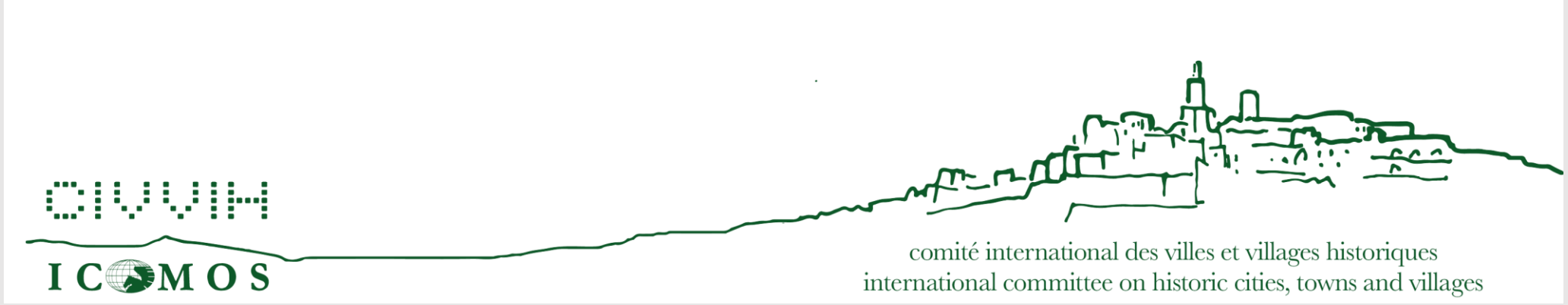

CIVVIH-ICOMOS Mediterranean sub-committee Scientific Symposium

Sinassos (Mustafapaşa)- Cappadocia - TÜRKİYE

September 5th - 6th 2024

CLIMATE CHANGE IN HISTORIC TOWNS AND VILLAGES OF THE MEDITERRANEAN AREA

«A heritage project emphasising bioclimatic values: Troglodyte architecture in the Mediterranean»

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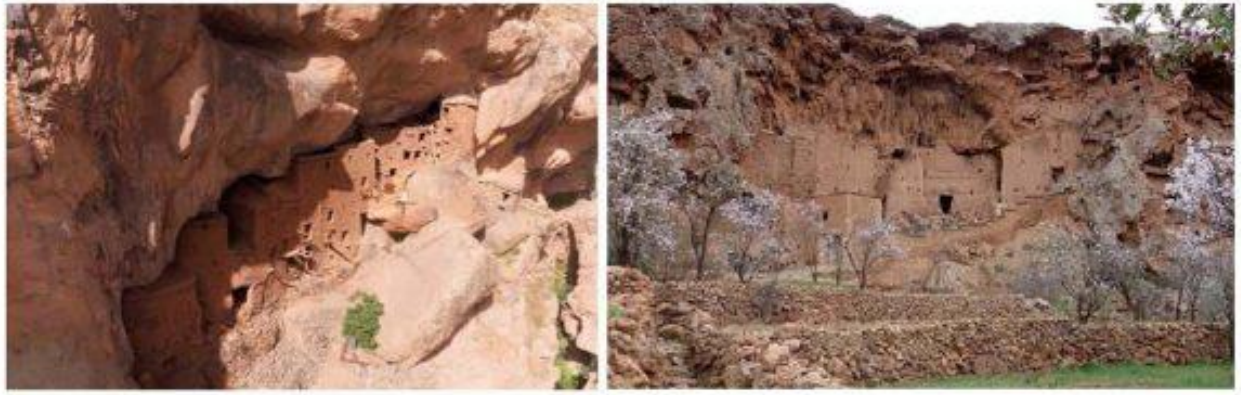
Presentation content

- Troglodyte architecture in the Mediterranean
- What is Rehabimed ?
- Project description
  - Aim of the Project
  - Methodology
- Case study
- Turkish part studies

Marroc



Graners col·lectius de la regió de l'Atles

Espanya

Cases cova excavades a Guadix, Granada i cases sota el penya-segat a Setenil, Cadis

(www.rehabimed.net)

Troglodyte architecture in the Mediterranean

- The Mediterranean basin is home to exceptional places of troglodyte architecture.
- **Two essential types** of troglodyte architecture have been considered: the one that makes use of the natural voids offered by the geology of the cliffs, and the one that results from the hollowness of the rock, in easy-to-excavate terrain.
- Some of these places, registered as World Heritage by **UNESCO**, are today international references in the conservation, rehabilitation and promotion of this type of architectural heritage.
- Therefore, a RehabiMed project «**Living inside the Cliff**» has been initiated to document, preserve and develop these sites, many of which are under threat.

Grècia

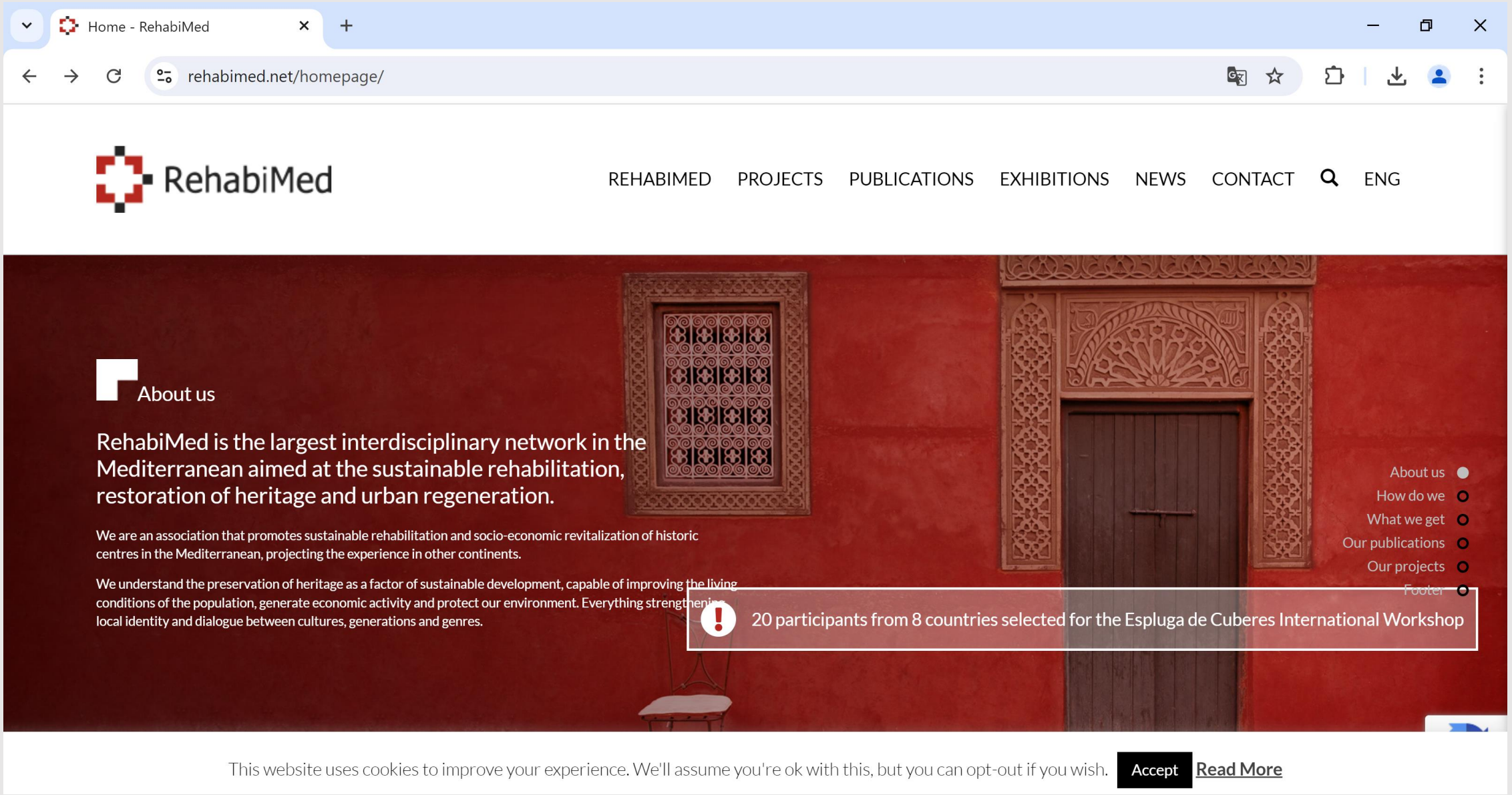
Poble d'Oia en la vessant de la muntanya a Santorini

Turquia

Parc Nacional de Göreme i habitatges en la roca de la Capadòcia. Patrimoni Mundial UNESCO

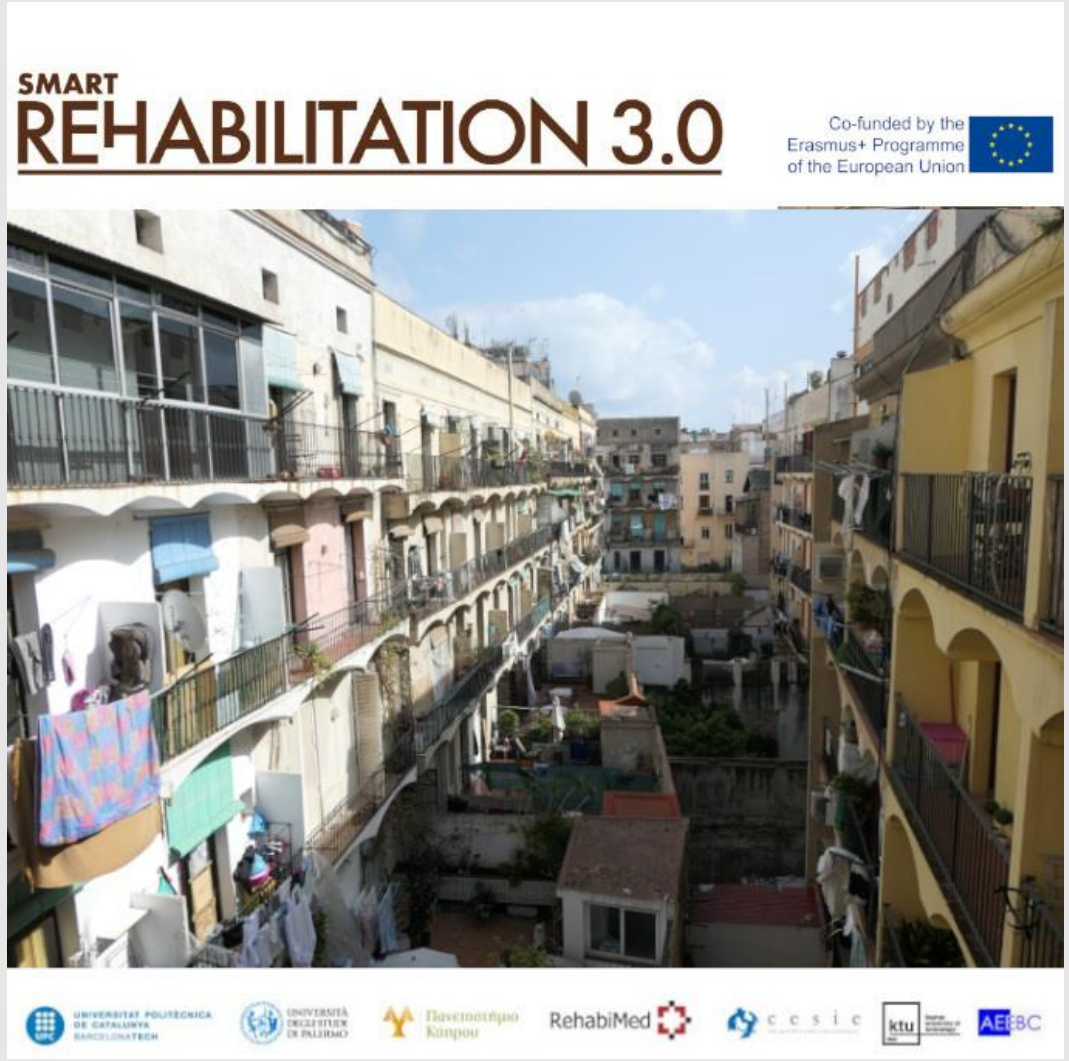
(www.rehabimed.net)

What is Rehabimed ?



What is Rehabimed ?

- RehabiMed Association is an initiative that represents the ongoing experience of partnership between institutions and organizations in over **40 Euro-Mediterranean countries.**
- It brings together a **network of experts** consolidated by continuing joint work between countries, **extends** its experience and knowledge to **other regions of the world**.
- The Association's fundamental objective is to promote the **sustainable rehabilitation** of existing buildings and the social and economic **revitalization of historic centres**.

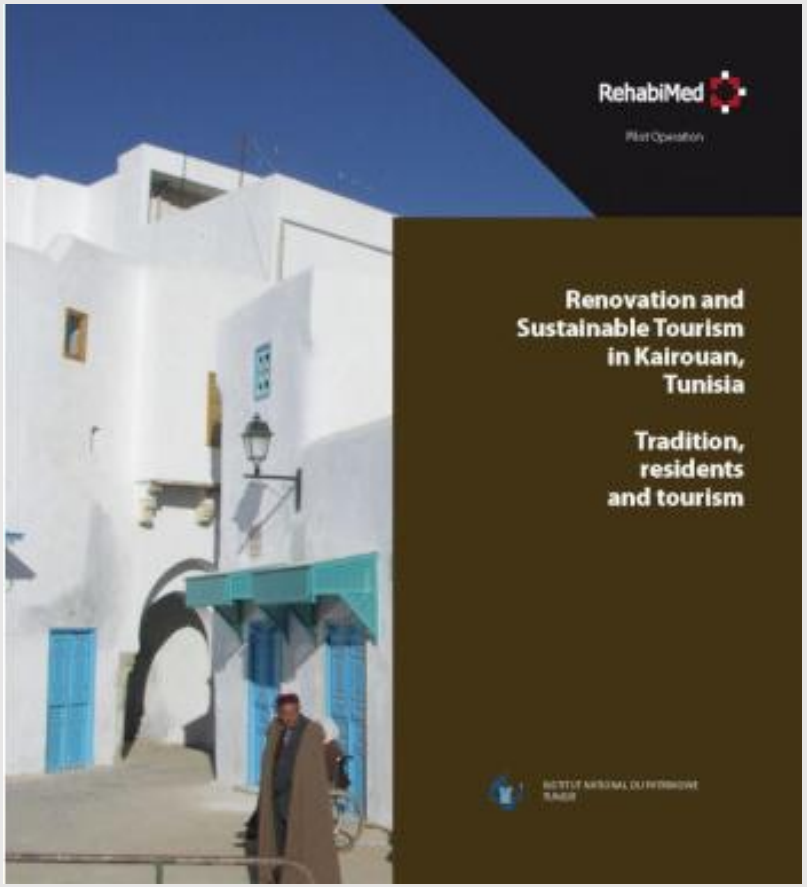


(www.rehabimed.net)

What is Rehabimed ?

- RehabiMed promotes **research and training in rehabilitation**, disseminates a multidisciplinary working methodology, increases the management capacity of government agencies, helps to improve living conditions and raises awareness of the **importance of heritage preservation** as a factor of sustainable development.

- RehabiMed Association is based in **Barcelona** and develops its objectives and activities in all European and Mediterranean countries, with a clear commitment to global outreach in the form of collaboration agreements with various international organizations.



Application of the RehabiMed Method in an intervention in urban rehabilitation aimed at revitalising Place Jraba in the medina of Kairouan (Tunisia), as a place for recreation for local residents and as a tourist attraction on guided tours (2008).

What is Rehabimed ?

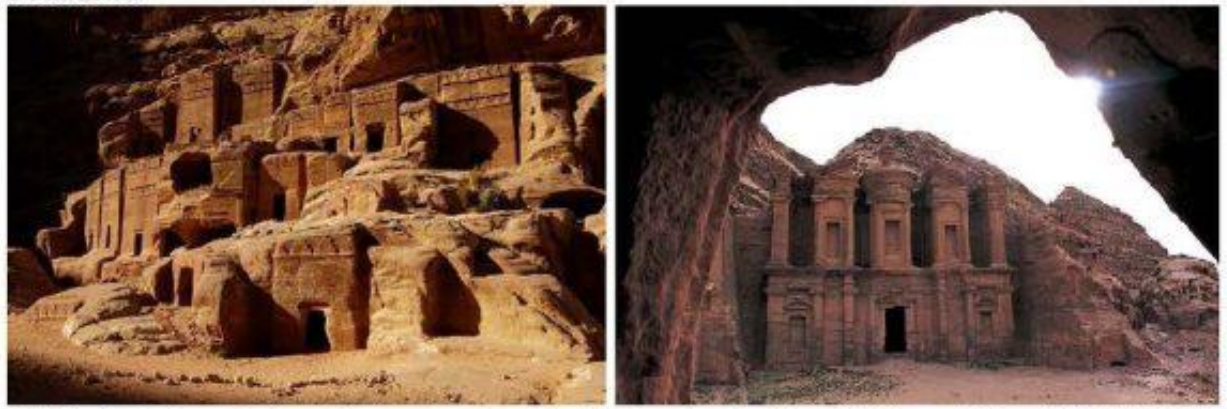
Place Jraba (P: A.Ç., 2006)

https://www.rehabimed.net/2024/01/rehabilitation-of-the-jraba-15-years-later/

Aim of the project

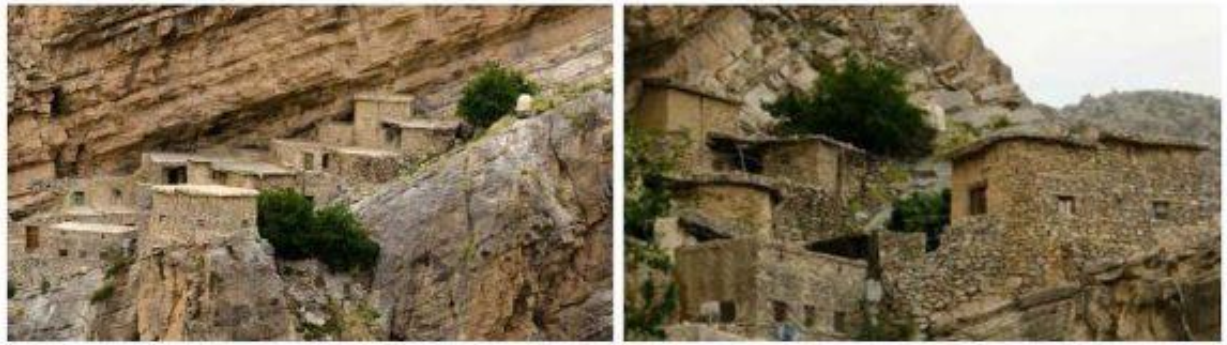
- «**Living inside the Cliff**» is a project of research, documentation and preservation of cultural heritage.
- The aim of the Project is carrying out a **systematic analysis** of troglodyte architecture in the Mediterranean area, as an archetype that emerged in different places, cultures and times.
- The adaptation in different environments, heritage and **bioclimatic values**, preservation opportunities for various functions are its main research themes.
- With a **holistic and interdisciplinary vision**, the related areas will be studied in detail from historical, geographical, typological, social and ethnological perspectives, and considering their bioclimatic values.

Jordània



Ciutat de Petra amb temples, mausoleus i habitatges troglodítics. Patrimoni Mundial UNESCO

Oman



Poble troglodític d'Akhdar

(www.rehabimed.net)

Aim of the project

- An aspect to highlight is the bioclimatic values of this type of natural habitat, as well as analysing the limitations it may present in aspects such as **ventilation or natural lighting**.
- We should be able to make **a first Inventory** of Troglodyte Heritage, with updated and accurate information on this heritage resource.
- Another purpose of the Project is to define strategies and instruments for the **sustainable revitalization** of this heritage, preventing it from falling into neglect or being overexploited for tourist purposes, of both cases we can see real examples.
- It would be necessary to propose a **local utilization** oriented towards social profitability and sustainability, while incorporating the demands of contemporary life or simply valuing it as a heritage asset.

Tunísia

Les cases de Matmata són conegudes pels grans pous on estan ubicades

Algèria

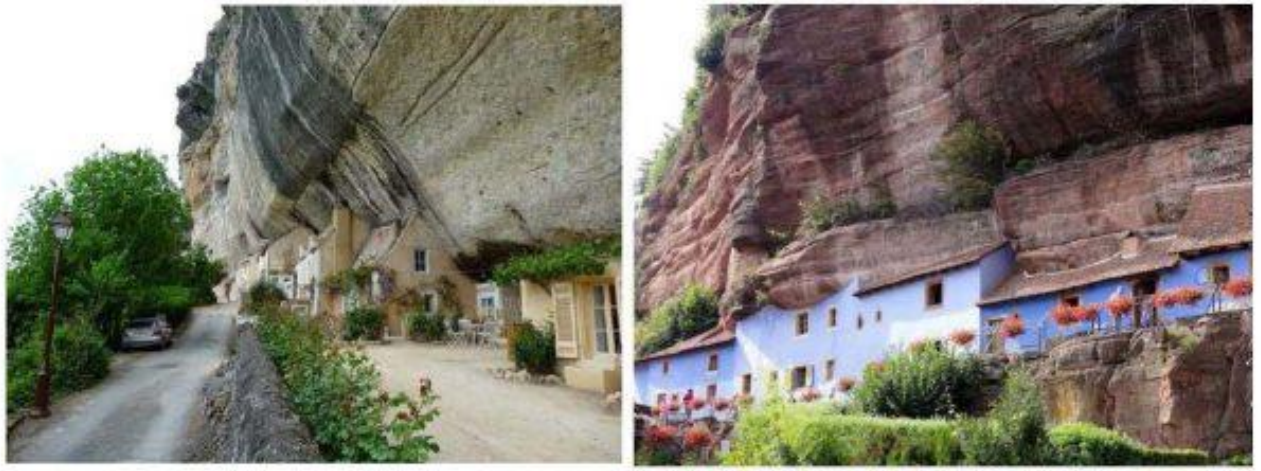
Construccions troglodítiques al Goufi i a Djemina, a la regió dels Aures

(www.rehabimed.net)

Methodology

- The Project is promoted by the **RehabiMed** Association with the collaboration of the **Technical University of Catalonia** and the **University of Cagliari**. DICAAR. Italy, with the main support of **ICOMOS**, Institut Europeu de la Mediterrània (**IEMed**), Union for Mediterranean (**UfM**) and many **Mediterranean universities** and local entities.
- The development of the Project is structured in several related research vectors that represent the variables that support the design of this architectural and heritage model. The analysis will take place at four scales.

França



Les Eyzies de Tayac i Graufthal

Itàlia

Sassi de Matera i església rupestres. Patrimoni Mundial UNESCO

(www.rehabimed.net)

Methodology

1. Global issues

- Troglodyte settlements in the Mediterranean
- Documentary and bibliographic study
- Archaeology and History of the area
- Population and demographic evolution
- Tangible and intangible heritage
- Awareness and public engagement

2. Territorial analysis

- Natural environment and landscape
- Geology of the place
- Territory and environment. Fauna, flora, ethnobotany, use of natural resources

3. Site and buildings study

- Graphic survey of the sites and surroundings
- Urban structure of the settlements and accessibility
- Constructive characteristics of the built elements
- Construction techniques and materials
- Constructive and structural diagnosis
- **Components of bioclimatic architectural, behaviour and utilization**
- Ethnological aspects related to the traditional way of life

4. Proposals for the future

- Guidelines for the preservation and promotion of this architecture.
- Recovery models related to housing or tourism.
- Future prospects of these settlements

Organizing committee

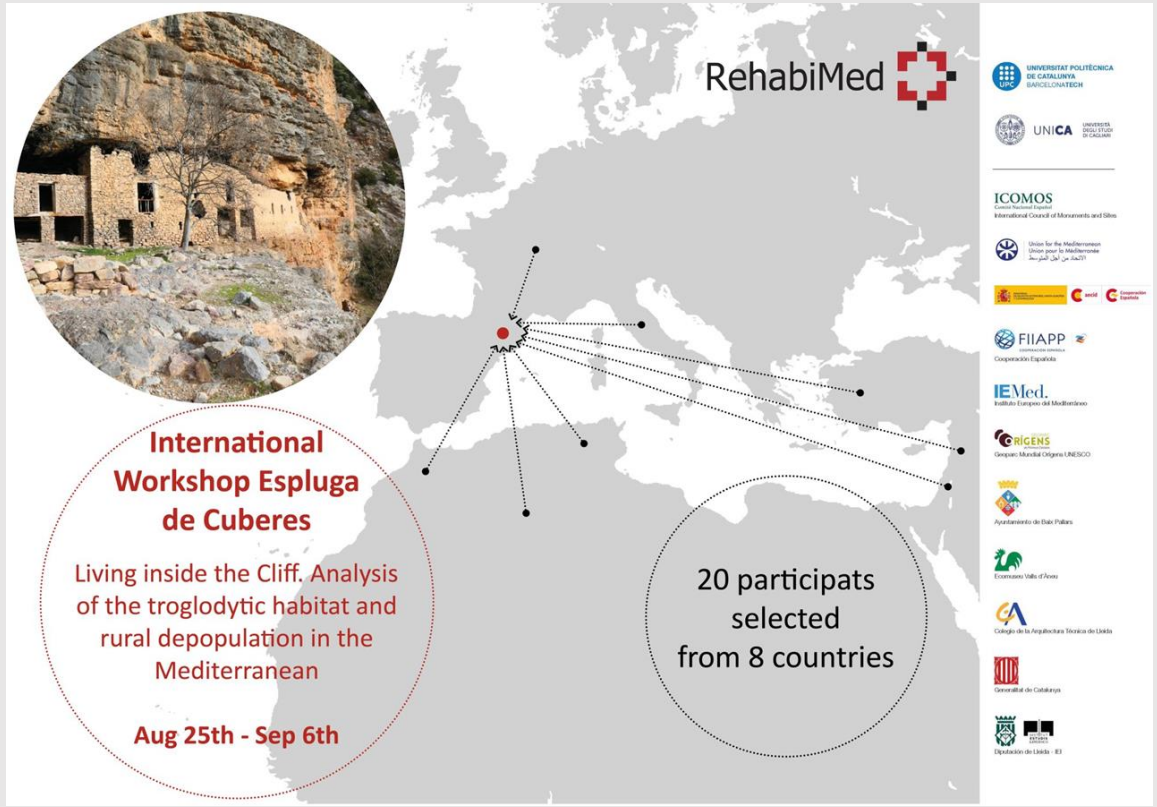
- *Xavier Casanovas Boixereu.* RehabiMed president, ICOMOS Spain, Catalonia Polytechnic University
- *Josep Coll Miró.* RehabiMed, Ramon Llull and Lleida University
- *Montserrat Casado Herrera*. RehabiMed

Scientific committee

- *Lounès Akretche.* RehabiMed Algeria
- *Shireen Allan.* ICOMOS Palestine
- *Carlo Atzeni.* Cagliari University
- *Faika Bejaoui.* ICOMOS Tunisia
- *Mireia Bosch Prat.* Catalonia Polytechnic University
- *Felipe Buill Pozuelo.* Catalonia Polytechnic University
- *Tiziana Campisi.* Palermo University
- *Arcadi Castilló Cadena.* Expert on Geography
- *Faisal Cherradi Akbil.* RehabiMed Morocco
- *Aboulkacem Chebri.* ICOMOS Morocco
- *Aynur Ciftci.* Yıldız Technical University
- *Sisco Farràs Grau.* Expert on History
- *Rémi Papillault.* Ecole Architecture Toulouse.
- *Joan Ramon Rosell i Amigó. RehabiMed and* Catalonia Polytechnic University
- *Sara Vima Grau.* Catalonia Polytechnic University
- *Antonella Violano.* Università della Campania “L Vanvitelli”

Case study: Espluga de Cuberes, Gerri de la Sal, Catalonia, Spain

- A farm built taking advantage of a large concavity in a cliff placed on the **UNESCO Origins Geopark**, with several houses and a Romanesque church (XI century).
- The International Workshop organised by RehabiMed from 25 August to 6 September 2024, is a case study and starting point of the Project, with the **participation of 30 professionals and experts** from Morocco, Algeria, Tunisia, Palestine, Lebanon, Türkiye, Italy, France and Spain (20 interns, 10 professors).
- RehabiMed, with the **Polytechnic University of Catalonia and ICOMOS-Spain**, are working in their studio with university professors and local experts, from a landscape, architectural, historical and ethnographic perspective, to document the existing elements in the site and its natural surroundings.
- Future strategies will be proposed to preserve and revitalize these unique places, throughout the Mediterranean area.

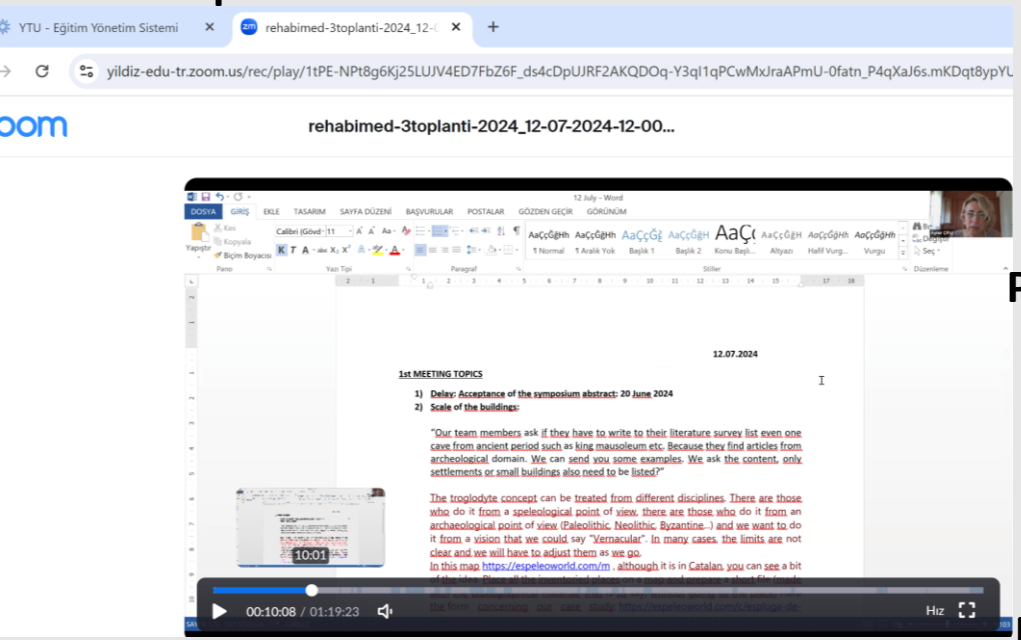


(www.rehabimed.net)

Workshop
(P: Xavier Casanovas, 2024)

Workshop
(P: Xavier Casanovas, 2024)

Turkish part studies

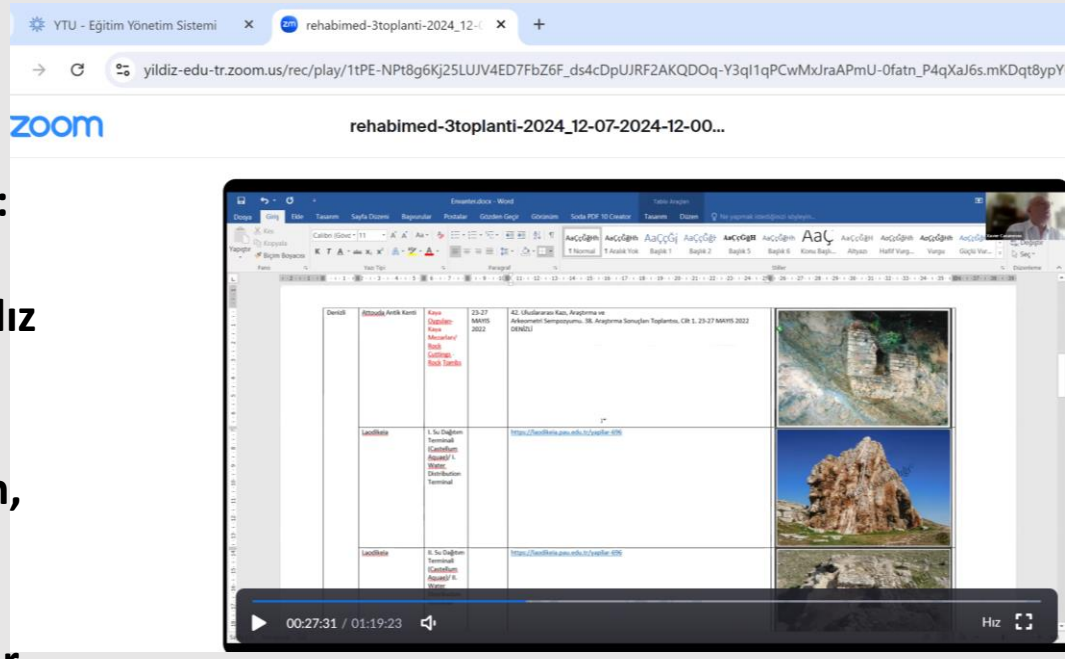


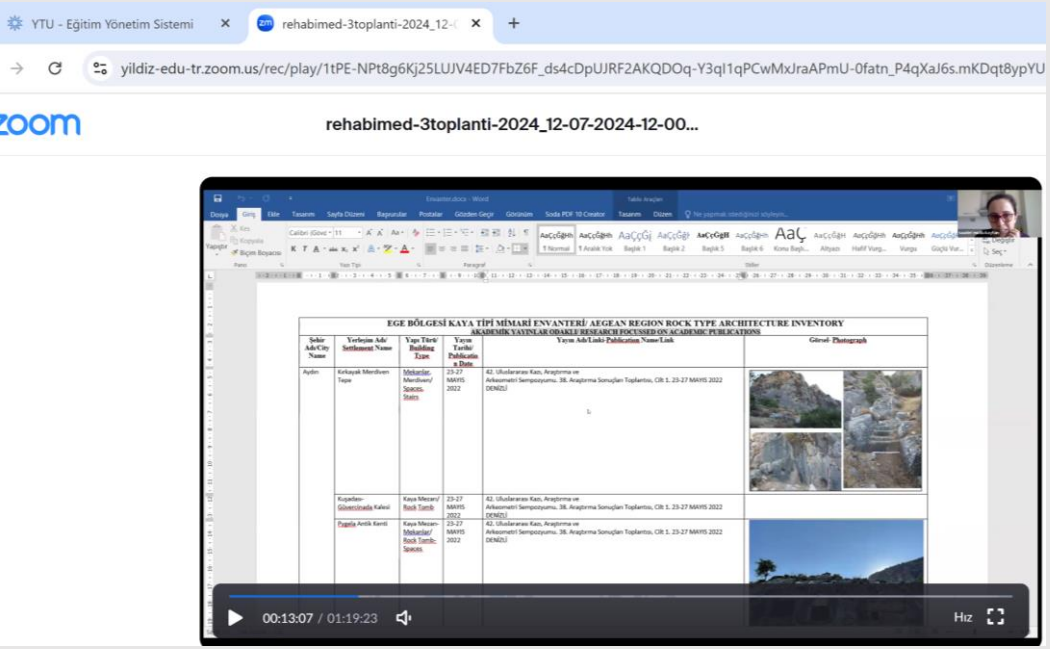
Turkish team members:

Prof. Dr. Aynur Çiftçi, Yıldız Technical University

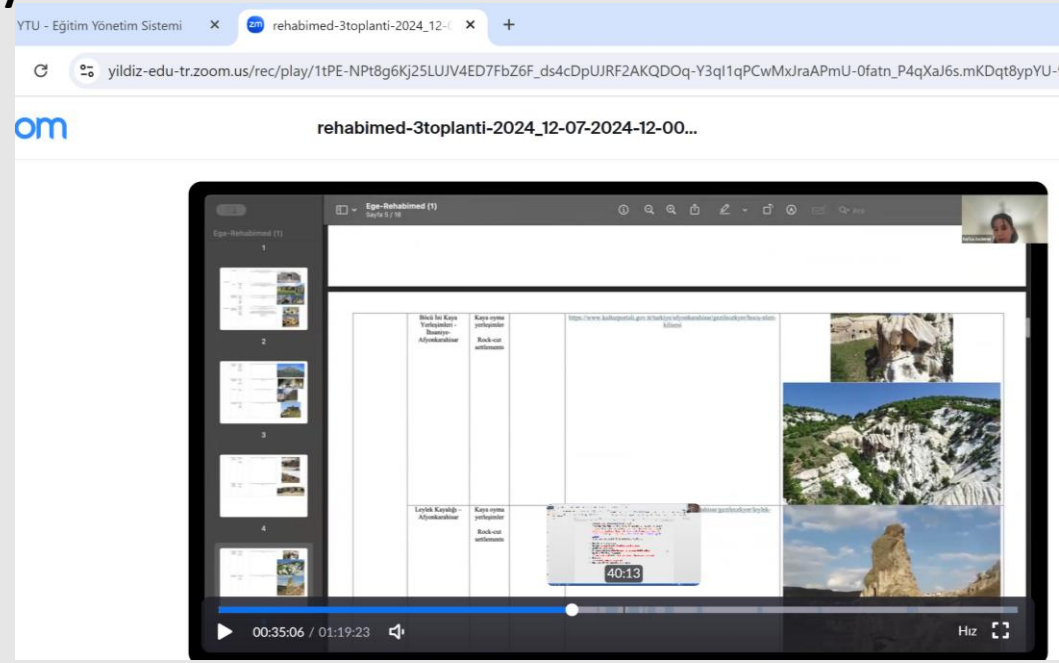
Dr. Saadet Mutlu Kaytan, Pamukkale University

Msc.Arch. Hafsa Özdemir, Yıldız Technical University





Meeting with Xavier Casanovas (08.07.2024)



EGE BÖLGESİ KAYA TİPİ MİMARİ ENVANTERİ/ AEGEAN REGION ROCK TYPE ARCHITECTURE INVENTORY

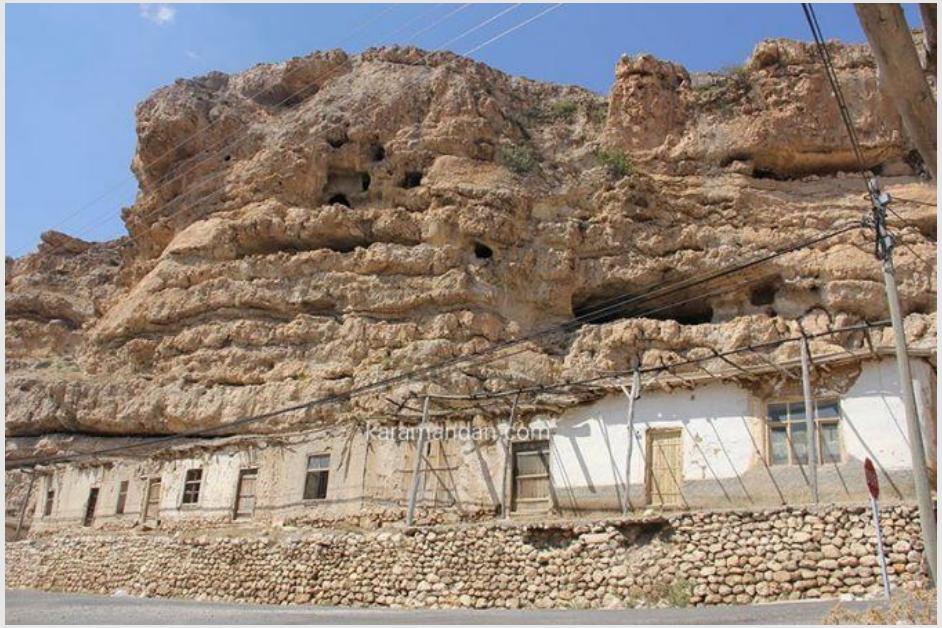
AKADEMİK YAYINLAR ODAKLI/ RESEARCH FOCUSSED ON ACADEMIC PUBLICATIONS

Şehir Adı/City Name	Yerleşim Adı/ Settlement Name	Yapı Türü/ Building Type	Yayın Tarihi/ Publication Date	Yayın Adı/Linki-Publication Name/Link	Görsel- Photograph
Aydın	Kırkayak Merdiven Tepe	Mekanlar, Merdiven/ Spaces, Stairs	23-27 MAYIS 2022	42. Uluslararası Kazı, Araştırma ve Arkeometri Sempozyumu. 38. Araştırma Sonuçları Toplantısı, Cilt 1. 23-27 MAYIS 2022 DENİZLİ	
	Kuşadası-Güvercinada Kalesi	Kaya Mezarı/ Rock Tomb	23-27 MAYIS 2022	42. Uluslararası Kazı, Araştırma ve Arkeometri Sempozyumu. 38. Araştırma Sonuçları Toplantısı, Cilt 1. 23-27 MAYIS 2022 DENİZLİ	
	Pygela Antik Kenti	Kaya Mezarı-Mekanlar/ Rock Tomb-Spaces	23-27 MAYIS 2022	42. Uluslararası Kazı, Araştırma ve Arkeometri Sempozyumu. 38. Araştırma Sonuçları Toplantısı, Cilt 1. 23-27 MAYIS 2022 DENİZLİ	

Literature survey table (prepared by Dr. Saadet Mutlu Kaytan)

Şehir Adı/City Name	Yerleşimin Adı/Settlements Name	Yapı Türü/Building Type	Yayın Tarihi/ Publication Date	Yayın Adı/Linki	
Afyonkarahisar	Frigya	Vadi/ Mağara		https://afyon.ktb.gov.tr/TR-63478/frigya--afyon.html	
	İhsaniye/Döğer Ören Yeri	Açık hava tapınağı, mezarlar, kiliseler Open air temple/tombs/churches		https://afyon.ktb.gov.tr/TR-63479/ihsaniyedoger-oren-yeri.html	
	İhsaniye/Ayazin Köyü Ören Yeri (METROPOLİS):	Kaya mezar odaları, yerleşimler, kiliseler Rock-cut tombs Rock-cut settlements churches		https://afyon.ktb.gov.tr/TR-63484/ihsaniyeayazin-koyu-oren-yeri-metropolis.html https://www.kulturportali.gov.tr/turkiye/afyonkarahisar/gezilecekyer/frig-vadisi--ayazin-oren-yeri--metropolis İçlek, G. (2019). Afyonkarahisar Ayazini Ören Yeri'nin (Metropolis) sürdürülebilir turizm potansiyeli açısından değerlendirilmesi [Yüksek lisans tezi, Süleyman Demirel Üniversitesi]. Fen Bilimleri Enstitüsü, Peyzaj Mimarlığı Ana Bilim Dalı. Isparta. Tez No: 548681	 

Literature survey table (prepared by Msc. Architect Hafsa Özdemir)



https://www.karamandan.com/foto/6488264/divle-ucharman-koyu

https://www.aa.com.tr/tr/gundem/karamanda-divle-obruk-peyniri-magarasi-fpv-dron-ile-goruntulendi/2740722

It is a cave located approximately 1 km south of Divle (Üçharman) village of Ayrancı district of Karaman. There is no definite information about when this cave was found/discovered. It is estimated that the cave was used as a **cold storage** for hundreds of years and especially cheese and other dairy products were stored there.

The cave is about 35 m. deep and about 200 m. long. Its width varies between 1 and 5 m. **The temperature of the cave is 4-5 °C in summer and the humidity is around 90-100%.**

With this feature, the cave contributes to the ripening of the cheese and the formation of its special flavour (https://www.divleobrukpeyniri.com.tr/sayfa/divle-obruk-magarasi)

Thank you for your attention…….