IDRiM2023

AWARDEES

PRESENTATION

ONLINE

11 December 2023
9AM (UTC)

Presentations events by those who came in the top three of the YSS at the IDRiM 2023 conference (online presenters), which gives a full academic style presentation.

3rd place Awardee

Fengyi Sun

Research Assistant and Master's Degree Candidate in Environmental Engineering, Kyoto University. Specializing in environmental economics and risk management, my work focuses on assessing impact of environmental disasters and poverty under climate change

Development of a Natech Social Vulnerability Index: a Comprehensive Multi-Hazard Risk Assessment for a Case Study in Colombia

Abstract

Our study introduces a novel methodology for assessing social vulnerabilities to Natech (natural disaster-triggered technological accidents), focusing on Colombia as a case study. We developed a Natech social vulnerability index by analyzing various Natech scenarios and their interconnected hazards. The methodology was tested using Colombia's landslide-triggered pipeline accidents, where distinct hazards and their impact on social vulnerability were identified and quantified using composite indicators. These indicators were then integrated into a Geological Information System (GIS) using Structural Equation Modelling (SEM) for analysis. Our findings align with previous studies but also highlight some ambiguities in the model. The research concludes with policy recommendations for the Colombian government and future research directions, marking a significant contribution to the study of social vulnerability in multi-hazard contexts like Natech

2ⁿᵈ place Awardee

Sofia A. Kalogeromitrou

Architect Engineer NTUA, MSc in Environmental, Disaster and Crises Management Strategies

Dwelling After Disaster: Design and Improvisation in Transitional Shelter

Abstract

This research delves into the dynamic relationship between formal design and user interventions, referred to as "spatial improvisation," in post-disaster transitional housing. Bridging a research gap, it explores how beneficiaries interact with designed spaces, offering insights into the interplay between formal design and spatial improvisation.

The study starts with an extensive literature review on disaster impacts and housing strategies, drawing insights from diverse case studies, including Turkey's 1999 earthquake, Japan's 2011 earthquake/tsunami/Natech disaster and Jordan's 2012 refugee influx. Additionally, two Greek paradigms contribute through interviews and visual documentation. The findings unveil recurring spatial improvisation types, leading to a typology reflecting pre-disaster dwelling characteristics of the community and its space.

The significance of this work extends to its potential implications for policy and practice, by deciphering community needs through spatial footprints and advocating for architect involvement in disaster management, while stressing the importance of recording housing operations for academic and operational purposes. In essence, the study addresses the gap in understanding beneficiary-space interaction in transitional housing through a multi-method approach by developing a typology of spatial improvisations in transitional housing.

1st place Awardee

Becky Richardson

Doctoral Researcher, Disaster Risk Reduction and Development, Northumbria University, UK

Child-Centred Disaster Risk Reduction: children's narratives of lived experiences through arts-based methods in Nairobi, Kenya

Abstract

Children's exposure and vulnerability to local hazards, influenced by socio-economic factors, is often overlooked due to 'adultcentrism' in DRR, impacting their health and wellbeing. An inclusive 'whole of society' approach, valuing children's perspectives, leads to risk-informed decisions and enhances resilience. Despite the United Nations Convention on the Rights of a Child (UNCRC 1989) advocating their right to be heard, children's voices are rarely reflected in policy. This research explores the effectiveness of a child-centred approach in understanding the risk environment and improving health and wellbeing of children in a Nairobi informal settlement.

The hazards and risks in this context are understood through participatory methods with 36 children aged 10-14. Hazards such as open sewage, poor sanitation, and inadequate infrastructure in their schools and neighbourhoods are frequently withstood. To comprehend these risks, child-centred arts-based activities were conducted, enabling the children to express their lived experiences through creativity, propose solutions, and identify their support networks for risk communication. The children engaged in various activities such as drawing, deep mapping, body mapping, walking interviews, modelling, and storytelling, which facilitated engagement, balanced power dynamics, and fostered ownership.

Initial results from this research emphasise the considerable hazards and risks affecting children's health and wellbeing in their schools and neighbourhoods. The effectiveness of child-led methods is confirmed through the output of detailed, authentic narratives expressed through storytelling and art. These narratives have led to insightful themes, encapsulating ideas such as 'children are experts in their own lives' and 'dynamics of adult-child relationships'. Further examination of the collected data on risk narratives and communication networks is planned. It is expected that these analyse will reveal a unique perspective of children's risk perception, differing from prevailing views, and highlight the complexity of existing communication pathways for children's voices to be heard and actioned for DRR.

Zoom

https://kyoto-u-edu.zoom.us/j/87258723335?pwd=2oUYXZyPORdg3KpN3QCRybH8pVy4jB.1

Meeting ID: 872 5872 3335
Passcode: 149039

Time

Time Zone	Time
UTC / GMT	9:00 AM
CET	10:00 AM
EET	11:00 AM
IST	14:00 PM
JST	18:00 PM