



GreenHeritage

The Impact of Climate Change on the Intangible Cultural Heritage

Deliverable D2.1 **GreenHeritage** **Research Protocol**

Version: V 2.0

Project details:

GA No:	101087596
Name:	GreenHeritage
Title:	The Impact of Climate Change on the Intangible Cultural Heritage
Start date:	December 1, 2022
Duration:	36 months



**Co-funded by
the European Union**

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Dissemination Level		
PU	Public	●
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
SEN/CO	Sensitive/Confidential, only for members of the consortium (including the Commission Services)	

Document details:	
Project	GreenHeritage
Title	Deliverable D 2.1: Research Protocol
Version	2.0
Work package	WP 2
Author(s)	Kitija Balcare, Elīna Gailīte, Rita Grīnvalde, Sandis Laime, Anita Vaivade
Contributor(s)	Eugenia Apicella, Patrizia Grifoni, Fulvio Biddau, Giuseppina Padeletti, Alessandro Trani
Keywords	Research protocol, intangible cultural heritage, data collection
Document ID	Research Protocol D2.1 v-2.0
Synopsis	Report for work package 2
Release Date	February 28th, 2023



Revision history			
Version	Date	Changes	Changes by
0.1	January 31, 2023	Draft version	
0.2	February 6, 2023	Draft version	Eugenia Apicella, CUEBC
0.3	February 9, 2023	Draft version	Patrizia Grifoni, CNR
0.4	February 23, 2023	Draft version	Fulvio Biddau, CMCC
0.5	February 27, 2023	Final version	Kitija Balcare, Elīna Gailīte, Rita Grīnvalde, Sandis Laime, ILFA
1.0	February 27, 2023	Final version finalisation	Patrizia Grifoni, Giuseppina Padeletti, Alessandro Trani, CNR
2.0	December 20, 2023	Revised version upon PO request	G. Padeletti



Table of Contents

TABLE OF CONTENTS	4
EXECUTIVE SUMMARY	5
1. INTRODUCTION.....	6
1.1. DOCUMENT ORGANIZATION.....	6
1.2. REFERENCE DOCUMENTS	7
1.3. ACRONYMS AND ABBREVIATIONS	7
2. BACKGROUND AND LITERATURE REVIEW	8
2.1. RESEARCH PUBLICATIONS	8
2.2. INTERNATIONAL LEGAL ACTS AND POLICY FRAMEWORK.....	9
2.3. NATIONAL LEGAL FRAMEWORKS AND POLICY	10
2.4. ON-GOING NETWORKING AND RESEARCH PROJECTS	11
3. AIMS AND OBJECTIVES	13
4. KEY ACTIONS	13
5. METHODS: DATA COLLECTION AND ANALYSIS	16
5.1. DATA COLLECTION I: DATA RETRIEVAL FROM PUBLIC LEGAL AND POLICY DOCUMENTS	16
5.2. DATA COLLECTION II: STRUCTURED SURVEY	17
5.3. DATA COLLECTION III: SEMI-STRUCTURED INTERVIEW	18
5.4. DATA ANALYSIS: MAPPING AND CREATION OF INTERACTIVE MAP	19
5.5. DATA ANALYSIS: COMPLEX STUDY OF DATA	20
6. METHODOLOGICAL CHALLENGES AND ANTICIPATED PROBLEMS	20
7. ETHICAL CONSIDERATIONS.....	22
8. OUTCOME	23
9. STUDY SIGNIFICANCE	23
10. BIBLIOGRAPHY	24
APPENDIX 1: UNESCO LISTS OF INTANGIBLE CULTURAL HERITAGE	28
APPENDIX 2: NATIONAL INVENTORIES OF INTANGIBLE CULTURAL HERITAGE	29
APPENDIX 3: SURVEY “THE IMPACT OF CLIMATE CHANGE ON THE INTANGIBLE CULTURAL HERITAGE”	
33	
APPENDIX 4: CONSENT	37
APPENDIX 5: INTERVIEW QUESTIONS.....	38
APPENDIX 6: DATASET FOR CASE STUDIES AND EXISTING PRACTICES	39
APPENDIX 7: CLIMATE IMPACTS AND EXPECTED EFFECTS ON HERITAGE.....	40
APPENDIX 8: INFOGRAPHIC “CLIMATE CHANGE RISKS”	42

Executive Summary

The Research Protocol is a guiding document for the project “The Impact of Climate Change on the Intangible Cultural Heritage” (GreenHeritage, ERASMUS-EDU-2022-PI-FORWARD-LOT1, No. 101087596) consortium partners and implementers. Developed as part of the WP2 “Needs analysis & development of GreenHeritage Methodology”, it is intended to provide explicit instructions to the partners involved on how to carry out the project tasks T2.1 “Needs analysis” and T2.2 “Mapping of existing practices”. The results of the completed tasks will be integrated into the D2.2 “Primary and secondary data research findings” and will also serve the objectives of T2.3 “Development of methodology” and other working groups: WP3 “GreenHeritage ICT tools”; WP4 “GreenHeritage course: Blended-learning & Microcredentials”; WP5 “Policy dialogue, dissemination and exploitation”.

The document presents the methodological tools that will be used for the needs analysis and mapping exercises. It also clarifies the division of roles between the WP2 leader ILFA who is the main responsible partner for performing T2.1 and T2.2 and other partners.

The following sections of the Research Protocol present methodological instructions on collecting data on the intangible cultural heritage under the climate change threats:

- Methods: data collection, management, analysis
- Methodological challenges, anticipated problems

The document also covers these topics under relevant sections:

- Background and literature review
- Aims and objectives
- Key actions
- Timeline and engagement of partners
- Ethical considerations
- Outcome
- Study significance

The Research Protocol is a public document in English. It is primarily addressed to the GreenHeritage project partners: CNR, CUEBC, FSMLR, ILFA, and UAEGEAN. However, any other interested party is also authorised to acquaint themselves with the content of the document.



1. Introduction

1.1. Document Organization

The present document is organized into the following sections:

Section 2: overview of the research and contributions made to date and still in the field of ICH interfacing CC

Section 3: defines the aims and objectives

Section 4: defines and briefly describes the main data collection, management and analysis activities, their implementation timeline and involved partners

Section 5: description of the methodology used in the collecting, processing and analysing research data

Section 6: overview of the methodological challenges and anticipated problems during the data collection process

Section 7: discloses the ethical considerations in data collection and processing

Section 8: presents the expected outcome

Section 9: concluding remark on study significance

Section 10: bibliographical overview of research publications and policy documents regarding ICH and CC

Eight appendices supplement the document:

Appendix 1: references to the international UNESCO lists of ICH

Appendix 2: references to the national inventories of ICH in the EU countries

Appendix 3: overview of the design of the online survey “The Impact of Climate Change on the Intangible Cultural Heritage”

Appendix 4: text of oral consent

Appendix 5: guiding questions for the interviews with stakeholders

Appendix 6: overview of the data structure for case studies and existing practices

Appendix 7: list of climate impacts and examples of expected effects on heritage

Appendix 8: infographic presenting main CC risks



1.2. Reference Documents

Document name	Reference number
GreenHeritage – Annex 1: Description of Work	Grant Agreement No. 101087596

1.3. Acronyms and Abbreviations

Acronym	Description
CC	Climate Change
CMCC	Foundation Euro-Mediterranean Centre on Climate Change
CNR	National Research Council (Italy)
CO	Confidential
CUEBC	European University Centre for Cultural Heritage
D	Deliverable
EC	European Commission
ERASMUS-EDU-2022-PI-FORWARD-LOT1	Erasmus+ Programme, Partnerships for Innovation - Forward-Looking Projects - Cross-sectoral priorities
EU	European Union
FSMLR	Foundation of Historical Heritage of Santa María la Real
ICH	Intangible Cultural Heritage
ICOMOS	International Council on Monuments and Sites
ICT	Information Communication Technology
ILFA	Institute of Literature, Folklore and Art of the University of Latvia
M	Month
NGO	Non-Governmental Organization
No.	Number
PO	Project Officer
PP	Restricted to other programme participants
PU	Public
RE	Restricted to a group specified by the consortium
ReadLab	Research Innovation and Development Lab
T	Task
UAEGEAN	University of the Aegean
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
WP	Work package

2. Background and Literature Review

The aim of this section is to summarise and describe the research and contributions made so far in the field of intangible cultural heritage and climate change. It includes a review of literature, research and policy documents that provides an overview of the UN, EC, UNESCO documents; insights into national legal frameworks; scientific publications; popular science publications.

The aim of this project is to analyse primary and secondary data to provide a basis for future scientific research. It will also bring together examples of good practices in the EU, and to gather information that can then be used to inform education projects and policy-making across the EU, as well. The GreenHeritage project will continue to explore the context of the EU research environment, to identify and, where possible, follow relevant on-going research activities in the EU countries.

For the current bibliographical lists of research publications on ICH and CC as well as the key policy documents and reports, see the Bibliography.

2.1. Research Publications

Studies on intangible cultural heritage and climate change separately are widely available, as is most of the existing studies on UNESCO World Heritage sites or Natural World heritage. The link between intangible cultural heritage and climate change is much less addressed in popular science publications (Goswami, 2015; Markham, 2022) and especially in the scientific literature, in particular when it comes to the European situation. There are more reports and studies on general policy issues (Kim, 2011; Lenzerini, 2014), EU documents (for example EC, 2022). Some of the research looks at people forced to emigrate because of climate change, and how their intangible cultural heritage values merge with the intangible cultural heritage values practised in the new location (Aktürk, Lerski 2021). Just a few specific case studies (for example Dirksen, 2019; Horstkotte, Holand, Kumpula, Moen, 2022) are researched. It is the case study that allows a better understanding of the issues of impacts on intangible cultural heritage and in a given community. Although UNESCO series (papers, reports, manuals) have been published since 2002, covering various cases, intangible cultural heritage and climate change have received little coverage over the years (UNESCO, from 2002). However, [UNESCO](#) is important because it regularly raises issues related to cultural heritage and climate.

While the literature reviewed covers specific communities, their movements and traditions as they change due to climate change, geographic regions and their specific climate impacts, in general, all of the above results in recommendations for policy-makers. The specific elements related to climate change and inscribed on UNESCO's international and national intangible cultural heritage inventories as case studies have hardly been described in more extensive studies. Research shows that this area is still young as a research field, but it is gaining momentum.

To highlight a good example that has been studied so far, the case of Finland is briefly described. However, it should be mentioned that this example is more



general than our approach of focusing on intangible cultural heritage inventories. Nevertheless, this example is a good illustration of a successful line of research. The Sámi community and its practices (e.g., reindeer husbandry and herding, coastal fishing, fur processing, handicrafts etc.) are an essential part of Finland's culture. It is also most directly linked to climate change, as many practices and traditions are specific to winter and the cold, predictable ice condition. For example, weather and climate variability resulting from climate change affect the lifespan and quality of wild reindeer, which further affects the traditions that reindeer fur, horns, etc. are used to maintain. The same applies to fishing traditions, where stable weather forecasts and water temperatures are essential. Finland ratified the UNESCO Convention for the Safeguarding of Intangible Cultural Heritage in 2013. In addition, in 2021 they submitted a periodic report on the Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2021). Sámi culture and climate change also featured prominently in the report. There is a plan to set up a Sámi Climate Council to promote the inclusion of Sámi traditional knowledge in climate policy decision-making. "According to the policy, all activities in the Arctic region must be based on ecological carrying capacity, climate protection, principles of sustainable development, and respect for the rights of indigenous peoples," is written in the document (UNESCO, 2021: 179). There will be a particular focus on local livelihoods and food security, including reindeer husbandry and other traditional skills. Biodiversity must also be preserved. Reindeer husbandry is one of the specific practices that has been explored both as part of a cultural tradition and to highlight the challenges of climate change (Horstkotte, Holand, Kumpula, Moen, 2022). Herding practices must be modified and adjusted to the new conditions as a result of climate change's effects on the ecosystem. For example, as climatic conditions affect the ability of reindeer to feed themselves, supplementary feed is needed, the traditional use of pastures is being put to the test by climate change, which also has an impact on the health and diseases of reindeer. More and more, institutions and individuals located far from the local level are making decisions on the policies affecting the future of reindeer pastoralism.

2.2. International Legal Acts and Policy Framework

"Communities, groups and even individuals play an important role in the production, safeguarding, maintenance and re-creation of the intangible cultural heritage, thus helping to enrich cultural diversity and human creativity," according to the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003). This survival of intangible cultural assets is at risk due to the consequences of climate change. While climate change on tangible heritage has received attention with European initiatives such as the European Heritage Label, and the EU Prize for Cultural Heritage/Europa Nostra Awards, the Intangible Cultural Heritage has struggled to receive the same attention (exception – European Heritage Days). In 2014, the European Commission, through its communication "Towards an integrated approach to cultural heritage for Europe" made a clear reference to the importance of intangible heritage. Nonetheless, in 2016, the EC's "Joint Communication of the European Parliament and the Council: Towards an EU strategy for international cultural relations" focused on tangible heritage with regard to climate change and natural

catastrophes. Despite the efforts through the Creative Europe Programme, the European Regional Development, Fund and Cohesion Fund, there has been little to no attention on how climate change and environmental degradation affect the intangible heritage of Europe. This neglect derives from a “terminological versatility” which links intangible cultural heritage mainly to products, assets, treasures and tourism as well as from an EU top-down approach instead of a bottom-up approach that would involve a larger community of ICH practitioners and carriers of local knowledge. (Schreiber, 2019)

2.3. National Legal Frameworks and Policy

The project includes representatives from Greece, Italy, Latvia and Spain. So far, the following provisions have been included in the local legislation of these countries:

Greece

- Greece enacted a law in 2002 protecting antiquities and cultural assets, which included language about “intangible cultural goods”.
- Created a national inventory and ratified the Convention for the Safeguarding of the Intangible Cultural Heritage in 2006. Since that time, there has been a National Scientific Committee for the Implementation of the Convention for the Safeguarding of Intangible Cultural Heritage.
- A National Strategy for the Adaptation of Cultural Heritage to the Effects of Climate Change was developed in 2016, and as a result, the Ministry of Culture and Education established an Internal Cross-Sectoral Committee to Study the Effects and Form Recommendations for a National Action Plan.
- Although Greece is active in this area at the international (UN, UNESCO, EU) and national level, it has focused its safeguarding approach only on the tangible heritage assigning a complementary role to the intangible.

Italy

- In December 2020 the National Observatory for the enhancement of the UNESCO Intangible Heritage was launched at the Italian Ministry of Culture. Climate change’s potential impact on intangible cultural heritage is not being taken into consideration.
- A change to the Relaunch Decree was approved in 2020, and it allotted funds to assist heritage communities amid the Covid-19 outbreak. Due to the social containment measures in place, the epidemic has made it difficult for communities to preserve and spread their traditions.
- In general, intangible heritage is taken into consideration as a tool to achieve sustainable development: this is the case, for example, of the National Strategy for Marginal Areas (*Strategia Nazionale per le Aree Interne*) launched in 2014. Nevertheless, no direct reference to the impact of climate change on intangible cultural heritage can be spotted.



Latvia

- A Council of Intangible Cultural Heritage was established in March 2017. It is composed of representatives from the Ministry of Culture, the Ministry of Education and Science, the Ministry of Environmental Protection and Regional Development, the Latvian National Commission for UNESCO and the Latvian Association of Local and Regional Governments, science, academia and NGOs.
- A law that aims to protect intangible cultural heritage and pass it on to future generations was adopted on September 29, 2016.
- There is no study or national plan regarding ICH in the context of climate change. However, in smaller-scale documents, like the preventive security plans of memory institutions, the climate change risks or rather critical situations (flood, heat) have been considered. There is a need for increased understanding among both the decision-makers and the general public.

Spain

- There is a National Plan for the Safeguarding of Intangible Cultural Heritage (2011) that adopts the definition of Intangible Cultural Heritage established by the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage of Paris (October 17, 2003). This Plan acknowledges that the Intangible Cultural Heritage currently runs the risk of having its continuation or forms of alteration mediated by the large audiences who value and claim them. It does not recognize the direct impact of climatic factors as a specific risk.
- There is a specific law in Spain (Law 10/2015, of May 26, for the safeguarding of Intangible Cultural Heritage), and different legal texts in regional legislations, communities, inventories, local maps, etc.
- In the National Heritage Protection Plans, designed by the Ministry of Culture, there are no specific tools or specific lines aimed at mitigating the effects of climate change. Nor is there a census of the heritage vulnerable to these dangers.

2.4. On-going Networking and Research Projects

The relevance of the topic is also highlighted by other networking and research projects and initiatives implemented in recent years. For example:

- [LIVIND](#) – Creative and living cultural heritage as a resource for the Northern Dimension region

Duration of the project: 2021-2023

Region: Ten Northern European countries and the Northern Autonomous Communities

Description: The project strengthens the role of intangible cultural heritage as a resource for the sustainable development of local communities. Climate change and the associated environmental risks also have a direct and indirect impact on living cultural heritage. Living heritage can play a role in ensuring ecological sustainability.



Many of these living heritage practices should be better promoted and protected. Several traditional practices face environmental regulations that sometimes even threaten their existence. It is therefore important to understand how living heritage relates to ecological sustainability and how to make it sustainable.

- [CHERISH](#) – Creating opportunities for regional growth through promoting Cultural HERitage of fISHing communities in Europe

Duration of the project: 2018-2023

Region: Netherlands, Latvia, Spain, Greece, Portugal, Cyprus, Italy, Finland, Germany

Description: The main objective of CHERISH is to enhance regional development strategies that safeguard and promote cultural heritage in fishing communities in order to increase the region's appeal to businesses, residents, and tourists. Climate change, pressure from tourism, and the evolution of the European fishing industry are all issues that affect communities that depend on fishing in the EU. The EU encourages greater efforts to better position and characterize the fishing communities, including their intangible heritage, such as mythology to daily behaviours, ecological knowledge, crafts, as well as the valuable role of their cultural heritage for sustainable development.

- [SHiFT](#) – Social Sciences and Humanities for Transformation and Climate Resilience

Duration of the project: 2022-2026

Region: Europe

Description: In order to solve current issues by developing timely societal transitions in the face of climate change this COST Action suggests the establishment of a transdisciplinary hub. It also entails the delivery of a schedule of initiatives, missions, and the production of digital content. The participants explore transformation processes in practice across different dimensions, which include research, policy, business, community and individual practices.

- [UNESCO Survey](#) on thematic initiatives under the 2003 Convention

Description: In line with UNESCO's Medium-Term Strategy for 2022–2029 (41C/4), the Operational Directives of the Convention (Chapter VI) and the Committee's decisions (Decisions 15.COM 8 and 16.COM 5.b), there is initiated activities to develop a comprehensive approach to intangible cultural heritage safeguarding and sustainable development. UNESCO conducted a survey "Safeguarding intangible cultural heritage and climate change", which invites representatives of Member States, representatives of cultural heritage management institutions to share case studies on the impact of climate on intangible cultural heritage in their countries. This extensive survey is likely to provide valuable information in the coming years.

In addition to the above-mentioned, the "Anthropological Journal of European Cultures" also invites scientific submissions for the forum edition "[Intangible Cultural Heritage, Folklore & Climate Change](#)" to be published at the end of 2023. Intangible cultural heritage and climate change are therefore issues for researchers, policy-makers and the wider public.

3. Aims and Objectives

The Research Protocol is developed as part of the WP2 “Needs analysis & development of GreenHeritage Methodology” during the initial implementation phase, M1-3, of the project “The impact of Climate Change on the Intangible Cultural Heritage” (GreenHeritage, ERASMUS-EDU-2022-PI-FORWARD-LOT1, No. 101087596). It is intended to serve as a guiding document to carry out the project tasks T2.1 “Needs analysis” and T2.2 “Mapping of existing practices”.

Primary **aims** to accomplish these tasks are:

- Identifying and analysing the state of play at national and European levels regarding ICH and current CC threats.
- Exploring the key role that ICH could have in sustainable and climate-resilient development and mapping existing adaptation practices across EU.

The **specific objectives** to address are the following:

- Take stock of different definitions of ICH at national and EU levels and provide a common definition.
- Capture data in partner countries and across EU regarding types of threats linked to climate change.
- Provide causal link or probability of causation between climate change and ICH degradation.
- Detect and map existing management, conservation and protection practices across EU.

4. Key Actions

This section aims to define and shortly describe the main data collection, management and analysis activities, their implementation timeline and involved partners.

Implementation of tasks 2.1 “Needs analysis” and 2.2 “Mapping of existing practices” will be carried on by realising activities listed and characterised in Table 1. It also indicates the implementation timeline and involved partners.

Table 1. Overview of key activities, their timeline and implementers

No.	Activities	Timeline (months)	Implementer(s)
T2.1	Needs analysis: (A) Research Protocol	M1-2	ILFA, project partners
A2.1	Detailed planning of WP2 Task 2.1 and Task 2.2 activities, defining the methodological framework of the research and preparation of the draft of the Research Protocol	M1	ILFA

A2.2	Evaluation of the draft of the Research Protocol	M2	ILFA, all project partners
A2.3	Preparation of the final version of the Deliverable D 2.1: Research Protocol	M2	ILFA
T2.1	Needs analysis: (B) ICH definition	M1-9	ILFA
B2.1.1	Data collection: Taking stock of different definitions of ICH at national and EU levels and their references and uses in legislation	M1-6	ILFA and partners in the different countries
B2.1.2	Analysis of data collected	M7-9	ILFA
B2.1.3	Providing a common definition of ICH	M9	ILFA
T2.1	Needs analysis: (C) Impact of CC on ICH, evaluation of overall situation across EU	M1-6	ILFA (leading partner), CNR, CUEBC, FSMLR, UAEGEAN
C2.1.1	Data collection: Monitoring of recent theoretical and empirical publications on the impact of CC on ICH. Maintaining a list of publications in the GreenHeritage MS Teams repository	M1-36	ILFA
C2.1.2	Data collection: Monitoring of current research projects on the impact of CC on ICH. Maintaining a list of projects in the GreenHeritage MS Teams repository	M1-36	ILFA
C2.1.3	Identification the types of CC that could have a degrading impact on ICH; preparation of a description of different CC manifestations and infographic for distribution to survey participants (see activities C2.1.5 and C2.1.6)	M1-3	CMCC
C2.1.4	Identification of ICH organisations in EU member states, obtaining their contact information (for contact exit points, see Appendix 1 and Appendix 2)	M2	ILFA
C2.1.5	Methodology: Development of a structured survey to obtain quantitative data on the impact of CC on ICH in EU member states	M2	ILFA
C2.1.6	Methodology: The pilot version of the survey is sent to 3-4 institutions, both the received answers and feedback are analysed; if necessary, the survey is improved	M3	ILFA
C2.1.7	Data collection: Distribution of online surveys to ICH organisations of EU member states with the aim of obtaining a general overview of the impact of different CC types on ICH in different EU regions	M3-6	ILFA

C2.1.8	Data management: Compiling survey data and preparing a dataset for further analysis	M6	ILFA
T2.2	Mapping of existing practices	M4-9	WP2: ILFA (leading partner), UAEGEAN, CNR, CUEBC, FSMLR WP3: ReadLab
2.2.1	Planning the data structure and design of an interactive map to show examples of the most endangered areas and regions in Europe where CC has started to impact negatively different types of ICH. The map will be based on the data collected within Activity C2.1.7	M4-5	ILFA in cooperation with ReadLab (WP3, T3.1.)
2.2.2	Analysis of the survey data, preparing the quantitative data for the development of the interactive map	M5	ILFA
2.2.3	Analysis of survey data, selection of the most characteristic examples of ICH elements affected by climate change for in-depth case studies	M5	ILFA
2.2.4	Methodology: development of case study methodology (structure and processing of semi-structured interviews)	M5	ILFA
2.2.5	Data collection: (remote) interviews with selected representatives of ICH traditions affected by climate change (tradition practitioners, local community members, local authorities and ICH organisations)	M6-7	ILFA (leading partner), CNR, CUEBC, FSMLR, UAEGEAN
2.2.6	Data collection: a collection of published sources (scientific articles, interviews), legislative documents and other publicly available information relevant to case studies	M7-8	ILFA
2.2.7	Data management: Compiling interview data and preparing a dataset for final analysis	M7-8	ILFA (leading partner), CNR, CUEBC, FSMLR, UAEGEAN
2.2.8	Data analysis: analysis of interviews, published data and public data to find out the impact of CC on ICH in EU countries and the solutions used by local communities, municipalities and the state to reduce this impact	M8	ILFA (leading partner), CNR, CUEBC, FSMLR, UAEGEAN
2.2.9	Preparation of the draft of Deliverable D2.2: Primary and secondary data research findings	M8	ILFA (leading partner), CNR, CUEBC, FSMLR, UAEGEAN
2.2.10	Evaluation of the draft of the Deliverable D2.2	M9	ILFA, all project partners

2.2.11	Preparation of the final version of Deliverable D2.2: Primary and secondary data research findings	M9	ILFA
--------	---	----	------

5. Methods: Data Collection and Analysis

In this section, a description of the methodology used for collecting, processing and analysing research data, is provided. It also describes the structure of the obtained datasets. Taking into account the research needs, various quantitative and qualitative data collection and analysis methods will be combined in the study, which are briefly described below.

Before, and along with the data collection via the structured survey and online interviews, the implementers of the tasks will make themselves aware of the ICH elements of the potential danger of CC impacts, using the international UNESCO lists of ICH (see **Appendix 1**) as well as the national inventories of the ICH across the EU countries (see **Appendix 2**) as the entry points for the pre-selection of the targeted elements. In addition, the Periodic reporting under UNESCO's 2003 Convention will be used as a strategic source. In the [submissions](#) delivered in 2021 by the Europe region stakeholders, the answers to question No. 13.2 will be examined in particular ("Have policies or legal and administrative measures for inclusive social development and environmental sustainability been established or revised to give consideration to ICH and its safeguarding?"). Other sections of the submitted reporting texts will be browsed using keywords such as "climate", "climate change" et al. These initial exploratory approaches will also guide the selection of the informants to be addressed, including the ICH supervisors at the national level, local authority staff and the ICH community representatives.

5.1. Data Collection I: Data Retrieval from Public Legal and Policy Documents

Objective: To establish a sufficiently complete overview of different definitions of ICH at national and EU levels for the purposes of the GreenHeritage project study.

Advantages of the method: Availability of up-to-date data from public on-line repositories of legal and policy documents from different EU countries.

Tasks: On the basis of the retrieved data, develop a framework for qualitative comparative analysis of the ICH definitions and trace the understanding of the ICH concept in various public legal and policy documents; detect the cases of the appearances of ICH notion in the documents addressing climate change and its threats and vice versa—the potential threat of climate change in ICH documents. Additionally, identifying secondary sources, such as recent research publications and ongoing research and networking projects, needs to be performed.

The research process will also consider the correspondence of national definitions with the UNESCO definition of the ICH within the [Convention for the](#)



Safeguarding of the Intangible Cultural Heritage: “The “intangible cultural heritage” means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. For the purposes of this Convention, consideration will be given solely to such intangible cultural heritage as is compatible with existing international human rights instruments, as well as with the requirements of mutual respect among communities, groups and individuals, and of sustainable development.” For the Convention purposes, the ICH manifestations are identified in the following domains: (a) oral traditions and expressions, including language as a vehicle of the intangible cultural heritage; (b) performing arts; (c) social practices, rituals and festive events; (d) knowledge and practices concerning nature and the universe; (e) traditional craftsmanship.

Types of data collected: Public EU and national legal and policy documents related to climate change and ICH.

Implementers: These tasks will be carried out entirely by ILFA.

For a compilation of secondary data from the initial phase of the study, see the Bibliography.

5.2. Data Collection II: Structured Survey

Objective: The general goal is to get an overview of the impact of climate change on ICH in the EU territory. The specific goal is to identify general trends in the impact of specific CC types on ICH in specific EU regions.

Advantages of the method: Data collection method; data can be obtained from a large number of respondents in a short time; data can be easily standardised; flexibility in the data processing process.

Tasks: In the course of the survey, representatives of the ICH institutions of the EU member states will be surveyed, clarifying the impact of climate change on the ICH in each EU member state, learning the attitude of the bearers of tradition, local communities, ICH institutions, municipalities and the national government towards this phenomenon, the measures taken to improve the situation.

It is planned that representatives of UNESCO National Commissions and other national ICH organizations will be interviewed.



Types of data collected: Personal data: contact data (names, titles, e-mail addresses) of ICH institutions (e.g., UNESCO National Commissions), names, titles and e-mail addresses of ICH community members; communications (e-mails); semi-structured interviews with representatives of the ICH communities; affiliation and position data of the interviewed representatives of the ICH institutions and communities; location data of the interviewed representatives of the ICH communities (to be used in digital mapping if necessary).

Implementers: These tasks will be carried on entirely by ILFA.

For the content of the online survey “The Impact of Climate Change on the Intangible Cultural Heritage”, see **Appendix 3**. The types of CC are listed in **Appendix 7**: “Climate Impacts and Expected Effects on Heritage”, while **Appendix 8**: “Infographic “Climate Change Risks”” illustrates the infographic to be sent to informants.

5.3. Data Collection III: Semi-structured Interview

Objective: To obtain qualitative data on the impact of climate change on ICH, by choosing the most typical examples for in-depth analysis.

Advantages of the method: Semi-structured interview is best to gain a detailed understanding and insight into the context of the researched topic. It allows the interviewee to describe what is important to him; useful for quotes and representation needs.

Tasks: Conduct in-depth semi-structured interviews to obtain qualitative data for at least 10 case studies on the most typical types of climate change and their impact on ICH, and perform a more detailed analysis on the involvement of society and government institutions of various levels in solving problems.

Based on survey data, cases will be selected for the case studies, which (a) illustrate the effects of different climate changes on ICH, (b) characterize the CC problems of different regions of the EU and (c) most vividly illustrates different solutions to the impact of CC on ICH. By choosing specific problem cases, interviews will be conducted with the bearers of the tradition threatened by climate change and the local community members, on the one hand, and with local authorities, on the other hand, in order to find out the attitude of the various parties involved towards the problem and the proposed solutions.

Before interviewing, ILFA will instruct the WP2 partners about the conduct of the interviews. The interviews must only be conducted after the oral consent (see **Appendix 6**) and informants’ prior and informed acceptance of the purposes of the GreenHeritage project. Otherwise, the conduct of interviews is not strictly regulated and the interviewers themselves can choose their interviewing strategy according to the given circumstances and situation. The most important questions to be included in the interview are summarized in **Appendix 5**.



Types of data collected: Personal data: contact data (names, titles, e-mail addresses) of ICH institutions; names, titles and e-mail addresses of ICH community members; communications (e-mails); semi-structured interviews with representatives of the ICH communities; affiliation and position data of the interviewed representatives of the ICH and other institutions and communities; location data of the interviewed representatives of the ICH communities (to be used in digital mapping if necessary); cultural or social identity data of the interviewed representatives of the ICH communities; social media posts on the impact of climate change on ICH.

Implementers: ILFA will play a leading role in this task by conducting interviews for four case studies and advising the other WP2 partners (CNR, CUEBC, FSMLR, UAEGEAN), each of whom will conduct interviews for at least one case study in their home countries.

For the guiding questions of the interviews with stakeholders, see **Appendix 5**. The interviews must only be conducted after the information related to the interviews and the project will be provided, (see **Appendix 4**) and the potential interviewees sign a consent form compliant with the form defined within “D1.7 Privacy and Open data policy and Procedures”.

5.4. Data Analysis: Mapping and Creation of Interactive Map

Objective: Carry out qualitative data mapping, thus establishing the impact of certain CC types on ICH in different EU regions (in collaboration with WP3).

Tasks: Structured and semi-structured interviews with ICH institutions, local communities and other stakeholders are expected to provide information on the impact of CC on traditions existing in different regions of the EU. The task of this activity is to classify and analyse the geospatial data obtained in the interviews and to prepare this data set for the creation of an interactive map. The purpose of the interactive map will be twofold—to identify regions with common CC challenges regarding ICH preservation, as well as to visualise research data for the promotion and further use of project results.

Types of data analysed: Personal and non-personal data: location data of the interviewed representatives of the ICH communities and other stakeholders (personal) and ICH elements under threat (non-personal).

Implementers: These tasks will be carried on by ILFA (preparation of data set) in cooperation with ReadLab (technical solutions of the interactive map; WP3, T3.1.).

For the overview of the data structure for case studies and existing practices, see **Appendix 6**.

5.5. Data Analysis: Complex Study of Data

Objective: To carry out primary and secondary data research.

Tasks: To evaluate and compare different definitions of ICH at national (Greece, Italy, Latvia and Spain) and EU levels and provide a common definition. To provide an in-depth analysis of the data captured in partner countries and across EU regarding types of threats linked to climate change and provide causal link or probability of causation between climate change and ICH degradation. Providing a comprehensive overview of the overall situation, according to the indicators of the GreenHeritage project (Grant Agreement, Article 1.2), at least 10 case studies, 3 threats, 8 national policies and initiatives, 5 EU policies and initiatives and 8 existing practices will be examined in more detail. The output of the analysis will be incorporated into the GreenHeritage deliverable D2.2 “Primary and secondary data research findings”.

Implementers: ILFA will play a leading role in this task by preparing 6 case studies and advising the other WP2 partners (CNR, CUEBC, FSMLR, UAEGEAN), each of whom will prepare at least one case study based on their interview. ILFA will also prepare the rest of the requirements needed for deliverable D2.2.

Types of data analysed: Personal data: communications (e-mails); semi-structured interviews with representatives of the ICH institutions and communities; affiliation and position data of the interviewed representatives of the ICH and other institutions and communities; location data of the interviewed representatives of the ICH communities (to be used in digital mapping if necessary); cultural or social identity data of the interviewed representatives of the ICH communities; social media posts on the impact of climate change on ICH. Non-personal data: Mass media publications (analytical articles, interviews, news reports, etc.) on the impact of climate change on ICH; scholarly publications (both theoretical analysis and case studies) on the impact of climate change on ICH.

6. Methodological Challenges and Anticipated Problems

This section describes the methodological challenges, evaluates their feasibility and offers solutions for their prevention.

Table 2. Overview of anticipated problems during data collection and possible solutions, according to the activities indicated in Table 1.

No.	Activity	Anticipated problem	Solution
B2.1.1	Taking stock of different definitions of ICH at EU levels and	Documents of interest to the study may not be freely available to the public. In some cases, the	Consultation with relevant international and national experts, such as

	their references and uses in legislation	interpretation of national languages may pose difficulties.	UNESCO facilitators and focal points in Europe.
T2.1, T2.2	Research on the impact of CC on ICH (Tasks 2.1 and 2.2)	The methodology chosen for the study turns out to be ineffective	Methodological shortcomings are evaluated and more appropriate methodological solutions are found for the research
C2.1.5	Development of a semi-structured survey to obtain quantitative data on the impact of CC on ICH in EU member states	The survey or some of its questions are not understood by the respondents or are misunderstood, which may affect the overall quality of the data	The pilot version of the survey is sent to 3-4 institutions; both, the received answers and feedback are analysed; if necessary, the survey is improved
C2.1.7	Data collection: Distribution of online surveys to ICH organisations of EU member states with the aim of obtaining a general overview of the impact of different CC types on ICH in different EU regions	The addressed institutions are not interested and do not participate in the survey	At least two ICH institutions are identified in each EU member state (National Commission for UNESCO and other institutions responsible for ICH). Not receiving a response from one institution, the survey is addressed to the other.
2.2.3	Data collection: (remote) interviews with selected representatives of ICH traditions affected by climate change (tradition practitioners, local community members, local authorities and ICH organisations)	The parties involved do not agree to the interview; such a passive position precludes obtaining the qualitative data for an in-depth case study	Quantitative survey data are re-evaluated, and another similar climate change affected ICH element is selected for a case study

7. Ethical Considerations

Any collection and processing of data are for the sole purposes and objectives of the GreenHeritage project and, during M1-9, primarily for the benefit of the WP2 tasks T2.1 "Needs analysis" and T2.2 "Mapping of existing practices". The data collected will be stored and processed following the GreenHeritage project internal standards, rules and procedures for data protection (Deliverable D.1.7-GreenHeritage Data Management Plan) in compliance with the applicable EU, international and national law on data protection, in particular, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation; see Grant Agreement, Article 15).

During the phase of collecting data on particular ICH elements under the threats of the CC, the online survey "The Impact of Climate Change on the Intangible Cultural Heritage" along with remote interviews will be conducted. With both data collection methods, informants' prior and informed acceptance of the purposes of the GreenHeritage project is mandatory. The online survey form (see **Appendix 3**) is introduced by the Information:

"The aim of this survey is to collect data on the intangible cultural heritage under the climate change threats, thus building an understanding of both individual cases and the overall situation in the EU countries.

This research is a part of the project "The Impact of Climate Change on the Intangible Cultural Heritage" (GreenHeritage, ERASMUS-EDU-2022-PI-FORWARD-LOT1, No. 101087596). It is carried on by the Institute of Literature, Folklore and Art of the University of Latvia in cooperation with other GreenHeritage project partners.

The data collected will be used to implement project activities, including needs analysis, mapping of existing practices, development of GreenHeritage methodology, blended-learning and micro-credential programs, promoting policy dialogue and knowledge dissemination."

A shortened version of the Consent (**Appendix 4**), in its turn, will serve as an oral introduction to the remote interviews with the stakeholders or the survey data collection. People will sign before the interview or survey data collection the consent form compliant with the form defined within "D1.7 Privacy and Open data policy and Procedures".

Throughout the needs analysis process and mapping of existing practices, the overall principles of research ethics must be respected. This includes academic integrity, forming unbiased opinions and sharing attained knowledge freely with the relevant parties and society, at large.



8. Outcome

This document, the Research Protocol, presents the methodological tools that will be used for the needs analysis and mapping exercises. As the result of the successful implementation of the GreenHeritage project tasks T2.1 “Needs analysis” and T2.2 “Mapping of existing practices”, the outcome of the study will be adopted in the deliverable of the WP2 “Needs analysis & development of GreenHeritage Methodology”, D2.2 “Primary and secondary data research findings”. This public report will present the findings of the needs analysis and mapping exercises, including an in-depth analysis, as a minimum, of 10 case studies, 3 threats, 8 national policies and initiatives, 5 EU policies and initiatives and 8 existing practices.

The forthcoming document will be delivered by M9 and carried out by ILFA in cooperation with other GreenHeritage project partners, CNR, CUEBC, CMCC, FSMLR and UAEGEAN, who will provide their inputs according to their professional competence. The outcome will be one of the reference sources for the D2.2 “Primary and secondary data research findings” and will also serve the objectives of T2.3 “Development of methodology” (lead beneficiary CMCC) and other work packages: WP3 “GreenHeritage ICT tools” (ReadLab); WP4 “GreenHeritage course: Blended-learning & Microcredentials” (UAEGEAN); WP5 “Policy dialogue, dissemination and exploitation” (CUEBC).

9. Study Significance

This study is a part of the project “The Impact of Climate Change on the Intangible Cultural Heritage” (GreenHeritage, ERASMUS-EDU-2022-PI-FORWARD-LOT1, No. 101087596). The GreenHeritage project aims at developing a holistic, innovative and inclusive approach toward direct and indirect climate change impact on intangible cultural heritage. Until recently, this problem has received little attention. However, our preliminary research shows that it is currently a rising topic in the academic world as well as among the ICH safeguarding institutions, such as the international UNESCO organisation and the National Commissions for UNESCO, and other stakeholders.

The study will be both timely and relevant for ICH and CC researchers, other academics and university students, ICH communities and stakeholders from outside the communities, policy-makers at both national and EU levels. Looking prospectively, the study also expects to address and engage society at large.

10. Bibliography

Intangible cultural heritage and climate change

1. Aktürk, Gül. (2020). Remembering traditional craftsmanship: conserving a heritage of woodworking in Rize, Turkey. *International Journal of Intangible Heritage* 15. P 134–146. Available: <https://www.ijih.org/volumes/article/948>
2. Aktürk, Gül, Lerski, Martha. (2021). Intangible cultural heritage: a benefit to climate–displaced and host communities. *Journal of Environmental Studies and Sciences*, 11. P 305–315. Doi: <https://doi.org/10.1007/s13412-021-00697-y>
3. Climate and Traditional Knowledges Workgroup (CTKW). (2014). *Guidelines for Considering Traditional Knowledge in Climate Change Initiatives*. Available: <https://climatetkw.wordpress.com>
4. Dirksen, Rebecca. (2019). Haiti’s Drums and Trees: Facing Loss of the Sacred. *Ethnomusicology*, 63(1). P 43–77. Doi: <https://doi.org/10.5406/ethnomusicology.63.1.0043>
5. Henderson, Malorey, Erin Seekamp. (2018). Battling the Tides of Climate Change: The Power of Intangible Cultural Resource Values to Bind Place Meanings in Vulnerable Historic Districts. *Heritage*, 1(2). P 220–238. <https://doi.org/10.3390/heritage1020015>
6. Goswami, Rahul. (2015). How intangible cultural heritage adapts to a changing world. *World Heritage*, 77. P 30–36. Available: <https://en.calameo.com/read/003329972d5e3072dc248>
7. Higgins, Noelle. (2022). Changing Climate; Changing Life – Climate Change and Indigenous Intangible Cultural Heritage. *Laws*, 11(3): 47. Doi: <https://doi.org/10.3390/laws11030047>
8. Horstkotte, Tim, Holand, Øystein., Kumpula, Jouko, & Moen, Jon. (Eds.). (2022). *Reindeer Husbandry and Global Environmental Change: Pastoralism in Fennoscandia* (1st ed.). Routledge. <https://doi.org/10.4324/9781003118565>
9. Kim, Hee-Eun. (2011). Changing Climate, Changing Culture: Adding the Climate Change Dimension to the Protection of Intangible Cultural Heritage. *International Journal of Cultural Property*, 18. P 259–290. Available: https://unfccc.int/files/adaptation/groups_committees/loss_and_damage_executive_committee/application/pdf/changingclimatechangingculture.pdf
10. Lenzerini, Federico. (2014). Protecting the Tangible, Safeguarding the Intangible: A Same Conventional Model for Different Needs. *Climate Change as a Threat to Peace: Impacts on Cultural Heritage and Cultural Diversity*. Ed.: Sabine von Schorlemer, Sylvia Maus. P 141–60. Peter Lang AG. Available: <http://www.jstor.org/stable/j.ctv2t4cvc.13>
11. Markham, Adam. (2022). *Cultural Heritage Loss and Damage Goes Ignored. This Needs to Change at COP27*. Available: <https://blog.ucsusa.org/adam-markham/loss-and-damage-to-cultural-heritage-goes-largely-ignored-this-needs-to-change-at-cop27/>
12. Nakashima, Douglas, Galloway McLean, Kirsty, Thulstrup, Hans, Ramos Castillo, Ameyali, Rubis, Jennifer. (2012). *Weathering Uncertainty: Traditional*



- Knowledge for Climate Change Assessment and Adaptation*. Paris, UNESCO, and Darwin, UNU. Available: <https://unesdoc.unesco.org/ark:/48223/pf0000216613>
13. Neal, Abbey. (2020). *Cultural Heritage Is a Necessary Component of Climate Solutions*. Available: <https://www.eesi.org/articles/view/cultural-heritage-is-a-necessary-component-of-climate-solutions>
 14. Nocca, Francesca. (2017). The Role of Cultural Heritage in Sustainable Development: Multidimensional Indicators as Decision-Making Tool. *Sustainability*, 9(10): 1882. P 1–28. <https://doi.org/10.3390/su9101882>.
 15. Orlove, Ben, Sherpa, Pasang, Adelekan, Ibidun, Alangui, Willy, Carmona, Rosario, Coen, Deborah, Nelson, Melissa, Reyes-García, Victoria, Rubis, Jennifer, Sanago, Gideon, Wilson, Andrew, Dawson, Neil. (2022). *Intangible Cultural Heritage, Diverse Knowledge Systems and Climate Change ICSM CHC White Paper*. Available: https://www.researchgate.net/publication/363537805_Intangible_Cultural_Heritage_Diverse_Knowledge_Systems_and_Climate_Change_ICSM_CHC_White_Paper
 16. Quirico, Ottavio. (2014). A human rights-based approach to climate change? Insights from the regulation of intangible cultural heritage. *International Law for Common Goods: Normative Perspectives on Human Rights, Culture and Nature*. Oxford, United Kingdom. P 381–394.
 17. Schreiber, Hanna. (2019). Intangible Cultural Heritage, Europe, and the EU: Dangerous Liaisons? *Cultural Heritage in the European Union. A Critical Inquiry into Law and Policy*. Eds. Jakubowski, Andrzej, Fiorentini, Francesca, Hausler, Kristin. Brill-Nijhoff. P 324–364. Doi: https://doi.org/10.1163/9789004365346_015
 18. Shorlemer, Sabine, Maus, Sylvia. (Eds.) (2014). *Climate Change as a Threat to Peace – Impacts on Cultural Heritage and Cultural Diversity*. Peter Lang AG. Available: <https://www.jstor.org/stable/j.ctv2t4cvp>

Cultural heritage and climate change (general)

1. Adger, W. Neil, Barnett, Jon, Chapin, F. S., Ellemor, Heidi. (2011). This Must Be the Place: Underrepresentation of Identity and Meaning in Climate Change Decision-Making. *Global Environmental Politics*, 11 (2). P 1–25. Doi: https://doi.org/10.1162/GLEP_a_00051
2. Ballard, Christopher, Baron, Nacima, et.al. (2022). White Paper. Cultural Heritage and Climate Change: New Challenges and Perspectives for Research. JPI Cultural Heritage & JPI Climate. Available: <https://www.heritageresearch-hub.eu/white-paper-cultural-heritage-and-climate-change-new-challenges-and-perspectives-for-research/>
3. Berenfeld, Michelle L. (2008). Climate Change and Cultural Heritage: Local Evidence, Global Responses. *The George Wright Forum*, 25(2). P 66–82.
4. Christie, Wendy. (2017). *Safeguarding Indigenous Architecture in Vanuatu*. Paris, UNESCO Apia Office Paris: United Nations Educational, Scientific and

- Cultural Organization. Available:
<https://unesdoc.unesco.org/ark:/48223/pf0000248144>
5. Cornu, Marie, Vaivade, Anita, Lily Martinet, Clea Hance (Eds.). (2020) *Intangible Cultural Heritage under National and International Law: Going Beyond the 2003 UNESCO Convention*. Edward Elgar Publishing.
 6. Dawson, T., Nimura, C., López-Romero, E., Daire, M.–Y. (Eds.). (2017). *Public Archaeology and Climate Change* (1st ed.). Oxbow Books. Doi: <https://doi.org/10.2307/j.ctvh1dp4n>
 7. Eckersley, Susannah. (2017). Changing Places, Changing People: Critical Heritages of Migration and Belonging. *Anthropological Journal of European Cultures*, 26(2). P 1–5.
 8. García, Bárbara Mínguez (2020). Resilient cultural heritage for a future of climate change. *Journal of International Affairs*, 73(1). Journal of International Affairs Editorial Board. P 101–120.
 9. Goswami, Rahul. (2011). A Gandhi Turning Point for ICH. *Heritage & Society*, 4. P 135–140. Doi: <https://doi.org/10.1179/hso.2011.4.1.135>
 10. Gruber, Stefan. (2011). The Impact of Climate Change on Cultural Heritage Sites: Environmental Law and Adaptation. *Carbon & Climate Law Review*, 5(2). Lexxion Verlagsgesellschaft mbH. P 209–219.
 11. Hambrecht, George, Rockman, Marcy. (2017). International approaches to climate change and cultural heritage. *American Antiquity*, 82(4). Cambridge University Press. P 627–641.
 12. Jigyasu, Rohit. (2020). Managing cultural heritage in the face of climate change. *Journal of International Affairs*, 73(1). Journal of International Affairs Editorial Board. P 87–100.
 13. Kapsomenakis, John, Douvis, Kostas, Poupkou, Anastasia, et al. (2022). Climate change threats to cultural and natural heritage UNESCO sites in the Mediterranean. *Environment, Development and Sustainability*. Doi: <https://doi.org/10.1007/s10668-022-02677-w>
 14. MacDonagh, Michael. (2019). Riding the storm. Archaeological heritage and climate change. *Archaeology Ireland*, 33(3). Wordwell Ltd. P 30–33.
 15. Sesana, Elena, Gagnon, Alexandre S., Ciantelli, Chiara, Cassar, JoAnn, Hughes, John J. (2021) Climate change impacts on cultural heritage: A literature review. *WIREs Climate Change*, 12(4). Available: <https://wires.onlinelibrary.wiley.com/doi/10.1002/wcc.710>
 16. UNESCO (from 2002). *World Heritage Papers series*. Available: <https://whc.unesco.org/en/series/>
 17. UNESCO (2007a). *Case Studies on Climate Change and World Heritage*. UNESCO World Heritage Centre. Available: <https://whc.unesco.org/en/activities/473/>
 18. UNESCO (2007b). *Climate Change and World Heritage*. UNESCO World Heritage Centre. Available. <https://whc.unesco.org/en/series/22/>

Policy documents and reports

1. EC (2014). *Towards an integrated approach to cultural heritage for Europe*. Document 52014DC0477. Available: <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:52014DC0477>
2. EC (2015). *Getting cultural heritage to work for Europe. Report of the Horizon 2020 Expert Group on Cultural Heritage*. Documentation. Publications Office of the European Union, Luxembourg. ISBN 978-92-79-46046-3. Available: <http://openarchive.icomos.org/id/eprint/1693/>
3. EC (2016). *Joint Communication of the European Parliament and the Council: Towards an EU strategy for international cultural relations*. Document 52016JC0029. Available: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=JOIN%3A2016%3A29%3AFIN>
4. EC (2018). *A New European Agenda for Culture*. SWD (2018) 267 final. Available: <https://culture.ec.europa.eu/document/a-new-european-agenda-for-culture-swd2018-267-final>
5. EC (2019). European Commission, Directorate-General for Education, Youth, Sport and Culture. *European framework for action on cultural heritage*. Publications Office. Available: <https://data.europa.eu/doi/10.2766/949707>
6. EC (2021). *Culture and the United Nations Sustainable Development Goals: Challenges and Opportunities*. Brainstorming report. Available: <https://voicesofculture.eu/2021/02/26/brainstorming-report-culture-and-the-sustainable-development-goals-challenges-and-opportunities/>
7. EC (2022). European Commission, Directorate-General for Education, Youth, Sport and Culture. *Strengthening cultural heritage resilience for climate change: where the European Green Deal meets cultural heritage*. Publications Office of the European Union. Available: <https://data.europa.eu/doi/10.2766/44688>
8. Rosana, Gabriele, Tsitse, Irene (Eds.) (2021). *Culture in the EU's National Recovery and Resilience Plans*. Culture Action Europe. Available: <https://www.heritageresearch-hub.eu/new-publication-culture-in-the-eus-national-recovery-and-resilience-plans/>
9. EUCO (2018). Council conclusions on the Work Plan for Culture 2019-2022. *Official Journal of the European Union*. C 460/12. Available: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XG1221\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XG1221(01))
10. Iwamoto, Wataru, Ohnuki, Misako, Nojima, Yoko. (Eds.) (2018). *Preliminary Research on ICH Safeguarding and Disaster Risk Management in the Asia-Pacific Region. Project Report for the FY 2016-2017*. Osaka, Japan: United Nations Educational, Scientific and Cultural Organization. Available: https://www.irci.jp/wp_files/wp-content/uploads/2018/07/ICH_DRM-Project-Report-2016-2017-1.pdf
11. UNESCO (2008). *Policy Document on the Impacts of Climate Change on World Heritage Properties*. UNESCO World Heritage Centre. Available: <https://whc.unesco.org/uploads/activities/documents/activity-397-2.pdf>



Appendix 1: UNESCO Lists of Intangible Cultural Heritage

1. Representative List of the Intangible Cultural Heritage of Humanity
2. List of Intangible Cultural Heritage in Need of Urgent Safeguarding
3. Register of Good Safeguarding Practices

<https://ich.unesco.org/en/lists>

Appendix 2: National Inventories of Intangible Cultural Heritage

Austria, National Inventory of the Intangible Cultural Heritage in Austria (*Nationales Verzeichnis des immateriellen Kulturerbes in Österreich*)
<https://www.unesco.at/en/culture/intangible-cultural-heritage/national-inventory>

Belgium, Inventory of Intangible Cultural Heritage (*Inventaire du patrimoine culturel immatériel*)
<http://patrimoine.brussels/decouvrir/inventaires-du-patrimoine-bruxellois/inventaire-du-patrimoine-culturel-immateriel> (French)

Bulgaria, Register of Intangible Cultural Heritage of the Republic of Bulgaria (*Регистър на нематериално културно наследство в България*)

- <https://bulgariaich.com/index.php?act=content&rec=34>
- https://www.treasuresbulgaria.com/main.php?act=features_nac

Czech Republic, List of Intangible Elements of Traditional Folk Culture of the Czech Republic (*Seznam nemateriálních statků tradiční lidové kultury České republiky*)
<https://www.nulk.cz/en/list-of-intangible-elements-of-traditional-folk-culture/>

Croatia, Cultural Property Register of the Republic of Croatia (*Registra kulturnih dobara Republike Hrvatske*)

- <https://registar.kulturnadobra.hr/#/> (Croatian)
- <https://min-kulture.gov.hr/croatian-intangible-cultural-heritage-on-unesco-lists/19525> (English, only UNESCO inscribed nominations)

Cyprus, National Inventory of Intangible Cultural Heritage of Cyprus (*Εθνική Απογραφή Άυλης Πολιτιστικής Κληρονομιάς Κύπρου*)
<http://www.unesco.org.cy/Programmes-Intangible-Cultural-Heritage-of-Cyprus,EN-PROGRAMMES-04-02-03,EN>

Denmark, Inventory of Intangible Cultural Heritage in Denmark ‘Living Culture’ (*En fortegnelse over immateriel kulturarv i Danmark ‘Levende kultur’*)
https://levendekultur-prod-01.kb.dk/index.php/English_summary

Estonia, Estonian National Inventory of Intangible Cultural Heritage (*Eesti vaimse kultuuripärandi nimistu*)



- <https://rahvakultuur.ee/vkp/nimistu/> (Estonian)
- <https://rahvakultuur.ee/wp-content/uploads/2022/12/uue-nimistu-sissekannete-loend-151222.pdf> (Estonian)

Finland, Finnish National Inventory of Living Heritage (*Elävän perinnön kansallisessa luettelossa*)

- https://wiki.aineetonkulttuuriperinto.fi/wiki/Elävän_perinnön_kansallinen_luettelo/valitut/en
- <https://www.aineetonkulttuuriperinto.fi/en/sopimus-suomessa/kansallinen-luettelo>

France, Inventory of Intangible Cultural Heritage in France (*L'inventaire national du Patrimoine culturel immatériel*)

<https://www.culture.gouv.fr/en/Thematic/Intangible-cultural-heritage/Intangible-Cultural-Heritage2/National-Inventory-of-Intangible-Cultural-Heritage>

Germany, Nationwide Inventory of Intangible Heritage (*Bundesweites Verzeichnis des Immateriellen Kulturerbes*)

- <https://www.unesco.de/en/culture-and-nature/intangible-cultural-heritage>
- <https://www.unesco.de/en/culture-and-nature/intangible-cultural-heritage/nationwide-inventory-intangible-cultural-heritage>

Greece, National Inventory of Intangible Cultural Heritage (*Εθνική Απογραφή Άυλης Πολιτιστικής Κληρονομιάς*)

<https://ayla.culture.gr/en/purpose/>

Hungary, National Inventory of Intangible Cultural Heritage in Hungary (*Szellemi Kulturális Örökség Magyarországon*)

- http://szellemikulturalisorokseg.hu/index0_en.php?name=en_f22_elements
- http://szellemikulturalisorokseg.hu/index0_en.php?name=en_f23_elements_bes_t_safe

Ireland, Ireland's National Inventory of Intangible Cultural Heritage (*Fardal Náisiúnta na hOidhreachta Cultúrtha Doláimhsithe*)

<https://nationalinventoryich.chg.gov.ie/national-inventory/>

Italy, National Inventory of Intangible Cultural Heritage (*Inventario Nazionale del Patrimonio Culturale Immateriale*)

- <https://www.unesco.it/it/ItaliaNellUnesco/Detail/189> (Italian)



- <https://ich.unesco.org/en/state/italy-IT?info=elements-on-the-lists> (English, only UNESCO inscribed nominations)

Latvia, The National List of Intangible Cultural Heritage (*Nemateriālā kultūras mantojuma saraksts*)

<https://nematerialakultura.lv/en/>

Lithuania, National Inventory of Intangible Cultural Heritage (*Nematerialaus kultūros paveldo vertybių sąvadas*)

<https://savadas.lnkc.lt/en/elements/element-list/>

Luxembourg, National Inventory of Intangible Cultural Heritage (*Immateriellt Kulturierwen zu Lëtzebuerg*)

<https://iki.lu/post>

Malta, National Inventory of Intangible Cultural Heritage (*Inventarju Nazzjonali tal-wirt kulturali intangibbli*)

<https://www.ichmalta.org/nationalinventory>

Netherlands, Intangible Heritage in the Netherlands (*Immaterieel Erfgoed In Nederland*)

<https://www.immaterieelerfgoed.nl/immaterieelerfgoed#eyJxcyl6lilslnR5cGUiOiJsaXN0liwiYW55a2V5d29yZCI6W10sImZhY2V0cyI6e319>

Poland, National Intangible Cultural Heritage List (*Krajowa lista niematerialnego dziedzictwa kulturowego*)

- https://niematerialne.nid.pl/Dziedzictwo_niematerialne/Krajowa_inwentaryzacja/Krajowa_lista_NDK/ (Polish)
- <https://niematerialne.nid.pl/Aktualnosci/archiwum/folder%20krajowa%20lista%20niematerialne%20EN.pdf> (English, 2016)

Portugal, List of the National Inventory of Intangible Cultural Heritage (*Lista do Inventário Nacional do Património Cultural Imaterial*)

- <http://www.matrizpci.dgpc.pt/MatrizPCI.Web/pt-PT/InventarioNacional/Index> (Portuguese)
- <https://unescoportugal.mne.gov.pt/pt/temas/proteger-o-nosso-patrimonio-e-promover-a-criatividade/patrimonio-cultural-imaterial-em-portugal> (Portuguese)



Romania, Inventory of Living Elements of Intangible Cultural Heritage (*Inventarul elementelor vii de patrimoniu cultural imaterial*)

- <https://patrimoniu.ro/patrimoniu-imaterial/inventarul-elementelor-vii-de-patrimoniu-cultural-imaterial> (Romanian)
- <https://www.cnr-unesco.ro/en/subcommittee/culture> (English, only UNESCO inscribed nominations)

Slovakia, Representative List of the Intangible Cultural Heritage of Slovakia (*Reprezentatívny Zoznam Nehmotného Kultúrneho Dedičstva Slovenska*)

<https://www.ludovakultura.sk/en/ich-lists-slovakia/representative-list-of-the-intangible-cultural-heritage-of-slovakia/elements-included-in-the-representative-list-of-the-intangible-cultural-heritage-of-slovakia/>

Slovenia, Register of Intangible Cultural Heritage (*Seznam registriranih enot nesnovne dediščine*)

<http://www.nesovnadediscina.si/en/register-of-intangible-cultural-heritage>


Spain, National Inventory of Intangible Cultural Heritage (*Inventario General de Patrimonio Cultural Inmaterial*)

<https://www.exteriores.gob.es/RepresentacionesPermanentes/unesco/es/UNESCO%20en%20Espana/Paginas/Inscripciones%20UNESCO/Patrimonio-Inmaterial.aspx>
(Spanish)

Sweden, An inventory of Intangible Cultural Heritage in Sweden 'Living Traditions' (*Nationell förteckning över immateriella kulturarv i Sverige*)

<https://www.isof.se/other-languages/english/living-traditions>

Appendix 3: Survey “The Impact of Climate Change on the Intangible Cultural Heritage”



Survey *The Impact of Climate Change on the Intangible Cultural Heritage*

The aim of this survey is to collect data on the intangible cultural heritage under the climate change threats, thus building an understanding of both individual cases and the overall situation in the EU countries.

This research is a part of the project “**The Impact of Climate Change on the Intangible Cultural Heritage**” (GreenHeritage, ERASMUS-EDU-2022-PI-FORWARD-LOT1, No. 101087596). It is carried out by the Institute of Literature, Folklore and Art of the University of Latvia in cooperation with other GreenHeritage project partners.

The data collected will be used to implement project activities, including needs analysis, mapping of existing practices, development of GreenHeritage methodology, blended-learning and micro-credential programs, promoting policy dialogue and knowledge dissemination.

(not shared) [Switch account](#)

* Required


1. How does climate change affect the local intangible cultural heritage (ICH) nowadays? *

Your answer

2. How will climate change affect the local intangible cultural heritage (ICH) in the future? *

Your answer

3. Considering the following **climate change impacts** (rising temperatures, droughts, melting snow and glaciers, rising sea levels, biodiversity loss, etc.) which **traditions** (intangible cultural heritage forms) are affected and how? *



The diagram illustrates various climate change risks surrounding a central hub. The central hub is a dark blue circle labeled "CLIMATE CHANGE RISKS". Surrounding it are several green and blue circles, each containing a specific risk: "CHANGED FREEZE, THAW CYCLES", "SEA LEVEL RISE", "INCREASED OCEAN TEMPERATURES", "INCREASED HUMIDITY", "GLACIAL MELT", "MORE EXTREME RAINFALL", "INCREASED STORM INTENSITY AND/OR FREQUENCY", "DROUGHT", "INCREASED WIND OR CHANGES IN WIND DIRECTION", "PERMAFROST THAW, ICE PATCH MELT, WARMING SOILS", "LOSS OF SEA ICE", "COASTAL FLOODING", and "COASTAL EROSION". A small GreenHeritage logo is also present in the top right corner of the diagram.

Your answer



4. How are the different stakeholders perceiving the problem? Has the climate change problems been noticed **by local communities**? *

- ☐ Yes
- ☐ No
- ☐ Not informed

4.1. Please comment. *

Your answer

5. How are the different stakeholders perceiving the problem? Has the climate change problems been noticed **by officials responsible for the ICH safeguarding**? *

- ☐ Yes
- ☐ No
- ☐ Not informed

5.1. Please comment. *

Your answer

6. How are the different stakeholders perceiving the problem? Has the climate change problems been noticed **by other (e.g., journalists, researchers)**? *

- ☐ Yes
- ☐ No
- ☐ Not informed

6.1. Please comment. *

Your answer

7. Have any **solutions** been proposed (e.g., through practical actions, legislation, planning documents) **at community level**? *

- ☐ Yes
- ☐ No
- ☐ Not informed

7.1. Please comment. *

Your answer

8. Have any **solutions** been proposed (e.g., through practical actions, legislation, ^{*} planning documents) **at municipal (local authority) level**?

- ☐ Yes
- ☐ No
- ☐ Not informed

8.1. Please comment. ^{*}

Your answer

9. Have any **solutions** been proposed (e.g., through practical actions, legislation, ^{*} planning documents) **at regional level**?

- ☐ Yes
- ☐ No
- ☐ Not informed

9.1. Please comment. ^{*}

Your answer

10. Have any **solutions** been proposed (e.g., through practical actions, legislation, ^{*} planning documents) **at national level**?

- ☐ Yes
- ☐ No
- ☐ Not informed

10.1. Please comment. ^{*}

Your answer

Please provide **titles** and **links** to the legal acts:

Your answer

Please provide relevant WEB **links** or other useful **resources** on the subject:

Your answer



Please provide **publications** on the subject:

Your answer

Please provide links to relevant **photos**:

Your answer

Additional comments on the subject:

Your answer

Name, surname: *

Your answer

Your role in relation to the ICH element: *

Your answer

Institution: *

Your answer

Position (if relevant):

Your answer

E-mail address: *

Your answer

Date of completing the survey: *

MM DD YYYY

__ / __ / __

Submit Clear form

<https://docs.google.com/forms/d/e/1FAIpQLSezEJtoeKMgiydNT80zsR-HesfjUfl183w9GwEULL-EAB63Fw/viewform>



Appendix 4: Consent

The aim of this survey is to collect data on the intangible cultural heritage under the climate change threats, thus building an understanding of both individual cases and the overall situation in the EU countries. This research is a part of the project “The Impact of Climate Change on the Intangible Cultural Heritage” (GreenHeritage, ERASMUS-EDU-2022-PI-FORWARD-LOT1, No. 101087596). The data collected will be used to implement project activities, including needs analysis, mapping of existing practices, development of GreenHeritage methodology, blended-learning and micro-credential programs, promoting policy dialogue and knowledge dissemination.



Appendix 5: Interview Questions

1. Is climate change (CC) affecting the local intangible cultural heritage (ICH) in any way now or potentially in the future?
2. Which traditions (ICH forms) and how are affected by CC impacts (rising temperatures, droughts, melting snow and glaciers, rising sea levels, biodiversity loss, etc.)?
3. How are the different stakeholders perceiving the problem? Has the CC problems been noticed by:
 - (a) the ICH bearers and practitioners;
 - (b) local communities;
 - (c) officials responsible for the ICH safeguarding;
 - (d) other (e.g., journalists, researchers)?
4. Have any solutions been proposed (e.g., through practical actions, legislation, planning documents) at:
 - (a) community level;
 - (b) municipal (local authority) level;
 - (c) regional level;
 - (d) national level? (Please provide titles and links to the legal acts.)
5. Additional comments; publications on the subject, web links and other useful information; photos.

Informant: name, role in relation to the ICH element, institution and position (if relevant), email address, date of interview



Appendix 6: Dataset for Case Studies and Existing Practices

1. ICH element under the threat of the CC:

Title in English

Title in the original language

Web address: UNESCO List of ICH and/or National Inventory of ICH

A brief description of the ICH element (including the geographical coverage and indicating the time of origin of the tradition, as far as identifiable)

Geographical coordinates

2. CC risks

Description of the CC impacts observed or expected

3. Attitudes and recognition of problems, as demonstrated by:

- (a) the ICH bearers and practitioners;
- (b) local community;
- (c) officials responsible for the ICH safeguarding;
- (d) other (e.g., journalists, researchers)

4. Existing practices: solutions implemented, planned or proposed at:

- (a) community level;
- (b) municipal (local authority) level;
- (c) regional level;
- (d) national level?

5. Publications, web links, photos and other **additional information**.

6. **Personal information** of informants (Name, surname; affiliation and position; e-mail address)

Appendix 7: Climate Impacts and Expected Effects on Heritage

Climate Impacts	Examples of expected effects on heritage
Sea level rise	Sea level rise worsens coastal flooding, storm surge and coastal erosion (see below). Threats include permanent inundation of low-lying coastal communities and displacement of populations. Rising sea levels can cause freshwater drinking supplies for traditional communities to become salinized, especially on islands; rising water tables can cause underground archaeology to be damaged; and buildings and statues may be damaged by capillary action in porous materials. Permanent inundation of low-lying coastal cave art and tidal zone archaeology is likely.
Coastal flooding	Flooding exacerbated by sea-level rise will permanently inundate some areas and increase storm surge damage in others, resulting in damage to or loss of historic buildings and districts, cultural landscapes, archaeology and sacred sites.
Coastal erosion	Coastal erosion Impacts are also increased by sea level rise and more intense or more frequent storms, resulting in damage to or loss of historic buildings and districts, cultural landscapes, archaeology and sacred sites.
Loss of sea ice	Culturally important ice-dependent species may lose habitat and their populations decline; shipping access to sensitive areas may increase. Loss of seasonal ice can expose erodible coasts to winter storm damage, accelerating loss of archaeological resources.
Glacial melt	Glacial melt lakes can overflow, threatening villages and communities; Loss of glaciers jeopardises vital water supplies for cities, villages and rural areas.
Permafrost thaw, ice patch melt and warming soils	Melting permafrost in mountain or polar environments exposes frozen archaeology to erosion. Warmer soil temperatures accelerate microbial decay of buried organic materials; melting ice patches may expose previously frozen archaeology. Foundations of buildings and structures in permafrost areas will be damaged by softening and subsidence of substrate.
Changed freeze/thaw cycles	Warmer winters increase the frequency of freeze/thaw cycles in some areas thereby increasing likely structural damage to materials such as brick and stone.

Increased ocean temperatures	Increased ocean temperatures affect ecosystems that form important parts of cultural landscapes and provide livelihoods for coastal communities and traditional practices. Warmer seas also have implications for underwater archaeology, for example, the increased prevalence of organisms that damage wooden structures, such as shipworm species.
Increased storm intensity and/ or frequency	More intense or more frequent storms increase rates of coastal erosion and damage to or loss of historic buildings and districts, cultural landscapes, archaeology and sacred sites. Risk from flooding and wind damage increases.
More extreme rainfall	Worse and more damaging floods and landslides are caused by more rain falling in shorter periods of time. Historic buildings can be damaged or completely lost. Tourist footfall at high visitation heritage sites can cause more damage and erosion in wet conditions.
Increased humidity	Increased humidity is a major threat to indoor collections unprotected by air conditioning or dehumidifying technology; humidity in caves and semi-enclosed archaeological sites can damage pigmented rock art and plastered surfaces.
Increased wind or changes in wind direction	Wind can increase abrasion and degradation of rock art and underwater archaeological sites, cause damage to historic buildings, changes in the dynamics of sand dune systems, loss of agricultural topsoil, and increased wave height and erosion at the coast.
Drought	Drought affects agro-ecological cultural landscapes, may cause loss of forests important for traditional foods or building materials, and may also cause damage to built structures due to cracking or splitting. Drought exacerbates issues of water scarcity and conflict, and it causes internal displacement and migration.

Source for Appendix 8: ICOMOS releases “Future of Our Pasts” report to increase engagement of cultural heritage in climate action (July 2, 2019). P 69.

<https://www.icomos.org/en/focus/climate-change/59522-icomos-releases-future-of-our-pasts-report-to-increase-engage>



Appendix 8: Infographic “Climate Change Risks”

