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**International Inaugural Symposium for
UNESCO WENDI Chair, Kyoto University, Japan**
**30 July 2018, Symposium Hall, International Science Innovation
Building (WEST) 5F**

More-Room-For-Water Initiative

Matjaž Mikoš

UNESCO Chair on Water-Related Disaster Risk Reduction
University of Ljubljana, Slovenia
www.unesco-floods.eu

Presentation Overview

❑ Activities of UNESCO WRDRR Chair at University of Ljubljana, Slovenia

❑ Sustainable Development Goals Index and Dashboard Report 2018

❑ Sendai Framework on DRR and Disaster Science

❑ More-Room-for-Water (MR4W) Initiative

❑ Perspectives for Collaboration WRDRR - WENDI

https://www.unesco-floods.eu

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Since 2016, WRDRR is targeting **capacity development** and **society resilience** for water-related disaster risk reduction by focusing on:

(1) Improving the understanding and encouraging the approach to <u>controlling flood risk</u>, based on the idea of "living with floods", rather than on "implementing flood measures";

(2) Furthering research and developing early warning systems, including strengthened monitoring of capacities and hydrological modelling of socio-ecological systems, consisting of natural and anthropogenic water cycles for operational support of <u>Integrated Water Resources Management</u>;

(3) Translating, comparing and analysing data on <u>socio-economic damages</u> due to water-related hazards, while taking into account the scope of hydrological hazard and social vulnerability;

(4) Supporting member states to increase the resistance to water-related disasters and <u>promote risk management</u>;

(5) Developing the knowledge on past natural disasters, with insight into the <u>changing nature of hazards and vulnerability</u>;

UNESCO Chair Activities II

(6) Developing adjustment measures related to <u>climate change</u>;

(7) <u>Adjusting hydrological models</u> with remote sensing data for various water management uses;

(8) Supporting actions for increasing the availability of hydrological data in nearly real time obtained in remote sensing and field monitoring, allowing for an integrated approach and continuous <u>calibration and upgrading of the models</u>;

(9) Studying how different environments understand the <u>uncertainty of flood maps</u> and other water-related risks;

(10) Developing and performing systematic checks of existing natural systems with satisfactory performance in the <u>urban environment</u>, and finding new approaches, particularly those leading to the use of <u>eco-hydrological concepts</u>;

(11) Developing platforms for cooperation of several interested parties and the public related to the <u>effective use of eco-hydrological achievements</u>, and

(12) Developing new solutions suitable for local natural and cultural conditions through an <u>integrated approach to research and doctoral study programmes</u>.

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4th World Landslide Forum (May 29 - June 2, 2017, Ljubljana)

600 participants from 50 countries

many international bodies

www.wlf4.org

World Construction Forum (April 8 – 11, 2019, Ljubljana)

- Energy in 21st Century
- Engineering Capacity Building
- Construction 4.0
- Cultural Heritage in Digital World
- Disaster Risk Management & Governance for Resilient Communities
- Facility & Asset Management & BIM Lifecycle

www.wcf2019.org

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TU Dresden, Germany
IHE Delft, Netherlands
TU Catalonia, Spain
University of Ljubljana, Slovenia

This 2-year Master Programme (2011-2017 over 100 masters; new for 2019-2024) follows the holistic approach and is explicitly designed to cover a wide range of topics – from drivers and natural processes to models, decisions and socio-economic consequences and institutional environment, and is therefore an important advance in water education for Europe.

http://www.floodriskmaster.org/

UNESCO Chair Activities V

Slovenian Research Agency (ARRS) research programme P2-0180 „Water Science and Technology, and Geotechnical Engineering" – 2017-2021

ARRS & IPL-225 research project „Recognition of potentially hazardous torrential fans using geomorphometric methods and simulating fan formation" – 2017-2020

ARRS & IPL-226 research project „Studying landslide movements from source areas to zone of deposition using a deterministic approach " – 2017-2020

World Centre on Excellence (WCoE) on Landslide Risk Reduction „Landslides in Weathered Flysch: from activation to deposition" – 2017-2020

ARRS Targeted research project „Development of a unified method for estimation of benefits of constructional and non-constructional measures for flood risk reduction" – 2018-2019

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On track for the global goals:
Which country performs best to achieve the Sustainable Development Goals by 2030?

1.	Sweden		85,0
2.	Denmark		84,6
3.	Finland		83,0
4.	Germany		82,3
5.	France		81,2
6.	Norway		81,2
7.	Switzerland		80,1
8.	Slovenia		80,0
9.	Austria		80,0
10.	Iceland		79,7
14.	United Kingdom		78,7
15.	Japan		78,5
19.	Korea, Rep.		77,4
20.	Canada		76,8
29.	Italy		74,2
35.	United States		73,0
37.	Australia		72,9
53.	Argentina		70,3
54.	China		70,1
56.	Brazil		69,7
63.	Russian Federation		68,9
79	Turkey		66,0
86.	Mexico		64,8
98.	Saudi Arabia		62,9
99.	Indonesia		62,8
107.	South Africa		60,8
112.	India		59,1
G20			

The Scores represent the overall rankings from the SDG-Index (157 country's) for individual countries. 100 is the maximum score.

SUSTAINABLE DEVELOPMENT SOLUTIONS NETWORK | BertelsmannStiftung

SDG INDEX AND DASHBOARDS REPORT 2018

GLOBAL RESPONSIBILITIES

IMPLEMENTING THE GOALS

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SDG Index and Dashboard Report 2018

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Sendai Framework on DRR and Disaster Science

Disaster science scholarly output overall, by disaster management cycle stage, and by disaster type according to the Sendai Framework; 2012-2016; source: Scopus®.
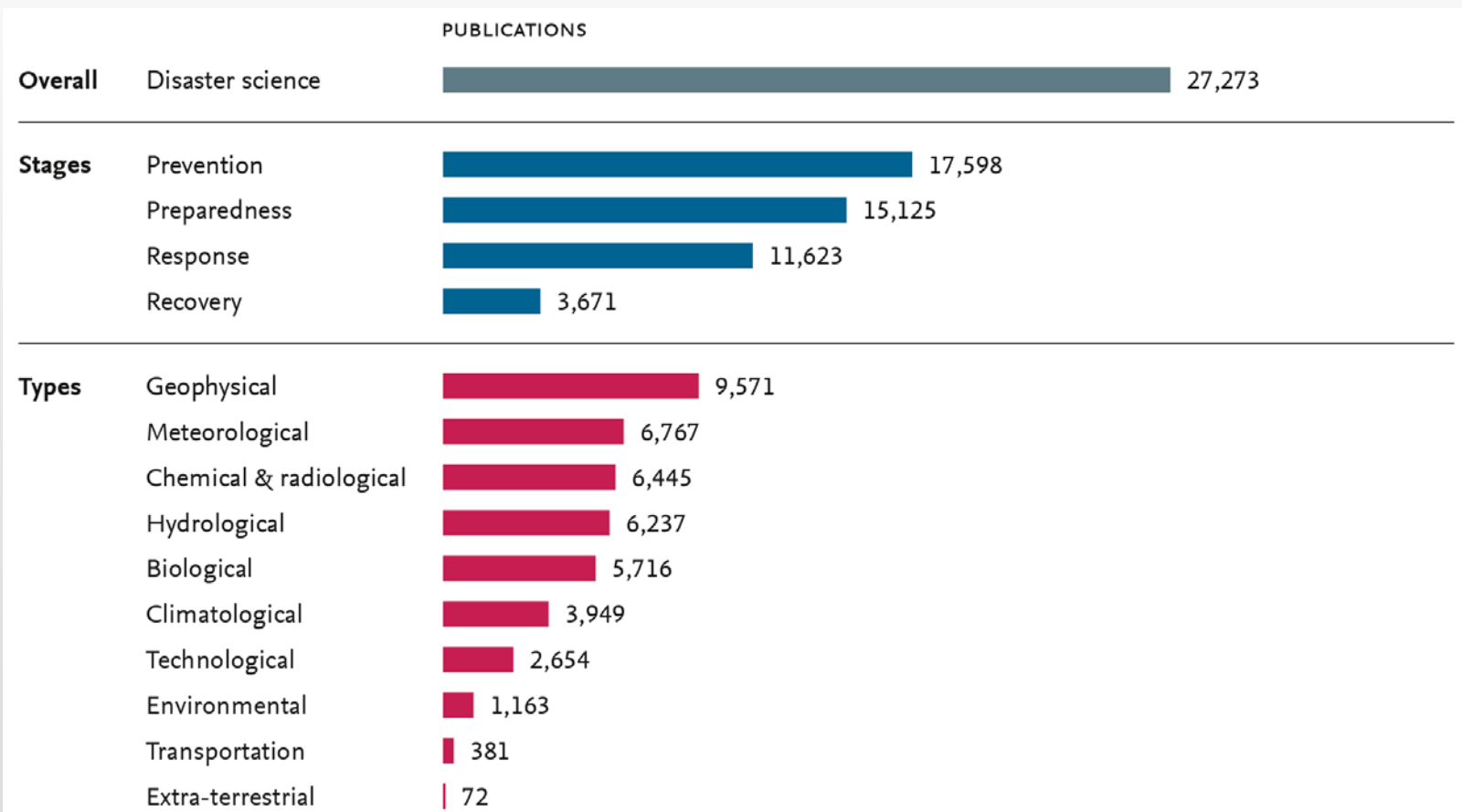
PUBLICATIONS

Overall	Disaster science	27,273
Stages	Prevention	17,598
	Preparedness	15,125
	Response	11,623
	Recovery	3,671
Types	Geophysical	9,571
	Meteorological	6,767
	Chemical & radiological	6,445
	Hydrological	6,237
	Biological	5,716
	Climatological	3,949
	Technological	2,654
	Environmental	1,163
	Transportation	381
	Extra-terrestrial	72

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Sendai Framework on DRR and Disaster Science

2004-2013 natural disasters death toll as a share of population (shade of country), disaster science 2012-2016 scholarly output (size of circle), disaster science 2012-2016 relative activity index (RAI, color of circle); sources: Scopus, IFRC 2015 Disaster Report, World Bank, and Taiwan Statistical Data book.
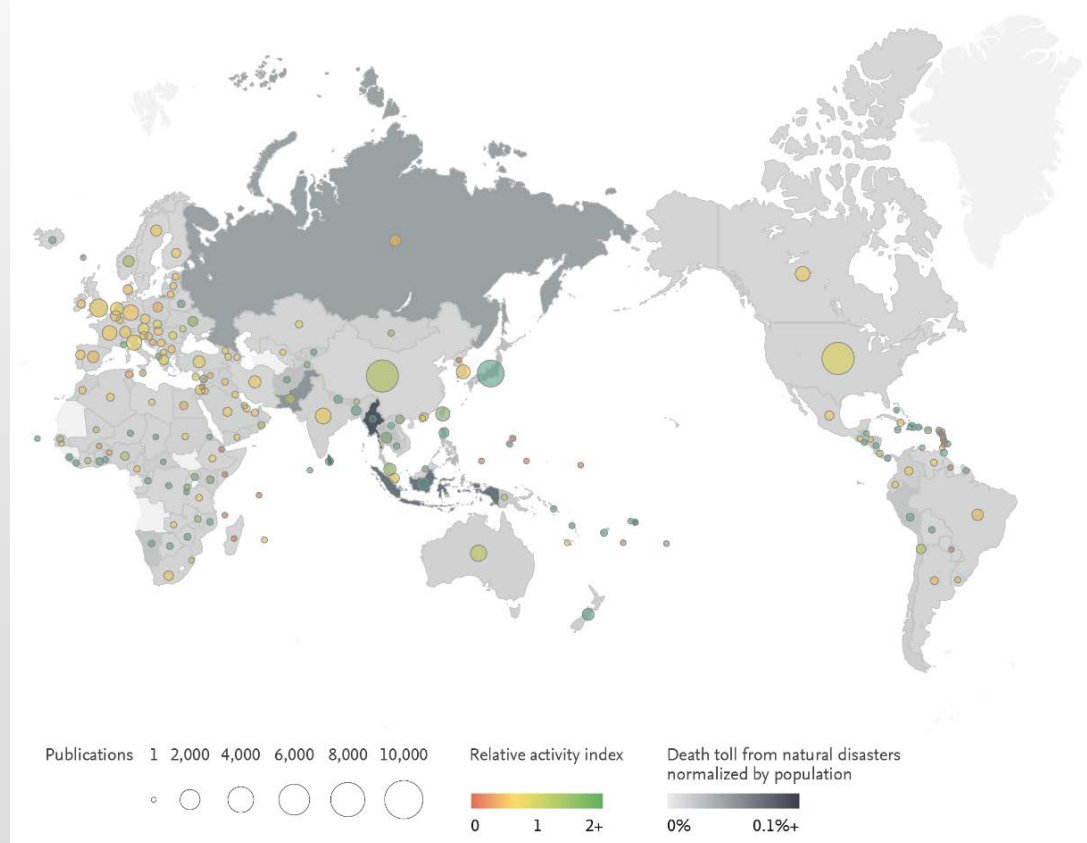
https://www.elsevier.com/research-intelligence/resource-library/a-global-outlook-on-disaster-science

Sendai Framework on DRR and Disaster Science

Disaster science scholarly output (circle size), relative activity index, and field-weighted citation impact per comparator country; 2012-2016; source: Scopus.

https://www.elsevier.com/research-intelligence/resource-library/a-global-outlook-on-disaster-science
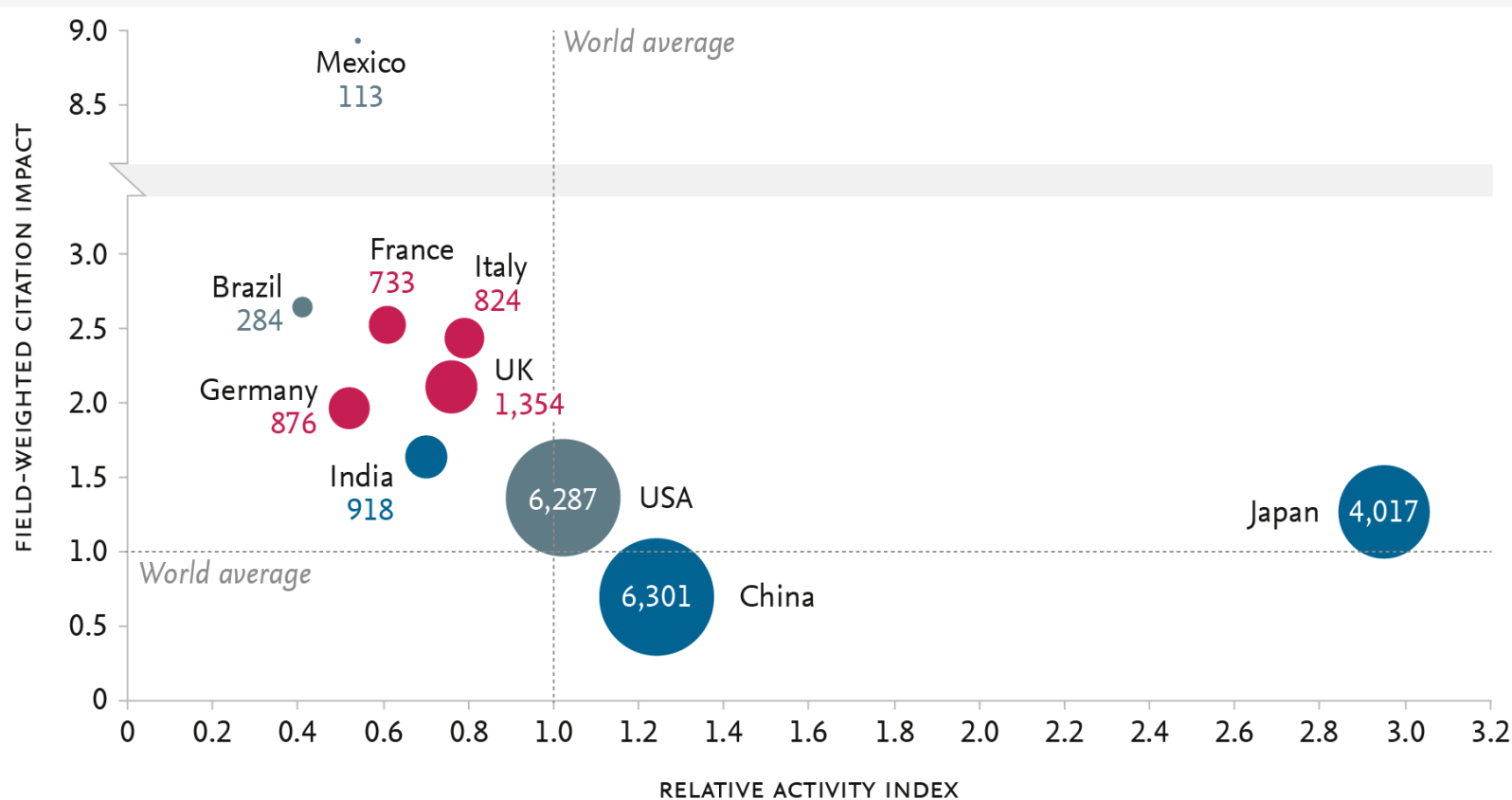
MR4W Initiative's Starting Points

International Vision 2050 for Achieving Zero Traffic Deaths by 2050.

The Netherlands Programme „Room for the River" for a safer and more attractive river landscape – 2006/2016 Dutch flood mitigation projects not to confine rivers any more but to give water more space to move on floodplains (https://www.ruimtevoorderivier.nl/english/).

Sendai Framework for Disaster Risk Reduction 2015-2030.

The UN 2030 Agenda for Sustainable Development & 17 Sustainable Development Goals.

Our own experiences with field experiments and mesurements in Experimental River Basins (ERB).

Our contributions to the international cooperation in the Sava & Danube River Basins (http://www.savacommission.org/ & https://www.icpdr.org/).

MR4W Initiative & SDGs

WRDRR Chair is targeting:

#4 Quality Education

#6 Clean Water and Sanitation

#13 Climate Change

#17 Partnerships for the Goals.

Therefore, we are networking with other UNESCO Chairs in related fields.

MR4Water Initiative is in line with the world-wide efforts to reach the above mentioned four Sustainable Development Goals till 2030.
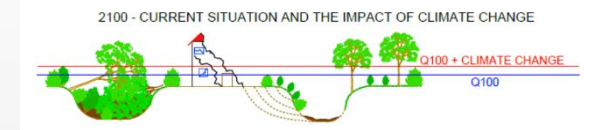

https://sustainabledevelopment.un.org/sdgs

MR4W Initiative Rationale

WRDRR Chair's firm orientation to interrelate natural and technical sciences with social sciences, lead in the last year to a formal initiative called More-Room-for-Water Initiative (MR4Water Initiative).

MR4W Initiative was prepared for the **23rd Session of the UNESCO IHP Intergovernmental Council** (Paris, 11-15 June 2018) where it got informal support.

The ratio behind the Initiative is to promote **adaptive & integrated water resources management** (IWRM) and **bottom-up governance** in the field of water management, including water-related disasters: floods, droughts, rainfall-induced shallow and deep-seated landslides & fast flowing mudflows and debris flows.

Especially in the preparedness phase, MR4Water Initiative should raise the awareness of water-related disasters and stimulate orientation towards **adaptive process-oriented water resources management** that would less interfere with natural processes instead of trying to technically solve all problems.

The first step planned: preparation of a monograph of selected case studies & best practices around the world prepared by invited contributors.

WRDRR – WENDI Collaboration

WRDRR (UL FGG & UL) and WENDI can cooperate in the following higher education and research fields:

❑ Raising landslide risk awareness and social resilience through research and education for landslide risk reduction.

❑ Raising knowledge, expertise and awareness of transboundary water issues related to climate change: pollution, floods, sediments, droughts.

❑ More-Room-for-Water Initiative (MR4Water Initiative).

❑ Drinking water issues and water reuse related to circular economy and smart cities.

❑ Earthquake engineering and disaster risk reduction (building codes).

❑ Digitalization of cultural heritage.

❑ Introducing ICT to education curricula in Water, Energy and DRR.

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WRDRR – WENDI Collaboration

WRDRR (UL FGG & UL) and WENDI cooperation can take the following forms:

❖ International Consortium on Landslides (ICL).

❖ Summer schools for doctoral (PhD) students.

❖ Bilateral research projects Japan – Slovenia.

❖ Working in Experimental Rivers Basins (ERB) in Slovenia.

❖ Working in GGN – Idrija Geopark (mercury pollution) & Karavanke Geopark (torrents & debris flows).

❖ Supporting international publications in co-authorship, preparing interdisciplinary papers for knowledge dissemination.

❖ Developing of Open Education Resources (OER).

My sincere condolences for the July 2018 Floods, Landslides & Heat Wave & Typhoon victims in Japan.

Thank You for Your attention ….. Arigato gozaimasu