UNISDR Science and Technology Conference

Mobilizing science to implement the Sendai Framework

27-29 January 2016
Geneva, Swizterland

UNISDR
The United Nations Office for Disaster Risk Reduction

Work stream 3: Use of science, technology and innovation tools, methods and standards to support the implementation and reporting of Sendai Framework

1 **Mental Health Care Professionals' Capacity to Deliver Services During Recovery**
Sarbjit Johal, Joint Centre for Disaster Research, Massey University / GNS Science, Wellington, New Zealand

2 **Use of science and research to support the implementation of Sendai Framework in Malaysia**
Muhammed Fathi Yusof, University of Technology Malaysia

3 **Addressing the science and technology needs of city governments for SFDRR implementation: Insights from Shimla Municipal Corporation in the Indian Himalayas**
Komal Gokalbhai Kantariya, United Nations Development Programme (UNDP)

4 **"Disaster Loss Data" – A global metric for implementing the Sendai Indicators and reducing disaster risk.**
Daniele Ehrlich, European Commission - Joint Research Centre

5 **Researching psychosocial interventions in the aftermath of disasters: The "All Right?" Campaign: A social marketing campaign for well being.**
Alistair Humphrey, Canterbury District Health Board

6 **Rapid Risj Analysis with the RASOR Platform**
Roberto Rudari, CIMA Research Foundation

7 **Mainstreaming as a key concept to achieving urban resilience**
Fouad Bendimerad, EMI (Earthquakes and Megacities Initiative)

8 **Downward Vertical Evacuation for Disabilities People from Tsunami using Escape Bunker Technology**
Haris Rahadianto, Electronics Engineering Polytechnic Institute of Surabaya

9 **Data Integration and Analysis System (DIAS) for Disaster Risk Reduciton**
Akiyuki Kawasaki, The University of Tokyo

10 **Mobilizing Science, Evidence and Technology for the Sendai Framework**
Julie Calkins, UK Collaborative on Development Science

11 **Calculation and analysis of tidal forces of the Moon and the Sun acting on the body mass of a given considering the Earth's rotation**
Vladimir Kochnev, Institute of Computational Modeling of Siberian Branch of the Russian Academy of Sciences

34 **Development of a remote simulation training system for nurses responding to disaster**
Sonoe Mashino, University of Hyogo

35 **Assessing Landslide Hazard and Susceptibility for Early Warning in Papua New Guinea**
Joanne Robbins, MET Office of the UK

36 **Quantifying ecosystem services for disaster risk reduction – research from the EPIC project**
Karen Sudmeier-Rieux, University of Lausanne

37 **Monitoring for ensured communicable disease control on evacuation site by local nurses (EpiNurse) in Nepal**
Sakiko Kanbara, University of Kochi

38 **Environmental disaster protection from textile sludge: A biotechnology based approach**
Romana Siddique, BRAC University

39 **Improving Water Quality in Kiribati with Solar Disinfection (SODIS)**
Juliana Ungaro, Pacific Community - Geoscience Division

40 **Property flood resilience and its role in disaster mitigation**
Stephen Garvin, BRE

41 **Using research findings to produce international standards in disaster risk reduction**
Duncan Shaw, Manchester University

42 **START DEPP Linking Preparedness Resilience and Response in Emergency Context (LPRR)**
Rebecca Murphy, Christian Aid

43 **GIS Technology enhances disaster resilience and disaster risk reduction**
Carine Yi, Tohoku University

44 **National risk data sharing platform for participative governance**
Roland Nussbaum, Mission Risques Naturels (MRN)

45 **The Pandemic Survival Roadshow: Improving health literacy and emergency preparedness through a transportable, low cost exhibition in Canterbury, New Zealand**
Alistair Humphrey, Canterbury District Health Board

67 **Improving global capacity in earthquake risk assessment**
Vitor Silva, Global Earthquake Model

68 **Community Solidarity in Disasters Response: An aspect for enhance community resilience.**
Jane Ciambele Souza da Silva, Federal University of the Rio Grande do Norte - UFRN

69 **Free geoinformatics – for disaster risk reduction and sustainable development applications: examples from Sierra Leone and Sri Lanka**
Richard Teeuw, University of Portsmouth

70 **Data Scientists to the Rescue: An Example of Effective Collaboration Between University-Based Data Scientists and SAR Reconnaissance Teams**
Steven Reece, Oxford University

71 **Social Dimensions of Technological Disasters: Findings from the UNU-IAS Fukushima Global Communication Programme**
Akiko Sato, United Nations University Institute for the Advanced Study of Sustainability

72 **Higher Education and Disaster Risk Reduction Capacity Building: Insights from an independent evaluation of Periperi U**
Ailsa Holloway, Research Alliance for Disaster and Risk Reduction

73 **Capacity Building for Application of Disaster Risk Reduction Technology at Community Level of Bagladesh**
Zahurul Karim, Center for Agriresearch and Sustainable Environment & Entrepreneurship Development

74 **Disaster Evaluation Typologies**
Diana Wong, Monash University

75 **Disaster preparedness for energy ~ water ~ waste Resilience with geo-spatial statistics**
Salil K Sen, Asian Development Bank

76 **Ethics case studies to build people's resilience for disasters**
Dónal O'Mathúna, Dublin City University

77 **Leveraging the built environment professional skills and needs to Sendai framework: community's perspective**
Srinath Perera, Northumbria University

78 **Effectiveness of Participatory Community-based Program on Preparation, Response and Recovery from the 2014 Flood Episodes in Kuala Krai, Kelantan, Malaysia.**
Zailina Hashim, Universiti Putra Malaysia

12 **S&T achievements, from the perspective of an association acting as operator of the national DRR platform, to support the implementation of SFDRR objectives**
Roland Nussbaum, Mission Risques Naturels (MRN)

13 **The contribution of benchmarks and ongoing evaluation to emergency preparedness and risk reduction of communicable diseases**
Bruria Adini, Ben-Gurion University of the Negev

14 **PEARL (Preparing for Extreme And Rare events in coastaL regions)**
Arabella Fraser, King's Centre for Integrated Research on Risk and Resilience

15 **Modelling of Sea-level Rise, Inundation and Effects on the Bonriki Freshwater Lens, Tarawa, Kiribati**
Amandine Bosserelle, Pacific Community - Geoscience Division

16 **Role of Science and Technology in Reducing Flood Disaster Risk in the District of Bab El Oued in Algiers (Algeria)**
Djillali Benouar, University of Science and Technology Houari Boumediene (USTHB)

17 **3Ds (Digital humanitarians, Diasporas and Drones) during disasters: A lesson from Nepal's earthquake**
Uttam Babu Shrestha, University of Southern Queensland

18 **Simulated Triage Training by Mobile in Emergency Technicians**
Seyed Habibollah Kavari, University of Social Welfare and Rehabilitation Sciences (USWR),Tehran, Iran

19 **Weather Modification Application for Disaster Risk Reduction**
Leonid Sorokin, Peoples' Friendship University of Russia

20 **A global database of flood protection standards**
Paolo Scussolini, Vrije Universiteit Amsterdam

21 **Assessing national seismic risk with the OpenQuake suite of tools**
Vitor Silva, Global Earthquake Model

22 **Visualization Platform and apps for smart phones for communicating water related risks and assessing authorities' performance: case study of Mexico City**
Fabiola Sosa-Rodríguez, Metropolitan Autonomous University

23 **Multi-disciplinary science and scenario to support the Sendai Framework.The SAFRR tsunami scenario as a model.**
Deborah Brosnan, Brosnan Center

24 **Decision Support and Data Discovery for Improved Hazard Analysis and Disaster Response**
Margaret Glasscoe, Jet Propulsion Laboratory, California Institute of Technology

46 **Use of the Disaster Logic Model in the Design and Evaluation of Relief/Recovery and Risk-Reduction Interventions**
Marvin Birnbaum, University of Wisconsin School of Medicine and Public Health

47 **What are the knowledge gaps in global civil society for disaster risk perceptions? Insights from a global online training program**
Emily Ying-Yang Chan, Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC), The Chinese University of Hong Kong

48 **Local Challenges and Opportunities for DRR Science after Sendai: the View from the Bottom**
Eric Lindquist, Public Policy Research Center, Boise State University

49 **Integration of Provenance-enabled Crowdsourced Information with Traditional Disaster Management Information using Linked Open Data**
Werner Leyh, University of São Paulo

50 **Strengthening Quality of Health Action in Humanitarian Relief through Online Library. Experiences from two years online.**
Karin Geffert, Medical Mission Institut

51 **Tsunami Inundation Modelling of Tongatapu, Kingdom of Tonga**
Herve Damlamian, Pacific Community - Geoscience Division

52 **The EDEN Toolbox of Toolboxes: a new approach to integration, connection and data fusion applicable to disasters and climate change events**
Brigitte Serreault, Airbus Defence and Space SAS

53 **Cleaning up Afterwards. The UK Recovery Handbook for Biological Incidents**
Thomas Pottage, Public Health England

54 **What constitutes a global baseline for worldwide casualties from catastrophes?**
Marie Pears-Piggott, RMS

55 **Understanding Disaster Response from Information Flow: Text Mining Analysis of Crowdsourced Disaster Reports in Project Agos and eBayanihan**
Maria Regina Justina Estuar, Ateneo de Manila University

56 **Post-disaster Emergency Communication for School Evacuation Shelters: A Spatial Analysis of the Sendai Municipal Disaster Prevention Radio System**
Takashi Oda Miyagi, University of Education, Sendai

57 **Integrating Geospatial Information and Local Adaptation for Reducing Climate Related Agricultural Risk (Implementation of SFDRR in Indonesia, 2015)**
Sudibyakto, Chairman of the Indonesian Disaster Expert Association, National Agency for Disaster Management (BNPB) - Indonesia; Professor in Hydrology, Faculty of Geography, Gadjah Mada University-Indonesia

58 **New Technology for Field Collection of Medical and Disaster Data**
Philip Gaffney, L2S2 Ltd

79 **Developing Science Policy Interfaces in Disaster Risk Management: experience in the EU**
Tom De Groeve, European Commission - Joint Research Centre

80 **Post-disaster Emergency Communication for School Evacuation Shelters: A Spatial Analysis of the Sendai Municipal Disaster Prevention Radio System**
Takashi Oda, Miyagi University of Education, Sendai

81 **WHO's policies and guidance on evidence-based guideline development and research: models for strengthening science and evidence for disaster risk management**
Jonathan Abrahams, World Health Organization

82 **Post-Research Ethics Audit (PREA) for Health Research in Humanitarian Crises**
Dónal O'Mathúna, Dublin City University

83 **Design for disaster and rescue; a challenge for architects and designers**
Noemi Bitterman, Technion

84 **Resilience through Investing in Ecosystems – knowledge, innovation and transformation of risk management (RELIEF Kit)**
Naoya Furuta, IUCN - International Union for Conservation of Nature

85 **The role of science in innovation for the emergency sanitation sector**
Yoke Pean Thye, Bandung Institute of Technology

86 **Preparedness of Aceh Search And Rescue (SAR) Team in Handling The Earthquake And Tsunami**
Azwar Hamidi, Community Emergency and Disaster Management Spesialist

87 **The Glasgow Game: The Challenges of Developing a Truly Shared Resilience Vision**
Eleanor Murtagh, University of Strathclyde

88 **NOU PARE : reducing vulnerability through children participation and integration of the civil society of Haiti**
Guerty Aimé, Terre des Hommes Suisse, Haïti

89 **Disaster Risk Reduction: Socio-Ecological Urbanism**
Nuha Eltinay, Arab Urban Development Institute (AUDI)

90 **The role of The University of the South Pacific in building capacity for disaster risk reduction in the Pacific Region: Special focus on the EU-PacTVET project**
Helene Jacot Des Combes, The University of the South Pacific

91 **Best Innovative technique in EM precursory as early warning for Earthquakes forecasting f High Magnitude through Satellite imagery of NOAA and IPS Australia "**
Umesh Prasad Verma, Patna University

25 **International Savanna Fire Management Initiative**
Sam Johnston, The United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)

26 **Innovative tools and effective scheme to support establishing effective disaster damage and loss database -Strategy of Global Centre for Disaster Statistics-**
Yuichi Ono, International Research Institute of Disaster Science, Tohoku University

27 **Forecasts for triggering humanitarian action: science to support the Forecast-based Financing pilot projects**
Liz Stephens, University of Reading

28 **The Use of Multirotor and Fixed Wings UAVs to Assess Damage Generated by Tropical Cyclone Pam (Category 5) in Vanuatu 2015.**
Herve Damlamian, Pacific Community - Geoscience Division

29 **Strengthening the Collaboration Between Scientists and Civil Protections in DRR: The Example of the VeTOOLS Project**
Joan Marti Molist, Group of Volcanology, Institute of Earth Sciences Jaume Almera, CSIC, Barcelona, Spain

30 **Building Resilience through climate information in Burkina Faso and Ethiopia**
Sophie Rigg, King's College London

31 **Disaster Risk Governance in Bangladesh to Manage River Flood risk**
Md. Salimul Alam Shahin, TU Dortmund, Germany

32 **Detection of water based Bisphenol A using real-time microwave sensing**
Mohammad Russel, Dalian University of Technology

33 **The Socioeconomic Component of OpenQuake: Assessing Earthquake Risk using the Integrated Risk Modelling Toolkit**
Christopher Burton, Global Earthquake Model (GEM) Foundation

59 **Disaster Mental Health Risk Reduction – An Upstream Paradigm Shift for Disaster Mental Health**
Lennart Reifels, University of Melbourne / Free University of Berlin

Work stream 4: Leveraging science through capacity development and research

60 **Building a Culture of Resilience through Cyberbased Technologies**
Ahsan Kareem President, International Association for Wind Engineering

61 **Making advances in science and technology available for Disaster Risk Reduction planning in middle and low-income countries.**
Christopher Wardle, GEM Foundation

62 **System Enabled Real-Time Coordinated Decision Making in Crisis and Emergency Management Using the Sendai Framework**
Alexis Amaye, University College Cork, Centre for Security and Emergency Management

63 **Projections, Prospects, and Challenges of the Community data**
Shabana Khan, International Social Science Council

64 **Trends in science and technology for Disaster Risk Reduction and the implementation of the Sendai Framework 2015-2030: a case study-based analysis**
Amina Aitsi-Selmi, Public Health England

65 **Measuring Disaster Resilient Communities: A Case Study of 43 Coastal Communities in Aceh and on Nias Island, Indonesia**
Shesh Kafle Disaster and Climate Change Study Centre, Nepal (DCCSC Nepal)

66 **Strengthening adaptation and resilience to climate variability and change in Kenya**
Nyree Pinder, Met Office

92 **Sow Seeds of Change: Local Best Practices in Disaster Risk Reduction Efforts**
Exaltacion E. Lamberte, De La Salle University-Manila

93 **WMO/WWRP HIWeather project to harness global science for better local warning systems**
Brian Golding, Met Office

94 **In the Heat of the Moment: Scientists, Scientific Risk and Expertise during Disasters and Hazard Events.**
Deborah Brosnan, Brosnan Center

95 **Governance & advanced regionalism: keys to integrated risk management in Morocco**
Abdeslam Badre Mohammed, V University of Rabat

96 **Reducing Flood Disaster Risk using Participatory Mapping as Capacity Building**
Haris Rahadianto, Electronics Engineering Polytechnic Institute of Surabaya

97 **The Influence of Civil Society in Negotiation Processes at the United Nations: the Case of the Women's Major Group on the Sendai Framework for Action**
Leah Kimber, UNIGE

98 **Advancing the Understanding of Creeping Disasters for Resilience Building in Africa; The Role of Partnerships and Capacity Building through BRACED in Uganda**
Shuaib Lwasa, Makerere University

99 **Leveraging Science and Policy on Disaster Risk Reduction through Regional Networks – A Case Study**
Snezana Krstic