

Risk and resilience in practice: vulnerabilities, displaced people, local communities and heritages

The global assessment report published in 2019, evaluating the lessons from the implementation of the Sendai Report (UNDRR, 2019), directly challenge existing risk assessment approaches to deal with complexity and incorporate surprise as the new normal. The new approaches to risk assessment must also give us tools to tackle and implement the objectives and goals set in the international risk governance instruments, as the Sendai Framework for Disaster Risk Reduction 2015-2030, the Transforming our World: the 2030 Agenda for Sustainable Development, the Paris Agreement, the Addis Ababa Action Agenda and the New Urban Agenda (NUA).

The world faces the emergence of a new climatic regime connected to the increased possibility of natural and human-made hazards, extreme events and massive people displacements. In this new Anthropocene era (Blok and Jensen, 2019), research and analytic approaches must be multi-disciplinary and multi-scalar, incorporating communities and affected population in truly participatory and changing processes.

This special issue results from a first selection of papers presented in the 8th International Conference on Building Resilience that took place in Lisbon on November 2018, under the general theme *Risk and Resilience in practice: Vulnerabilities, Displaced People, Local Communities and Heritages*. The conference topics were structured according to the four priorities of the Sendai Framework. This first group of papers reflects the orientation of the different conference thematic tracks. They mainly focus on strengthening disaster risk governance to manage disaster risk, understanding disaster risk, enhancing disaster preparedness for effective response and to “build back better” in recovery, rehabilitation and reconstruction and investing in disaster risk reduction for resilience. Often from a comparative perspective, the current articles address strategies to foster community resilience and sustainable livelihoods and how to implement resilience through local-community-based processes.

In the first paper, Mittul Vahanti and Irina Rafliana propose a critical review of the concept of building back better (BBB), emphasising that its conceptual definition by the UNDRR occurred only in 2017. From the authors’ standpoint, the socio-ecological systems perspective, a resilient system always results from system transformation. The authors advance an innovative and operational BBB resilience scheme consisting of six themes: governance, economy, ecology, human settlement, vulnerable communities and safety nets and essential services. The comparative analysis of recovery and reconstruction processes in Bihar (India) and Mentawai (Indonesia) leads the authors’ to conclude for the relevance of strengthening human capabilities and sustaining capacity for resilience building of those living with risk and poverty.

Nuha Eltinay’s paper aims to analyse and redefine the meaning of resilience in the Arab Region context, taking into account climate change, conflict and displacement. The overall approach is based on the notion of “the fragile city”. The comparative framework is structured along a careful analysis of UNDRR Disaster Resilience Scorecard, as it was applied to the city-to-city (C2C) resilience building programme exchange between Amman (Jordan) and Khartoum (Sudan). The main conclusion is that the existing toolkits and United Nations frameworks are marked by an objectivist approach, ignoring the social



constructionism of refugees and internally displaced persons and the need for an approach based on human rights access to land and security.

Francisco Freitas and José Manuel Mendes paper change the context of analysis to Europe, and specifically to Portugal. Taking as a starting point, the forest fires of 2017 and 2018 and their heavy toll on human and material losses, the authors highlight the importance of data for reconstruction, of the application of transparency and accountability principles and the guiding notion of data for social good. They emphasise the need for analysing the role of infrastructure in safety and of design and technology innovations for effectively changing the preparation for future events. For the authors, the Portuguese context lacks a principle of information to foster democracy and safety. They conclude that data for social good and data activism do promote strong ties and community participation, assuring sustainable post-disaster recovery processes.

The paper by Liliane Hobeica and Adib Hobeica focusses on the role of design for built-environment professionals in flood adaptation. The authors compare architectural practices for the integration of flood risk in urbanism through three case studies: Coimbra (Portugal), Antwerp (Belgium) and Bordeaux (France). The main conclusion is that built-environment professionals do not realise their potential as flood designers mainly because of a mindset and contexts of professional practice that portray floods as a constraint and not as an opportunity. For these professionals to deal with flood adaptation challenges, there is a need for acquiring soft skills, beyond technical expertise, as professional openness and a positive mindset.

Abel Táiti Konno Pinheiro analyses the evacuation strategies for childcare facilities in two cities after the Great Eastern Japan Earthquake of 2011. His main objective is to fully understand the effectiveness of early warning and community cooperation in evacuation processes related to coastal hazards. His comparative and meticulous analysis shows the importance of pre-designated emergency plans and emergency meeting points, as well as the explicit incorporation of community cooperation, and its adaptation to the specificities of terrain and internal and external dynamics of the childcare facilities.

The paper by A. Nuno Martins and Aline Rocha proposes a comparative analysis of the role of local NGOs in promoting resilient architectural practices in informal settlements. Based on fieldwork and using a qualitative approach, they study a *favela* in Rio de Janeiro (Brazil) and an informal settlement in Bissau (Guinea-Bissau). The two case studies show how social innovation tools anchored on community participation and addressing disaster risk issues can enhance the sustainability of humanitarian approaches to architecture and urbanism. The authors argue for the crucial role of co-development and co-designing strategies that stem from lived experience, traditions, expectations and risk perceptions.

Florence Zapico addresses the factors that endanger traditional agroecosystems and specifically those inhabited by indigenous tribes. She uses as case studies farming villages in the province of Sarangani in Southern Philippines. The author shows how unregulated application of modern capitalised agricultural, with no regard for ecological, socio-economic and genetic consequences has led to soil impoverishment, agro-biodiversity losses and socio-economic downturns. Zapico proposes a multi-disciplinary, bottom-up and participatory approach. She discusses frontier technologies and local knowledge concerning food production and environmental preservation for assuring the existence and survival of agroecosystems, their peoples and resources.

Finally, Ali Jamshed evaluates the Model Villages programme in a post-disaster context in Pakistan, comparing between governmental and non-governmental resettlement initiatives and their different impacts in promoting community resilience. Resorting to the application of a survey and the construction of a community resilience index, Jamshed

concludes that access to education, health, safety and hazard information can enhance resilience. The results also show better performances in resettlements process coordinated by NGOs. In the conclusions, the author recommends incremental and participatory planning approaches with a broader reach.

A. Nuno Martins

*CIAUD, Research Center for Architecture, Urbanism and Design,
University of Lisbon, Lisbon, Portugal and Engenharia e Arquitectura,
University of Beira Interior Faculty of Engineering, Covilha, Portugal*

José Manuel Mendes

Faculty of Economics, University of Coimbra, Coimbra, Portugal, and

Pedro Pinto Santos

University of Lisbon Centre for Geographical Studies, Lisbon, Lisboa, Portugal

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Corresponding author

A. Nuno Martins can be contacted at: afonsojunohenriquemartins@gmail.com