

# Adaptive Solutions for Climate Resilience in Cultural Heritage: Integrating Review, Interviews, and Questionnaires

## Empowering Cultural Heritage Experts through Comprehensive Methodology

### 1. Introduction

Global warming has altered the means and patterns of climatic factors, resulting in variations in the speed and rate of degradation processes. This poses a significant threat to the preservation of cultural heritage. Therefore, it is **crucial to adapt to the impacts of climate change to minimize adverse effects on heritage buildings**. However, studies on practical adaptive measures are limited and fragmented, particularly in the context of tangible cultural heritage, where real-life applications are rarely examined.



### 2. Objectives

In response to the need to address the challenges of climate change in the protection of tangible cultural heritage, this research aims to:

- **develop a framework for practical adaptive solutions** to assist cultural heritage experts such as site managers, coordinators, and practitioners in adapting cultural heritage to new climatic conditions.
- generate interest and **promote the development of tailored adaptive solutions** for mitigating the effects of climate change on historical buildings.

### 3. Methodology

This comprehensive approach allows us to gather

- insights from existing research,
- gauge experts' perceptions of adaptive solutions, and
- investigate specific drawbacks associated with implementation



Systematic literature review

**Identification and analysis of existing various regional and field-specific adaptive measures** in the context of heritage buildings and climate change

Design and administration of questionnaires to international experts in cultural heritage. These questionnaires aim to capture their **perceptions and experiences regarding the impacts of adaptive solutions on specific parameters and heritage values**. The international context also allows to explore different perspectives across countries and preservation approaches.



Questionnaires



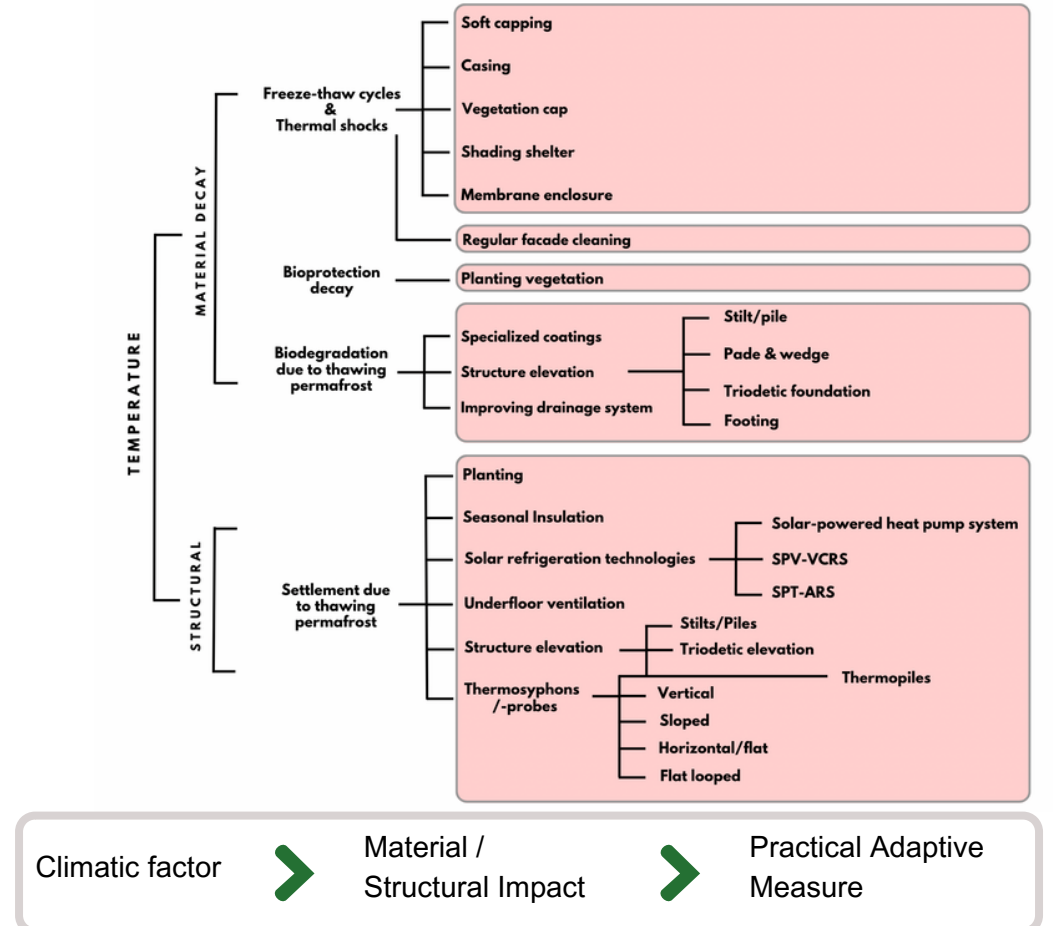
Semi-structured interviews

To address specific drawbacks, **semi-structured interviews with international experts will be conducted**. These interviews provide valuable insights into existing adaptive solutions, highlighting their pros and cons, and identifying areas for improvement.

**Participants** belong to the following sectors:

University, Research Centres, Governmental institution, Professionals

### 4. First Results



### 5. Conclusions

Our comprehensive methodology identifies interventions and deepens our understanding of experts' perspectives. This knowledge guides future research, minimizing drawbacks of existing solutions and exploring emerging technologies. Collaboration and knowledge sharing among heritage professionals are vital for continuous improvement in climate resilience strategies.

In conclusion, our research highlights the importance of adaptive measures in mitigating climate change's adverse effects on historical buildings. By implementing our framework and advancing research, we ensure the preservation and long-term sustainability of cultural heritage for future generations.