



HERITAGE, DISASTER RESPONSE AND RESILIENCE

Heritage and Our
Sustainable Future
Issue 8; 6th December 2021
ISSN 2752-7026

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Brief Report from the UK National Commission for UNESCO and PRAXIS at the University of Leeds. Session held on Tuesday 23rd February 2021.

Disasters have significant physical, environmental, economic, cultural and social impacts, including the loss of lives and livelihoods, detrimental effects on buildings and infrastructure, and displacement of communities, as well as the destruction, damage, and fragmentation of (tangible and intangible) heritage. This session explored the role of heritage in risk preparedness, disaster response and recovery, but also in the long-term planning for disaster risk management. It also focused on how heritage can be used to better strengthen communities' resilience, an integral part of sustainable development.

KEY INSIGHTS

ONE. Heritage – cultural and natural, tangible and intangible – is an invaluable resource for emergency preparedness and recovery.

It can support the implementation of multi-dimensional and integrated approaches for disaster risk planning, assessment, management and response. The use of traditional knowledge, building techniques, materials and management practices can ensure more sustainable responses in reconstruction and recovery processes. Built heritage, like churches and temples, can also offer refuge to displaced and evacuated people.

TWO. The effectiveness of disaster resilience and recovery depends heavily on the implementation of inclusive, locally and culturally appropriate approaches.

Local communities can support cohesive and adaptive practices and cultural responses to cope with disasters and climate-induced hazards and foster resilience. Local communities can support cohesive and adaptive practices and cultural responses to cope with disasters and climate-induced hazards and foster resilience. Preparedness and recovery efforts can be more effective, sustainable and durable when they are inclusive and tailored to the local cultural context and social environment.



RECOMMENDATIONS FOR RESEARCH, POLICY, AND PRACTICE

ONE. Heritage – cultural and natural, tangible and intangible – is an invaluable resource for emergency preparedness and recovery.

- **Protect heritage from disasters and, where this proves impossible, mitigate heritage loss and damage in disaster recovery and reconstruction processes** through adequate recording, and transfer of memories through arts and culture.
- **Support preparedness to reduce loss from disasters through comprehensive assessments** that explore projected risks and vulnerabilities of heritage sites and the definition of appropriate prevention and mitigation measures.
- **Develop overarching risk management plans** equipped to address multiple challenges and to build bridges between disaster risk reduction, climate change adaptation, heritage conservation and tourism management.
- **Use heritage knowledge, including traditional practices, techniques and materials, together with innovative technological solutions,** to ensure more sustainable responses in reconstruction and recovery processes and foster resilience to future disasters.
- **Harness the power of intangible heritage to offer more than technical and structural solutions** to disaster recovery by fostering resilience and supporting culturally sensitive approaches.
- **Develop and implement holistic strategies to cope with disaster and climate-induced hazards,** by developing integrated management plans for both cultural and natural heritage, preferably using a landscape approach which pays full regard to context and culture-nature interrelationships.
- **Share case studies, lessons learnt and scaleable examples** where heritage has been effectively used in disaster response and recovery and in supporting resilience in a post-disaster or post-conflict environment.

TWO. The effectiveness of disaster resilience and recovery depends heavily on the implementation of inclusive, locally and culturally appropriate approaches.

- **Conduct ethnographic research to understand local values and the cultural dimensions** that underpin disaster responses and use the results to inform the decision-making process for disaster planning and management.
- **Use a multidisciplinary approach to cross the boundaries between different sectors, approaches and expertise, break down silos** both in academia and in the implementation of different global instruments, and support joined-up efforts in management planning and resource sharing.
- **Integrate cultural heritage and communities' needs in disaster risk management policies** at national and local levels to balance existing power dynamics between international and national interests and local needs and expectations.
- **Use heritage and creative practices to build trust, engage with communities,** particularly the most vulnerable ones, and other stakeholders in the context of risk preparedness, disaster response and recovery, while taking steps to avoid re-traumatisation of disaster survivors.
- **Support local stakeholders in developing disaster risk management plans and strategies for heritage sites and associated livelihoods** through international, national, regional and local collaborations and capacity building.
- **Work with local authorities and communities to provide training, guidance and advice** to assist in planning for and mitigating against disasters and to promote local long-term custodianship and commitment to heritage conservation and management.



KEY ISSUES

1. Disasters worldwide are having devastating impacts on cultural and natural heritage as well as on local communities. In this context, heritage, climate change and disaster management cannot be viewed in isolation.
2. Many places are facing a demographic transformation due to the impacts of disasters, climate change, other environmental hazards, conflict and other human actions. This causes social fragmentation and a rupture in communities' connections with their families, land and heritage.
3. Awareness and application of existing legal instruments which could be used in the context of disasters is inadequate, and not always coordinated. Moreover, disaster management policies rarely take cultural and natural heritage into consideration.
4. Local communities are often excluded from heritage reconstruction processes, which are frequently led by external donors and agencies and national authorities. However, local knowledge, engagement and custodianship constitute a unique resource for resilience and long-term heritage conservation, maintenance and management.
5. Promoting a swift, strong and inclusive recovery can reduce the impact on livelihoods and well-being and improve community resilience towards future events.

KEY CHALLENGES

1. EARTHQUAKES, FLOODS, WILDFIRES, LANDSLIDES AND OTHER HAZARDS
2. SUDDEN AND LONG-TERM IMPACTS OF CLIMATE CHANGE
3. HERITAGE DESTRUCTION, DAMAGE AND FRAGMENTATION
4. INADEQUATE MANAGEMENT PLANS, DISASTER RESPONSE AND RECOVERY MEASURES
5. DISPLACEMENT AND LOSS OF LIVELIHOODS
6. SOCIAL FRAGMENTATION AND GLOBAL INEQUALITIES

CASE STUDIES

'DISASTERS PASSED': RESILIENT CARIBBEAN FUTURES VIA SHARED KNOWLEDGE OF RECENT DISASTERS

We all experience and understand hazardous events differently; it is at the intersection of these experiences that the most valuable knowledge for effective future disaster risk reduction is generated. On one hand, scientific responses have the potential to improve understanding of subsurface magma movement and anticipate volcanic impacts on communities and the environment. On the other, social and cultural responses have the potential to help communities learn, respond and adapt to eruptions. The aim of ['Disaster Passed'](#) is to bring together and celebrate these different forms of knowledge on two Eastern Caribbean Islands. Here, we demonstrate key aspects of our interactive exhibits designed to convey the lived experience, scientific monitoring and cultural responses to past eruptions on St. Vincent and Montserrat. ['Disaster Passed'](#) sought to entwine critical risk messages with lived experience, and in so doing further enrich everyone's understanding. Throughout [Disaster Passed](#), the design process has been dynamic, underpinned by collaboration between scientific bodies, governmental organisations and, critically, the wider community; the centrepieces are two volcano-shaped mobile exhibits ('Soufrière Blow' and 'MountainAglow') and a [Mountainaglow website](#). Now exhibited at multiple festivals and events, primary schools of Montserrat have designed new panels and audio-visuals for MountainAglow to reflect their own learning about the volcano.



Image: Mountain Aglow Project, Brades Primary School, Montserrat

Image: China Farmers' Seed Network (CFSN)



IUCN'S HOLISTIC APPROACH TO CLIMATE AND DISASTER RESILIENCE FOR HERITAGE

Natural and cultural heritage are inherently intertwined with climate change and disaster risk. The [IUCN World Heritage Outlook 3](#) (2020) found that “climate change has become the most prominent current threat” to natural World Heritage sites. In the last five years IUCN has had over 100 projects focused on adaptation, resilience and disaster risk reduction. IUCN's holistic approach to assessment and planning considers the landscape context and values the contribution of tangible and intangible heritage, such as in the form of traditional and local knowledge and ancestral practices. A Friends of Ecosystem-based Adaptation (EbA) [multimedia story](#) on EbA and green recovery explored how communities around the world are more resilient to, and building back better from, the COVID-19 pandemic thanks to EbA initiatives such as the revival of traditional agroecological practices, conservation of local crop diversity including heirloom varieties, and reestablishment of traditional infrastructure such as water infiltration canals. Meanwhile, vulnerability assessments and hazard mapping tools, such as the [IUCN Red List of Ecosystems](#), can help identify risks for individual heritage sites and broader landscapes, examine the capacities of local communities and institutions, and guide the design of targeted initiatives to reduce risks and build resilience.

CO-PRODUCING METHODS TO EXPLORE THE SEISMIC SAFETY OF KATHMANDU'S HISTORIC INFRASTRUCTURE

Kathmandu's medieval cities are exceptional architectural and artistic achievements, but also form the fabric of everyday urban life. The 2015 Gorkha Earthquake was a humanitarian disaster that caused 9000 fatalities and changed Kathmandu's iconic skyline in seconds, with monuments damaged across its UNESCO World Heritage site. Representing a key component of tourism in Nepal, their rehabilitation is key to reducing risk to lives and livelihoods. While overseas aid was pledged for reconstruction, there was little funding for researching why monuments collapsed. Many risk reduction strategies are demolishing historic monuments and rebuilding with modern materials, threatening their authenticity and intangible value, but also destroying evidence of traditional seismic adaptation. Local communities and craftspeople are frequently excluded from decision-making but the risk to them, and their livelihoods, remains. Our partnership integrated archaeology, geoarchaeology, architecture, 3D visualisation, geotechnical and structural engineering with community engagement to co-produce methodologies to explore the seismic safety of Kathmandu's historic infrastructure. Analysing soil profiles, foundations and superstructures, we have reconstructed complex monument biographies, changing the understanding of the seismically adaptive properties of traditional materials and techniques. Aligned with SDGs 11 and 17, we are contributing to the nexus in which post-disaster reconstruction is renegotiated between experts, artisans, elected representatives and residents through the rebuilding of an exemplar, the [Kasthamandap](#).



The Saptabidhānuttar Pūjā and prayer ceremony marking the completion of the UNESCO, AHRC-GCRF, British Academy-GCRF and Government of Nepal sponsored post-disaster interdisciplinary research in the ruins of the Kasthamandap (courtesy Durham's UNESCO Chair).





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ACKNOWLEDGEMENTS

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