

International Conference

Ancestral Hydrotechnologies as a Response to Climate, Health and Food Emergencies



Good practices in the Mediterranean and Latin America
“Use of Cultural Heritage to Rescue the Future”

MAIN CONCLUSIONS

16 – 17 February 2023
8:00 – 18:30, Spain (GMT+1)

MAIN CONCLUSIONS

ANCESTRAL HYDRO-TECHNOLOGIES:

KNOWLEDGE FROM THE PAST RESPONDING TO PRESENT AND FUTURE GLOBAL CHALLENGES

The value and the potential of ancestral hydrotechnologies to respond to the current global emergencies (climate, biodiversity, water scarcity, health and food) have been recognized and substantially documented, through evidence from best practices and case studies (Annex 1).

Ancestral hydrotechnologies have a low energy, resources and carbon footprint, and can be instrumental to preserve and restore biodiversity and strengthening ecosystem services' provision. Moreover, ancestral hydrotechnologies can serve for adapting to climate change and disaster risk reduction.

Ancestral hydrotechnologies are based and inspired by nature, coupling traditional knowledge and management of ecosystems, therefore ancestral hydrotechnologies can be fully considered as nature-based solutions.

Ancestral hydrotechnologies should be considered not only as historical infrastructures and cultural heritage, but as models for sustainable water management for the present and the future, and can be further enhanced by using the latest innovation and technologies from social, ecological and engineering disciplines.

Ancestral hydrotechnologies serve for the further integration of WEF NEXUS at local and regional scale for their transfunctionality, and contribution to the Sustainable Development Goals (SDGs).

Many ancestral hydrotechnologies have the full potential to be recovered and/or scaled up to contribute to the transformative change needed for responding to the global challenges in the wide framework of sustainable development.

In order to fully enable the scale up ancestral hydrotechnologies, we need:

-Multi-level governance both to harmonize national policies with local practices and to integrate sectorial policies on climate, water, energy, food, biodiversity, health, urban and rural development, among others.

-Legal frameworks for the recognition, protection and preservation of existing ancestral hydrotechnologies, under threat of loss and disappearance.

-Capacity building for policy and decision makers at local and national levels, practitioners, researchers and local authorities and communities, for the theoretical and operational development of ancestral hydrotechnologies.

-Multidisciplinary research, including low and high technology integration and **interdisciplinary exchange of scientific knowledge**, including socio-cultural and traditional knowledge; also recognizing the value of eco-museums;

-Awareness raising and advocacy to raise the understanding of the value and impact of ancestral hydrotechnologies for resilience transition;

-Financial resources and capacities for the development and implementation of large-scale demonstrators for transformative change;

-International network of networks for knowledge brokerage on ancestral hydrotechnologies, including the development of project proposals and implementation.

Finally, we commit to **establish a Community of Practice (CoP)** composed of experts from different research centres, including the UNESCO Water Family, that will collaborate on research, development and implementation of ancestral hydrotechnologies, also in liaison with the IHP's flagship initiative WAMUNET, through its inventory of best practices and knowledge dissemination mechanisms.

The CoP will focus on the following activities:

- Organize regular international or multi-regional scientific events for the sharing of knowledge and of best practices on ancestral hydrotechnologies;
- Document by scientific means, through inventories, best practices publications, journal special issues and other means, the occurrence and value of ancestral hydrotechnologies, including the associated knowledge systems and the specific sites where they occur, as a tool for sustainable development, highlighting their characteristic feature as Nature-based Solutions and their contribution to circular green-economy;
- Consider the development of an international initiative, as an independent initiative or as a component of existing ones, focusing on ancestral hydrotechnologies. It is suggested to establish an International Day on Ancestral Hydrotechnologies;
- Explore possibilities for the development of project proposals and for their implementation in the Mediterranean, Latin America and the Caribbean and in other regions for the safeguarding, recuperation, promotion or development of ancestral hydrotechnologies as a response to current emergencies.

Ancestral Hydrotechnologies:

Building the world heritage of the future

Organized by



With the support of:



Organizing Committee

Intergovernmental Hydrological Programme of UNESCO (UNESCO-IHP)
UNESCO Chair on Sustainability (UNESCOSOST), Universitat Politècnica de Catalunya (UPC)
Global Network of Water Museums (a flagship Initiative of UNESCO-IHP)
UNESCO Chair 'Water, Heritage and Sustainable Development' (Ca' Foscari Univ. of Venice)
Chairman: Jordi Morató, UNESCO Chair on Sustainability at UPC, Spain
Co-Chair: Jose Luis Martín Bordes, UNESCO Chair on Sustainability at UPC, Spain
Luis David Díaz, UNESCO Chair on Sustainability at UPC, Spain
Eriberto Eulisse, Global Network of Water Museums (a flagship Initiative of UNESCO-IHP)
Sergio Martos, IGME-CSIC, Spain
Rosario Pastor, UNESCO Chair on Sustainability at UPC, Spain
Ali Rhouma, Partnership for Research and Innovation in the Mediterranean Area (PRIMA)
Olga Lucía Sánchez Santander, UNESCO Chair on Sustainability at UPC, Spain
Tadej Stepisnik Perdih, National Technical University of Athens (NTUA), Greece
Brent Villanueva, UNESCO Chair on Sustainability at UPC, Spain

Scientific Committee

UNESCO Water Chairs in the Mediterranean
Sara Ahmed, Global Network of Water Museums (a flagship Initiative of UNESCO-IHP)
Ziad Al-Saad, University of Yarmouk, Jordan
Marco Albarracín, Salesian Polytechnic University Ecohydrological Foundation, Ecuador
Miguel Antequera, Univ. de Valencia, Spain
Hanane Benqilou, Global Network of Water Museums (a flagship Initiative of UNESCO-IHP)
Josep Canals, MedCities, Spain
Juan José Duran Valsero, IGME-CSIC, Spain
Abdennabi El Mandour, Director of the Musée Mohammed VI de la Civilisation de l'Eau au Maroc 'Aman', Morocco
Ali Gharshallah, University of Tunis El Manar
Jorge Hermosilla, Univ. de Valencia, Spain
Duván Hernán López, RECNET, Spain
Jorge Jódar Bermúdez, IGME-CSIC, Spain
Elpida Kolokytha, AUth UNESCO Center, Aristotle Univ of Thessaloniki, Greece
Simos Malamis, National Technical University of Athens (NTUA), Greece
Ramiro Martínez, REMOC/Dialogo 5+5, Spain
Rachid Mrabet, Institut National de la Recherche Agronomique-INRA, Morocco
Thierry Ruf, Global Network of Water Museums (a flagship Initiative of UNESCO-IHP)
Taleb Saleh Falah, Alrousan Gadara Society for friends of Archaeology and Heritage, Jordan
Robert Save, IRTA & UNESCO Chair on Sustainability Advisory Board
Nicola Tollin, University of Southern Denmark, Denmark
Francesco Vallerani, Global Network of Water Museums (a flagship Initiative of UNESCO-IHP)

ANNEX 1

11/03/2021. Best Practices on Ancestral Hydrotechnologies in response to Health and Food Climate Emergencies - Session 1 – [Summary Video](#)

11/03/2021. Best Practices on Ancestral Hydrotechnologies in response to Health and Food Climate Emergencies - Session 1 - [Full Session](#)

18/03/2021. Best Practices on Ancestral Hydrotechnologies in response to Health and Food Climate Emergencies - Session 2 - [Full Session](#)