred, and how best to recover from these situations. The book examines 104 cases that run the gamut from natural disasters such as the 2011 Tohoku earthquake and tsunami, to social movements like the Ukrainian protests in 2013, from the Syrian Electronic Army's cyber-attacks, to the reputational damage to firms in the wake of a corporate scandal. This book is a revised and expanded edition of Akira Ishikawa and Atsushi Tsujimoto's book, Risk and Crisis Management: 101 Cases, and explores a number of recent events. It draws on the expertise of the contributors to the volume to create a well-rounded book that will benefit professionals, academics, and the general public alike. In particular, safety professionals, public management professionals, CEOs, CIOs, students and researchers will appreciate its pragmatic approach to dealing with and recovering from crises in the interest of long-term survival and sustainability.

Strategic Disaster Risk Management in Asia

Authors: Huong Ha et al. (Editors) Year: 2015 Publisher: Springer ISBN: 8132223721

Content: his book presents strategies for managing disasters and reducing risks in Asian countries. Given the dynamic changes in the natural environment as well as the patterns of land use and management, the growing populations of the developing nations in Asia, migration patterns, and other social-cultural aspects, the impacts of disasters have increased manifold in Asian countries.

Against this backdrop, the book examines disaster management issues such as disaster preparedness, post-disaster reconstruction, peace, development and corruption. The views of different groups of stakeholders are incorporated in the discussion to ensure a comprehensive analysis of and findings on the governance process, as well as best practices in pre- and post-disaster management. The book also includes chapters focusing on aspects often overlooked in the context of disaster management, such as the need to invest in public education to improve public awareness, and approaches to supporting the disabled, the vulnerable and the elderly from disaster risks. In closing, the book presents research on disaster management methods employed by different countries in the Asian region.

Disaster Vulnerability, Hazards and Resilience: Perspectives from Florida

Authors: Fernando I. Rivera (Author), Naim Kapucu (Author) Year: 2015 Publisher: Springer

ISBN: 331916452X

Content: This monograph provides valuable lessons in building disaster resilience for rural communities and beyond. With a focus on Florida, the authors present a comprehensive review of the current debates surrounding the study of resilience, from federal frameworks, state plans and local initiatives. They also review evaluation tools and feature first-hand accounts of county emergency managers as well as non-profit and community groups on key issues, including perspectives on vulnerable groups such as the elderly, children and farm workers. The primary audiences of this book are scholars in emergency and crisis management, planning and policy, disaster response and recovery, disaster sociology and environmental management and policy. This book can also be used as a textbook in graduate and advanced undergraduate programs / courses on disaster management, disaster studies, emergency and crisis management, environmental policy and management and public policy and administration.

Rethinking Disaster Recovery: A Hurricane Katrina Retrospective

Authors: Jeannie Haubert et al. (Editors) Year: 2015 Publisher: Lexington Books ISBN: 1498501206

Content: Rethinking Disaster Recovery focuses attention on the social inequalities that existed on the Gulf Coast before Hurricane Katrina and how they have been magnified or altered since the storm. With a focus on social axes of power such as gender, sexuality, race, and class, this book tells new and personalized stories of recovery that help to deepen our understanding of the

disaster. Specifically, the volume examines ways in which gender and sexuality issues have been largely ignored in the emerging post-Katrina literature. The voices of young racial and ethnic minorities growing up in post-Katrina New Orleans also rise to the surface as they discuss their outlook on future employment. Environmental inequities and the slow pace of recovery for many parts of the city are revealed through narrative accounts from volunteers helping to rebuild. Scholars, who were themselves impacted, tell personal stories of trauma, displacement, and recovery as they connect their biographies to a larger social context. These insights into the day-to-day lives of survivors over the past ten years help illuminate the complex disaster recovery process and provide key lessons for all-too-likely future disasters. How do experiences of recovery vary along several axes of difference? Why are some able to recover quickly while others struggle? What is it like to live in a city recovering from catastrophe and what are the prospects for the future? Through on-the-ground observation and keen sociological analysis, Rethinking Disaster Recovery answers some of these questions and suggests interesting new avenues for research.

Natural Disaster Management in the Asia-Pacific: Policy and Governance

Authors: Caroline Brassard et al. (Editors) Year: 2015 Publisher: Springer

ISBN: 4431551565

Content: The Asia-Pacific region is one of the most vulnerable to a variety of natural and manmade hazards. This edited book productively brings together scholars and senior public officials having direct experience in dealing with or researching on recent major natural disasters in the Asia-Pacific. The chapters focus on disaster preparedness and management, including pre-event planning and mitigation, crisis leadership and emergency response, and disaster recovery. Specific events discussed in this book include a broad spectrum of disasters such as tropical storms and typhoons in the Philippines; earthquakes in China; tsunamis in Indonesia, Japan, and Maldives; and bushfires in Australia. The book aims to generate discussions about improved risk reduction strategies throughout the region. It seeks to provide a comparative perspective across countries to draw lessons from three perspectives: public policy, humanitarian systems, and community engagement.

National Economic Impact Analysis of Terrorist Attacks and Natural Disasters

Authors: Harry W. Richardson et al. (Editors) Year: 2015 Publisher: Edward Elgar Pub

ISBN: 1783475854

Content: A unique contribution towards mitigation is offered in this book, which develops a national economic impact model to estimate the effects of simulated terrorist attacks and real world natural disasters on individual US States and economic sectors. The model, NIEMO (The National Interstate Economic Model),

examines interindustry relationships and interregional trade, and presents a multiregional input-output analysis of the economic impact resulting from these events. Students and researchers in regional science, planning, economics and geography will find this book offers an informative perspective. Practitioners, policy makers and general readers interested in public policy issues will appreciate the insights.

Tohoku Recovery: Challenges, Potentials and Future

Authors: Rajib Shaw (Editor) Year: 2015 Publisher: Springer ISBN: 4431551352

Content: The March 11 disaster in 2011, known as the Great East Japan Earthquake and Tsunami, caused extensive damage in various sectors. Through the recovery process, special lessons are being learned and applied in the affected region. This book attempts to draw lessons from different issues and sectors such as policy perspectives (both national and local), the role of international NGOs, fishing industries and other livelihoods, temporary housing, health, heritage, and lesson sharing. The book outlines the need and approach for sharing the lessons with wider communities in developing those lessons. Based on intensive field research, the book also provides some key lessons from community-based recovery in the affected regions of Iwate, Miyagi, and Fukushima prefectures. This book has 13 chapters in two parts. The first part of the book, with seven chapters, provides a set of lessons from diverse sectors. The second part, with six chapters, provides case studies from different areas of Tohoku. Six specific issues are addressed in part 1: the role of international agencies, livelihood (namely, fisheries) recovery, temporary housing, health, heritage, and lesson sharing. Part 2 has six case studies from different areas of the Tohoku region, including Fukushima. The primary target groups for this book are students and researchers in the fields of environment, disaster risk reduction, and recovery studies. The book provides them with a good idea of the current research trends in the field and furnishes basic knowledge about these vital topics. Another target group comprises practitioners and policy makers, who will be able to apply the knowledge collected here to policy and decision-making.

Hazards, Risks and, Disasters in Society

Authors: Andrew E. Collins et al. (Editors) Year: 2014 Publisher: Academic Press ISBN: 0123964512 Content: Hazards Risks and Disaster

Content: Hazards, Risks, and Disasters in Society provides analyses of environmentally related catastrophes within society in historical, political and economic contexts. Personal and corporate culture mediates how people may become more vulnerable or resilient to hazard exposure. Societies that strengthen themselves, or are strengthened, mitigate decline and resultant

further exposure to what are largely human induced risks of environmental. social and economic degradation. This book outlines why it is important to explore in more depth the relationships between environmental hazards, risk and disasters in society. It presents challenges presented by mainstream and non-mainstream approaches to the human side of disaster studies. By hazard categories this book includes critical processes and outcomes that significantly disrupt human wellbeing over brief or long time-frames. Whilst hazards, risks and disasters impact society, individuals, groups, institutions and organisations offset the effects by becoming strong, healthy, resilient, caring and creative. Innovations can arise from social organisation in times of crisis. This volume includes much of use to practitioners and policy makers needing to address both prevention and response activities. Notably, as people better engage prevalent hazards and risks they exercise a process that has become known as disaster risk reduction (DRR). In a context of climatic risks this is also indicative of climate change adaptation (CCA). Ultimately it represents the quest for development of sustainable environmental and societal futures. Throughout the book cases studies are derived from the world of hazards risks and disasters in society. Includes sections on prevention of and response to hazards, risks and disasters

Provides case studies of prominent societal challenges of hazards, risks and disasters Innovative approaches to dealing with disaster drawing from multiple disciplines and sectors

Emergency Management and Social Intelligence: A Comprehensive All-Hazards Approach

Authors: Charna R. Epstein et al. (Editors) Year: 2014 Publisher: CRC Press ISBN: 1439847975

Content: For effective preparedness, emergency managers must comprehend how a disaster impacts not only the physical infrastructure of the affected community but also the population. They must understand how the people interact with one another, how they interact with government, and how they react to the disaster event. In other words, they must have social intelligence. Emergency Management and Social Intelligence: A Comprehensive All-Hazards Approach provides a comprehensive framework for understanding a community before, during, and after a disaster in order to best mitigate the effect of a disaster on its people. After an overview of what we've learned and what we haven't learned from past events, the book provides detailed case studies on a spectrum of disasters spanning a century, including hurricanes, floods, earthquakes, and oil spills. This context provides a framework for understanding a host of essential issues, including: The interplay between how people perceive people in their communities, the public policy which results from socially constructed views, and the issues which surface during and after disaster as a result The base logic of Social Intelligence which is rooted in the U.S. national security and intelligence apparatus. The application of the intelligence cycle in emergency management and how to develop and understand situational

awareness Baseline data points applicable to any community or jurisdiction and how they can be woven together to build on existing jurisdictional competence and real-time situational awareness How geographic information systems (GISs) are used in emergency management, along with their limitations and the different software programs available Modeling for disasters and how this helps the emergency management community plan for and respond to disasters How emergency managers can use social intelligence to build resiliency at the local level and harness preexisting community strength before, during, and after a disaster. The insight presented in this volume supplies emergency managers, policy makers, and elected officials with a powerful blueprint for implementing social intelligence in any community or organization, maximizing the effectiveness of disaster recovery efforts. Equally important, this volume supplies emergency managers, municipalities, government organizations, and private sector entities with a framework to understand and identify social and economic fault lines in communities.

Geographic Information Systems (GIS) for Disaster Management

Authors: Brian Tomaszewski

Year: 2014

Publisher: CRC Press

ISBN: 1482211688

Content: Geographic Information Systems (GIS) provide essential disaster management decision support and analytical capabilities. As such, homeland security professionals would greatly benefit from an interdisciplinary understanding of GIS and how GIS relates to disaster management, policy, and practice. Assuming no prior knowledge in GIS and/or disaster management, Geographic Information Systems (GIS) for Disaster Management guides readers through the basics of GIS as it applies to disaster management practice. Using a hands-on approach grounded in relevant GIS and disaster management theory and practice, this textbook provides coverage of the basics of GIS. It examines what GIS can and can't do, GIS data formats (vector, raster, imagery), and basic GIS functions, including analysis, map production/cartography, and data modeling. It presents a series of real-life case studies that illustrate the GIS concepts discussed in each chapter. These case studies supply readers with an understanding of the applicability of GIS to the full disaster management cycle. Providing equal treatment to each disaster management cycle phase, the book supplies disaster management practitioners and students with coverage of the latest developments in GIS for disaster management and emerging trends. It takes a learning-by-examples approach to help readers apply what they have learned from the examples and disaster management scenarios to their specific situations. The book illustrates how GIS technology can help disaster management professionals, public policy makers, and decision-makers at the town, county, state, federal, and international levels. Offering software-neutral best practices, this book is suitable for use in undergraduate- or graduate-level disaster management courses. Offering extensive career advice on GIS for disaster management from working professionals, the book also includes a GIS

Coastal and Marine Hazards, Risks, and Disasters

Authors: Jean Ellis et al. (Editors) Year: 2014 Publisher: Elsevier ISBN: 0123964830

Content: Sea and Ocean Hazards, Risks and Disasters provides a scientific approach to those hazards and disasters related to the Earth's coasts and oceans. This is the first book to integrate scientific, social, and economic issues related to disasters such as hazard identification, risk analysis, and planning, relevant hazard process mechanics, discussions of preparedness, response, and recovery, and the economics of loss and remediation. Throughout the book cases studies are presented of historically relevant hazards and disasters as well as the many recent catastrophes. Contains contributions from experts in the field selected by a world-renowned editorial board Cutting-edge discussion of natural hazard topics that affect the lives and livelihoods of millions of humans worldwide Numerous full-color tables, GIS maps, diagrams, illustrations, and photographs of hazardous processes in action will be included

Volcanic Hazards, Risks and Disasters

Authors: Paolo Papale (Editor), John F. Shroder (Editor) Year: 2014 Publisher: Elsevier ISBN: 0123964539 Content: Volcanic Hazards, Risks, and Disasters provides you with the latest

scientific developments in volcano and volcanic research, including causality, impacts, preparedness, risk analysis, planning, response, recovery, and the economics of loss and remediation. It takes a geoscientific approach to the topic while integrating the social and economic issues related to volcanoes and volcanic hazards and disasters. Throughout the book case studies are presented of historically relevant volcanic and seismic hazards and disasters as well as recent catastrophes, such as Chile's Puyehue volcano eruption in June 2011. Puts the expertise of top volcanologists, seismologists, geologists, and geophysicists selected by a world-renowned editorial board at your fingertips Presents you with the latest research-including case studies of prominent volcanoes and volcanic hazards and disasters-on causality, economic impacts, fatality rates, and earthquake preparedness and mitigation Numerous tables, maps, diagrams, illustrations, photographs, and video captures of hazardous processes support you in grasping key concepts

Authors: Paolo Paron, Giuliano Di Baldassarre, John F. Shroder (Editors) Year: 2014 Publisher: Elsevier ISBN: 0123948460

Content: *Hydro-Meteorological Hazards, Risks, and Disasters* provides an integrated look at major atmospheric disasters that have had and continue to have major implications for many of the world's people, such as floods and droughts. This volume takes a geoscientific approach to the topic, while also covering current thinking about some directly relevant social scientific issues that can affect lives and property. *Hydro-Meteorological Hazards, Risks, and Disasters* also contains new insights about how climate change affects hazardous processes. For the first time, information on the many diverse topics relevant to professionals is aggregated into one volume. Contains contributions from experts in the field selected by a world-renowned editorial board Cutting-edge discussion of natural hazard topics that affect the lives and livelihoods of millions of humans worldwide Numerous full-color tables, GIS maps, diagrams, illustrations, and photographs of hazardous processes in action

Long-Term Community Recovery from Natural Disasters

Authors: Lucy A. Arendt et al. (Editors) Year: 2014

Publisher: CRC Press

ISBN: 1466593024

Content: Today, governmental efforts at long-term community recovery from a natural disaster consist primarily of rebuilding the physical artifact of the reestablishing entails vital community community. This services and infrastructure and creating housing to replace that which has been lost. While restoring the built environment of a disaster area is essential, alone it is not sufficient to achieve complete recovery. Long-Term Community Recovery from Natural Disasters presents what the authors have learned over two decades from more than two dozen community disasters in and outside the United States. Based on their experiences, they provide a set of practical, cost-effective steps for both reducing the consequences of extreme natural hazard events on communities and for facilitating community recovery. To achieve long-term recovery, it is essential that we understand how communities develop and/or decay in the absence of an extreme natural hazard event. Then, by recognizing how these events disrupt "normal" development and change, we can determine which parts of the community have to become reestablished or made more functional so that the community can achieve long-term viability. The authors explain how this appreciation of community dynamics and the consequences of extreme natural hazard events enables us to identify those critical points for policy intervention at appropriate levels of government. The combined practical and philosophical insight presented in this book will be valuable not only to policy makers but to scholars as well.

Natural Disasters and Climate Change: An Economic Perspective

Authors: Stéphane Hallegatte Year: 2014 Publisher: Springer ISBN: 3319089323

Content: This book explores economic concepts related to disaster losses, describes mechanisms that determine the economic consequences of a disaster, and reviews methodologies for making decisions regarding risk management and adaptation. The author addresses the need for better understanding of the consequences of disasters and reviews and analyzes three scientific debates on linkage between disaster risk management and adaptation to climate change. The first involves the existence and magnitude of long-term economic impact of natural disasters on development. The second is the disagreement over whether any development is the proper solution to high vulnerability to disaster risk. The third debate involves the difficulty of drawing connections between natural disasters and climate change and the challenge in managing them through an integrated strategy. The introduction describes economic views of disaster, including direct and indirect costs, output and welfare losses, and use of econometric tools to measure losses. The next section defines disaster risk, delineates between "good" and "bad" risk-taking, and discusses a pathway to balanced growth. A section entitled "Trends in Hazards and the Role of Climate Change" sets scenarios for climate change analysis, discusses statistical and physical models for downscaling global climate scenarios to extreme event scenarios, and considers how to consider extremes of hot and cold, storms, wind, drought and flood. Another section analyzes case studies on hurricanes and the US coastline; sea-level rises and storm surge in Copenhagen; and heavy precipitation in Mumbai. A section on Methodologies for disaster risk management includes a study on cost-benefit analysis of coastal protections in New Orleans, and one on early-warning systems in developing countries. The next section outlines decision-making in disaster risk management, including robust decision-making, No-regret and No-risk strategies; and strategies that reduce time horizons for decision-making. Among the conclusions is the assertion that risk management policies must recognize the benefits of risktaking and avoid suppressing it entirely. The main message is that a combination of disaster-risk-reduction, resilience-building and adaptation policies can yield large potential gains and synergies.

Towards a Territorial Multi-Disaster Buildings' Resistance Certification

Authors: Daniele Fabrizio Bignami Year: 2014 Publisher: Springer ISBN: 884705222X

Content: Disaster risk is increasing, not only in number of events, but also in incurred losses. Such increases are being driven also by the growing exposure of assets, due to the rapid urban growth, because vulnerability decreases as countries develop, but not enough to compensate. The situation will be more and

more critical, due to the growth of the amount of the building stock. Thus we need new initiatives to foster upgrading of existing building and enhancement of land planning strategies. "Safe Home" scheme is aimed at increasing urban safety requirements against hazards under an advanced labeling approach. It provides a quantitative evaluation of building performance through an objective, reproducible approach, assessing risks at a land, urban and building scale. Aim of this rating system is to result in useful information to different users, like land planning decision makers, owners, purchasers, tenants or property and real estate managers.

Extreme Natural Hazards, Disaster Risks and Societal Implications

Authors (Eds.): Alik Ismail-Zadeh et al.

Year: 2014

Publisher: Cambridge University Press

ISBN: 1107033861

Content: This book presents a unique, interdisciplinary approach to disaster risk combining cutting-edge natural science and social science research. methodologies. Bringing together leading scientists, policy makers and practitioners from around the world, it presents the risks of global hazards such as volcanoes, seismic events, landslides, hurricanes, precipitation floods and space weather, and provides real-world hazard case studies from Latin America, the Caribbean, Africa, the Middle East, Asia and the Pacific region. Avoiding complex mathematics, the authors provide insight into topics such as the vulnerability of society, disaster risk reduction policy, relations between disaster policy and climate change, adaptation to hazards, and (re)insurance approaches to extreme events. This is a key resource for academic researchers and graduate students in a wide range of disciplines linked to hazard and risk studies, including geophysics, volcanology, hydrology, atmospheric science, geomorphology, oceanography and remote sensing, and for professionals and policy makers working in disaster prevention and mitigation.

Assessment of Vulnerability to Natural Hazards: A European Perspective

Authors (Eds.): Jörn Birkmann, Stefan Kienberger, David Alexander Year: 2014

Publisher: Elsevier

ISNB: 0124105289

Content: Assessment of Vulnerability to Natural Hazards covers the vulnerability of human and environmental systems to climate change and eight natural hazards: earthquakes, floods, landslides, avalanches, forest fires, drought, coastal erosion, and heat waves. This book is an important contribution to the field, clarifying terms and investigating the nature of vulnerability to hazards in general and in various specific European contexts. In addition, this book helps improve understanding of vulnerability and gives thorough methodologies for investigating situations in which people and their environments are vulnerable to

hazards. With case studies taken from across Europe, the underlying theoretical frame is transferrable to other geographical contexts, making the content relevant worldwide. Provides a framework of theory and methodology designed to help researchers and practitioners understand the phenomenon of vulnerability to natural hazards and disasters and to climate change. Contains case studies that illustrate how to apply the methodology in different ways to diverse hazards in varied settings (rural, urban, coastal, mountain, and more). Describes how to validate the results of methodology application in different situations and how to respond to the needs of diverse groups of stakeholders represented by the public and private sectors, civil society, researchers, and academics

Heads or Tails: Financial Disaster, Risk Management and Survival Strategy in the World of Extreme Risk

Authors: Evgueni Ivantsov Year: 2014 Publisher: Gower Pub Co ISBN: 1409460738

Content: In the wake of the global financial crisis, Heads or Tails answers the question: what changes should financial institutions undergo to ensure reliable protection against extreme risks? Recent massive failures among large and respected financial institutions, clearly demonstrate that contemporary risk management and regulation fail to provide adequate responses to the challenges set by extreme risks. Dr Evqueni Ivantsov combines analysis of the nature of extreme risk (so-called tail risk), risk management practices and practical solutions to build a robust, enterprise-wide, extreme risk management framework which includes three lines of defence, ranging from strategic to tactical, designed to help address the tail risk during different stages of its development. The author also discusses: Why modern 'sophisticated' risk management frameworks, strong capitalisation and liquidity do not prevent banks from failure in the face of systemic crisis; What it means to build an effective defence against systemic and catastrophic losses; What risk architecture should look like to ensure that extreme risk events are identified early and efficiently mitigated; How modern management practices, regulation and risk and business culture need to change to guarantee sustainability. While the context of Dr Ivantsov's writing is financial services, the book contains an important message for specialists from any industries exposed to the extreme risks (oil/gas, energy, mining, chemical productions, transportation, etc.). Until the shortcomings of current risk management and regulation are resolved, financial services and other at risk industries will repeat the painful mistakes of the past, over and over again.

Risk - A Multidisciplinary Introduction

Authors: Claudia Klüppelberg, Daniel Straub and Isabell M. Welpe Year: 2014 Publisher: Springer ISBN: B00IPA444U

Content: This is a unique book addressing the integration of risk methodology from various fields. It will stimulate intellectual debate and communication across disciplines, promote better risk management practices and contribute to the development of risk management methodologies. Individual chapters explain fundamental risk models and measurement, and address risk and security issues from diverse areas such as finance and insurance, the health sciences, life sciences, engineering and information science. Integrated Risk Sciences is an emerging discipline that considers risks in different fields, aiming at a common language, and at sharing and improving methods developed in different fields. Readers should have a Bachelor degree and have taken at least one basic university course in statistics and probability. The main goal of the book is to provide basic knowledge on risk and security in a common language; the authors have taken particular care to ensure that all content can readily be understood by doctoral students and researchers across disciplines. Each chapter provides simple case studies and examples, open research questions and discussion points, and a selected bibliography inviting readers to further study.

An Introduction to Statistical Modeling of Extreme Values

Authors: Stuart Coles Year: 2014 Publisher: Springer ISBN: 1849968748

Content: Directly oriented towards real practical application, this book develops both the basic theoretical framework of extreme value models and the statistical inferential techniques for using these models in practice. Intended for statisticians and non-statisticians alike, the theoretical treatment is elementary, with heuristics often replacing detailed mathematical proof. Most aspects of extreme modeling techniques are covered, including historical techniques (still widely used) and contemporary techniques based on point process models. A wide range of worked examples, using genuine datasets, illustrate the various modeling procedures and a concluding chapter provides a brief introduction to a number of more advanced topics, including Bayesian inference and spatial extremes. All the computations are carried out using S-PLUS, and the corresponding datasets and functions are available via the Internet for readers to recreate examples for themselves. An essential reference for students and researchers in statistics and disciplines such as engineering, finance and environmental science, this book will also appeal to practitioners looking for practical help in solving real problems. Stuart Coles is Reader in Statistics at the University of Bristol, UK, having previously lectured at the universities of Nottingham and Lancaster. In 1992 he was the first recipient of the Royal Statistical Society's research prize. He has published widely in the statistical literature, principally in the area of extreme value modeling.

Extreme Financial Risks and Asset Allocation

Authors: Olivier Le Courtois and Christian Walter Year: 2014

Content: Each financial crisis calls for - by its novelty and the mechanisms it shares with preceding crises - appropriate means to analyze financial risks. In Extreme Financial Risks and Asset Allocation, the authors present in an accessible and timely manner the concepts, methods, and techniques that are essential for an understanding of these risks in an environment where asset prices are subject to sudden, rough, and unpredictable changes. These phenomena, mathematically known as "jumps", play an important role in practice. Their quantitative treatment is generally tricky and is sparsely tackled in similar books. One of the main appeals of this book lies in its approachable and concise presentation of the ad hoc mathematical tools without sacrificing the necessary rigor and precision. This book contains theories and methods which are usually found in highly technical mathematics books or in scattered, often very recent, research articles. It is a remarkable pedagogical work that makes these difficult results accessible to a large readership. Researchers, Masters and PhD students, and financial engineers alike will find this book highly useful.

Climate Change and Flood Risk Management: Adaptation and Extreme Events at the Local Level

Authors: E. Carina H. Keskitalo (eds.) Year: 2014 Publisher: Edward Elgar Pub ISBN: 1781006660

Content: Climate Change and Flood Risk Management discusses and problematises the integration of adaptation to climate change in flood risk management. The book explores adaptation to climate change in relation to flood risk events in advanced industrial states. It provides examples of how flood risk management, disaster and emergency management, and adaptation to climate change may intersect in a number of European and Canadian cases. Taken together, the studies show that integration of adaptation in flood risk and emergency management may differ strongly - not only with risk, but with a number of institutional and contextual factors, including capacities and priorities in the specific municipal cases and within a national and wider context. The book will be relevant to researchers involved with adaptation to climate change and those involved with comprehensive planning in relation to it. It will also be of interest to academics within the fields of environmental studies and the environmentally-oriented social sciences. Contributors: J. Åkermark, E.C.H. Keskitalo, M. Massie, M.G. Reed, P. Scholten, D. Shrubsole, M. Turunen, J. Vola, G. Vulturius, T. Vuojala-Magga

Routledge Handbook of the Economics of Climate Change Adaptation

Authors: Anil Markandya, Ibon Galarraga and Elisa Sainz de Murieta Year: 2014 Publisher: Routledge

ISBN: 0415633117

Content: Climate change is one of the greatest challenges facing human kind owing to the great uncertainty regarding future impacts, which affect all regions and many ecosystems. Many publications deal with economic issues relating to mitigation policies, but the economics of adaptation to climate change has received comparatively little attention. However, this area is critical and a central pillar of any adaptation strategy or plan and is the economic dimension, which therefore merits the increase in attention it is receiving. This book deals with the difficulties that face the economics of adaptation. Critical issues include: uncertainty; baselines; reversibility, flexibility and adaptive management; distributional impacts; discount rates and time horizons; mixing monetary and non-monetary evaluations and limits to the use of cost-benefit analysis; economy-wide impacts and cross-sectoral linkages. All of these are addressed in the book from the perspective of economics of adaptation. Other dimensions of adaptation are also included, such as the role of low- and middle-income countries, technology and the impacts of extreme events. This timely book will prove essential reading for international researchers and policy makers in the fields of natural resources, environmental economics and climate change.

Long-Term Governance for Social-Ecological Change (Routledge Research in Environmental Politics)

Authors: Bernd Siebenhüner, Marlen Arnold, Klaus Eisenack, Klaus H. Jacob (Editors) Year: 2013 Publisher: Routledge ISBN: 0415633524

Measuring Vulnerability to Natural Hazards: Towards Disaster Resilient Societies (2nd Edition)

Authors: Jörn Birkmann (Editor) Year: 2013 Publisher: Springer ISBN: 9280812025

Managing Adaptation to Climate Risk: Beyond Fragmented Responses

Authors: Phil O'Keefe, Geoff O'Brien (Authors) Year: 2013 Publisher: Routledge ISBN: 0415600944

Managing Extreme Climate Change Risks through Insurance

Authors: W. J. Wouter Botzen (Author) Year: 2013 Publisher: Cambridge University Press ISBN: 1107033276

Extreme Events and Natural Hazards: The Complexity Perspective (Geophysical Monograph Series)

Authors: A. Surjalal Sharma, Armin Bunde, Vijay P. Dimri, Daniel N. Baker (Editors) Year: 2013 Publisher: American Geophysical Union ASIN: B00CV3VBIE

Disaster Resiliency: Interdisciplinary Perspectives (Routledge Research in Public Administration and Public Policy)

Authors: Naim Kapucu, Christopher V. Hawkins, Fernando I. Rivera Year: 2013 Publisher: Springer

The Economic Impacts of Natural Disasters [Hardcover]

Authors: Debarati Guha-Sapir, Indhira Santos, Alexandre Borde (Editors) Year: 2013 Publisher: Oxford University Press ISBN: 0199841934

Encyclopedia of Natural Hazards (Encyclopedia of Earth Sciences Series)

Authors: Pedro Basabe, Tom Beer, Norm Catto, Viacheslav Gusiakov, Bill McGuire, H. Jay Melosh, Farrokh Nadim, Philipp Schmidt-Thomé, Paul Slovic, Peter T. Bobrowsky Year: 2013 Publisher: Springer ISBN: 9400702639

Integrated Catastrophe Risk Modelling: Supporting Policy Processes (Advances in Natural and Technological Hazards Research)

Authors: A. Amendola, T. Ermolieva, J. Linnerooth-bayer, R. Mechler (Editors) Year: 2013 Publisher: Springer ISBN: 9400722257

Risk and Uncertainty Assessment for Natural Hazards

Authors: Jonathan Rougier, Steve Sparks, Lisa Hill (Editors) Year: 2013 Publisher: Cambridge University Press ISBN: 1107006198

Floods in a Changing Climate: Risk Management (Advances in Natural and Technological Hazards Research)

Authors: Slobodan P. Simonović Year: 2013 Publisher: Cambridge University ISBN: 1107018749

Community Disaster Vulnerability: Theory, Research, and Practice

Authors: Michael J. Zakour, David F. Gillespie Year: 2013 Publisher: Springer ISBN: 978-1-4614-5736-7

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Education and Natural Disasters

Authors: David Smawfield (Editor) Year: 2013 Publisher: Continuum ISBN: 1441199918

Natural Disasters: Prevention, Risk Factors and Management

Authors: Biljana Raskovic, Svetomir Mrdja (Editors) Year: 2013 Publisher: Nova Science Pub Inc ISBN: 1622576764

Environmental Hazards: Assessing Risk and Reducing Disaster

Authors: Keith Smith (Author) Year: 2013 Publisher: Routledge (6th Edition) ISBN: 0415681057

Flash Floods: Forecasting and Warning

Authors: Kevin Sene (Author) Year: 2013 Publisher: Springer ISBN: 940075163X

7. Selected Article References¹

- Joel C. Gill, Bruce D. Malamud (2014). Reviewing and visualizing the interactions of natural hazards. Reviews of Geophysics, 2014, 52(4): 680-722. DOI: 10.1002/2013RG000445.
- Xiaodong Ming, Wei Xu, Ying Li, Juan Du, Baoyin Liu, and Peijun Shi (2015). Quantitative multi-hazard risk assessment with vulnerability surface and hazard joint return period. Stochastic Environmental Research and Risk Assessment, 29(1): 35-44.
- Collins, E. Andrew (2015) Beyond Experiential Learning in Disaster and Development Communication. In: Egner H. et al.: Learning and Calamities: Practices, Interpretations, Patterns. Routledge, New York.
- Cruz, A. M., Y. Kajitani, and H. Tatano (2014) Natech disaster risk reduction: Can integrated risk governance help? Invited book chapter in: Risk governance. The articulation of hazard, politics and ecology. U. Fra. Paleo (Ed.), Springer.
- Cruz, A. M. (2014). Managing infrastructure, environment and disaster risk. Invited book chapter in: Disaster Management: International lessons in risk reduction, response and recovery. Alejandro López-Carresi, Maureen Fordham, Ben Wisner, Ilan Kelman and JC Gaillard (Eds.), Earthscan, Routledge, 352 p.
- Herrnegger, H. H. P. Nachtnebel, and K. Schulz (2014). From runoff to rainfall: inverse rainfall–runoff modelling in a high temporal resolution. Hydrol. Earth Syst. Sci. Discuss., 11, 13259–13309, doi: 10.5194/hessd-11-13259-2014
- Hochrainer-Stigler, S., Mechler, R., Pflug, G. and Williges, K. (2014). Funding Public Adaptation to Climate-Related Disasters. Estimates for a Global Fund. Global Environmental Change. http://dx.doi.org/10.1016/j.gloenvcha.2014.01.011
- Jing-Li Fan, Qiao-Mei Liang, Xiao-Jie Liang, Hirokazu Tatano, Yoshio Kajitani, Yi-Ming Wei (2014).National vulnerability to extreme climatic events: the cases of electricity disruption in China and Japan. Natural Hazards, Volume 71, Issue 3, pp 1937-1956
- Jongman, B., Hochrainer-Stigler, S., Feyen, L., Aerts, C.J.H., Mechler, R., Botzen W.J., Bouwer, L.M., Pflug, G., Rojas, R., and Ward, P.J. (2014). Increasing Stress on Disaster-risk Finance due to Large Floods. Nature Climate Change 4: 264-268. Doi: 10.1038/nclimate2124

¹ To spread the information of published articles in the last year from IDRiM members to other IDRiM members we now include selected and recent (not older than 1-2 years) publications of IDRiM members (see IDRiM News section for more details).

- Klinga Harald, Philipp Stanzela, Martin Fuchsa and Hans-Peter Nachtnebel (2014). Performance of the COSERO precipitation-runoff model under non-stationary conditions in basins with different climates. Hydrological Sciences Journal. DOI: 10.1080/02626667.2014.959956
- Kloos J. and Renaud, F.G., (2014). Organic cotton production as an adaptation option in north-west Benin. Outlook on Agriculture, 43 85-90
- Linnerooth-Bayer, J. and Hochrainer-Stigler, S. (2014). Financial Instruments for Disaster Risk Management and Climate Change Adaptation. Climatic Change. DOI: 10.1007/s10584-013-1035-6.
- Mechler, R., Bower, L.M., Linnerooth-Bayer, J, Hochrainer-Stigler, S., Arts, C.J.H., Surminski, S. and Williges, J. (2014). Managing Unnatural Disaster Risk from Climate Extremes. Nature Climate Change 4: 235-237. Doi: 10.1038/nclimate2137
- Nourjou Reza, Stephen F. Smith, Michinori Hatayama, Norio Okada, and Pedro Szekely (2014) Dynamic Assignment of Geospatial-Temporal Macro Tasks to Agents under Human Strategic Decisions for Centralized Scheduling in Multi-Agent Systems.International Journal of Machine Learning and Computing, Vol. 4, No. 1.
- Ochi Seiki, Takayuki Ueda and Muneta Yokomatsu (2014). Knowledge and skill for infrastructure technology and economic growth. In: Karlsson C. et al.: Knowledge, Information and Space. Edward Elgar Publishing Limited, Cheltenham.
- Pakdel-Lahiji, N., Hochrainer-Stigler, S., Ghafory-Ashtiany, M. and Sadeghi, M. (2015). Consequences of Financial Vulnerability and Insurance Loading for the Affordability of Earthquake Insurance Systems: Evidence from Iran. The Geneva Papers on Risk and Insurance: Issues and Practices. doi: 10.1057/gpp.2014.35
- Roberts Bryan, Adam Rose, Nathaniel Heatwole, Dan Wei, Misak Avetisyan, Oswin Chan, Isaac Maya (2014) The impact on the US economy of changes in wait times at ports of entry Transport Policy, Volume 35,Pages 162-175
- Samaddar Subhajyoti, Junho Choi, Bijay Anand Misra, Hirokazu Tatano (2015). Insights on social learning and collaborative action plan development for disaster risk reduction: practicing Yonmenkaigi System Method (YSM) in flood-prone Mumbai. Natural Hazards, Volume 75, Issue 2, pp 1531-1554
- Scolobig Anna, Reinhard Mechler, Nadejda Komendantova, Wei Liu, Dagmar Schröter, Anthony Patt (2014) The Co-Production of Scientific Advice and Decision Making Under Uncertainty:Lessons from the 2009 L'Aquila earthquake, Italy. Planet@Risk, Volume 2, Issue 2.
- Shi Peijun & Kasperson Roger. World Atlas of Natural Disaster Risk. Springer and Beijing Normal University. 2015. 368 pages.

- Tatano Hirokazu, Mamoru Yoshida (2014) Integrated Disaster Risk Management from the Perspective of Human Security Engineering. In: Yuzuru Matsuoka and Mamoru Yoshida: Integrated Disaster Risk Management from the Perspective of Human Security Engineering, Springer, Japan, 11-142
- Warner, K. and van der Geest, K. (2013). Loss and damage from climate change: Local-level evidence from nine vulnerable countries. Int. J Global Warming, Vol. 5, No. 4, pp. 367-386.
- Wang Pin, Zhao Zhang, Xiao Song, Yi Chen, Xing Wei, Peijun Shi, Fulu Tao (2014)Temperature variations and rice yields in China: historical contributions and future trends. Climatic Change, Volume 124, Issue 4, pp 777-789
- Wei Xu, Ying Li, Norio Okada, Yukiko Takeuchi, Yoshio Kajitani5 and Peijun Shi (2014). Collaborative modelling-based shelter planning analysis: a case study of the Nagata Elementary School Community in Kobe City, Japan Disasters. Volume 38, Issue 1, pages 125–147
- Wing Ian Sue, Adam Z Rose, Anne M Wein (2015). Economic Consequence Analysis of the ARkStorm Scenario. Natural Hazards Review. DOI: 10.1061/(ASCE)NH.1527-6996.0000173
- Yamori Katsuya (2014). Revisiting the Concept of Tsunami Tendenko: Tsunami Evacuation Behavior in the Great East Japan Earthquake. In: Kawase Hiroshi (eds.): Studies on the 2011 Off the Pacific Coast of Tohoku Earthquake. Springer, Japan, http://dx.doi.org/10.1007/978-4-431-54418-0_5.
- Yokomatsu Muneta, Hiroyuki Wada, Hiroaki Ishiwata, Takeshi Kono, Katsumi Wakigawa: An Economic Growth Model for Disaster Risk Reduction in Developing Countries, the Proceedings of the 2014 IEEE International Conference on Systems, Man and Cybernetics, October 5-8, 2014, San Diego, CA, USA, pp.1584-1591, 2014.
- Zhao Zhang, Pin Wang, Yi Chen, Xiao Song, Xing Wei, Peijun Shi (2014) Global warming over 1960–2009 did increase heat stress and reduce cold stress in the major rice-planting areas across China. European Journal of Agronomy, Volume 59, pp. 49-56.

8. Miscellaneous

Other Newsletters:

- IISD Reporting Services: Free Newsletters and lists for environment and sustainable development issues.
 Website: http://www.iisd.ca/email/subscribe.htm
- The International Emergency Management Society Newsletter (TIEMS) Website: http://www.tiems.info/
- Natural Hazards Group Newsletters: Website: http://www.agu.org/focus_group/NH/about/newsletters/
- **Disaster Research:** DISASTER RESEARCH (DR) is a moderated newsletter for creators and users of information about hazards and disasters. Website: http://www.colorado.edu/hazards/dr/currentdr.html
- Emergency Manager's Weekly Report: Website: http://www.6pinternational.com/news.php?category=Emergency%20Managers%20 Weekly%20Report&
- KatNet-Newsletter: (mostly in German language) Website: http://www.katastrophennetz.de/
- EM-DAT: International Disaster Database Newsletter (CRED) Website: http://www.emdat.be/publications
- DSCRN: Disaster and Social Crisis Research Network Newsletter Website: http://www.dscrn.org/cms/index.php?page=newsletter
- International Institute for Sustainable Development Newsletter: IISD Reporting Services.

Website: Climate Change: http://climate-l.iisd.org/about-the-climate-l-mailing-list/ General Information: http://www.iisd.ca/

- Society of Risk Analysis Newsletter: Website: http://www.sra.org/newsletter.php
- ULC Institute for Risk and Disaster Reduction Newsletter: Website: http://www.ucl.ac.uk/rdr/irdr/newsletter/

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