
International Society for Integrated Disaster Risk Management



IDRiM Newsletter

Issue 11, March 2016



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1. IDRIM NEWS

7th International Conference on Integrated Disaster Risk Management

Disaster and Development: Towards a Risk Aware Society
1 – 4 October 2016
Isfahan-Iran

<http://www.idrim2016.com/Congress/UIPanel/Index>

The 7th Annual Conference of the International Society for Integrated Disaster Risk Management (IDRiM 2016), entitled “Disasters and Development: Towards a Risk Aware Society” with focus on “Natural Hazards and Disasters, Water and Climate Change” will be held in Isfahan, Iran from October 1- 4, 2016. In collaboration with IDRiM, the 2016 conference is organized and hosted by the Iranian Earthquake Engineering Association (IEEA) in collaboration with multiple national and international organizations.

IDRiM 2016 builds on the strength of its predecessor conferences, and features a broad scope of topics and partners. The conference also aims to bring the implementation of the Hyogo Framework for Action forward to be followed by Sendai framework for Disaster Risk Reduction in the next few years. Earthquakes, Floods, Water, Climate change, and their multi-fold linkages with natural hazards, risk and disasters will be discussed in this conference. The conference therefore, intends to reflect how theory and implementation can make a difference to the future of dealing with disasters worldwide.

The 2016 conference focuses on papers and sessions under the main themes including: Resilient Societies, Cities and Infrastructures, Risk Reduction and Sustainable Development, Climate Change and Environment, Risk Governance Frameworks for Disaster Risk Management, Integrated Disaster Risk Management, Economic Loss Estimation, Disaster Insurance, and Disaster Response. Also sub-themes have been selected and will be presented under the main theme headings as follows below. The event has special emphasis on implementation of oriented panel discussions, parallel sessions, and oral/ poster presentations as well as the Young Scientists Session (YSS). The first call for abstracts will be announced in February 2016.

Conference Organization:

The conference will be organized by the Iranian Earthquake Engineering Association (IEEA) and IDRiM Society. The supporting organizations are: Disaster Prevention Research Institute (DPRI) of Kyoto University, Japan Foundation, International Institute of Applied System Analysis (IIASA), International Institute of Earthquake Engineering and Seismology (IIEES), Iran National Science Foundation, Ministry of Energy, Isfahan Governor office, Isfahan University, Isfahan

Technical University, Isfahan Water Resource Management, Shakhsh Pajouh Disaster Research Institute, etc.

Conference Topics:

- 1. Resilient Societies, Cities and Infrastructures** a. Lessons learnt from past disasters b. Resilience criteria of cities and infrastructures c. Resilience modeling
- 2. Risk Reduction and Sustainable Development** a. Social and economic factors b. Creating demand for safety among public c. Building code implementation d. Coping capacity building e. Mitigation strategies and planning f. Urban planning for disasters g. Role of women in disaster preparedness
- 3. Climate Change and Environment** a. Integrating with climate change and development goals b. Energy, water, food and poverty nexus in the face of climate uncertainty c. Water resource management d. Water security and environment e. Modeling environmental change f. Financing in water resource management
- 4. Risk Governance Frameworks for Disaster Risk Management** a. Integrated risk governance b. Role of scientists, government and people for implementation of Sendai c. Risk communication and participatory stakeholder processes
- 5. Integrated Disaster Risk Management: Emerging Tools and Implementation Cases** a. Natural and anthropogenic hazard and risk modeling b. Risk and contingency planning c. Na-Techs and natural hazard threats to critical infrastructure d. Industrialization, land use and technological hazards e. Multi-hazard approaches f. Human loss and casualty estimation
- 6. Economic Loss Estimation and Disaster Insurance** a. Direct economic loss estimation b. Catastrophe risk financing mechanisms c. Fiscal resilience d. Business interruption and supply chain vulnerability
- 7. Disaster Response** a. Role of non-states agencies (NGOs) in disasters b. Role of international agencies and donors c. Centralized top-down disaster response and efficiency d. Monitoring and managing long term impacts of disasters e. How to cope with refugees and displaced persons in disasters f. Emergency and crisis management h. Disaster restoration, revitalization and regrowth

Important Dates:

January 15	Approval of Conference Announcement by Steering Committee
February 15	<ul style="list-style-type: none">• Opening of IDRIM 2016 official website• Call for Abstracts and Submission of Extended Abstracts• Start of Pre-registration,• Special Sessions Proposal
May 1	Nomination of Keynote Lecture by the Conference Steering Committee
May 30	Closing Date for Extended Abstracts
June 30	Notification of Session and Extended Abstract Acceptance
July 15	Announcement of Preliminary Conference Program
August 15	<ul style="list-style-type: none">• Deadline for Early Registration• Deadline for Additional Poster Submissions
September 1	Announcement of Final Conference Program
October 1	Start of the Conference On-site Registration, IDRiM 2016

Conference Venue: Hotel Abbasi, Isfahan, Iran

The Abbasi Hotel is located in Isfahan, Iran. This complex was built at the time of King Sultan Husayn of Safavid about 300 years ago. It was built as a caravansary to provide lodging for passengers. The structure has been renovated since the 1950s by Andre Godard to fight and prevent degradation.

About Iran

Iran, also known as Persia, is a country in Western Asia comprising a land area of 1,648,195 km²; with the second-largest population in the Middle East and the 18th-largest in the world. Iran is the world's 17th most populous country with a population of 78.4 million residents. It has long been of geostrategic importance due to its central location in Eurasia and Western Asia. Iran has been exposed to almost all types of natural hazards, namely earthquakes, floods and droughts and so far has experienced more than 130 strong earthquakes with magnitude of 7.5 or more over the past centuries. In recent decades, 3 major earthquakes of Tabas (1979), Manjil (1990) and Bam (2003) have caused great human, social and property losses stemming from the vulnerability of the built environment and seismically-incompatible urban expansion of the whole country. These events have established turning points toward improving the safety of the country against natural disasters with levels of successfulness in reducing the risk.

About Isfahan

The historical city of Isfahan is one of the most wonderful and picturesque Iranian cities which accommodate many UNESCO registered attractions. Isfahan is the third largest city and the fourth most populated city of Iran. The ancient civilization of the region dates back to 3000 B.C. Due to its geographical location and climate characteristics, it has been given some titles namely "Half of the World", "the Second Paradise" and "Bridge of Turquoise" that signifies one of the most extraordinary collections of architecture and Islamic urban planning and design in harmony with the nature and cultural diversity.

About IEEA

IEEA is a non-profit institution founded in 1993 by a group of Iranian earthquake researchers, faculties and engineers. The main goal of the association is to improve the quality of earthquake engineering and seismology as an important field of study in Iran and provides the students and engineers with required scientific support. IEEA is a national member of the International Association of Earthquake Engineering (IAEE) as well as European Association of Earthquake Engineering (EAEE).

Conference Website: <http://www.idrim2016.com/Congress/UIPanel/Index>

IDRiM Society Website: <http://idrim.org>

2. Other NEWS



Establishment of the Global Alliance of Disaster Research Institutes (GADRI)

We are pleased to inform the establishment of a new international organization of institutes involved in disaster risk research, the “Global Alliance of Disaster Research Institutes (GADRI).” Following the Hyogo Framework for Action (HFA), advances have been made in the application of damage reduction principles, but many challenges remain as seen by the continued increase in disaster losses. The new Sendai Framework for Disaster Risk Reduction 2015-2030 has pointed out the need to better link disaster risk reduction (DRR) objectives with sustainable development and climate change efforts towards a common goal of harmonious living with nature and our planet. The Framework explicitly calls for coordinated efforts by the scientific community to deepen the understanding of disaster risks, promote evidenced-based implementation of disaster risk reduction strategies, and transfer and disseminate scientific knowledge and technologies in support of decision making processes.

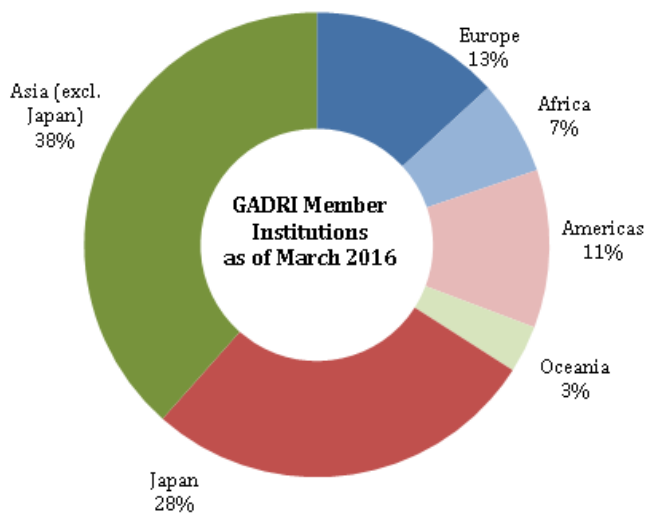
In 2015, GADRI was established as a collaborative platform for discussion, sharing knowledge and promoting networks on topics related to risk reduction and resilience to disasters. Specifically, GADRI pursues the following objectives:

- To establish a global research network
- To provide a research road map, and plans and organization of disaster research groups
- To promote capacity development of disaster research institutes and enhance researcher and student exchange
- To promote exchange and sharing of data and information for scientific research across the globe
- To serve as an advocacy organization to present views in an effort to influence decision-making processes.

GADRI engages in several key activities with its member institutions as follows to reach the above goals. These include:

- Planning and organization of collaborative disaster risk research initiatives
- Formation of international research groups to investigate current global disasters, and implement new research methodologies
- Establishment of an international network for timely communication related to natural disaster research
- Organization of conferences, workshops and meetings
- Dissemination and sharing of information, publications, reports, data, etc.
- Facilitation of rapid reconnaissance field surveys following disasters
- Preparation of GADRI news releases, policy recommendations, news bulletins, research reports, and other publications

GADRI members are institutions with an aim to contribute to the advancement of disaster research, and those working in the field of disaster risk reduction. As of March 2016, GADRI has over 91 member institutions from 20 countries. The figure below shows the distribution of GADRI membership by regions/ continent. Membership is free and GADRI welcomes institutions to join and continue to work together with to accomplish the objectives set out by GADRI.



For more information, please contact:

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 Webpage: www.gadri.net

Global Assessment Report 2016 Published

From the website: “The Global Risks Report 2016 features perspectives from nearly 750 experts on the perceived impact and likelihood of 29 prevalent global risks over a 10-year timeframe. The risks are divided into five categories: economic, environmental, geopolitical, societal and technological.

The report also examines the interconnections among the risks, and through that analysis explores three areas where global risks have the greatest potential to impact society. These are the concept of the “(dis)empowered citizen”, the impact of climate change on food security, and the potential of pandemics to threaten social cohesion.

The report also takes an in-depth look at the how the global security landscape could evolve in the future; sharing the outcomes of a year-long study to examine current trends and possible driving forces for the future of international security.” (Source: <http://www.weforum.org/reports/the-global-risks-report-2016>)

From the Executive Summary:

“*The Global Risks Report 2016* draws attention to ways that global risks could evolve and interact in the next decade. The year 2016 marks a forceful departure from past findings, as the risks about which the *Report* has been warning over the past decade are starting to manifest themselves in new, sometimes unexpected ways and harm people, institutions and economies. Warming climate is likely to raise this year’s temperature to 1° Celsius above the pre-industrial era, 60 million people, equivalent to the world’s 24th largest country and largest number in history, are forcibly displaced, and crimes in cyberspace costs the global economy an estimated US\$445 billion, higher than many economies’ national incomes. In this context, the *Report* calls for action to build resilience – the “resilience imperative” – and identifies practical examples of how it could be done.

Geopolitical concerns remain prominent in the minds of respondents to the Global Risks Perception Survey for the second year in a row. The *Report* therefore delves into the international security landscape and explores what drives this evolution and, in particular, how it could be affected by the Fourth Industrial Revolution and climate change. The three scenarios for possible futures developed in this context inform new ways of building resilience to security threats through public-private collaboration.

The *Report* also steps back and explores how emerging global risks and major trends, such as climate change, the rise of cyber dependence and income disparity are impacting already-strained societies by highlighting three clusters of risks as Risks in Focus. As resilience building is helped by the ability to analyse global risks from the

perspective of specific stakeholders, the *Report* also analyses the significance of global risks to the business community at a regional and country-level.” (Source: <http://reports.weforum.org/global-risks-2016/executive-summary/>)

From the Introduction: “Over the past decade, *The Global Risks Report* has expanded its scope from analysing the interconnected and rapidly evolving nature of global risks to also putting forward actionable solutions and calling for public-private collaboration in strengthening resilience. Now in its 11th edition, the *Report* describes a world in which risks are becoming more imminent and have wide-ranging impact: tensions between countries affect businesses; unresolved, protracted crises have resulted in the largest number of refugees globally since World War II; terrorist attacks take an increasing toll on human lives and stifle economies; droughts occur in California and floods in South Asia; and rapid advances in technologies are coupled with ever-growing cyber fragilities and persistent unemployment and underemployment.

Implications of sweeping digitization (also termed the “Fourth Industrial Revolution”), ranging from transformations that are the result of rising cyber connectivity to the potential effects of innovations on socio-economic equality and global security, remain far from fully understood. At the same time, climate change is unequivocally happening, and there is no turning back time.


The increasing volatility, complexity and ambiguity of the world not only heightens uncertainty around the “which”, “when”, “where” and “who” of addressing global risks, but also clouds the solutions space. We need clear thinking about new levers that will enable a wide range of stakeholders to jointly address global risks, which cannot be dealt with in a centralized way.

Taken together, this calls for a *resilience imperative* – an urgent necessity to find new avenues and more opportunities to mitigate, adapt to and build resilience against global risks and threats through collaboration among different stakeholders.

By putting the resilience imperative at its core, this year’s *Global Risks Report* combines four parts to present an analysis of different aspects of global risks – across both global risks and stakeholders – focused as much on the search for solutions as on the analysis of the risks themselves. The report is structured into 4 parts.

Part 1 analyses the difference in risk perceptions over different time horizons and the perceived interconnections among risks, as visualized in the Global Risks Landscape 2016, all based on the Global Risks Perception Survey, which combines the views of different stakeholders. Three risk interconnection clusters stand out: climate change in relation to water and food crises; the growing challenges of the rising number of displaced people worldwide; and what the Fourth Industrial Revolution means in an era of economic risks.

Part 2 discusses the implications of a changing international security landscape and identifies the drivers that are at work and the implications for addressing global risks.



Inspired by the results of *The Global Risks Report 2015* and the continued instability of the global security situation, it lays out alternative and plausible futures that could materialize unless there is a change in how we respond and manage the forces at play. Part 3 explores three risks clusters that have the potential to challenge social stability. For each of these “Risks in Focus”, it describes three existing, practical initiatives that could help to build resilience. The concept of the (dis)empowered citizen is introduced to describe the tensions created by growing cyber connectivity that empowers citizens at the same time as they feel increasingly disenfranchised from traditional decision-making processes. The second contribution further explores one impact of climate change: coupled with rising population growth, it is threatening food security. Finally, in the wake of the Ebola crisis, the potential of pandemics to threaten social cohesion is discussed.

Part 4 applies the resilience imperative to one specific stakeholder – the business community – with an analysis at country and regional levels. Drawing on a unique data set of more than 13,000 business leaders in 140 economies, it explores the differing landscape of global risks across regions and offers a deep-dive into five of the six most cited global risks worldwide. Its aim is to inform the discussion of which risks to prioritize in order to build resilience within businesses.” (Source: <http://www3.weforum.org/docs/Media/TheGlobalRisksReport2016.pdf>)

Website: <http://www.weforum.org/reports/the-global-risks-report-2016>

World Disasters Report 2015

The International Federation of Red Cross and Red Crescent Societies


Focus on local actors, the key to humanitarian effectiveness

From the Forward: “The Ebola crisis in West Africa, the Nepal earthquake, the conflict in Syria, floods in Germany and Hurricane Sandy in the United States mobilized our humanitarian response. They were all very different crises, but they shared one common feature. Each of them highlighted the critical yet often undervalued role of local actors. Local actors are always the first to respond. In Nepal, local volunteers and emergency workers were responding even as the dust from the earthquake still hung in the air. In West Africa, well before the world woke up to the true nature of the Ebola threat, local health workers and affected communities were treating and isolating the sick and burying the dead.

Their effectiveness goes beyond their proximity. They are also effective because of the perspective they bring. Because they are present in communities before a crisis hits, they see it not as an event in and of itself, but as something that is linked to the past, to unaddressed risks, vulnerabilities and inequalities. Emergencies – disasters, health crises, even conflicts – are not beginnings or ends, no matter how severe. They are moments that need to be overcome; simply overcoming them, however, will not put an end to the challenges faced by communities.

Local actors are uniquely placed to find solutions that reduce underlying risks because of their understanding of local contexts – of weather patterns, of community leaders, of vulnerabilities and of sources of strength. They are able to support communities to preempt and address future crises and threats, and to become stronger and more resilient in the process. This year’s *World Disasters Report* calls for the recognition of the role that local actors play. It invites governments and the international aid community to do more to reinforce and support that critical role. However, the whole responsibility for responding to large-scale disasters cannot be transferred to local actors. The international community still has a very important role to play, but a better balance needs to be struck. International actors can provide specialized resources and technical expertise, brought with humility, trust and respect, and with a true commitment to building local capacity.

This report is an important contribution to discussions about localized action that have been ongoing for many years, but that have gained increased profile this year as



governments and aid groups re-evaluate how they work. It builds on discussions that were held at the beginning of the year during the United Nations World Conference on Disaster Risk Reduction in Sendai and more recently during the process to finalize and adopt the Sustainable Development Goals. It makes a direct contribution to next year's World Humanitarian Summit where the localization of aid is one of the key thematic areas of focus. Each process has proclaimed the importance of reinforcing and funding national and local capacity. The ultimate success or failure of our responses will depend on how effectively we can find a better balance between global and local.

In that perspective, the IFRC earlier this year launched the One Billion Coalition for Resilience, a new initiative to rally communities and partners to dramatically increase action on resilience to save lives, preserve livelihoods and build the capacity of communities to bounce back better and withstand future shocks.” (Source: http://ifrc-media.org/interactive/wp-content/uploads/2015/09/1293600-World-Disasters-Report-2015_en.pdf)

Website: http://ifrc-media.org/interactive/wp-content/uploads/2015/09/1293600-World-Disasters-Report-2015_en.pdf

3. Conference Announcements

- **1 October –4 October 2016**

- IDRiM 2016

The 7th Annual Conference of the International Society for Integrated Disaster Risk Management (IDRiM 2016), entitled “Disasters and Development: Towards a Risk Aware Society” with focus on “Natural Hazards and Disasters, Water and Climate Change” will be held in Isfahan, Iran from October 1- 4, 2016. In collaboration with IDRiM, the 2016 conference is organized and hosted by the Iranian Earthquake Engineering Association (IEEA) in collaboration with multiple national and international organizations.

For more information, see IDRiM news section.

Website: <http://idrim.org/>

- **17 November – 1 December 2016**

- IPRA-DwD 2016: 'Conflict Prevention, Post-Conflict Transformation, and the Conflict, Disaster Risk and Sustainable Development Debate'

The International Peace Research Association has been hosting insightful conferences in the pursuit of world peace and security since its inception in 1964 and has recorded massive success and support from global stakeholders of peace building. The 26th IPRA General Conference organised by IPRA in collaboration with the University of Sierra Leone as the host institution as and Northumbria University (UK) and Sakarya University of (Turkey is to be recorded as another benchmark of our visionary history. The increasing ratio of violent conflicts arising within countries rather than between them in the post-cold war era possesses serious threat to global peace and security. This unabated growth of conflicts and wars has created an academic awakening and opened the eyes of scholars and decision makers to deliberate on the means of developing effective short, medium and long term strategies and viable methodologies for preventing and resolving these conflicts and wars and in overcoming the challenges and difficulties that lie ahead. Following its successes and remarkable international recognition it gained in its contribution to inspire global peace and security, IPRA recognises its obligation and responsibility at this important point in time to frame its 26th General Conference to focus on generating research interest and discourse on how to take active, preventive and remedial action to address the challenges of development as part of the root causes of conflicts. Most wars fought in the world are now civil wars although they attract less global attention compared to international wars. Because civil wars are increasingly common in developing countries and go on for years, a report by the World Bank in 2003 argued that civil war is now an important issue

for development. War represents an obstacle to development, but conversely, development can prevent war. Civil wars have been on the increase, especially in the most deprived parts of the world, because the international community has done little to prevent them through pro-active development projects. It is recognised that lack of development which manifests in the form of poverty has been responsible for civil wars in Africa, Latin America, the Middle East, Eastern Europe, the Gulf, the Caucasus, and Southeast Asia. Poverty and conflict are two dependent variables that can cause each other leading to human disasters that become protracted. There is evidence that where conflict reduction and good governance prevails the effects of environmental disasters are reduced. This could be achieved through more comprehensive approaches to development, peace and human security.

Website: www.ipra2016.org

- **22 September – 24 September 2016**
The 3rd Conference on Disaster Prevention and Mitigation

DPM 2016 will be held from September 22 to 24, 2016 in Xi'an, China. The conference is focus on Disaster Prevention and Mitigation. Topics of interest for submission include, but not limited to:

- Securing and Supplying Temporary Services and Shelter
- Structural Design for Disaster Prevention
- Disaster Mitigation in Urban Areas and Settlements
- Housing and Settlement Rehabilitation and Reconstruction
- Operation and Maintenance of Water Supply System
- Rehabilitation and Restoration of Major Infrastructure
- Waste Management and Recycling after a Disaster
- Security and Risk Management
- Emergency Preparedness
- Management Practices at Different Phases of the Disaster Lifecycle
- Financial Management and Governance for Disaster Mitigation
- Tools and Mechanism for Post-disaster Recovery

The aim of DPM 2016 is to provide a stage for researchers, engineers, academicians as well as industrial professionals from all over the world to present their latest research results and advanced research methods in Disaster Prevention and Mitigation. DPM 2016 will be a valuable and important platform for inspiring international and interdisciplinary exchange at the forefront of Disaster Prevention and Mitigation. On behalf of Engineering Information Institute, we cordially invite you to participate DPM 2016 and look forward to seeing you in Xi'an, during September

22 to 24, 2016. Xi'an, one of the birthplaces of ancient civilization in the Yellow River Basin area of the country, records the great changes of the Chinese nation just like a living history book.

Website: <http://www.engii.org/ws2016/Home.aspx?ID=807>

- **18 September – 21 September 2016**

Tropentag

This year the call for papers addresses prospective procedures for solidarity and the fair use of increasingly scarce natural and non-renewable resources around the world. Focus is given to the rising demand for food, fiber, feed and fuel to cover the needs of a growing world population and to innovative sustainable practices, e.g. organic farming, and new economies and policies. Therefore, we are interested into research and learning processes between the North and the South, the East and the West, and between women and men throughout multiple generations to cope with these challenges. *Tropentag 2016* offers a discussion platform for technical and economic potentials to feed a world faced with increasing population, climate hazards, and loss of soil and biodiversity. Looking beyond (bio-) economic and technical perspectives, solutions are asked that seriously consider social and ethical standards. Along this vein, we encourage the examination of 'fair' within practices that occur in farming and other forms of food procurement, and management of natural resources. Thus, we wish to identify new forms of societal contracts between multiple stakeholder levels, building solidarity among practitioners, scientists and policy advisors that allow us to cope with current and future challenges. *Tropentag 2016* invites you to present and share a wide range of scientific solutions investigated in transdisciplinary settings in the agrofood value web

Website: <http://www.tropentag.de/news.php>

- **17 August – 20 August September 2016**

ISRERM

We invite you to attend and participate in the 5th International Symposium on Reliability Engineering and Risk Management (ISRERM2016). The aim of ISRERM2016 is to bring engineers and scientists all over the world together to present and discuss innovative methodologies and the practical applications of these technologies in the field of reliability engineering and risk management. Emerging concepts as well as state of the art and novel applications of reliability principles and risk based decision making in all types of structures, infrastructures and mechanical systems will be emphasized within the scope of the symposium. In this context, papers on theories, methods, algorithms and applications are all welcome.

SRERM2016 will be held in Seoul, Korea on Aug. 17-20, 2016, and provide a post-workshop program in Jeju Island on Aug. 20-22, 2016. For detailed information please visit the

Website: <http://www.isrerm2016.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/>
- Emergency Events Database EM-DAT
<http://www.emdat.be/>
- World Economic Forum Database
<http://reports.weforum.org/>
- Global Assessment Report and UNISDR
<https://www.unisdr.org/we/inform/gar>
- Munich NatCatService
<http://www.munichre.com/en/reinsurance/business/non-life/natcatservice/index.html>
- 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/>

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- 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/disasterManagementResources.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 man-made 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/joe>

- **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 climate extremes Research Approaches •Atmospheric science (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 socio-economic 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 building; Infrastructure design; Management and systematic 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 Climate-sensitive 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

geography and Physical geography. A Natural Disaster may be defined as the effect of Natural hazards which leads to human, environmental or financial losses. The journal includes a wide range of fields in its discipline to create a platform for the authors to make their contribution towards the journal and the editorial office promises a peer review process for the submitted manuscripts for the quality of publishing. Journal of Geography and Natural Disasters is an Open Access journal and aims to publish most complete and reliable source of information on the discoveries and current developments in the mode of original articles, review articles, case reports, short communications, etc. in all areas of the field and making them freely available through online without any restrictions or any other subscriptions to researchers worldwide. The journal is using Editorial Tracking System for quality in review process. Editorial Tracking is an online manuscript submission, review and tracking systems. Review processing is performed by the editorial board members of Journal of Geography and Natural Disasters or outside experts; at least two independent reviewers approval followed by editor approval is required for acceptance of any citable manuscript. Authors may submit manuscripts and track their progress through the system, hopefully to publication. Reviewers can download manuscripts and submit their opinions to the editor. Editors can manage the whole submission/review/revise/publish process.

- **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 rapid-publication, 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>

- **Current Opinion in Environmental Sustainability:**
http://www.elsevier.com/wps/find/journaldescription.cws_home/718675/description#description
- **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#description
- **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://wwwsoc.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>

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- **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+climatology/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

Geostatistical and Geospatial Approaches for the Characterization of Natural Resources in the Environment: Challenges, Processes and Strategies

Authors: N. Janardhana Raju (Editor)

Year: 2016

Publisher: Springer

ISBN: 3319186620

Content: Mathematics plays a key part in the crust, mantle, oceans and atmosphere, creating climates that cause natural disasters, and influencing fundamental aspects of life-supporting systems and many other geological processes affecting Planet Earth. As such, it is essential to understand the synergy between the classical geosciences and mathematics, which can provide the methodological tools needed to tackle complex problems in modern geosciences. The development of science and technology, transforming from a descriptive stage to a more quantitative stage, involves qualitative interpretations such as conceptual models that are complemented by quantification, e.g. numerical models, fast dynamic geologic models, deterministic and stochastic models. Due to the increasing complexity of the problems faced by today's geoscientists, joint efforts to establish new conceptual and numerical models and develop new paradigms are called for.

National Flood Insurance: Management and Accountability in the Wake of Superstorm Sandy

Authors: Brenda Murphy (Editor)

Year: 2016

Publisher: Nova Science Pub Inc

ISBN: 1634843797

Content: -

Estimating Fatality Rates for Earthquake Loss Models

Authors: Emily So (Author)

Year: 2016

Publisher: Springer

ISBN: 3319268376

Content: This manuscript sets out a process for estimating fatalities in collapsed buildings due to ground shaking in an earthquake. The aim of this research is to supplement current earthquake loss estimation with fatality rates (percentage of occupants killed) for use in models which are based on recent empirical information on deaths from earthquakes. This document specifically explores the lethality potential to occupants of collapsed structures. Whilst earthquake casualty modeling has admittedly suffered from a lack of post-earthquake

collection of data and rigour in assessing these data, recent earthquakes such as 2008 Wenchuan (China) and 2011 Christchurch (New Zealand) have brought to light some important findings. Under the auspices of US Geological Survey's PAGER, empirical fatality data related to collapses of buildings from significant earthquakes in the past 40 years have been thoroughly examined. Through detailed investigations of fatal building collapses and the volume reductions within these buildings, important clues related to the lethality potential of different failure mechanisms of global modern and older construction types were found. The gathered evidence forms the basis of the derivation of a set of fatality rates for use in loss models. The set of judgment-based rates are for 31 global building types. This significant advancement in casualty modeling, the resolutions and quality of available data, the important assumptions made, and the final derivation of fatality rates are discussed here. This document contributes to global efforts to develop a way of estimating probable earthquake fatalities very rapidly after an earthquake has taken place. The fatality rates proposed here can be incorporated directly into earthquake loss estimation models where fatalities are derived from collapses of different types of buildings.

Resilience by Design

Authors: Alexandra Jayeun Lee (Author)

Year: 2016

Publisher: Springer

ISBN: 3319306391

Content: This book discusses that disasters, whether natural or man-made, are essentially a human phenomenon. When a city becomes gridlocked and its resources depleted, the collective resilience of those who remain on the ground becomes critical to its immediate survival and recovery. The author argues that in order to build resilient futures for our urban environment, we need more than the skills of architects, engineers, and planners. Support of local communities and policymakers is also needed. The book revisits the recent catastrophic events: the earthquakes in Port-au-Prince and Christchurch, and the hurricane in New Orleans, and places emphasis on the social, cultural, and political processes of rebuilding houses, facilities, and infrastructure that often go unnoticed. Understanding the wider context for how a built project comes to be, the author argues, is a solid indicator of its longevity than by the measure of its material characteristics alone, and gives us reasons to question the validity of our intentions as designers of the future. This book provides strategies for thinking about, assessing, and developing ways for place-makers from all disciplines to become responsible citizen designers of our cities.

Disaster Resilience After Hurricane Sandy: Enhancement Efforts, Use of Funds, and National Mitigation Framework

Authors: Johnathan Carr (Editor)

Year: 2016

Publisher: Nova Science Pub Inc

ISBN: 1634846451

Content: -

Implementing Climate Change Adaptation in Cities and Communities: Integrating Strategies and Educational Approaches

Authors: Walter Leal Filho (Editor), Kathryn Adamson (Editor), Rachel Dunk (Editor), Ulisses M. Azeiteiro (Editor), Sam Illingworth (Editor), Fatima Alves (Editor)

Year: 2016

Publisher: Springer

ISBN: 3319285890

Content: This book analyzes how climate change adaptation can be implemented at the community, regional and national level. Featuring a variety of case studies, it illustrates strategies, initiatives and projects currently being implemented across the world. In addition to the challenges faced by communities, cities and regions seeking to cope with climate change phenomena like floods, droughts and other extreme events, the respective chapters cover topics such as the adaptive capacities of water management organizations, biodiversity conservation, and indigenous and climate change adaptation strategies. The book will appeal to a broad readership, from scholars to policymakers, interested in developing strategies for effectively addressing the impacts of climate change.

Extreme Weather, Health, and Communities: Interdisciplinary Engagement Strategies

Authors: Sheila Lakshmi Steinberg (Editor), William Sprigg (Editor)

Year: 2016

Publisher: Springer

ISBN: 3319306243

Content: This volume presents a unique interdisciplinary approach, drawing on expertise in both the natural and social sciences. A primary goal is to present a scientific and socially integrated perspective on place-based community engagement, extreme weather, and health. Each year extreme weather is leading to natural disasters around the world and exerting huge social and health costs. The International Monetary Fund (2012) estimates that since 2010, 700 worldwide natural disasters have affected more than 450 million people around the globe. The best coping strategy for extreme weather and environmental change is a strong offense. Communities armed with a spatial understanding of their resources, risks, strengths, weaknesses, community capabilities, and social

networks will have the best chance of reducing losses and achieving a better outcome when extreme weather and disaster strikes.

Disaster Resilience of Education Systems: Experiences from Japan

Authors: Koichi Shiwaku (Editor), Aiko Sakurai (Editor), Rajib Shaw (Editor)

Year: 2016

Publisher: Springer

ISBN: 4431559809 **Content:** Education is regarded as a cross-cutting issue for disaster risk reduction (DRR) through reviewing the Sendai Framework for DRR (SFDRR) 2015–2030. Mainstreaming Disaster Risk Reduction (DRR) in the education sector is one of the important efforts to enhance resilience in a community. DRR in the education sector not only focuses on provision of disaster education, but also includes securing a safe school environment, developing school disaster management plans, and building the capacity of schoolteachers and local educational officers. Japan, with its wealth of experience in DRR, has developed a good resilient system in its education sector, which has been tested and revised through experiences of past disasters. This book reviews the evolution of DRR in the education sector in Japan, including some of the recent developments after the 2011 Great East Japan Earthquake, focusing on DRR governance and practices in national policies, curriculum development and teacher training, community linkage, and international cooperation, to enhance resilience in the education sector. The primary target groups for this book are students and researchers in the fields of disaster management and DRR studies. Another target group comprises practitioners and policy makers, who will be able to apply the collective knowledge from this work to policy and decision making. The book provides an overview of the current research trends and furnishes basic knowledge on this important topic.

The Handbook of Disaster and Emergency Policies and Institutions

Authors: John Handmer (Author), Stephen Dovers (Author)

Year: 2016

Publisher: Routledge

ISBN: 113897188X

Content: Disasters both natural and human-induced are leading to spiralling costs in terms of human lives, lost livelihoods and damaged assets and businesses. Yet these consequences and the financial and human crises that follow catastrophes can often be traced to policies unsuited to the emerging scales of the problems they confront, and the lack of institutional capacity to implement planning and prevention or to manage disasters. This book seeks to overcome this mismatch and to guide development of a policy and institutional framework. For the first time it brings together into a coherent framework the insights of public policy, institutional design and emergency and disaster management.

Managing Extreme Climate Change Risks through Insurance

Authors: W. J. Wouter Botzen (Editor)

Year: 2016

Publisher: Cambridge University Press

ISBN: 1316600882

Content: In recent years, the damage caused by natural disasters has increased worldwide; this trend will only continue with the impact of climate change. Despite this, the role for the most common mechanism for managing risk - insurance - has received little attention. This book considers the contribution that insurance arrangements can make to society's management of the risks of natural hazards in a changing climate. It also looks at the potential impacts of climate change on the insurance sector, and insurers' responses to climate change. The author combines theory with evidence from the rich experiences of the Netherlands together with examples from around the world. He recognises the role of the individual in preparing for disasters, as well as the difficulties individuals have in understanding and dealing with infrequent risks. Written in plain language, this book will appeal to researchers and policy-makers alike

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 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.

Risk Governance: The Articulation of Hazard, Politics and Ecology

Authors: Urbano Fra.Paleo (Editor)

Year: 2015

Publisher: Springer

ISBN: 9789401793278

Content: *Risk Governance: The Articulation of Hazard, Politics and Ecology* explores the common language of politics, ecology and risk, and crosses their conceptual divides. It seeks to shed light on the underlying structural factors, processes, players and interactions in the risk scenario, all of which influence decision-making that both increases and reduces disaster risk. The first section explores risk governance under conditions of increasing complexity, diversity and change. The discussion includes chapters on The problem of governance in the risk society; Making sense of decentralization; Understanding and conceptualizing risk in large-scale social-ecological systems; The disaster epidemic and Structure, process, and agency in the evaluation of risk governance. Part II, focused on governance in regions and domains of risk, includes nine chapters with discussion of Climate governance and climate change and society; Climate change and the politics of uncertainty; Risk complexity and governance in mountain environments; On the edge: Coastal governance and risk and Governance of megacity disaster risks, among other important topics. Part III discusses directions for further advancement in risk governance, with ten chapters on such topics as the transition From risk society to security society; Governing risk tolerability; Risk and adaptive planning for coastal cities; Profiling risk governance in natural hazards contexts; Confronting the risk of large disasters in nature and Transitions into and out of a crisis mode of socio-ecological systems. The book presents a comprehensive examination of the complexity of both risk and environmental policy-making and of their multiple—and not always visible—interactions in the context of social–ecological systems. Just as important, it also addresses unseen and neglected complementarities between regulatory policy-making and ordinary individual decision-making through the actions of nongovernmental actors. A range of distinguished scholars from a diverse set of disciplines have contributed to the book with their expertise in many areas, including disaster studies, emergency planning and management, ecology, sustainability, environmental planning and management, climate change, geography, spatial planning, development studies, economy, political sciences, public administration, communication, as well as physics and geology.

Hazards, Risks and, Disasters in Society

Authors: Andrew E. Collins et al. (Editors)

Year: 2014

Publisher: Academic Press

ISBN: 0123964512

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 for disaster management research agenda and ideas for staying current in the field.

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

Hydro-Meteorological Hazards, Risks, and Disasters

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 community. This entails reestablishing vital community 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 risk-taking 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 research, combining cutting-edge natural science and social science 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

ISBN: 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 Evgueni 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. Welpé

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

Publisher: Imperial College Press

ISBN: 1783263083

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.

Already listed new books in previous newsletters:

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

ASIN: B00AYIK95E

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

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

- Alexander, D.E. 2015. Evaluation of civil protection programmes, with a case study from Mexico. *Disaster Prevention and Management* 24(2): 263-283.
- Davis, I. and D. Alexander 2015. *Recovery from Disaster*. Routledge, Abingdon, UK, 357 pp.
- Karki, R., Talchabhadel, R., Aalto, J. & Baidya, S. K. (2015) New climatic classification of Nepal. *Theoretical Appl. Climatol.* <http://dx.doi.org/10.1007/s00704-015-1549-0>
- Talchabhadel, R., Shakya, N. M., Dahal, V. & Eslamian, S. (2015). Rainfall runoff modelling for flood forecasting (a case study on west rapti watershed). *J. Flood Eng.* 6, 53–61 <http://www.serialsjournals.com/serialjournalmanager/pdf/1443607915.pdf>
- X Jiang, N Mori, H Tatano, L Yang, Y Shibutani (2015) Estimation of property loss and business interruption loss caused by storm surge inundation due to climate change: a case of Typhoon Vera revisit. *Natural Hazards*, 1-15
- Samaddar, J Choi, BA Misra, H 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* 75 (2), 1531-1554
- Shen-En Chen, James English, Andrew, B., Kennedy, Mark Leeman, Forrest Masters, Jean-Paul Pinelli, Weichiang Pang, Jose, A., Rullan-Rodriguez, Joseph Calvo, Ferdinand A. Briones (2015) “ASCE Hurricane Haiyan (Yolanda) Disaster Investigation in the Philippines,” *Journal of Performance of Constructed Facilities*, 29(4), 02514003.
- Baheru Thomas, Chowdhury Arindam Gan, Pinelli Jean-Paul, (2015) “Estimation of Wind-Driven Rain Intrusion through Building Envelope Defects and Breaches during Tropical Cyclones,” *ASCE Natural Hazard Review*, 16, (2), Article number 04014023.
- Maria L. Bizo, Erika A. Levei, Erika Kothe, Marin Şenilă, Cristina O. Modoi, Alexandru Ozunu, 2015, *Chemical Assessment of Soil Quality for Ecological Reconstruction Strategies*, *Carpathian Journal of Earth and Environmental Sciences*, Vol. 10, 2015 – Number 4.

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 previous IDRiM News section for more details).

Zoltán Török, Alexandru Ozunu, 2015, *Hazardous Properties of Ammonium Nitrate and the Modeling of Explosions Using TNT Equivalency*, Environmental Engineering and Management Journal, November 2015, Vol. 14, No. 11, 2671 - 2679.

Collins, A.E., Jones, S., Manyena, B. and Jayawickrama, J. (Eds.)(2015) *Hazards, Risks and Disasters in Society*, Hazards Risks and Disasters Series, Elsevier, Oxford. ISBN 978-0-12-396451-9

Collins, A.E. (2015) 'Beyond experiential learning in disaster and development communication' in: Egner, H., Schorch, M. and Voss, M. (Eds.) *Learning and Calamities: Practices, Interpretations, Patterns*, London: Routledge, pp.56-76.

Borgomeo, E., Pflug, G., Hall, H, and Hochrainer-Stigler, S. (2015). Assessing water resource system vulnerability to unprecedented hydrological drought using copulas to characterize drought duration and deficit. *Water Resources Research*. doi: 10.1002/2015WR017324

Hochrainer-Stigler, S, Mechler, R. and Mochizuki, J. (2015) A risk management tool for tackling country-wide contingent disasters: A case study on Madagascar. *Environmental Modelling & Software* 72: 44-55

Linnerooth-Bayer J, Scolobig A, Ferlisi S, Cascini L, Thompson M (2015). Expert engagement in participatory processes: translating stakeholder discourses into policy options. *Natural Hazards*, Article in press (Published online 21 May 2015).

Berkhout F, Bouwer LM, Bayer J, Bouzid M, Cabeza M, Hanger S, Hof A, Hunter P, Meller L, Patt A, Pfluger B, Rayner T, Reichardt K, van Teeffelen A (2015). Editorial - European policy responses to climate change: progress on mainstreaming emissions reduction and adaptation. *Regional Environmental Change*, 15(6):949-959

Mechler R (2016). Reviewing estimates of the economic efficiency of disaster risk management: opportunities and limitations of using risk-based cost-benefit analysis. *Natural Hazards*, Article in press (Published online 5 February 2016)

8. Miscellaneous

New Graduate Degree Program:

We are pleased to announce a new blended Master of Science (MSc) Disaster Management: Resilience, Response and Relief course at the [Humanitarian and Conflict Response Institute \(HCRI\)](#) at [The University of Manchester](#). Offered jointly with [The Hong Kong Polytechnic University](#), this programme is designed for participants who intend to develop theoretical and practical knowledge and skills in the disaster risk management and humanitarian contexts. Graduates will be equipped to work and become leaders in the fields of disaster management, humanitarianism, and other related fields. This programme will further enhance students' personal and professional development and provide important collaborative links globally. The application deadline for the fall semester is 29 April 2016. For more information please visit HCRI's website (<http://www.hcri.manchester.ac.uk/study-with-us/postgraduate-taught/>).

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%20Weekly%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>

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- **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/>

IDRiM Social Media : Invitation



Be part of our new initiative!

International Society for
Integrated Disaster Risk Management

**We are recruiting IDRiM members to join the soon to be established
Social Media Committee**

*Be part of IDRiM and get the opportunity to
promote international knowledge sharing and
interdisciplinary research!*

Background

At last years, Board of Directors meeting a decision was made to explore the opportunity to broaden IDRiM's current communication strategy by including social media platforms like LinkedIn, Yammer and Twitter.

Why do we need to explore further communication opportunities?

To further broaden the options to promote knowledge sharing, interdisciplinary research and development on integrated disaster risk management.

Who are we looking for?

- Are you enthusiastic to make a difference by promoting disaster risk management knowledge?
- Do you want to be part of the IDRiM team?
- Are you familiar to social media and keen to utilize those skills to promote sector research?
- Are you committed to play an active role supporting the social media strategy development and/or monitoring?

If you answer the questions above with YES, please send a letter of interest to Matt Dorfstaetter.

Matthias.dorfstaetter@hotmail.com

Please send me a mail and explain in a paragraph your motivation, experience with social media and the estimated time you would be able to commit as part of the committee.

Have a look at our webpage and discover other committees and our team members.

http://idrim.org/?page_id=14

Thanks for your interest and have a great day!!!

Matt Dorfstaetter



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