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**SAFETY AND
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INTERSECTORAL
LABORATORY**

Resilience Catalysts

The Interplay of Education, Science and Culture
in Transforming Governance for
Building Resilience to Disasters.

Insights from UNESCO Chairs.

Report

from the **Global webinar:**

Resilience Catalysts: The Interplay between Education, Science and Culture in Transforming Governance for Building Resilience to Disasters.

Insights from UNESCO Chairs

19th June 2024

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UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience, SPRINT-Lab, University of Udine (Italy)

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This report summarizes the discussions held during the **"Resilience Catalysts" global webinar**, an initiative developed within the activities of the ResiliEnhance Programme. Launched in October 2022 by the UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience of the University of Udine (Italy) in collaboration with the Central Europe Initiative (CEI), the ResiliEnhance Programme aims to bolster the resilience and safety of societies, fostering sustainable development in the process.



UNESCO Chair on
Intersectoral Safety for
Disaster risk reduction
and Resilience
SPRINT-Lab,
University of Udine, Italy



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Summary

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1. Background

Events and phenomena with a strong impact on the territory, linked to climate change, natural hazards, and human activities are affecting with greater frequency and intensity all countries around the world while social and natural systems are becoming increasingly complex and strongly interconnected. This systemic dimension as well as the complexity of the aforementioned issues calls for strengthening the cooperation among countries and adopting intersectoral approaches to improve safety and resilience.

To address these challenges, a set of global frameworks has been developed, including the [United Nations 2030 Agenda for Sustainable Development](#), the [Sendai Framework for Disaster Risk Reduction 2015-2030](#), and the [Paris Agreement](#). These frameworks work hand in hand to provide a coordinated approach for building resilience across various sectors and scales. The [Global Assessment Report \(GAR\) 2022](#) and the [GAR Special Report 2023: Mapping resilience for the Sustainable Development Goals](#) encourage us to reflect on the progress made so far and the road ahead. They are to be conceived as a call to action to better understand and act to face systemic risk and to invest in strengthening community resilience.

Operating at the interface of the natural and social sciences, education, culture, and communication and information, UNESCO is uniquely positioned to contribute to disaster risk reduction (DRR). The Organization's wide mandate and expertise enable it to take a multi-hazard, multi-disciplinary and multi-stakeholder participatory approach, which is unique among UN agencies. As for the UNESCO Chairs and UNITWIN Networks, they have proven value in advancing interdisciplinary knowledge generation and UNESCO's role as a global observatory and as a laboratory of ideas acting as think tanks and bridge-builders, thereby strengthening the research-training-policy-society nexus.

In this context, under the umbrella of the Disaster Risk Reduction Unit of the Natural Sciences Sector of UNESCO, the UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience of the University of Udine in Italy (hereinafter, the UniUD Chair) organized on 19 June 2024, a global webinar among UNESCO Chairs focused on DRR and resilience. This webinar is part of the [ResiliEnhance Programme](#) launched in October 2022 by the UniUD Chair in collaboration with the Central European Initiative (CEI), a programme that aims to strengthen the resilience and safety of societies to foster sustainable development. This Programme includes a set of activities including the ResiliEnhance Platform, which provides an interdisciplinary and intersectoral space for experts to discuss and propose recommendations aiming at supporting risk-informed and resilient sustainable development, notably in Central Europe.

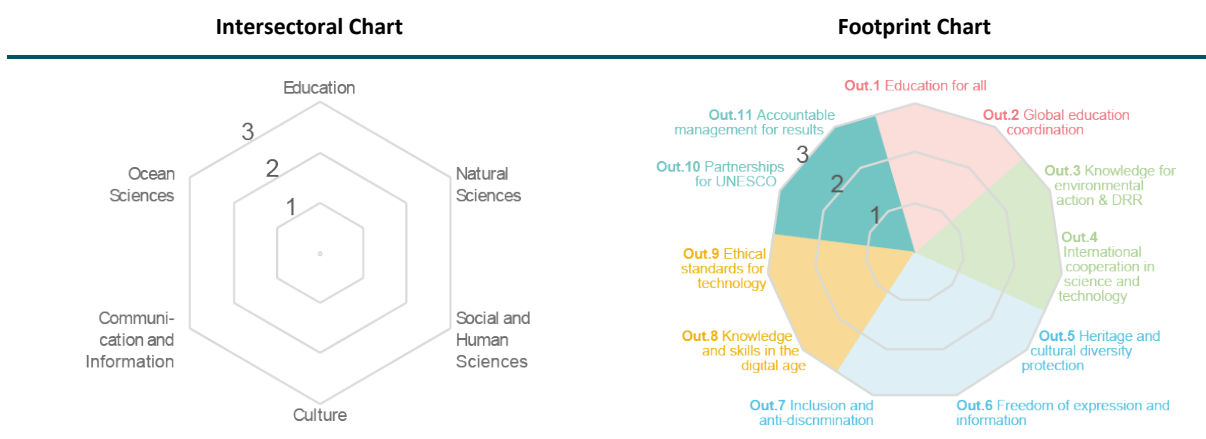
The present report aims to summarise the presentations and discussions held during this global webinar entitled: "Resilience Catalysts: The Interplay between Education, Science and Culture in Transforming Governance for Building Resilience to Disasters. Insights from UNESCO Chairs".

The webinar registration can be found at: <https://resilienhance.uniud.it/resilience-catalysts>.

2. Purpose and objectives of the “Resilience Catalysts” webinar

The “Resilience Catalysts” webinar aimed to begin exploring the role of UNESCO Chairs focused on disaster risk reduction and resilience, in the complex interplay between Education, Science, and Culture, to enhance resilience and mitigate disasters.

Ahead of the webinar, representatives from selected UNESCO Chairs¹ were asked to complete an information form detailing their activities related to Disaster Risk Reduction (DRR) and resilience. The form included information on their primary UNESCO field (education, natural sciences, social and human sciences, culture, communication and information, and ocean sciences) and their contribution to the various outcomes of [UNESCO's Medium-term Strategy \(2022-29\)](#) (see Annex 3). Thanks to this information, two radar graphs - the “Intersectoral Chart” and the “Footprint Chart”² - were developed per Chair using a three-level scale. Each Chair presented these charts during their respective presentations at the global webinar.



Chairs summarized their contribution through the three-level scale based on the following criteria:

- **Level 1: No or limited involvement.** This UNESCO field is not a primary focus of the Chair's research and activities. There might be minimal overlap between the Chair's work and this specific field.
- **Level 2: Substantial contribution.** This field is a significant area of impact for the Chair's research and activities. While not the absolute core focus, the Chair's work exhibits substantial understanding and contributes meaningfully to this UNESCO field.
- **Level 3: Core area of expertise.** This field constitutes the central focus of the Chair's research and activities. The Chair's work demonstrates in-depth knowledge and expertise within this UNESCO field.

¹ The UniUD Chair identified nineteen relevant UNESCO Chairs. These Chairs were selected based on their participation in the ResiliEnhance Platform and their titles containing the keywords “resilience”, “disaster”, or “risk” (see Annex 1 for the complete list). Fourteen of the nineteen Chairs responded positively and participated in the event.

² The predefined positioning criteria had been conceived in consultation with the Disaster Risk Reduction Unit of UNESCO.

Additionally, Chairs were invited to present case studies, projects or initiatives that highlight their role as a catalyst for resilience. These presentations aimed to showcase how the Chairs promote communities' capacity to prepare for, absorb, and adapt to shocks from natural hazards and climate impacts.

Through these presentations and discussions, the webinar overall aimed to initiate ongoing dialogue and collaboration among participating UNESCO Chairs.

3. Global webinar summary

The two-hour event fostered collaboration among thirty-six participants representing fourteen UNESCO Chairs, UNESCO, and other organizations and institutions. This was a closed-door event, facilitating focused discussions.

The following sections briefly summarize the outcomes of the webinar, highlighting the main aspects raised during the introductory remarks, and the mapping of involved Chairs within the UNESCO fields. Finally, the concluding remarks are also summarized.

3.1. Introductory remarks

Dr. Soichiro Yasukawa, Chief of the Disaster Risk Reduction Unit at UNESCO started the series of introductory remarks. He underscored the importance of interdisciplinary collaboration among UNESCO Chairs in disaster risk reduction. He acknowledged the difficulties in connecting with the vast network of global experts and expressed optimism that the webinar would foster networking opportunities and collaborative projects. Dr. Yasukawa highlighted UNESCO's multi-sectoral approach to disaster risk reduction, encompassing science, education, culture, and communication. He detailed UNESCO's multifaceted work in eight key areas, including early warning systems, school safety, and post-disaster response, with a particular focus on supporting Africa and Small Island Developing States (SIDS). This information is all compiled within the report: "[Disaster Risk Reduction: UNESCO's contribution to a global challenge](#)".

Ms. Inga Nichanian, Coordinator of the UNITWIN/UNESCO Chairs Programme at UNESCO emphasized the Programme's pivotal role in fostering international collaboration and knowledge exchange among universities. She stressed the Programme's interdisciplinary nature and its commitment to building institutional capacity across all facets of UNESCO's mandate. Ms. Nichanian underscored the significance of transdisciplinary, future-oriented approaches, and North-South-South cooperation in addressing global challenges. She extended an invitation to participants to engage in upcoming UNESCO events focused on youth, future generations, and knowledge transformation for Africa's future.

Professor Stefano Grimaz, Chairholder of the UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience at the University of Udine in Italy introduced the webinar as part of the [ResiliEnhance Programme](#), supported by the Central European Initiative and the Friuli Venezia Giulia region in Italy. He emphasized the goal of mapping the contributions of UNESCO Chairs as Resilience Catalysts within the UNESCO mandate. The webinar aims to create an intersectoral chart showcasing how the activities of the Chairs integrate with UNESCO's main sectors: education, natural sciences, social and human sciences, culture, communication and information, and ocean sciences. The initiative aimed to foster collaboration and synergies among the Chairs.

3.2. Chair’s contribution to UNESCO fields and outcomes

This section summarizes the key insights gleaned from the presentations delivered by UNESCO Chairs during the global webinar (full presentations are available for reference in Annex 2). The following table presents a summary of data provided by the participating UNESCO Chairs, showing the two radar graphs (the “Intersectoral Chart” and the “Footprint Chart”) shared by each Chair. Levels were assigned by each Chair using the criteria previously presented.

The order of the Chairs in the table is the presentation order adopted during the webinar.

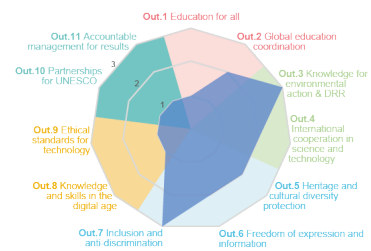
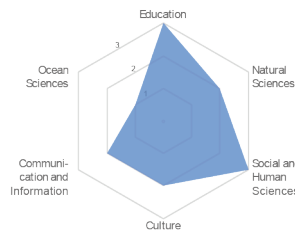
| Chair title (Country) - Chairholder | Intersectoral Chart | Footprint Chart |
|--|---------------------|-----------------|
| UNESCO Chair on Water, Energy and Disaster Management for Sustainable Development; Kyoto University (Japan) - Yasuto Tachikawa | | |
| UNESCO Chair on Cultural Heritage and Risk Management; Ritsumeikan University (Japan) - Junko Mukai | | |
| UNESCO Chair in Cultural Heritage Management and Sustainability; University of Pannonia; The Institute for Social and European Studies Foundation (ISES) (Hungary) - Akos Jacobi | | |
| UNESCO Chair on Urban Resilience; University of Southern Denmark (Denmark) – Nicola Tollin | | |

Chair title (Country) - Chairholder

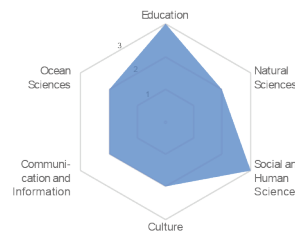
Intersectoral Chart

Footprint Chart

UNESCO Chair on Gender, Vulnerability and Well-being in Disaster Risk Reduction Support; Kobe University (Japan) - Ronni Alexander

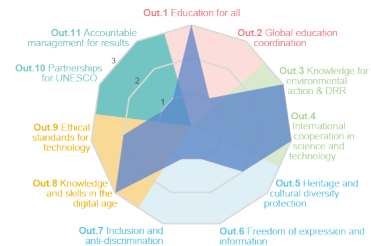
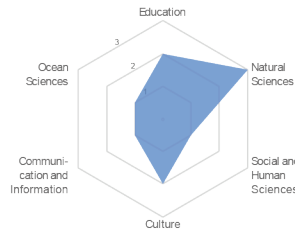


UNESCO Chair in Societal Climate Change Research and Resilience; Universität Hamburg (Germany) - Beate Ratter

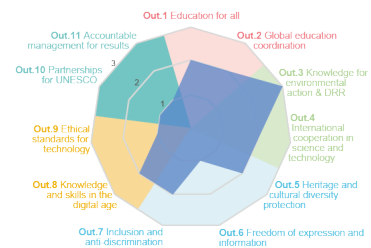
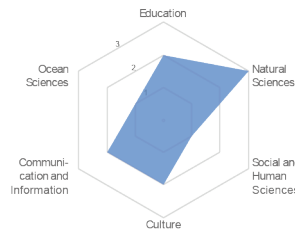


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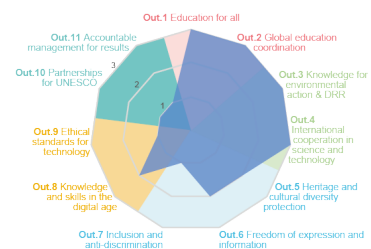
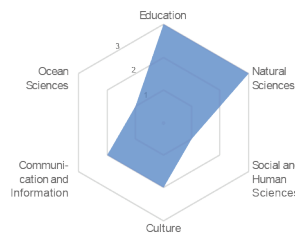
UNESCO Chair on Disaster Risk Reduction and Resilience Engineering; University College London (United Kingdom) - Dina D'Ayala



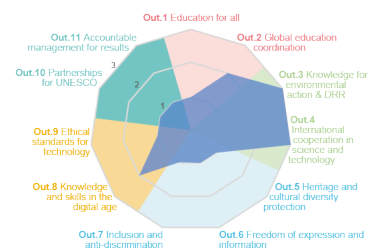
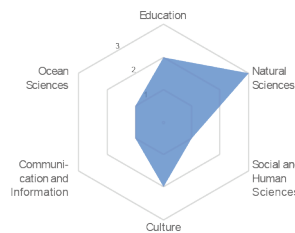
UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience; University of Udine (Italy) - Stefano Grimaz



UNESCO Chair on Solid Earth Physics and Geohazards Risk Reduction; Hellenic Mediterranean University (Greece) - Filippos Vallianatos



UNESCO Chair on the Prevention and Sustainable Management of Geohydrological Hazards; University of Florence (Italy) - Nicola Casagli

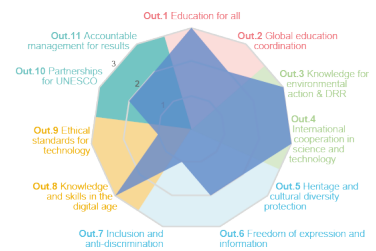
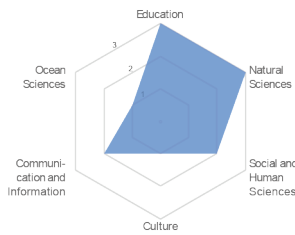


Chair title (Country) - Chairholder

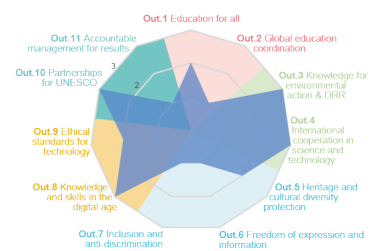
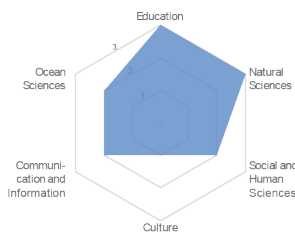
Intersectoral Chart

Footprint Chart

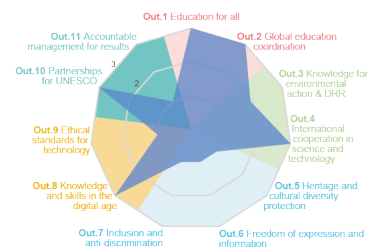
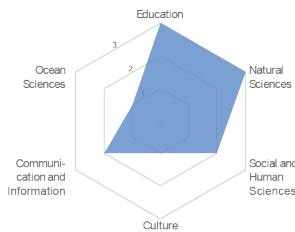
UNESCO Chair on Water-related Disaster Risk Reduction; University of Ljubljana (Slovenia) - Matjaz Mikos



UNESCO Chair in Informatics and Multi-hazard Risk Reduction; Loughborough University (United Kingdom) - Qihua Liang



UNESCO Chair for Science, Technology, and Engineering Education; AGH University of Krakow (Poland) - Janusz Szpytko



UNESCO Chair in Futures Studies, Story-telling and Anticipation: Living Traditions, Transitions, and Resilience; University of Makeni (Sierra Leone) - Kelawei Kamara

Information not available

Information not available

3.3. Closing remarks

In her concluding remarks, **Ms. Inga Nichanian** reiterated the importance of networking and collaboration among UNESCO Chairs. She encouraged the Chairs to function collectively as a think tank to support action, contributing their expertise to UNESCO's endeavours in disaster risk reduction and resilience. Ms. Nichanian highlighted the interdisciplinary methodologies employed by the Chairs and their crucial role as intermediaries between academia, research, civil society, local communities, and policymakers. She also urged them to remain abreast of UNESCO's actions and strategies through regular communication with their respective National UNESCO Commissions.

Dr. Soichiro Yasukawa expressed his gratitude for the insightful presentations and the opportunity to gain knowledge about the diverse activities undertaken by the UNESCO Chairs. He conveyed his interest in reinforcing collaborations between UNESCO Headquarters and the Chairs, as well as fostering collaboration among the Chairs themselves. Dr. Yasukawa also mentioned the possibility of colleagues from field offices initiating contact with the Chairs for collaborative endeavours.

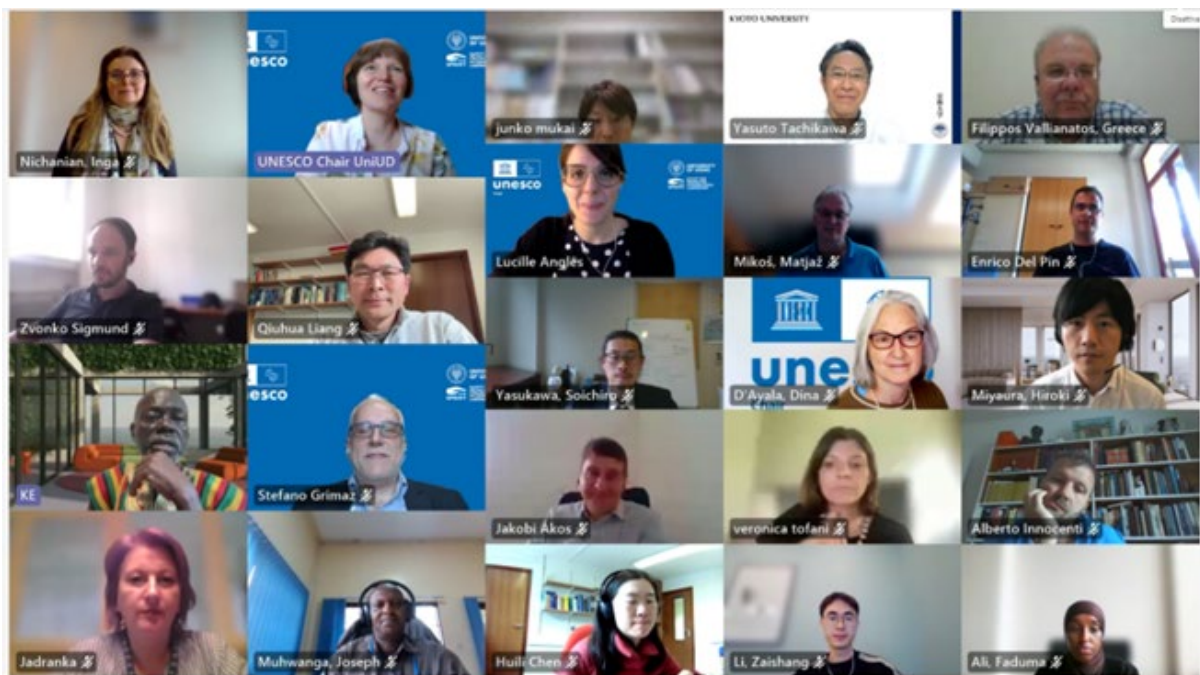
Professor Stefano Grimaz concluded the webinar by extending his appreciation to the participants. He proposed two subsequent steps: the compilation of a brief report summarizing the presentations, and the establishment of an agenda for "Resilience Catalyst Talks" to facilitate further dialogue and collaboration among the Chairs. Professor Grimaz emphasized the importance of cultivating a community of Chairs dedicated to the field of disaster risk reduction and resilience under the auspices of UNESCO.

4. Conclusion and next steps

The Resilience Catalysts global webinar has marked a relevant moment, bringing together UNESCO Chairs focused on disaster risk reduction and resilience. This collective force has ignited the creation of a forum – a platform for exchange where Chairs can learn from each other, exchange ideas, and foster intersectoral collaborations. This collaborative spirit is crucial for building a more resilient future.

To further enrich this forum, a compelling series of Talks will be convened in the coming year. Each Talk, hosted by a different UNESCO Chair, will delve into specific areas of expertise, fostering knowledge exchange. These talks will be recorded and published on a dedicated webpage under the ResiliEnhance Programme website. In parallel, the UniUD Chair will collaborate with UNESCO to identify and integrate new Chairs, further strengthening the collaborative hub.

Finally, another global webinar will be organized within a year, ensuring continuous dialogue and collaboration.



Group picture taken at the end of the webinar

Annex 1: List of UNESCO Chairs focused on disaster risk reduction and resilience

Ahead of the event, the UniUD Chair identified nineteen relevant UNESCO Chairs. These Chairs were selected based on their titles containing the keywords "resilience," "disaster," or "risk" and their participation in the ResiliEnhance Platform:

- UNESCO Chair in Futures Studies, Story-telling and Anticipation: Living Traditions, Transitions, and Resilience; University of Makeni (Sierra Leone)
- UNESCO Chair in Cultural Heritage Management and Sustainability; University of Pannonia; The Institute for Social and European Studies Foundation (ISES) (Hungary)
- UNESCO Chair on the Prevention and Sustainable Management of Geo-hydrological Hazards; University of Florence (Italy)
- UNESCO Chair for Science, Technology, and Engineering Education; AGH University of Krakow (Poland)
- UNESCO Chair on Water-related Disaster Risk Reduction; University of Ljubljana (Slovenia)
- UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience; University of Udine (Italy)
- UNESCO Chair on Cultural Heritage and Risk Management; Ritsumeikan University (Japan)
- UNESCO Chair on Water, Energy and Disaster Management for Sustainable Development; Kyoto University (Japan)
- UNESCO Chair on Solid Earth Physics and Geohazards Risk Reduction; Hellenic Mediterranean University (Greece)
- UNESCO Chair in Societal Climate Change Research and Resilience; Universität Hamburg (Germany)
- UNESCO Chair in Sustainable Development and Ecological Awareness; Technical University of Zvolen (Slovakia)
- UNESCO Chair in Informatics and Multi-hazard Risk Reduction; Loughborough University (United Kingdom of Great Britain and Northern)
- UNESCO Chair on Disaster Risk Reduction and Resilience Engineering; University College London (United Kingdom of Great Britain and Northern)
- UNESCO Chair on Gender, Vulnerability and Well-being in Disaster Risk Reduction Support; Kobe University (Japan)
- UNESCO Chair on Climate Change, Resilience and Sustainability; Strathmore University (Kenya)
- UNESCO Chair on Natural Disasters Management in the Islamic Republic of Iran and Countries in the Region; The Natural Disaster Research Institute and the Natural Disaster Higher Education Institute of Applied Science and Technology (Iran, Islamic Republic of)
- UNESCO Chair on Geoenvironmental Disaster Reduction; Shimane University (Japan)
- UNESCO Chair on Urban Resilience; University of Southern Denmark (Denmark)
- UNESCO Chair on Socio-cultural Anticipation and Resilience; The South American Institute for Resilience and Sustainability Studies (SARAS) (Uruguay)

Annex 2: Presentations made by UNESCO Chair participants

This annex contains the presentations delivered by the UNESCO Chairs during the global webinar, following the order of the agenda.

1. UNESCO Chair on Water, Energy and Disaster Management for Sustainable Development; Kyoto University (Japan) - Yasuto Tachikawa p.16
2. UNESCO Chair on Cultural Heritage and Risk Management; Ritsumeikan University (Japan) - Junko Mukai p.17
3. UNESCO Chair in Cultural Heritage Management and Sustainability; University of Pannonia; The Institute for Social and European Studies Foundation (ISES) (Hungary) - Akos Jacobi.. p.18
4. UNESCO Chair on Urban Resilience; University of Southern Denmark (Denmark) – Nicola Tollin p.19
5. UNESCO Chair on Gender, Vulnerability and Well-being in Disaster Risk Reduction Support; Kobe University (Japan) - Ronni Alexander..... p.20
6. UNESCO Chair in Societal Climate Change Research and Resilience; Universität Hamburg (Germany) - Beate Ratter..... p.21
7. UNESCO Chair on Disaster Risk Reduction and Resilience Engineering; University College London (United Kingdom) - Dina D'Ayala p.22
8. UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience; University of Udine (Italy) - Stefano Grimaz..... p.23
9. UNESCO Chair on Solid Earth Physics and Geohazards Risk Reduction; Hellenic Mediterranean University (Greece) - Filippos Vallianatos p.24
10. UNESCO Chair on the Prevention and Sustainable Management of Geo-hydrological Hazards; University of Florence (Italy) - Nicola Casagli..... p.25
11. UNESCO Chair on Water-related Disaster Risk Reduction; University of Ljubljana (Slovenia) - Matjaz Mikos..... p.26
12. UNESCO Chair in Informatics and Multi-hazard Risk Reduction; Loughborough University (United Kingdom) - Qihua Liang..... p.27
13. UNESCO Chair for Science, Technology, and Engineering Education; AGH University of Krakow (Poland) - Janusz Szpytko..... p.28
14. UNESCO Chair in Futures Studies, Story-telling and Anticipation: Living Traditions, Transitions, and Resilience; University of Makeni (Sierra Leone) - Kelawei Kamara p.29

Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture
in Transforming Governance for Building Resilience to Disasters.

Insights from
Water, Energy and Disaster Management for Sustainable Development (WENDI), Kyoto University, Japan

Yasuto Tachikawa
Professor, Dept of Civil and Earth Resources Engineering, Kyoto University, Japan
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Webinar organized by:
UNESCO Chair on International Safety for Disaster Risk Reduction and Resilience
SPRINT-Lab, University of Udine, Italy

Position of the Chair in relation to UNESCO fields
UNESCO-Chair: Water, Energy and Disaster Management for Sustainable Development (WENDI), Kyoto University

Global Webinar: Resilience Catalysts
Insights from: Water, Energy and Disaster Management for Sustainable Development (WENDI), Japan

Interdisciplinary Courses for Creating Resilient Societies

- WENDI brings Kyoto University researchers together across institutional boundaries to provide interdisciplinary educational opportunities.
- WENDI provides a comprehensive and interdisciplinary graduate-level HESD in the fields of water, energy, disaster and environmental issues.

UNESCO Chair WENDI

- Water Resources and Disaster Management Course
- Aquatic Environment & Water Quality Course
- Global Energy and Environment Course
- Sustainable Bioresource Utilization and Ecosystem Management Course

Self-motivated training

- Graduate school students
- Short-term students
- Young researchers

Certification of course completion
Total 84 students have completed since 2019
Currently 56 students are enrolled in WENDI (as of 2023).

UNESCO IHP, MAB, IGBP
IHP Flagship Programmes (P1, ICR, IWRG)

UNESCO Sites
Geoparks, Biosphere Reserves, World Heritage

Kyoto University's national and international network
(International 57, National 43) European Center at Heidelberg, North American Center at Washington D.C., ASEAN Center at Bangkok

Global Webinar: Resilience Catalysts
Insights from: Water, Energy and Disaster Management for Sustainable Development (WENDI), Japan

UNESCO Chair Field Work: Water, Forest and Society

This field work provides interdisciplinary knowledge on forest, water, society, and the interaction of ecological systems and social.

Course outlines

- Intensive Field Work in Kawakami Village, Nara Prefecture, which is one of the MAB programme.
- Intensive Field Work in Shirahama Oceanographic Observatory and Tanabe Bay, Wakayama Prefecture
- Field visits in the Kinki area incl. 4 fieldworks

Global Webinar: Resilience Catalysts
Insights from: Water, Energy and Disaster Management for Sustainable Development (WENDI), Japan

UNESCO IHP Training Course on Integrated Basin Management under Changing Climate

- Two weeks intensive IHP on-line training course at Disaster Prevention Research Institute, Kyoto University

"Integrated Basin Management under Changing Climate" at DPRI Kyoto University
The 2023 course: 43 participants from 18 countries incl. 36 participants outside of KU (Selected among 77 applicants)

Course outlines

- 10 Lectures by KU Profs. on Hydrology and Integrated River Basin Management
- 10 Exercise incl. GCM analysis, RRI Modeling
- Report presentations by each participant

Group photo from 2022

Global Webinar: Resilience Catalysts
Insights from: Water, Energy and Disaster Management for Sustainable Development (WENDI), Japan

Webinar organized by:
UNESCO Chair on Intersectoral Safety for Disaster Risk Reduction and Resilience SPRINT-Lab, University of Udine, Italy

Position of the Chair in relation to UNESCO fields

Intersectoral Chart

Footprint Chart

Global Webinar: Resilience Catalysts | Insights from: UNESCO Chair Programme on Cultural Heritage and Risk Management, Japan

DRR and Resilience-related projects of the Chair

1. International Training Course on Disaster Risk Management of Cultural Heritage

To provide theoretical and practical knowledge on various aspects of DRM of cultural heritage

- ITC has been conducted annually since 2006.
- In 2024, the 18th programme in the theme of "linking tangible and intangible CH for DRM will be organized in the hybrid methodology

Online: 29 Jul to 16 Aug
Onsite: 30 Aug to 13 Sep

Total 2,107 applicants

193 participants from 75 countries

Global Webinar: Resilience Catalysts | Insights from: UNESCO Chair Programme on Cultural Heritage and Risk Management, Japan

DRR and Resilience-related projects of the Chair

2. Publications related with ITC

A Training Guide on Disaster Risk Management of Cultural Heritage in Urban Areas
2012

Good Practices for Disaster Risk Management of Cultural Heritage: Practices of ITC Participants
2023

Global Webinar: Resilience Catalysts | Insights from: UNESCO Chair Programme on Cultural Heritage and Risk Management, Japan

DRR and Resilience-related projects of the Chair

3. Workshop and symposium on Good Practices for DRM of Cultural Heritage

showcased various projects on disaster risk management of cultural heritage undertaken by the former participants of ITC

Global Webinar: Resilience Catalysts | Insights from: UNESCO Chair Programme on Cultural Heritage and Risk Management, Japan

Global Webinar: Resilience Catalysts
 The Interplay of Education, Science and Culture
 in Transforming Governance for Building Resilience to Disasters.

Insights from
the UNESCO Chair in Cultural Heritage Management and Sustainability, University of Pannonia, Institute for Social and European Studies Foundation (ISES) (Hungary)

Dr. Ákos JAKOBI
 Scientific secretary
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Webinar organized by:

Position of the Chair in relation to UNESCO fields

Intersectoral Chart

Footprint Chart

Global Webinar: Resilience Catalysts
 Insights from the UNESCO Chair in Cultural Heritage Management and Sustainability, University of Pannonia, Hungary

DRR and Resilience-related projects of the Chair

Example 1: „Craft” - Creative Cities Sustainable Regions project

Building local and regional resilient society.

Aims to enhance interdisciplinarity in sustainable local and regional development based on cultural heritage management.

The concept highlights and measures ‘soft’ factors, such as creativity, identity, heritage, innovation capacity, knowledge production, knowledge transfer, willingness for cooperation, trust, and collective competences to improve resilient local society a new way.

It emphasizes the ‘hidden’ potential and inner ‘endogenous’ development possibilities of cities.

Global Webinar: Resilience Catalysts
 Insights from the UNESCO Chair in Cultural Heritage Management and Sustainability, University of Pannonia, Hungary

DRR and Resilience-related projects of the Chair

*Culture-based soft transformation of the society:
 Heritage assets as carriers of resilience*

- Strengthening resilient capacity of the local society by revitalization and refuncioning of heritage elements
- Exploration of local micro-histories
- Innovative approach to sustain cultural heritage and support creative research

Global Webinar: Resilience Catalysts
 Insights from the UNESCO Chair in Cultural Heritage Management and Sustainability, University of Pannonia, Hungary

DRR and Resilience-related projects of the Chair

Example 2: Enhancing environmental resilience

Development of circular economy to improve local economic sustainability and resilience

Proposals under the European New Deal - Circular Economy Action Plan

New regional development strategies during climate change and the post-COVID era

Global Webinar: Resilience Catalysts
 Insights from the UNESCO Chair in Cultural Heritage Management and Sustainability, University of Pannonia, Hungary

DRR and Resilience-related projects of the Chair

Example 3: Insula Magna project

Complex capacity building for resilient water management and social-cultural development.

Integrated framework: global and regional socio-economic changes of recent years have necessitated a reassessment of traditional investment and rural development strategies, while valuing creativity, knowledge production, socio-economic cohesion and social innovation.

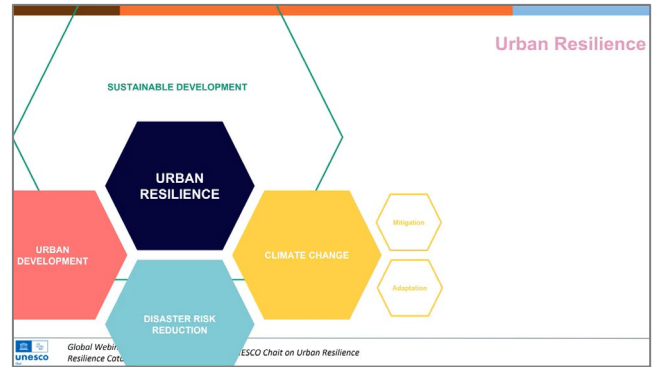
Global Webinar: Resilience Catalysts
 Insights from the UNESCO Chair in Cultural Heritage Management and Sustainability, University of Pannonia, Hungary

Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture
in Transforming Governance for Building Resilience to Disasters.

Insights from
UNESCO Chair on Urban Resilience
University of Southern Denmark

Please add here:
- Nicola Tollin
- Chairholder
- not@iti.sdu.dk

Webinar organized by:
UNESCO Chair on Intersectoral Safety for Disaster Risk Reduction and Resilience SPRINTLab, University of Udine, Italy
UNIVERSITY OF UDINE
SAFETY AND PROTECTION INTERSECTORAL SUPPORT LABORATORY



SDU.Resilience

UNESCO Chair on Urban Resilience (SDU.Resilience)
SDU.Resilience develops transdisciplinary research, education and knowledge transfer activities on urban resilience in Denmark and at international level.

SDU.Resilience's activities focus on urban resilient transition, systemically integrating disaster risk reduction, development and climate change, both mitigation and adaptation, in urban areas. SDU.Resilience's activities contribute to the implementation of the United Nation's Sustainable Development Goals, the Paris Agreement, the New Urban Agenda, and the Sendai Action Framework for Risk Reduction.

SDU.Resilience aims at developing research to inform policymaking at national and international level and to support science-based urban planning and design for local action, both in the Global North and South.

Aim

Global Webinar: Resilience Catalysts Insights from: UNESCO Chair on Urban Resilience

Research clusters

- WATER AND RESILIENT HUMAN SETTLEMENTS
- RESILIENT COASTAL AND MARITIME PLANNING
- CLIMATE NATURE-BASED SOLUTIONS
- CIRCULAR ECONOMY AND BUILT ENVIRONMENT
- HUMAN HEALTH AND CLIMATE IN CITIES
- CLIMATE FINANCE
- DATA FOR DISASTER RISK REDUCTION
- CLIMATE GOVERNANCE
- SPATIAL PLANNING FOR RESILIENCE
- CAPACITY BUILDING FOR RESILIENCE

Global Webinar: Resilience Catalysts Insights from: UNESCO Chair on Urban Resilience

Urban Content of NDCs
LOCAL CLIMATE ACTION EXPLORED THROUGHIN-DEPTH COUNTY ANALYSES
2024 REPORT

EMPOWERING LOCAL CLIMATE ACTION
PRELIMINARY ANALYSIS OF MUNICIPAL ACTION PLANS IN THE REGION OF SOUTHERN DENMARK

Chair on Urban Resilience

Urban Resilience Intensive Training 2024 Copenhagen

Hybrid training: 17 June - 18 June [on-line]
27 June - 05 July [on-site]

CALL FOR PARTICIPATION

Global Webinar: Resilience Catalysts Insights from: UNESCO Chair on Urban Resilience

Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture
In Transforming Governance for Building Resilience to Disasters.

Insights from
Gender, Vulnerability and Well-being in Disaster Risk Reduction Support (Kobe University, Japan)

Ronni Alexander - Chair-holder
Kobe University
UNESCO Chair: gmi-unesco@office.kobe-u.ac

Webinar organized by:
UNESCO Chair on International Safety for Disaster Risk Reduction and Resilience SPRINGLab, University of Udine, Italy

Position of the Chair in relation to UNESCO fields

Intersectoral Chart

Footprint Chart

Global Webinar: Resilience Catalysts
Insights from: Kobe University UNESCO Chair: Gender, vulnerability and well-being in disaster risk reduction support

DRR and Resilience-related projects of the Chair

Kobe University UNESCO Chair Education Program Summer Course

2018-2019 2-week training for 40 students

- Held at Gadjah Mada University
- Students from Kobe University (Japan), Gadjah Mada University (Indonesia), National Kaohsiung University of Science and Technology (Taiwan)
- Theme: Disaster (tsunami, earthquake, volcano)
- Lectures, field excursions, group problem solving
- Lecturers include Kobe University UNESCO Chair partner institution faculty, local experts, practitioners

Global Webinar: Resilience Catalysts
Insights from: Gender, Vulnerability and Well-being in DRR Support (Kobe University)

DRR and Resilience-related projects of the Chair

Kobe University UNESCO Chair Education Program Online Conference

2020-2024 2-day online training for 50 students

- Held by Kobe University, online participation by all partner universities: Gadjah Mada University (Indonesia), National Kaohsiung University of Science and Technology (Taiwan), Mae Fah Luang University (Thailand), Universiti Tunku Abdul Rahman (Malaysia), Kobe University (Japan)
- Theme: How we can make our communities safer during disaster – with a focus in gender, vulnerability
- Lectures, group presentations, group problem solving
- Lecturers include Kobe University UNESCO Chair partner institution faculty
- Good chance to learn about disaster and engage in international exchange

Global Webinar: Resilience Catalysts
Insights from: Gender, Vulnerability and Well-being in DRR Support (Kobe University)

DRR and Resilience-related projects of the Chair

Kobe University UNESCO Chair Research Program – Book Project

- Title: *Making Disaster Safer: A gender and vulnerability Approach* (Ronni Alexander & Siriporn Wajjwalku, eds., Springer, 2023)
- Consists of 12 chapters by Kobe University UNESCO Chair partners: Gadjah Mada University (Indonesia), National Kaohsiung University of Science and Technology (Taiwan), Mae Fah Luang University (Thailand), Universiti Tunku Abdul Rahman (Malaysia), Mercy Malaysia (Malaysia), Kobe University (Japan)
- Case studies focusing on gender-sensitive approaches to disaster at different levels
- Useful for scholars, students and practitioners

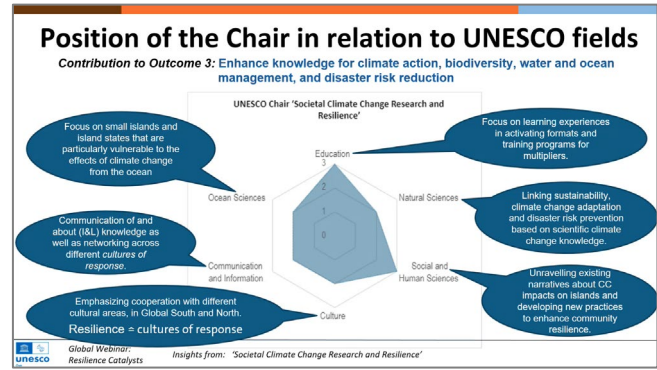
Global Webinar: Resilience Catalysts
Insights from: Gender, Vulnerability and Well-being in DRR Support (Kobe University)



Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture
in Transforming Governance for Building Resilience to Disasters.
Insights from
Societal Climate Change Research and Resilience
(Germany)

- Prof. Dr. Beate Ratter
- Professor for Integrative Geography
- E-Mail: beate.ratter@uni-hamburg.de

Webinar organized by:
UNESCO Chair on International Safety for Disaster Risk Reduction and Resilience (SPRINT) Lab, University of Udine, Italy
UNIVERSITY OF UDINE
SPRINT
PARTY FOR ENVIRONMENTAL LABORATORY



Position of the Chair in relation to UNESCO fields
Contribution to Outcome 3: Enhance knowledge for climate action, biodiversity, water and ocean management, and disaster risk reduction

UNESCO Chair 'Societal Climate Change Research and Resilience'

Focus on small islands and island states that are particularly vulnerable to the effects of climate change from the ocean

Focus on learning experiences in activating formats and training programs for multipliers.

Linking sustainability, climate change adaptation and disaster risk prevention based on scientific climate change knowledge.

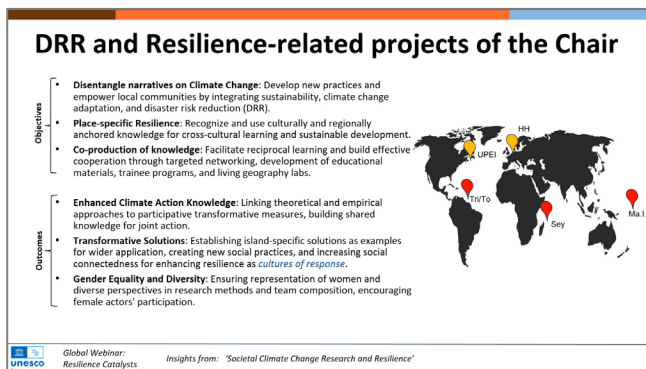
Unravelling existing narratives about CC impacts on islands and developing new practices to enhance community resilience.

Communication of and about (I&L) knowledge as well as networking across different cultures of response.

Emphasizing cooperation with different cultural areas, in Global South and North.
Resilience = cultures of response

Education
Ocean Sciences
Natural Sciences
Social and Human Sciences
Communication and Information
Culture

Global Webinar: Resilience Catalysts
Insights from: 'Societal Climate Change Research and Resilience'



DRR and Resilience-related projects of the Chair

Objectives

- **Disentangle narratives on Climate Change:** Develop new practices and empower local communities by integrating sustainability, climate change adaptation, and disaster risk reduction (DRR).
- **Place-specific Resilience:** Recognize and use culturally and regionally anchored knowledge for cross-cultural learning and sustainable development.
- **Co-production of knowledge:** Facilitate reciprocal learning and build effective cooperation through targeted networking, development of educational materials, trainee programs, and living geography labs.

Outcomes

- **Enhanced Climate Action Knowledge:** Linking theoretical and empirical approaches to participative transformative measures, building shared knowledge for joint action.
- **Transformative Solutions:** Establishing island-specific solutions as examples for wider application, creating new social practices, and increasing social connectedness for enhancing resilience as cultures of response.
- **Gender Equality and Diversity:** Ensuring representation of women and diverse perspectives in research methods and team composition, encouraging female actors' participation.

Map showing locations: HH, UPEI, TrnTO, Sey, Ma.I.

Global Webinar: Resilience Catalysts
Insights from: 'Societal Climate Change Research and Resilience'

Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture in Transforming Governance for Building Resilience to Disasters.
Insights from UNESCO Chair in Disaster Risk Reduction and Resilience Engineering - UK

Prof Dina D'Avila
Professor of Structural Engineering, Chair d.dayala@ucl.ac.uk

Webinar organized by:
UNESCO Chair on International Safety for Disaster Risk Reduction and Resilience SPRINKLab, University of Udine, Italy
UNIVERSITY OF UDINE
SAFE AND HEALTHY AND INTERDISCIPLINARY LEADERSHIP

Position of the Chair in relation to UNESCO fields

Intersectoral Chart

Footprint Chart

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair in Disaster Risk Reduction and Resilience Engineering

DRR and Resilience-related projects of the Chair
Minimize education disruption following natural hazards- Case study in Cagayan de Oro

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair in Disaster Risk Reduction and Resilience Engineering

DRR and Resilience-related projects of the Chair
BERLAC Project UNESCO DRR UNIT:
Leveraging artificial intelligence to minimize education disruption from natural hazards

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair in Disaster Risk Reduction and Resilience Engineering

DRR and Resilience-related projects of the Chair
Performance based probabilistic seismic risk assessment for urban heritage. Applications and new developments of the FaMIVE approach

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair in Disaster Risk Reduction and Resilience Engineering

DRR and Resilience-related projects of the Chair
Educational Webinar Series

| Number | Topic | Presenters | Date |
|--------|---|---|------------|
| 1 | UNESCO Chair on Disaster Risk Reduction and Resilience Engineering - Global Initiatives | Aur. Francisco Cruz, Aur. Pedro Peralta | 08-12-2022 |
| 2 | Introduction to the Resilience Catalysts Series | Prof. Dina D'Avila | 08-12-2022 |
| 3 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 4 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 5 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 6 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 7 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 8 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 9 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 10 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 11 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 12 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 13 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 14 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 15 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 16 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 17 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 18 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 19 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 20 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 21 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |
| 22 | Case Study: Resilience Catalysts in the Philippines | Prof. Dina D'Avila | 08-12-2022 |

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair in Disaster Risk Reduction and Resilience Engineering

Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture
in Transforming Governance for Building Resilience to Disasters.

Insights from
UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience

Stefano Grimaz (Chairholder)
Petra Malisan (Program Manager)

unescochair.sprint@uniud.it

Webinar organized by:
UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience
SPRINT Lab, University of Udine, Italy

Position of the Chair in relation to UNESCO fields

Intersectoral Chart

Footprint Chart

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience

DRR and Resilience-related projects of the Chair

VISUS methodology

Support in assessing the safety situation, safety upgrading needs and related costs for a large number of existent schools

- Decision-making support
- Multi-hazard assessment (flood, wind, earthquake, fire, day-by-day use of the school)
- Adaptation to local context (with local Universities)
- Capacity building, transfer of knowledge
- VISUS Academy

Adopted by GADRRES Technical tool

VISUS module in two UNESCO MOOCs

Disaster risk reduction: UNESCO's contribution to a global challenge

Thematic area 4

UNESCO Guidelines for Assessing Learning Facilities in the Context of Disaster Risk Reduction and Climate Change Adaptation

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience

DRR and Resilience-related projects of the Chair

SERM Academy: Safety and Emergency Response Management International Training school

Aims:

- strengthening an integrated system for the safety and emergency response management
- improving the cross-border interoperability among civil protection actors
- develop and test innovative solutions for:
 - technical triage in emergency situations
 - shoring damaged buildings (adopted by the European Civil Protection Mechanism)
- Active participation of MSc students

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience

DRR and Resilience-related projects of the Chair

ResiliEnhance Program

GVR to explore effective ways and means for strengthening territorial resilience to adverse events and critical situations in the context of complexity and systemic risk.

- elaboration of recommendations and reference guidelines
- creation of an interdisciplinary network (Platform) to promote a holistic approach
- increase of the synergy between scientists and policy- and decision-makers
- foster intergenerational dialogue (EUREKA)

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair on Intersectoral Safety for Disaster risk reduction and Resilience

Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture in Transforming Governance for Building Resilience to Disasters.

Insights from Solid Earth Physics and Geohazards Risk Reduction UNESCO Chair (Greece)

Prof. Filippos Vallianatos, Chairholder on Solid Earth Physics & Geohazards Risk Reduction
 Director of the Institute of Physics of the Earth's Interior & Geohazards, Hellenic Mediterranean University Research & Innovation Center, Greece
 - Email fvallian@hmu.gr and fvallian@geol.uoa.gr

Webinar organized by:
 UNESCO Chair on Intersectoral Safety for Disaster Risk Reduction and Resilience SPRINT-Lab, University of Udine, Italy

Position of the Chair in relation to UNESCO fields

Intersectoral Chart
 UNESCO Chair Solid Earth Physics and Geohazards Risk Reduction UNESCO Chair (Greece)

Footprint Chart
 UNESCO Chair: Solid Earth Physics and Geohazards Risk Reduction UNESCO Chair (Greece)

Global Webinar: Resilience Catalysts Insights from: Solid Earth Physics and Geohazards Risk Reduction UNESCO Chair (Greece)

DRR and Resilience-related projects of the Chair

Seismic response assessments of minarets and important high rise historical and monumental structures in Crete (Greece), Japanese Ministry of Infrastructure funds & UNESCO

HVSR for the Metropolitan Church of Rethymnon

HVSR at the base to the topmost level of Minaret Belli Passa in Rethymnon Crete, Greece

Global Webinar: Resilience Catalysts Insights from: Solid Earth Physics and Geohazards Risk Reduction UNESCO Chair (Greece)

DRR and Resilience-related projects of the Chair

SAFE Chania. Integrated Earthquake Early Warning System

PGA distribution in the City of Chania, Crete

EEMS in Crete

Global Webinar: Resilience Catalysts Insights from: Solid Earth Physics and Geohazards Risk Reduction UNESCO Chair (Greece)

DRR and Resilience-related projects of the Chair

Integrated understanding of Seismicity, using innovative Methodologies of Fracture mechanics along with Earthquake and non extensive statistical physics -

Global Webinar: Resilience Catalysts Insights from: Solid Earth Physics and Geohazards Risk Reduction UNESCO Chair (Greece)

Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture in Transforming Governance for Building Resilience to Disasters.

Insights from
UNESCO Chair on Prevention and Sustainable Management of Geo-Hydrological Hazards

Veronica Tofani
Deputy Chairholder
veronica.tofani@unifi.it

Webinar organized by:
UNESCO Chair on Intersectoral Safety for Disaster Risk Reduction and Resilience SPRINTeLab, University of Udine, Italy

UNESCO Chair on Prevention and Sustainable Management of Geo-Hydrological Hazards

1. Develop research and innovation for the prevention and mitigation of geo-hydrological hazards
2. Support policies for risk reduction and resilience enhancement
3. Foster the protection of cultural heritage threatened by geo-hydrological hazards
4. Promote scientific networking and open science, including outreach and capacity development

Global Webinar: Resilience Catalysts
Insights from: Prevention and Sustainable Management of Geo-Hydrological Hazards

Position of the Chair in relation to UNESCO fields

Intersectoral Chart
UNESCO Chair 'Prevention and Sustainable Management of Geo-Hydrological Hazards'

Footprint Chart
UNESCO Chair Prevention and Sustainable Management of Geo-Hydrological Hazards

Global Webinar: Resilience Catalysts
Insights from: Prevention and Sustainable Management of Geo-Hydrological Hazards

DRR and Resilience-related projects of the Chair
International Consortium on Landslides (ICL)

Kyoto Landslide COMMITMENT 2020

more than 100 members worldwide

Global Webinar: Resilience Catalysts
Insights from: Prevention and Sustainable Management of Geo-Hydrological Hazards

DRR and Resilience-related projects of the Chair
Regionally consistent risk assessment for earthquakes and floods and selective landslide scenario analysis for strengthening financial resilience and accelerating risk reduction in Central Asia

Global Webinar: Resilience Catalysts
Insights from: Prevention and Sustainable Management of Geo-Hydrological Hazards

DRR and Resilience-related projects of the Chair
Multi-risk science for resilient communities under a changing climate (RETURN)

347 researchers involved
26 partners
36 months

Global Webinar: Resilience Catalysts
Insights from: Prevention and Sustainable Management of Geo-Hydrological Hazards

Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture
in Transforming Governance for Building Resilience to Disasters.

Insights from
UNESCO Chair on Water-related Disaster Risk Reduction Slovenia

Matjaž Mikos
University Professor & Chairholder (since 2016)
University of Ljubljana, UNESCO Chair WRDRR, Jamova c. 2, SI-1000 Ljubljana
matjaz.mikos@fga.uni-lj.si & www.unesco-floods.eu

Webinar organized by:
UNESCO Chair on Intersectoral Safety for Disaster Risk Reduction and Resilience SPINTELab, University of Udine, Italy
UNIVERSITY OF UDINE
SAFETY AND INTERDISCIPLINARY LEADERSHIP

Position of the Chair in relation to UNESCO fields

Intersectoral Chart

Footprint Chart

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair on Water-related Disaster Risk Reduction - Slovenia

DRR and Resilience-related projects of the Chair 1

ERASMUS+ Master study program on Flood Risk Management (since 2011)

An international & interdisciplinary study program.
Master students are coming from around the whole World (~25 students in a generation).
IHE Delft, TU Dresden, UPC Barcelona, U Ljubljana.

We in Ljubljana are giving courses on:

- Spatial planning for flood protection &
- Socioeconomical assessment of flood protection.

FLOODRisk Master

Details: <https://www.floodriskmaster.org/>

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair on Water-related Disaster Risk Reduction - Slovenia

DRR and Resilience-related projects of the Chair 2

World Centre of Excellence (WCoE) in Landslide Risk Reduction (since 2008)

Promoting "landslide research and disaster risk reduction" on a regional and global scale.
Contributing to International Consortium on Landslides (ICL) activities - >100 members, associates, supporters, and friends worldwide.

Contributing to Sendai Framework on DRR (2015-2030) by a Voluntary Contribution. *Aveto Landslide Commitment 2016*

Contributing to the International Programme on Landslides (IPL) & UNITWIN Programme.

Details: <https://www.landslides.org/>

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair on Water-related Disaster Risk Reduction - Slovenia

DRR and Resilience-related projects of the Chair 3

Evaluation of hazard-mitigating hybrid infrastructure under climate change scenarios (2022-2025)

Bi-national research project (Czech Republic)
The proposed project will critically evaluate hybrid infrastructure that can be used for climate change adaptation as an alternative to the most frequently applied grey measures.

Details:
<https://cris.cobiss.net/ecris/si/en/project/20272>
<https://www.en.fga.uni-lj.si/research/national-projects/16-4628-evaluation-of-hazard-mitigating-hybrid-infrastructure-under-climate-change-scenarios/>

Global Webinar: Resilience Catalysts
Insights from: UNESCO Chair on Water-related Disaster Risk Reduction - Slovenia

Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture
in Transforming Governance for Building Resilience to Disasters.

Insights from
UNESCO Chair in Informatics and Multi-hazard Risk Reduction, UK

Prof Qiuhua Liang
Professor of Water Engineering
Chairholder of IMRR UNESCO Chair
E-mail: Q.Liang@lboro.ac.uk

Webinar organized by:
UNESCO Chair on Intersectoral Safety for Disaster Risk Reduction and Resilience (SPRINT) Lab, University of Udine, Italy

Position of the Chair in relation to UNESCO fields

Intersectoral Chart

Footprint Chart

Global Webinar: Resilience Catalysts | Insights from: UNESCO Chair in Informatics and Multi-hazard Risk Reduction

Global Partnership for Smart Informatics and Multi-hazard Reduction (SIMR)

Officially launched during the XIV IAEG Congress in 09/23, by 40 world-leading leading experts in informatics and multi-hazard risk reduction from more than 20 countries

- Provide an international platform and forum to discuss and explore the development and application of nascent informatics technologies to step-change multi-hazard risk reduction research and practice
- Foster international collaboration across different disciplines
- Share knowledge and resources to support global capacity development
- Influence local and global policies

* The 1st SIMR international conference in Loughborough, 15 – 19th September 2024; attracted ~200 abstracts

Global Webinar: Resilience Catalysts | Insights from: UNESCO Chair in Informatics and Multi-hazard Risk Reduction

PYRAMID: Platform for dYnamic, hyper-resolution, near-real time flood Risk AssessMent Integrating repurposed and novel Data sources (NERC; £800k)

- Demonstrate a new methodology and tool for assessing, analysing, monitoring and forecasting the state of flood risk at higher spatial and temporal resolutions than previously seen
- Lay the foundations for a 'digital twin' for flooding in a city/ catchment that is easily transferable to other UK locations.
- Create a range of innovative tools and data for open use (<https://github.com/NCL-PYRAMID>)
- Enable greater capacity to explain and engage with stakeholders around flood risk
- Organise engagement workshops to tailor technology development and encourage up-take

Global Webinar: Resilience Catalysts | Insights from: UNESCO Chair in Informatics and Multi-hazard Risk Reduction

The GCRF Living Deltas Hub (<https://livingdeltas.org>)

- Focusing on the sustainability of delta SESs of three major river deltas: the Red River and Mekong (Vietnam) and Ganges-Brahmaputra-Meghna (GBM: Bangladesh, India)
- Bringing together a transdisciplinary team of experts and practitioners from Global 'North' and 'South' (directly involving 24 universities/ organizations from 10 countries)
- Covering a range of priorities:
 - Voices of the delta
 - Behaviour and Risk
 - Science of the Delta
 - Coastal Systems
 - Sustainable Goals
 - Research for Change
 - Natural and Cultural Heritage
- Establish delta partners to disseminate findings, influence policies and create impact

Global Webinar: Resilience Catalysts | Insights from: UNESCO Chair in Informatics and Multi-hazard Risk Reduction

Global Webinar: Resilience Catalysts
The Interplay of Education, Science and Culture
in Transforming Governance for Building Resilience to Disasters.

Insights from
UNESCO Chair for Science, Technology and Engineering Education

Janusz Szpytko (Chairholder)
 unesco@agh.edu.pl

Webinar organized by:
 UNESCO Chair on Intersectoral Safety for Disaster Risk Reduction and Resilience (SPRINT) Lab, University of Udine, Italy

Position of the Chair in relation to UNESCO fields

Intersectoral Chart

Footprint Chart

Global Webinar: Resilience Catalysts Insights from: UNESCO Chair for Science, Technology and Engineering Education

DRR and Resilience-related projects of the Chair

Main area of Activities/Research:
 science, technology and engineering education;
 scientific disciplines in the field of engineering and technical sciences (Automation, Electronics and Electrical Engineering; Technical Information Technology and Telecommunications; Biomedical Engineering; Chemical Engineering; Civil Engineering and Transport; Materials Engineering; Mechanical Engineering; Environmental Engineering, Mining and Energy);

Recent projects:
 Engineering for sustainable energy;
 Engineering for natural resources and environment;
 Technologies for digital era;
 Engineering for the manufacturing of the future;
 Safety and resilience;
 Interplay of education, science and culture in transforming for building resilience to disasters;

SDGs: 04 (quality education), 06 (water and sanitation for all), 07 (modern energy for all), 09 (sustainable industrialization and foster innovation), 11 (cities resilient and sustainable), 12 (sustainable consumption and production), 15 (ecosystems, biodiversity);

Global Webinar: Resilience Catalysts Insights from: UNESCO Chair for Science, Technology and Engineering Education

DRR and Resilience-related projects of the Chair

AGH UNESCO DigiCamp Platform

*Engineering for sustainable energy;
 Engineering for natural resources and environment;
 Technologies for digital era;
 Engineering for the manufacturing of the future;*

on-line intensive course

Global Webinar: Resilience Catalysts Insights from: UNESCO Chair for Science, Technology and Engineering Education

DRR and Resilience-related projects of the Chair

UNESCO AGH Chair Fellowship projects

focusing on safety, reliability and resilience (objects, human, surrounding):

*water and sanitation,
 modern energy,
 sustainable industrialization,
 production and ecosystems;*

publications, thesis

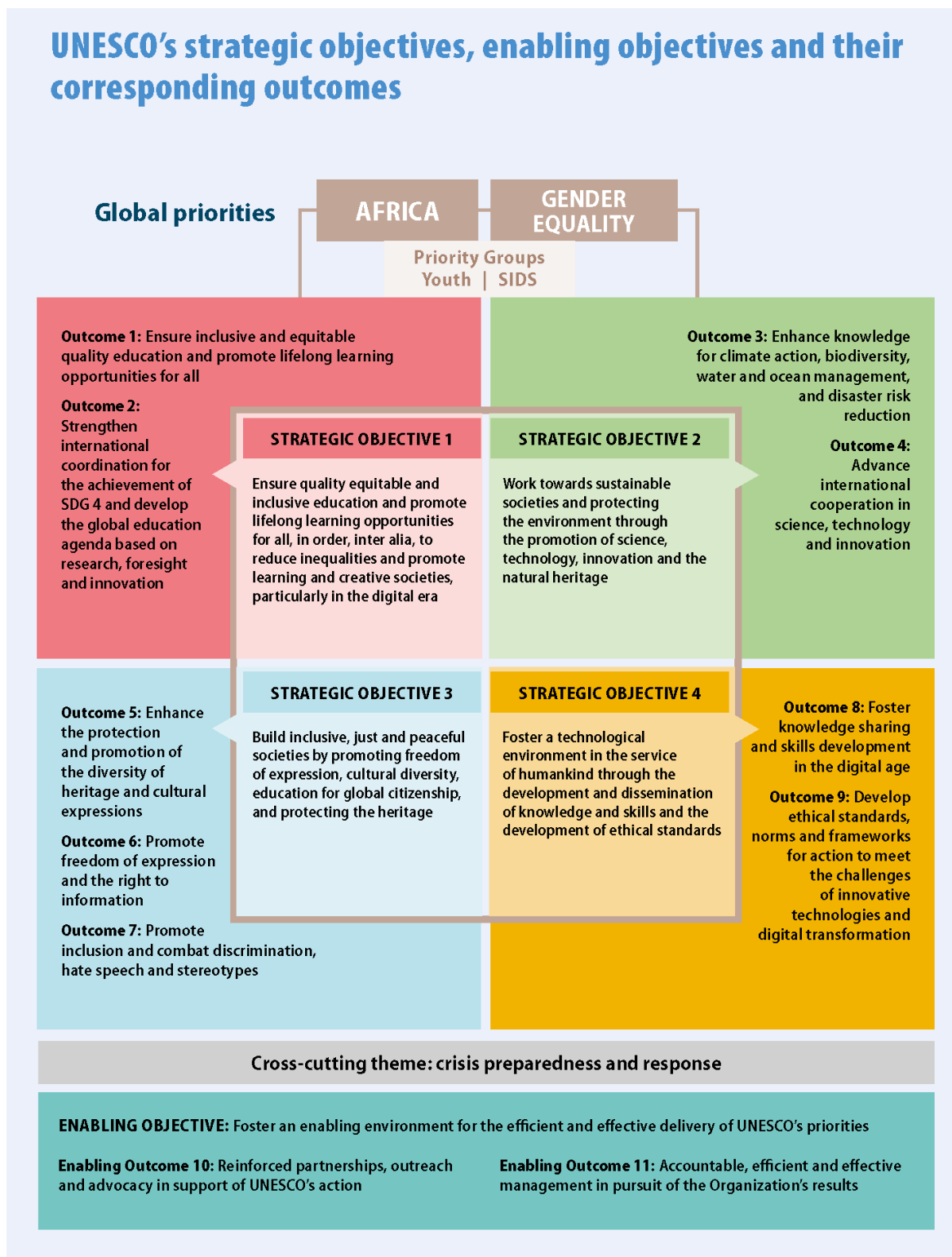
Global Webinar: Resilience Catalysts Insights from: UNESCO Chair for Science, Technology and Engineering Education



**UNESCO Chair in Future Studies, Story-telling and Anticipation:
Living Traditions, Transitions and Resilience
University of Makeni (Sierra Leone)**

Presentation was done without the support of slides.

Annex 3: UNESCO's strategic objectives, enabling objectives and their corresponding outcomes



From *UNESCO's Medium-term Strategy (2022-29)* p. 15.