MEMOLA project: How can social innovation and ICT tools be used to promote cultural heritage based on traditional agrosystems

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MEMOLab. Biocultural Archaeology Laboratory
MEditerranean MOuntainous LANDscapes

an historical approach to cultural heritage based on traditional agrosystems

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The implementation of MEMOLA project is framed under the analysis of Cultural Landscapes from late antiquity to modern times, evaluating the relationship between human societies and natural resources. The project aims to analyse, from an interdisciplinary perspective, the management of water and soil. The MEMOLA project counts with a total of ten partners and its central coordination is based at the University of Granada, Spain.
Theoretical framework

- Biocultural heritage
- Agrarian heritage
- Social-ecological systems
- Transdisciplinarity
- Participatory approaches / Dialogue of knowledge
- Archaeology of complexity/Archaeology of relationships
Landscapes: productive systems, irrigation systems and settlement network linked to them
Why?
- Concept of heritage
- Social and territorial significance
Concept of heritage
- Open, complex, integrated, holistic...
- Agrarian heritage
Rural heritage/
Agrarian heritage
Practices
Knowledge
Landscapes
Sustainability/Resilience
Flavours/Identity
Social Significance
Historical and traditional irrigation systems
A great collective effort
Ferreira irrigation system

118 km channels/canals
62 Ha intensive irrigation
139 Ha occasional irrigation
More than 3000 kms of channels mapped, just in Sierra Nevada Mountains!
830 irrigation systems, 530 communities, 190,000 farmers, 200,000 has, 24,000 kms of canals, just in Granada and Almeria provinces!
A great collective effort
A coevolutive process
Local / Traditional Ecological Knowledge
A social option, a productive strategy
Communal management
Governance
Social distribution of water
Knowledge creation and transmission
Soil fertility
Relationship between water, soil, crops, animals
Ecosystem services and values
Landscape destruction
Economical framework
Marginalization
Abandonment
Urbanization and land use changes
“Modernization” / substitution
Modernization

¿How to preserve cultural values (also environmental) of Agrarian Heritage in the current context?
¿How to apply innovation in communication and technology to preserve?
Community-led traditional cultural landscape management
Improving and dignifying farmer’s lives and rural areas:

- Income
- Social, academic, administrative acknowledgment and recognition
- Services, policies and territorial planning
The restoration of irrigation canals as a social tool
Work with local communities managing irrigation systems
Volunteers and students
Collaboration with other institutions
More than 25 kms recovered in 5 communities
Involving directly more than 400 people
With a great social...
...academic...
...political...
...and environmental impact
Participatory approach

Dialogue of knowledge
Involving.....

Rural areas
Rural communities
Cultural landscapes
Agrarian activities
Tangible heritage
Intangible heritage
Territorial planning
Agrarian policies
Environmental policies
Global change
Climate change
Cultural challenges
urban/urbanization
Involving.....
Local ecological knowledge
Dialogue of knowledge
Elder population
Gender role
Agrodiversity
Biodiversity
Ecosystem services
Governance
Land Stewardship
Production
Productivity
Economic development
Resilience
Involving..... Water policies & water planning Mediation & Environmental Mediation Building restoring community & identity Inter & Transdisciplinarity Epistemologies Role of humanities Participation Public/communal/private relationships
Local level -> BELONGING -> RIGHTS -> PARTICIPATION -> Regional level

BELONGING
- Farmers
- Schools
- Municipalities

RIGHTS
- Associations
- Regional governments

PARTICIPATION
- Policy brief
- International meetings
- Academia

Regional level -> European level
From local level to global context

Historical and Traditional irrigators Communities Association of Andalucía

Meetings with policy decision makers- River Basin Management Plans

EU Water Framework Directive
Soil-a vital resource

Soils support life in all its forms by playing a key role in all major earth cycles (Carbon, Nitrogen, Oxygen, Phosphorus, Sulphur and Water and Rock). Simply stated, it is Earth’s life support system.

Soils are not simply substrates composed on minerals and chemicals though. They are a living medium that is home to a myriad of microorganisms, fungi, animals and plants that are bound in system of co-dependency. Many soil deposits have developed over centuries and millennia and under highly specific local conditions which has in turn produced diverse soil ecosystems that are specific to particular regions.

Human impact on soil systems has increased with the gradual intensification of agriculture since the start of the Holocene (~10,000BP). Soils have not only been used and modified to support the shift to agriculture, but also as resources for building (adobe, piso and cob), material culture (clays for ceramics, pigments, mordants), and even as medicines (poultices, skin protection and more recently alternatives to antibiotics and existing immune suppressants – i.e Rapamycin). The long-established historic relationships that traditional communities have established with their environments has furnished us with a rich soil diversity that is the result of the complex interplay of specific regional environmental factors and culturally specific soil and land management strategies. MEMOLA has worked intensively to document the extent and character of this

MEMOLA has demonstrated that soils are an extensive cultural resource and form part of Europe’s rich cultural heritage. This brief stresses the need for a comprehensive European policy for soil protection and management that recognises the complex nature of soil and seeks to promote an awareness of soils as having a dual inheritance that stems from both cultural and natural processes.

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December 2016
IMPULSO DE LA ACCIÓN DEL GOBIERNO

PROPOSICIÓN NO DE LEY EN COMISIÓN

10-16/PNL-000136, Proposición no de ley relativa al apoyo a las acequias históricas de Andalucía

Aprobada por la Comisión de Medio Ambiente y Ordenación del Territorio en sesión celebrada el 7 de febrero de 2017
Orden de publicación de 20 de febrero de 2017

El Parlamento de Andalucía insta al Consejo de Gobierno a:
1. El reconocimiento público de que las acequias históricas de Andalucía son un patrimonio agrario, cultural, histórico y ambiental que hay que conservar para las futuras generaciones.
2. Promover la acción consensuada entre las comunidades de regantes y las administraciones públicas, especialmente las corporaciones locales, que faciliten la conservación de la importante red de acequias históricas que existen en Andalucía.
3. La creación de un catálogo de acequias históricas e infraestructuras hidráulicas, que incluya a aljibes y albercas, y a que tome las medidas necesarias para la conservación de las infraestructuras de regadío tradicional que emanan del mismo catálogo.
Mapa colaborativo de regadíos históricos de Granada y Almería

Los sistemas históricos de regadío constituyen un sistema agroecológico de interés socioeconómico, ambiental y cultural que han creado paisajes de gran belleza y que dotan (o han dotado) de identidad a los territorios donde se ubican.

El regadío es un paisaje realmente extraordinario, presente en una buena parte de nuestra tierra. Se trata de territorios modelados a lo largo de siglos de historia de coevolución entre el ser humano y la naturaleza. Sus valores, no solo patrimoniales, sino también ambientales, campesinos, identitarios e estéticos, van cada vez más reconocidos a nivel internacional.

Acequia histórica en el Parque de Sierra Nevada, Ohanes (Almería)
Connect local reality with global context
¿Qué es iComunales?

iComunales somos una asociación de ámbito estatal, formada por comunidades que gobiernan aguas, tierras, bienes y derechos de forma comunal. Otros miembros clave de la asociación son ONG, universidades, empresas y otras entidades, además de personas a título individual. Nuestro objetivo común es el apoyo y reconocimiento de estos sistemas comunales de gobernanza, con particular atención a promover sus valores sociales, ambientales y económicos.
“territories and areas conserved by indigenous peoples and local communities” or “territories of life”
Responsibility... long term action, strategy
Responsibility... long term action, strategy
Risks: expectations, dependence, idealization, romantic view...
Some reflections...

- Cultural Heritage (Archaeology) as dead places for dead people
- Adaptation to the context and specific circumstances (who, relationships…)
- Creativity
- Empathy, patience
- Dialogue of knowledge (equality)
- Dialogue tradition/innovation
- How far can we really get to? What is our real impact? (try to avoid frustration…)
- Role of new technologies (contextualize)
Some conclusions...

- Cultural Heritage (Archaeology) as a tool for social transformation
- Participation as an strategy
- Humanities (Archaeology) as Activism
- Relationship between public/communal/private
- Dialogue of knowledge
- Transdisciplinarity
Yes, we could...
Gracias / Thank you / Merçi / Mulțumesc
MEMOOLA project
www.memolaproject.eu

MEMOlab.
Biocultural Archaeology Laboratory
https://blogs.ugr.es/memolab/

www.reach-culture.eu