



GADRI ACTIONS

Autumn 2016
Volume 2— Number 1



3rd Global Summit of Research Institutes of
Disaster Risk Reduction

Disaster Prevention Research Institute (DPRI),
Kyoto University, Kyoto, Japan

19 to 21 March 2017

Typhoon Chabas, South Korea

4 to 5 October 2016



Typhoon Chaba was the strongest tropical cyclone to make landfall in South Korea since Sanba in 2012. The typhoon is categorized as "mid-sized" and "strong," with maximum winds of 50 meters per second and atmospheric pressure of 930 hectopascals.

Typhoon Chaba attacked southern part of Korean Peninsular including Jeju Island, Pusan and Ulsan during October 4 – 5, 2016. It caused 10 deaths and more than 170 million dollar damages in Korea.

According to the Ministry of Public Safety and Security (MPSS)¹, the typhoon inundated the homes of at least 200 people in Jeju and Ulsan, with at least 90 houses partially destroyed. A total of 7,747 hectares of farmland was inundated on Jeju Island and South Jeolla Province. In addition, 5,919 vehicles were damaged by flooding.

¹ <http://www.korea.kr/gonggam/newsView.do?newsId=01ImAujvwDGJM000>, Weekly Gonggam, 2016.10.17.



Especially, the damage of Ulsan city was particularly severe. According to the Ulsan Meteorological Administration, total 266mm rainfall fell from 0:30 am to 1:58 pm on the day of the typhoon Chaba approaching. This is the largest record in October in Ulsan area of 71 years since 151mm in 1945. Moreover, the damages were larger due to overlapping high tide.

Korean government has designated the affected regions as special disaster zones to assist regional recovery.

MPSS's Central Disaster Safety Headquarters announced on November 11, 2016 that it will fund 504.9 billion won (about 0.5 billion US dollar) in repairing costs for the areas damaged by the typhoon Chaba. The cost of restoration was KRW 317.7 billion in national expenses, KRW 121.1 billion in local expenses, and KRW 66.1 billion in self-restoration expenses.

By region, Busan will receive 86.2 billion won, Ulsan 133.7 billion won, Gyeongnam 171.2 billion won, Jeju 62.1 billion won, and other 4 cities and provinces 51.7 billion won. By facility, KRW 34.5 billion will be provided for restoration of damage to private facilities such as loss of housing and farmland, and KRW 470.4 billion for public facilities such as river and road maintenance.

Jibum Chung , Associate Professor; and Director, Disaster Management Institute, Ulsan National Institute of Science and Technology (UNIST)

6th International Disaster and Risk Conference (IDRC) Davos 2016

“Integrative Risk Management – towards resilient cities”

GADRI Session Summary

28 August—1 September 2016

IDRC Conferences

“The IDRC Conferences - the world's leading conferences on integrative risk management - gather over 1000 participants from more than 100 countries. It's an unique community of business leaders, decision

makers, practitioners, UN-, IO- & NGO-agents, and scientists that share and discuss new findings and experiences about the broad spectrum of risks societies are facing today. The conferences are structured in plenary & parallel sessions, workshops & training courses, and poster exhibitions.”



About

The 6th International Disaster and Risk Conference (IDRC), Integrative Risk Management – towards resilient cities was held in Davos, Switzerland from 26 August to 1 September 2016

The IDRC Davos 2016 was closed by Dr. Walter Ammann, Chairperson and Founder of the International Disaster and Risk Conference on Wednesday, 31 August. The conference had gathered more than 470 international attendees for its 10th year anniversary in Davos..

Outline of the session is as follows:

The GADRI Session was chaired and moderated by Prof. Andrew Collins and included the following



programme:

Introduction of the Session Objective

Prof. Andrew Collins, Chairman, Board of Directors of GADRI; and Leader of Disaster and Development Network, Northumbria University, UK

Introduction of GADRI

Prof. Hirokazu Tatano, Secretary-General, GADRI, Professor, Disaster Prevention Research Institute (DPRI), Kyoto University

Research Gaps in disaster risk reduction (DRR) in the context of GADRI Objectives: the cases of NaTech (Natural Disaster-triggered Technological Disasters) Disaster; and Disaster Health Monitoring

- NaTech Risk Governance: Prof. Ana Maria Cruz, DPRI, Kyoto University; and
- Disaster Health Monitoring: Dr. Sakiko Kanbara, Faculty of Nursing, University of Kochi

Roles of Scientific Communities for DRR Solutions- From the perspective of UNESCO/GRF: Dr. Badaoui Rouhban, Director, Disaster Reduction Section, UNESCO

At the end of the presentations, the floor was opened for discussion.

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Objectives of the session by Prof. Andrew Collins

Over the past three decades of the promotion of disaster risk reduction (DRR), we have achieved better understanding of disaster risk and have developed promising disciplinary and transdisciplinary approaches. However, improved scientific knowledges often could not bring about a significant reduction of disaster risk in the real world. In many

conferences related to DRR, gaps between scientific knowledge and practice have remained, such as for example in relation to implementation problems and the last mile issue.

A disaster is a local phenomenon and depends very much on the local context. Without considering dynamic local contexts, including their interconnectiveness with other local and global contexts, any good solutions for DRR cannot be implemented and sustained. Therefore, local research institutes, with links to one another, should play a key role for DRR. Furthermore, when a disaster happens, these institutions should be the primary sources of knowledge and information for critical decision making to prevent propagation of the impact of the disaster.

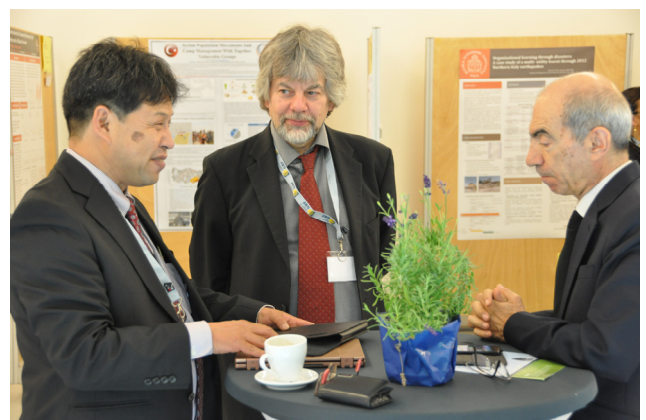
In March 2015, the Global Alliance of Disaster Research Institutes (GADRI) was established with the aim of contributing to DRR and disaster resilience in close collaboration with organizations around the world. In this way, the GADRI network of organizations creates a direct link from local actions and activities to the global community through sharing of information, knowledge, experiences and ideas on disaster research.

The session intends to generate a discussion on the role of such international bodies in contributing to the reduction of disaster risk in the real world.

Prof Collins then presented two slides with basic principles that need to underpin a Global Alliance of Disaster Risk Institutions and a series of three questions pertinent to the session as a whole (see accompanying PPT slides).

Introduction to GADRI by Prof. Hirokazu Tatano

The Global Alliance of Disaster Research Institutes (GADRI) was born as a result of the Second Global Summit of Research Institute for Disaster Risk Reduction (2GSRIDRR), March, 2015. GADRI now consists of more than 100 research institutions around the world. GADRI seeks to contribute to enhancing DRR and disaster resilience in close collaboration with organizations around the world through sharing of information, knowledge, experiences and ideas on disaster research.



NEWS—GADRI Representations

The objectives of GADRI are:

- to establish a global research network
- to provide a road map, plans and organization with disaster research groups
- to promote capacity development of disaster research institutes and encourage 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 speak with one voice in an effort to influence decision making processes



By referring to the GADRI activities, Prof. Tatano emphasized that GADRI is aiming to promote capabilities of local research institutes to deal with disasters. By promoting exchange and sharing of data and information, by identifying research gaps in the local context, and by serving as an advocacy organization to speak with one voice in an effort to influence decision making processes, GADRI can contribute for the institutional capacity building.

Visit GADRI homepage for further information.
<http://www.gadri.net>

Research Gaps in DRR - NaTech Risk Governance: Prof. Ana Maria Cruz, DPRI, Kyoto University

By using a case study of NaTech Disaster Risk Management, Prof. Cruz explained the possible contributions to GADRI: (1) data collection and sharing lessons, (2) benchmarking of methods and models, (3) development of DRM standards (or minimum rules), (4) rating system concerning “corporate social responsibility”, especially for NaTech risk areas, and (5) capacity building on NaTech risk management.

Disaster Health Monitoring: Prof. Sakiko Kanbara, Faculty of Nursing, University of Kochi

Based on the collaborative research after the Nepal Earthquake, Prof. Kanbara pointed out the importance of gathering information with local groups and sharing it with important stakeholders. A system

called “EP-Nurse” was introduced for the health care that was needed after the Nepal quake. She explained the following difficulty in disaster health monitoring that is likely to have wider resonance:

Geographic information is disrupted by tentative migration points
Unavailability of IT infrastructure
Inaccessibility to data
Visualize uncountable data
Validity and reliability
Reasonable crosscut point to report up
Population coverage to ensure that no one is left behind

A critical challenge during the response period after the disaster as human science has pointed out involves the balance of overall ethical considerations vs data.

Roles of Scientific Communities for DRR Solutions From the perspective of UNESCO/GRF: Dr. Badaoui Rouhban

By overviewing the major disasters and scientific activities, especially UN initiatives, Dr. Rouhban emphasized the importance of advocacy from the scientific community. Before 1985, in the UN system, disaster issue was dealt with through disaster relief. Thanks to the initiative of one scientist, finally UN decided to set up ID-NDR at the general assembly of UN, 1987. From that



point onwards, interdisciplinary/integrated scientific activities to contribute to the DRR has been started. However, implementation of the scientific knowledge to contribute for DRR was still missing. Scientists should translate their knowledge to the policy makers in an understandable way. To do this, Dr. Rouhban stated “Don’t stay in your lab and communicate with stakeholders for implementation. Share it with the world”

Discussion Period:

A number of pertinent questions were forthcoming from a lively group of participants. Comments were typically supportive of GADRI initiative. The content and flow of the session was also very well received.

7th Annual Conference of the International Society for Integrated Disaster Risk Management (IDRiM 2016)

1—3 October 2016

GADRI was represented at 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" which was held in the historical city of Isfahan, Iran from October 1-3, 2016. In collaboration with IDRiM, the 2016 confer-

ence was organized and hosted by the Iranian Earthquake Engineering Association (IEEA) in collaboration with multiple national and international organizations.



Prof. Ana Maria Cruz., DPRI, Kyoto



Prof. Hirokazu Tatano, Secretary-General, GADRI, and Professor, DRPI, Kyoto University



Group photograph

History

The IDRiM Society and its Journal (IDRiM Journal) were officially launched on October 15, 2009 in Kyoto, Japan, at the 9th IIASA-DPRI Forum on Integrated Disaster Risk Management (IDRiM Forum). The move to set up the IDRiM Society was based on the success of a series of nine Forums (the IIASA-DPRI Forums) on Integrated Disaster Risk Management organized by the Disaster Prevention Research Institute (DPRI) of Kyoto University and the International Institute for Applied Systems Analysis (IIASA). The launching of the IDRiM Society was promoted also by many national and international organizations including Beijing Normal University, International Institute of Earthquake Engineering and Seismology (IIEES), National Research Institute for Earth Science and Disaster Prevention (NIED), the United Nations International Strat-

egy for Disaster Reduction (UN/ISDR), the Joint Research Centre of the European Commission (JRC/EC) and other organizations. The IDRiM Society was enthusiastically welcomed and its Charter approved by more than 100 international experts, practitioners, and individuals from more than 20 different countries working in the disaster risk management field. The founding members of the IDRiM Society include Prof. Norio Okada (Director, DPRI), Dr. Aniello Amendola (IIASA), Dr. Peijun Shi (BNU), Dr. Joanne Bayer (IIASA), Prof. Hirokazu Tatano (DPRI), Dr. Mohsen Ghafory-Ashtiani (IIEES), Dr. Reinhard Mechler (IIASA) and Dr. Ana Maria Cruz (DPRI).

Training Workshop at NCDR, Taipei City, Taiwan 26—30 September 2016



Nine students from Disaster Prevention Research Institute (DPRI) of Kyoto University headed for Taiwan to participate in the 2016 International Training Workshop for Natural Disaster Reduction - Natural Disaster Risk Modelling and Applications. The workshop was hosted by National Science and Technology Center for Disaster Reduction (NCDR) of Taiwan from September 26th to 30th, 2016. Researchers, disaster managers, emergency responders, government officials, and practitioners from fourteen countries including Bulgaria, Bangladesh, Cambodia, India, Indonesia, Japan, Korea, Laos, Malaysia, Nepal, Philippines, Taiwan, Thailand, and Vietnam attended the workshop. In the workshop, a series of lectures were given by NCDR and representing

participants from each country. Also field visits were followed at the end of the workshop.

On the first day, three keynote speakers opened the workshop with presentations outlining the main theme of the workshop. Prof. Koike addressed disaster risk reduction for paving foundation for climate change and sustainable development. Prof. Chan stressed the importance of risk communication skill to share information between government and public in pre, during, and post disaster management. Prof. Watanabe mentioned on implementing the area business continuity management through public-private partnership to improve resilience on social economy on disaster time. In addition, three lectures from NCDR were shared about Taiwanese experiences focusing on the mesh-based earthquake impact assessment tool, assessment module for a quick response of earthquake disaster, and typhoon loss assessment system of Taiwan.



Opening Ceremony

Training Workshop at NCDR, Taipei City, Taiwan



Participants of the Training Course

According to the weather forecast, a strong typhoon, Megi was approaching to Taiwan peninsula so that the schedule of the second day was shorten for the safety reasons. On that day, we visited NCDR and Central Emergency Operation Center (CEOC) and could understand how prepare and operate for the emergency situation of typhoon in Taiwan. It seemed communications from the government to public are favorable.

Dr. Iizuka from National Research Institute for Earth Science and Disaster Prevention (NIED) of Japan emphasized the necessity of further studies for both prospective hazard modeling and development of observing system since there are possibilities for new kinds of weather risks and more intensive natural catastrophes. Dr. Kyungsoo National Disaster Management Research Institute of Korea introduced the social-big data platform is required to share or gain disaster situation reports. Dr. John Ong from Manila Observatory of Philippines addressed the success key points for communication with local community during a disaster event are humility, listening, and sincerity. A good map is also crucial on the evacuation time. Dr. Lung from Academia Sinica of Taiwan said it is necessary to provide scientific evidences to assist in heat warning system

establishment, urban renewal priority settings, and public health intervention programs to reduce health risks from heat stress.

The third day was the day after Typhoon Megi hit Taiwan. In the morning on the way to NCDR, we could see the people in the streets cleaning up the mess, such as broken branches, fallen scooters and bicycles, garbage rampaged by the wind. The first keynote speech was given by Prof. Dimiter Velev from Bulgaria on “Advanced Information Technology Applications in Disaster Risk Reduction”. He stressed upon the lack of preparedness for major disasters in Bulgaria as the country has witnessed almost no severe disaster in recent times. But with the changing global climate the situation is not the same anymore. Dr. Chung-Sheng Lee from NCDR, in his address focused on the importance of introduction of “Critical Infrastructure Protection Management Program” in Taiwan. Highlighting the recent chaos created at the Taoyuan International Airport in June, 2016, he explained how important to maintain the continuous functionality of critical infrastructures. This was followed by an update on the status and damage caused by the Typhoon Megi by Dr. Wei Sen Li, Secretary General, NCDR. Dr. Li continued with a talk on the deadliest typhoon to impact Taiwan in recorded history, Typhoon Marakot. Different case studies were shared and also some unique relocation projects were introduced to participants. As it was a day just after the typhoon Megi, many presenters could not attend the program but all was very well managed and handled by the organizers.



Prof. Wei-Sen Li, Secretary-General, NCDR, Taiwan giving a status update on Typhoon Megi

Training Workshop at NCDR, Taipei City, Taiwan



The fourth day started with a keynote speech by Prof. Hirokazu Tatano, Secretary General, GADRI. In his speech, he explained the importance of “Disaster Risk Governance” and stressed on the importance of a shift from “Disaster Risk Management”. Prof. Wenko Hsu from National Central University, Taiwan introduced the risk modelling of natural disasters and designing of related insurance schemes. Khaled Mashfiq from United Nations Institute for Training and Research (UNITAR) gave us a presentation on increasing efficiency of emergency response using earth observations. The final presentation by Dr. Jiun Huei Jang from NCDR explained about an ongoing project and advances in early warning system in Flood disasters due to high intensity rainfalls. After the lunch was the concluding session for the workshop and completion certificates were distributed amongst all of the participants.

The fifth day was a day of field visit. We visited Sanshui Soil and Water Conservation Outdoor Classroom in Dabeikeng Community, Taoyuan City. It

is set in a picturesque location with a goal to raise public awareness for soil and water conservation deepening the roots of coexistence of men and nature. We were made aware of the importance of contour cultivation, relation between several organisms and trees (e.g. Unicorn beetle) and also about how the intensity of soil erosion changes with changing soil cover.

While we were there, we also made a visit to an ancient traditional Chinese house and got introduced to many cultural and traditional aspects. We also made a visit to a uniquely maintained ecological area where we discovered how living close to nature reduces our dependency on many amenities forced into us with the advancement in modern technology. We were introduced to the local Hakka culture and also tried first hand preparing many local delicacies. The visit was a refreshing experience for city dwellers like us.



Prof. Li explaining the importance of contour cultivation

As students, we were exposed to a lot of important issues ruling the direction of research in present time. The probability of extreme events which cause high impacts to society is expected to increase because of human activities and/or as a result of climate variability and change. After disaster, the chain failures through dependencies have domestic as well as international impacts leading to long term economic impacts for some decades. Risk communication is one of the prominent factors deciding the effectiveness of risk modelling and its application. Uses of ICT, Geo-big data, remote earth observation and IOT have been introduced during assessment, response and decision making tools. Again uses of available local or limited resources are very much needed to come up with acceptable accurate and quick information especially in case of natural disaster. Critical Infrastructures should be always taken in top priority during risk management. We learnt how along with technical knowledge we also need to know more about underlying condition of social, economic and other non-technical parameters.

In conclusion, these 5 days spent at the International Training Workshop 2016, Taipei has been nothing short of a learning experience. The participants hailed from



Participant from DPRI receiving the Certificate of Completion from Prof. Li

various disaster risk handling agencies from their countries with experience in many different fields.

A gathering of such a scale is a unique opportunity for learning the situation and the problems faced by experts in different regions. This workshop also introduced us to the technologies available and researches undergoing in all fields of major disasters. The content of training workshop and the timing was very relevant.



Participant from DPRI receiving the Certificate of Completion from Prof. Li

Reported by Students of the Disaster Prevention Research Institute (DPRI), Kyoto University — Anirban Chakraborty, Dewi Dimyati, Masahiro Fujii, Lina Karlina, Bonjun Koo, Ryosuke Oba, Rocky Talchabhadel, Wendiharjupa Dt Linduang Alam, Junga Yang,



University for Development Studies , Ghana

University for Development Studies (UDS), Tamale, Ghana, is a public University in the Republic of Ghana, established under Provisional National Defense Council (PNDC) Law 279 (1992), to provide higher education undertake research and promote the advancement and dissemination of knowledge and its application to the people of Ghana; and to blend the

academic world with that of the community in order to provide constructive interaction between the two. Its mandated regions were Brong Ahafo, Northern, Upper East and Upper West regions, covering more than half of the country.

One of important areas of research and education for UDS is the Disaster Reduction Research. Ghana is faced with numerous disaster events, such as annual floods and droughts, health epidemics, fire outbreaks, and infestations from pests and parasites. In 2013, 5489 fire outbreaks were recorded in the country, resulting in a total economic loss of US\$6,834,424 (Apronti et al., 2015). The impact of these disasters is exacerbated by weak early warning systems, slow response mechanisms, poorly planned infrastructure development, and high levels of poverty. The mainstreaming of DRR into the national education system is thus of outmost importance. To support national effort, UDS has taken part in CECAR Africa project dealing in disaster management and resilience building as pilot for the entire Africa and made major impact in communities where project was implemented. Further impact of UDS to improvement of national disaster education and research will be also achieved through its relevant Departments, such as Food Security and Climate Change.

We would like to see GADRI expand its orientation, membership and activities in Ghana, as well as West Africa. Thus, membership of UDS will also be of value to GADRI, as an anchor for its operations in Africa.



Indian Institute of Technology Gandhinagar (IIT-G), India

The Indian Institute of Technology Gandhinagar strives to offer the best undergraduate and graduate education in India with unmatched innovations in curriculum. The institute promotes critical thinking and an appreciation of the interdisciplinary character of knowledge, with an emphasis on the liberal arts, project oriented learning, compulsory courses in design and the life sciences, diversity and globalization. IIT Gandhinagar was founded in 2008 and is located in Palaj, Gandhinagar, Gujarat on the banks of river Sabarmati. Gandhinagar is in proximity to Ahmedabad which is one of the oldest living cities in India, known both for a rich cultural past as well as state-of-the-art infrastructure, thriving industries, and many modern amenities. **Safety Centre** is one of the prominent centres at IIT Gandhinagar. The objective of the IIT Gandhinagar Safety Centre is to promote safety in public and private spheres, industry and the informal sector. The Safety Centre advances these objectives with activities to Discover (Research and Development), Teach (Offering safety courses in UG and graduate curriculum), Outreach (through Conferences, Workshops, Seminars, Symposia and training Professionals from Academia and Industry) and Practice.

Suggestions for GADRI Future Directions:

More closer collaboration between GADRI and other member institutes with IITGN

Joint research and conference / workshop with IIT Gandhinagar Safety Centre

Sharing announcement of all the events among all member institutes

GADRI Members



School of Civil Engineering and Built Environment, Science and Engineering Faculty,
Queensland University of Technology, Australia

We focus on innovative responses to existing and emerging community, commercial and industrial challenges. We do this through strong research, nationally—recognised courses, industry-responsive postgraduate and executive education, and seamless industry engagement.

Our research focuses on innovations in health, the environment, and sustainable resources, in areas ranging from the development of new medical treatments and devices to the identification and assessment of pollutants and air quality.

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[Mechanical systems and asset management](#)

[Nanotechnology and molecular science.](#)

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Students learn from experienced lecturers and professors. Our teaching staff work within multidisciplinary research teams at the cutting edge of science and engineering and collaborate closely with industry and business. We prepare students for success in the workplace by sharing the latest in technical knowledge and the best in industry practice.

Web: <https://www.qut.edu.au/science-engineering/our-schools/school-of-chemistry-physics-and-mechanical-engineering/about-the-school>



China Research Center for Emergency Management (CEM), Wuhan University, China

China Research Center for Emergency Management of Wuhan University of Technology (hereinafter referred to as The center) was established in December 2005. Its predecessor is Crisis and Disaster Research Center of Wuhan University of Technology. It is the first research institution engaging in public security and emergency management during domestic colleges and Universities. In October 2007, Hubei Provincial Department of Education formally approved The Center to construct and operate as "The Key Research Base for Humanities and Social Sciences of Universities of Hubei Province"; In 2004, authorized by the People's Government of Hubei Province, "Hubei Collaborative Innovation Center for Early Warning and Emergency Response Technology" was established by the union of 28 government functional departments, cities, universities, research institutes and large enterprises. The members of scientific research team of The Center come from University of South Australia, City University of Hong Kong, University of Science & Technology of China, Huazhong University of Science and Technology, Wuhan University, Wuhan University of Technology and other well-known colleges and universities. With more than 700 square meters of research site and 2,000 square meters of Visualized Simulation and Analog Laboratory, more than 3,000 copies of professional books, journals and scientific material to meet the needs of scientific research, personnel training and social services, etc., The Center has the abundant power and superior conditions for scientific research.

Suggestions for GADRI Future Directions:

To enhance researcher and student exchange among different countries.

To pay more attention on the relief distribution and trapped people evacuation in post-disaster, since some kinds of disasters cannot be foreseen.

Web: <http://english.whut.edu.cn/scientficr/ResearchCenters/>



Addressing local and global environmental problems – from water pollution and hazardous waste to climate change and resource depletion – is the great challenge of the 21st century. Established in 2002, GSGES is composed of the Hall of Global Environmental Research (a research body), the School of Global Environmental Studies (an educational body), and the Grove of Universal Learning (a supporting body for education and research). Programs include the Doctoral Program in Global Environmental Studies, designed to foster excellent, innovative researchers who can further develop the emerging field of global environmental studies, and Master's and Doctoral Programs in Environmental Management, designed to educate outstanding practitioners with international perspectives and advanced management expertise. The programs include practical internship study both in Japan and overseas and feature courses, many taught in English, covering a broad spectrum of global environmental topics.

www.ges.kyoto-u.ac.jp/



National Hydraulic Research Center, National Engineering Center, University of the Philippines at Diliman, Philippines

The National Hydraulic Research Center (NHRC) was established in 1973 as a unit of the University of the Philippines with the aim of creating a R & D center within an academic environment to conduct research and provide technical advice on various problems of water resources development and management, hydrology, hydraulic and coastal engineering, fluid mechanics, and other related fields. Its creation in the 1970's was very timely since the national government then started undertaking several water resources projects which required the technical inputs provided by both local and international experts in the field of water resources.

NHRC suggestions for GADRI Future Directions: As GADRI is aiming to achieve international stature, developing research networks with researchers in foreign institutions and universities must be a major undertaking for purposes of not only organizing international conferences and meetings but to undertake long-term, joint research projects with these international partners.

www.coe.upd.edu.ph



Global Risk Forum GRF Davos Switzerland

After the successful launch of IDRC Davos 2006, the need of a regular international forum to address most pressing issues in risk and disaster management was raised by international risk management professionals and institutions. As the chairman and the organiser of the first IDRC Davos 2006, Walter J. Ammann implemented this request by founding the Global Risk Forum GRF Davos as the institutional framework. GRF Davos is since 2008 the organiser of the IDRC Davos conferences and promotes the worldwide exchange of know-how and expertise, creates solutions and fosters good practices in integrative risk management and climate change adaptation. GRF Davos aims through research, implementation, advocacy and networking activities at serving as a Centre of Excellence in knowledge and know-how exchange for the application of timely and appropriate risk management strategies, tools and practical solutions.

GRF Davos suggestion to GADRI is a curriculum for risk and disaster management at Master level which addresses a fully integrative and interdisciplinary approach.

www.grforum.org/



Bournemouth University, Disaster Management Centre (BUDMC), UK

The BUDMC is delighted to announce acceptance of a formal invitation to join the Global Alliance for Disaster Research Institutes (GADRI) and have become a full member of the Global Alliance in September 2016. GADRI is co-ordinated by Professor Hirokazu Tatano at the Disaster Prevention Research Institute (DPRI), Kyoto University, Japan.

The Global Alliance includes over ninety of the most prestigious and prominent research institutes dedicated to the study and research of crisis and disaster management. As Lee Miles comments:

'The BUDMC is delighted to become a member of a vibrant community of disaster management scholars and researchers. The invitation and acceptance can be taken as further verification of the BUDMC's international reputation for research, knowledge and enterprise in the field of crisis and disaster management. The BUDMC looks forward to forging new international partnerships that will further contribute to establishing fresh knowledge and findings in international disaster management'.

Those interested can find further details as: <http://gadri.net/>



Center for Risk-Based Community Resilience Planning , Colorado State University, USA

The ability to model community resilience comprehensively requires that experts from a number of disciplines work in concert to systematically model how physical, economic and social infrastructure systems within a real community interact and affect recovery efforts. There are currently no models that consider all aspects of how a natural hazard affects a community or that measure its resilience quantitatively. The Center for Risk-Based Community Resilience Planning is unique in merging the disciplines of Engineering, Social Sciences and Economics to model community resilience comprehensively. Systems that are essential for the recovery and vitality of a community - technological, financial, social and political support, healthcare delivery, education, and public administration - are being integrated in the model, creating a nexus between social and technological infrastructure that will narrow the gap between engineering and social science aspects of resilience planning and will facilitate risk communication among stakeholders and community resilience planners. The Center is composed of more than 90 individuals, including researchers, programmers/developers, NIST collaborators, postdoctoral scholars, and graduate students from our University Partners.

Suggestions for GADRI Future Directions:

We would like to learn more about GADRI and will provide input in due course .

www.resilience.colostate.edu/

SEI Initiative of Transforming Development and Disaster Risk

The Stockholm Environment Institute (SEI) is leading a global initiative on 'Transforming Development and Disaster Risk' (TDDR). The TDDR Initiative seeks to integrate disaster risk reduction with equitable, sustainable and resilient development. It aims to improve the understanding of how risks are created and how they accumulate, recognizing that disaster risk and development are closely interlinked. Phase I of TDDR will finish in late 2016. Phase II of TDDR is planned to start in early 2017. It will continue to generate knowledge to support changes in governance, policy and practice, including evaluation of the implementation of the Sendai Framework for DRR 2015-2030.

Publication:

SEI (2015). The SEI Initiative on Transforming Development and Disaster Risk. Stockholm Environment Institute.

Link to publication:

<https://www.sei-international.org/mediamanager/documents/Publications/SEI-FS-2015-Transforming-development-disaster-risk-initiative.pdf>

Addressing the cultural gap between humanitarian assistance and local responses to risk

SEI staff authored a crowd-sourced brief for the 2016 United Nations Global Sustainable Development Report. The brief highlights the need to look at local cultural interpretations and responses to risks to develop context-specific and more effective disaster risk reduction strategies.

Publication:

Johnson, K., Wahl, D., Thomalla, F. (2016). Addressing the cultural gap between humanitarian assistance and local responses to risk through a place-based approach. Crowd-sourced Brief for the 2016 Global Sustainable Development Report. United Nations.

Link to publication: https://sustainabledevelopment.un.org/content/documents/994846_Johnson%20et%20al._Addressing%20the%20cultural%20gap%20between%20humanitarian%20assistance%20and%20local%20responses%20to%20risk%20through%20a%20place-based%20approach.pdf

SEI's work on disaster risk reduction and sustainable development

SEI works around the world to support efforts to reduce vulnerability and enhance resilience to disaster risks among individuals, communities and societies. We have a strong track record in sustainability science; risk assessment, vulnerability, adaptation and resilience research; as well as stakeholder engagement, collaborative learning, policy engagement and capacity-building.

Publication:

SEI (2016). SEI's work on disaster risk reduction and sustainable development. Stockholm Environment Institute.

Link to publication:

<https://www.sei-international.org/mediamanager/documents/Publications/SEI-FS-2016-DRR-development-capacity.pdf>

UPCOMING EVENTS

The 3rd Global Summit of Research Institutes for Disaster Risk Reduction

Date: 19 to 21 March 2017

※Early Bird registration until 10 January 2017:

JPY10,000/person (around US\$98/person)



The 3rd Global Summit of Research
Institutes for Disaster Risk Reduction

19 Mar. – 21 Mar. ,2016

3rd Global Summit of Research Institutes for Disaster Risk Reduction (GSRIDRR)

Background:

In the aftermath of the Great East Japan Earthquake and Tsunami which impacted on the economy and massive human losses, the Disaster Prevention Research Institute (DPRI) Kyoto University engaged to organize the First Global Summit of Research Institutes for Disaster Risk Reduction (GSRIDRR) in November 2011. The main objective of the summit was to bring together research organizations involved in disaster risk reduction (DRR) to reassess and reflect on the challenges posed, and discuss and identify new paradigms based on the lessons learned from recent disasters around the world. At the end of the First Global Summit, a resolution was adopted to establish an international forum on natural disaster research. During the Second Global Summit of Disaster Research Institutes for DRR in March 2015, the resolution was further discussed and the Global Alliance of Disaster Research Institutes (GRADRI) was formerly established to support the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) and the work of the Scientific and Technical Advisory Group of the United Nations Office for Disaster Risk Reduction (UNISDR). Today GADRI has over 100 member institutions.

Objectives:

The 3rd Global Summit of Research Institutes for DRR: **Expanding the Platform for Bridging Science and Policy Making** will be held at the Disaster Prevention Research Institute (DPRI), Kyoto University, Uji Campus from 19 to 21 March 2017. The 3rd Global Summit will build on the achievements of the last two Global Summits and GADRI projects.

The 3rd Global Summit will bring together representatives from research institutes involved in DRR research with the following objectives:

- To serve as an advocate for key research policy statements that are in line with real, evidence-based disaster research needs.
- To carry out a more detailed assessment of key research challenges and to identify priority research areas
- To identify pioneering scientific initiatives to effectively reduce the gaps between science and practice in disaster risk reduction activities.
- To share and build on achievements, and outcomes of past and ongoing GADRI Projects addressing research gaps.

To foster links between local and international organizations and their programs through the GADRI network.

Expected Outcome:

The 3rd Global Summit is an opportunity for various stakeholders in local governments, private sector and others to engage in risk management information, share responsibility and resources, and voice in unification evidence-based statements for implementation. One of the expected outcomes of the 3rd Global Summit will be a comprehensive table of research areas by disaster management phases identifying key and/ or critical research challenges.

Registration:

We extend an invitation to all stakeholders involved in DRR and disaster research to join the 3rd Global Summit.

Registration fee: JPY15,000/person

**(Early Bird Registration until 20 January 2017:
JPY10,000/person)**



INDIAN INSTITUTE OF TECHNOLOGY GANDHINAGAR

INTERNATIONAL CONFERENCE ON

SAFETY (ICS 2017)

January 3-6, 2017 ...Promoting a Culture of Safety



Organized by:
SAFETY CENTRE
IIT Gandhinagar

In Association with:
  
MARY KAY O'CONNOR
PROCESS SAFETY CENTER

3rd International Conference on Safety during January 3-6, 2017 (ICS 2017) at IIT Gandhinagar, Palaj, Gandhinagar, Gujarat – 382355, India

We are pleased to send the announcement for submission of abstract for presentation in the **3rd International Conference on Safety during January 3-6, 2017 (ICS 2017) at IIT Gandhinagar, Palaj, Gandhinagar, Gujarat – 382355, India**. While the first two days are kept for general conference including multiple sessions on Risk, Process safety, Fire Safety etc., the last two days are kept for two simultaneous symposium on (1) **Symposium on Process Safety (SPS 2017)** and (2) **Symposium on Structure under Fire (SSUF 2017)** by eminent safety professionals around the world.

For all other information, please see the conference website <http://safety.iitgn.ac.in/ics2017> or contact Safety Centre. Also see the call for abstract in attachment.

3rd Global Summit of Research Institutes for Disaster Risk Reduction (GSRIDRR) DPRI, Kyoto University, Uji Campus, Oubaku Plaza, Kyoto, Japan 19 to 21 March 2017

The **3rd Global Summit of Research Institutes for DRR: Expanding the Platform for Bridging Science and Policy Making** will be held at the Disaster Prevention Research Institute (DPRI), Kyoto University, Uji Campus from 19 to 21 March 2017.

The 1st GADRI General Assembly DPRI, Kyoto University, Uji Campus, Oubaku Plaza, Kyoto, Japan 21 March 2017

On the occasion of the **3rd Global Summit of Research Institutes for DRR: Expanding the Platform for Bridging Science and Policy Making** to be held at the Disaster Prevention Research Institute (DPRI), Kyoto University, Uji Campus from 19 to 21 March 2017, the Global Alliance of Disaster Research Institutes (GADRI) will hold its first General Assembly meeting on the afternoon of 21 March 2017.

The First Meeting of the DPRI Alumni and Visitors DPRI, Kyoto University, Uji Campus, Oubaku Plaza, Kyoto, Japan 20 March 2017

On the occasion of the **3rd Global Summit of Research Institutes for DRR: Expanding the Platform for Bridging Science and Policy Making** to be held at the Disaster Prevention Research Institute (DPRI), Kyoto University, Uji Campus from 19 to 21 March 2017, the first meeting of the DPRI Alumni and Visitors will take place during the afternoon of 20 March 2017. The meeting will be followed by a dinner reception.



GSRIDRR 2017



3rd Global Summit of Research Institutes for Disaster Risk Reduction Expanding the Platform for Bridging Science and Policy Making

**Disaster Prevention Research Institute (DPRI), Kyoto University
Obaku Plaza, Uji, Kyoto, Japan from 19 to 21 March 2017**

3rd Global Summit of Research Institutes for DRR : **Expanding the Platform for Bridging Science and Policy Making** (GSRIDRR 2017) will be held at the Disaster Prevention Research Institute (DPRI), Kyoto University, Uji Campus from 19 to 21 March 2017. The 3rd Global Summit will bring together representatives from research institutes involved in disaster risk reduction (DRR) research with the following objectives:

- To serve as an advocate for key research policy statements that are in line with real, evidence-based disaster research needs.
- To carry out a more detailed assessment of key research challenges and to identify priority research areas
- To identify pioneering scientific initiatives to effectively reduce the gaps between science and practice in disaster risk reduction activities.
- To share and build on achievements, and outcomes of past and ongoing GADRI activities addressing research gaps.
- To foster links between local and international organizations and their programs through the GADRI network.

Expected Outcome:

1. To develop a comprehensive tabulation of important research themes along the four priority areas that will be used to evaluate policies and practices of current research activities and identify gaps in disaster risk reduction in relation to the SFDRR.
 - I Understanding – Deepening the understanding of disaster risks
 - II Governance – Enhancing governance to manage disaster risks
 - III Resilience – Disaster risk reduction for resilience
 - IV Recovery – Effective response to disaster recovery / Build Back Better
2. A book publication based on the results of the discussions to identify the most important research themes for disaster risk reduction. The book will provide visions and knowledge to connect the current status of science and technology with future directions for disaster research to contribute for disaster risk reduction in the world.
3. Encourage cross-institutional collaboration to fill the research gaps.

We extend an invitation to all stakeholders involved in DRR and disaster research to join the 3rd Global Summit.

Registration: <http://gadri.net/summit/>



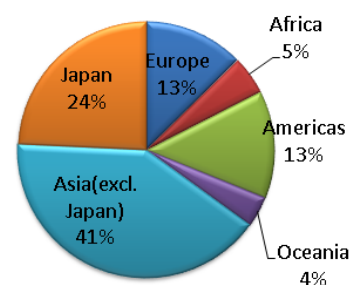
Global Alliance of Disaster Research Institutes (GADRI)

At the commendation of the Second Global Summit of Research Institutes held in March 2015 at the Kyoto University Disaster Prevention Research Institute, Kyoto, Japan, the Global Alliance of Disaster Research Institutes (GADRI) was established to support the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) and the work of the Scientific and Technical Advisory Group of the United Nations Office for Disaster Risk Reduction (UNISDR). One of the recommendations was to form a research roadmap for the next decade.

To further realize these goals, the members of the Second Global Summit joined hands and established GADRI. Since March 2015, GADRI's membership has expanded to over 100 member institutions.

Area	Members
Europe	13
Africa	5
Americas	14
Oceania	4
Asia(excl. Japan)	42
Japan	25
TOTAL	103 (31 States)

Regional Distribution



Global Alliance of Disaster Research Institutes (GADRI) Secretariat

GADRI Secretariat is currently hosted by the Disaster Prevention Research Institute (DPRI), Kyoto University, Uji Campus, Kyoto, Japan.



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