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Living Labs for participatory value, risk and impact assessments in coastal and underwater heritage sites

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Climate change can have detrimental effects on biodiversity and people's livelihoods and communities. Extreme weather conditions triggered by climate change significantly impact cultural heritage that represents tangible (i.e., historic sites, cultural landscapes) and intangible (i.e., knowledge, cultural practices, oral traditions) assets, especially in coastal areas and underwater sites. Inclusive risk monitoring, preparedness, and management are necessary to identify and ward off additional threats, and to promote inclusive and sustainable adaptation and safeguarding of the heritage sites.

Stakeholder and end-user engagement is gaining ground in risk mitigation and monitoring impacts of climate change to support co-creation processes for climate adaptation strategies. Stakeholders often have valuable knowledge, insights and expertise, and their engagement allows collection of diverse perspectives and data, which can lead to better-informed decisions and identify potential risks and opportunities. However, it can also be difficult to establish collaboration and open communication among different actors and parties. This paper presents the potential of Living Labs (LL), a participatory social innovative methodology, that functions as multi-stakeholder platforms. LL create interaction spaces in which multiple stakeholders and end users collaborate in creating new solutions to complex problems.

This paper presents the initial stage of development and testing of the LL methodology to be implemented in seven pilot sites of underwater and coastal heritage across three different Europe

oceanic climates that are vulnerable to varied impacts of climate change. Results present common challenges in the identification of diverse range of stakeholders and their engagement in co-creation processes of value and impact assessment, decision and future making, as well as testing and validating of a new crowdsourcing tool in real-life contexts. The goal has been building inclusive multi-stakeholder communities for establishing sustainable participatory processes for co-designing and co-creating risk assessment and adaptation strategies that take sociocultural values at their core. For this purpose, a LL toolkit has been developed that compiles different sets of tested methods that have been applied in the case studies adaptable to local contexts.

This paper will show the outcomes of a training workshop and the preliminary results of the adopted and tested LL tools and processes in which stakeholders from pilot sites identify heritage inherent values based on sociocultural relationships. Results highlighting diverse understandings of climate impacts and challenges but are also expected to show a shift on peoples' perspectives when providing meaning to climate change impacts. Such insights and feedback are discussed in terms of strengths and weaknesses that are unique to the site, as well the LL methods and tools employed in each site. Such exercises are increasingly needed to customize participatory methods adapted to fit integrated multiple hazard assessment tools and strengthen sustainable pathways for cultural heritage management. Overall, these processes will contribute to better understanding of the complexity of climate impacts, not only on heritage, but also in related social dynamics.

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