



RE-designing Access to Cultural Heritage for a wider participation in preservation, (re-)use and management of European Culture

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1. EXECUTIVE SUMMARY

The REACH project has established four participatory pilots that were each different in nature and working with diverse communities and stakeholders, in different socio-economic situations and political climates. The remit of each pilot was to undertake participatory activities with specifically identified stakeholder groups in order to consider which participatory approaches are most effective and, above all, which can raise the profile of cultural heritage (CH) in, and on behalf of, their communities. This deliverable D5.4 - *Rural heritage pilot results* - outlines the current situation and activities undertaken to build dialogue and consensus for CH preservation in rural areas.

The Rural heritage pilot explored participative mediation processes involving a range of local stakeholders: farmers and communities on the one hand, and administrative and institutional bodies on the other. The central issues are related to water and soil management and the use of other natural resources in order to preserve and safeguard the rural CH milieu. Co-governance and territorial safekeeping have been promoted to protect tangible and intangible agrarian heritage and rural landscapes. The pilot has focussed mainly on approaches in cultural and environmentally protected areas as a means of resolving conflicts between preservation, (re-)use and economic activities (such as tourism). This deliverable therefore offers a detailed analysis based on the presentation of five central case studies, including work with irrigation communities in the Sierra Nevada, community archaeology in Mojácar la Vieja and transversal participatory activities via the University of Granada's MEMOLab, all in Spain, and the *marcita* meadow and highway project at Ticino Park and post-earthquake recovery actions in Norcia, both in Italy. It considers themes of communal resources, resilience and empowerment, heritage awareness of agrarian culture, transmitting and benefitting from the past and the context of global and environmental change.

The Rural heritage pilot works with communities where traditional practices and knowledge are being abandoned. Communities are often threatened by change, they work without directive and do not know what will happen in future, so the pilot has worked with them in a participatory manner to support improved organisation. Work has been undertaken with city-based stakeholders and policy makers, making proposals to preserve and improve rural heritage. The pilot recognises the need to organise policy-making for economic and social benefits, maintaining productive activity whilst preserving landscapes, as well as cultural, social and environmental values. In both contexts, intervention and mediation become the foci in order to overcome social conflicts and lead to social empowerment, sustainable economic development and cultural and social acknowledgement. The mission of the pilot was therefore to reinforce social participation of local communities as the best strategy to manage and preserve the heritage, cultural and environmental values of the landscapes. The implementation of co-governance initiatives is designed to have a direct impact on reinforcing the resilience of this heritage, increasing its capacity to face current challenges, which are directly connected to global and climate change.



2. INTRODUCTION

2.1 BACKGROUND

The REACH project has set itself the task of considering the work of current and completed projects, to understand what they had done well, what might not have been as successful and the lessons that could be identified. A wealth of information was uncovered and evaluated to consider participatory approaches for the management, preservation and (re-)use of cultural heritage (CH). To test this further, it was decided that four participatory pilots should be established that were of diverse natures, working with different types of communities and stakeholders, in different situations and political climates. One of the REACH pilots explores rural heritage and has promoted participation in culturally and environmentally protected areas as a way to solve conflicts between preservation, (re-)use, and economical activities.

The pilot is led by the University of Granada (UGR), Spain. UGR has a strong regional, national and international presence when working with rural-based initiatives and projects, including having led the successful FP7 MEMOLA project (2014).¹ Building on MEMOLA, this REACH Rural heritage pilot has worked with irrigator communities (e.g. farmers) that have an important role in the south of Spain, in order to consider communal resources, resilience and empowerment. The transmission of intangible heritage and knowledge of traditional practices, dialogue consisting of both academic and practical expertise, overcoming conflicts for the use of water, including pathways, areas of concern and communal uses, and, environmental planning are all important factors here. A key focus is heritage awareness of agrarian culture, transmitting and benefitting from the past and, as in the MEMOLA project, considering this in the wider and urgent context of global and environmental change.

The methodological and theoretical approaches developed in the MEMOLA project have been further tested and improved within the REACH project framework. UGR's strategy has focussed mainly on **Traditional and Historical Irrigation Agroecosystems (THIAS)** among others (for more on THIAS see further below, chapter 3). Over the past fifty years, in Spain, the modernisation of agriculture, the rural population exodus and public policies have changed the ways in which farmers use water for irrigation. The abandoning of traditional irrigation and terraces has exposed the land, soil and biodiversity to degradation. This has been further aggravated by increasingly frequent extreme meteorological events and the misconception of modernising those systems according to the canons of conventional industrialised systems. The REACH project has considered THIAS as a vivid, resilient and valuable theme for preserving European rural heritage. Historical and traditional means of water management and irrigation strategies share long traditions and trajectories of water knowledge and of a careful utilisation of existing resources, particularly in the south of Europe. Archaeologists, historians and anthropologists study THIAS as an important part of cultural landscape dating back to antiquity and medieval periods, connecting past lifestyles and irrigation techniques with current ones. For this pilot, THIAS has been a valuable framework for both theory and practice.

¹ UGR coordinated the successful Mediterranean Mountainous Landscapes: an historical approach to cultural heritage based on traditional agro-systems (MEMOLA) project <https://memolaproject.eu/> (accessed 5/10/2020)



The Spanish dimension of this pilot is focussed mainly on the area of the Sierra Nevada, an important protected area as UNESCO Biosphere Reserve and National Park. In recent years, a serious disagreement has arisen. On the one hand, political administrations, stakeholders, and academia propose the Sierra Nevada as a World Heritage Site. On the other hand, local communities consider this proposal as external imposition, without any benefits and with negative consequences for local daily life as well as for the conservation of its environmental and heritage values. Simultaneously, a new development model, based on intensive agricultural production, has been implemented in this territory. This deliverable explores these differences of opinion over progress and tradition further through background context and a series of case studies detailed in Chapters 3 and 4.

Ticino Park, in northern Italy, is an area that uses traditional agricultural productive techniques, and as with Sierra Nevada, has also been recognised, as a UNESCO Biosphere Reserve. Ticino Park's rural landscape is mainly characterised by *marcita* meadows, an ancient practice based on a thin layer of underground and surface water flowing over the meadows; this flow avoids the grass freezing in wintertime enabling the creation of a fertile and varied landscape. However, this is now endangered and is at risk of disappearing, due to over-industrialisation and to the construction of new infrastructure, such as the expansion of the highway. Chapter 4 provides a detailed case study that reflect the views of local stakeholders.

In 2016-17, four strong earthquakes struck the central Apennine area, across four Italian regions. The first earthquake (of a magnitude of 6 on the Richter scale) was on 24th August 2016 causing the death of 299 people and about 600,000 people were affected in an area of almost eight thousand square kilometres. This was followed, two days later, by two further major shocks (magnitude 5.4 and 5.9 21.18), with another on 30th October 2016 (magnitude 6.5). In this earthquake, the town of Norcia suffered great damage: all of its churches collapsed and Castelluccio di Norcia was almost entirely destroyed. 40,000 people were now left displaced. On 18th January 2017, new shocks (magnitude 5.5) hit some municipalities, killing 29 people in the disaster of Rigopiano, where an avalanche, caused by these previous earthquakes, occurred. This deliverable evaluates the response to these disasters and subsequent activities in rebuilding the area.

2.2 ROLE OF THIS DELIVERABLE IN THE PROJECT

The role of this deliverable, as with the pilot itself, is two-fold. One aspect is to work with rural heritage stakeholders in Spain and Italy, to identify and share ideas, and elements of best practice. The other is to consider the range of participatory approaches that fit with this task to either confirm, or not, the REACH project's prior findings that will be used within project conclusions.

Above all, the pilot, has been interested in acquiring knowledge of mechanisms for generating the **sustainability and resilience of many traditional socio-ecosystems**, and for understanding the local systems of governance, management, participation, conflict resolution and strategies that have rendered this possible. The general objectives of this pilot, and therefore also this deliverable, may therefore be defined as follows:

1. **To trial participative mediation processes between local stakeholders**, farmers, local communities and local/regional administration and institutions involved in the cultural, territorial and environmental management



2. To discuss **the creation of a co-governance initiative for the territorial safe-keeping as the best way to protect agrarian heritage** (tangible and intangible) and rural landscapes
3. **To promote a more resilient rural CH improving local engagement and public participation in policy making**, economic, cultural and social initiatives and territorial and environmental management.

This deliverable details participatory activities carried out through five central case studies, the first three of which took place in Spain, with the others drawing on Italian scenarios, siting these studies within the wider context of promoting participation for safeguarding rural heritage:

- irrigation communities in the Sierra Nevada
- community archaeology in Mojácar la Vieja
- transversal participatory activities (MEMOLab)
- the *marcita* meadow and highway project at Ticino. Park
- post-earthquake recovery in Norcia.

Throughout the pilot, these activities have been consistently characterised by an important success of participation arousing great interest among diverse stakeholders. They have been important milestones in the development of the project, offering future perspectives to be explored and learning to be uncovered.

One of the first tasks of the REACH project had been to identify participatory activities within prior projects that were either beacons of good practice or activities from which lessons could be learned. This exercise was led by UGR and resulted in a number of cases examined and ultimately added to the database of good practices that is available on the project's Open Heritage website.²

With multiple projects available for analysis, a series of cultural heritage related participatory models were identified that not only consider the benefits of participatory activities for those people involved, but also for wider society. This area of work also evaluated the transition from the traditional direction of heritage from above, to the empowerment of community groups that sought to establish heritage from below, considering concepts such as participatory heritage and governance.³ Each of the REACH pilots were required to evaluate these models in areas such as informal education and intergenerational knowledge transfer, with activity undertaken to compare results, review and refine the models, as part of the project's conclusions.⁴ As such, the findings of the Rural heritage pilot will contribute to the project's assessment of resilient cultural heritage (considering how a community can bounce back, or indeed forward, in response to disturbance and change) and contribute to the project's final related proposal.⁵ These themes, set out within prior REACH tasks, will be revisited within chapter 5 of this deliverable, as part of the evaluation of the activities of the Rural heritage pilot.

² A wide range of entries are available at <https://www.open-heritage.eu/heritage-data/good-practices/> (accessed 22/9/2020.)

³ Cf. REACH deliverable D3.1 – *Participatory Models*, 2019, chapter 6, URL: <https://www.reach-culture.eu/wp-content/uploads/2019/12/REACH-D3.1-Participatory-Models.pdf>, (accessed 5/10/2020.)

⁴ REACH deliverable D3.3 – *Project evaluation report* – will include project conclusions and be available at the end of the project.

⁵ REACH deliverable D7.1 – *REACH proposal for resilient cultural heritage* – will be available at the end of the project. <https://www.reach-culture.eu/project/public-deliverables> (accessed 5/10/2020)



2.3 APPROACH

The central point of action for the REACH Rural heritage pilot, as well as the approach towards understanding the aim of CH, is its **focus on local communities**. All aspects of the pilot have been specifically designed with the intention that research consistently feeds back into a focus onto the communities involved. The pilot combines an analysis of its central case studies, within the context of various landscape and community archaeology methodological approaches and a wider understanding of CH as a **tool for social intervention with real impact**, given various current socio-political, economic and ecological high stakes. Cultural Heritage attempts to assist in improving the population's daily reality through, for example, **empowerment** or attempting to convince local, regional and national administration to take these rural realities into account, **giving rural communities a stronger voice** in local, regional and national discourse, governance and policy-making. For the archaeological excavations, methodology and strategies of participation, socialisation and diffusion were adopted according to the specificity of each site and its local population while also bearing in mind the particularities of each socio-economic context.

The pilot intended to reinforce social participation of local communities as the best strategy to manage and preserve the heritage, cultural and environmental values of these landscapes. Mediation processes have been conducted between the population and local agents and the institutions and administrations. The implementation of co-governance initiatives has a direct impact on reinforcing the resilience of this heritage, increasing its capacity to face current challenges, which are directly connected to global and climate change.

The pilot has aimed to consider cultural heritage in its broadest sense, looking at the communities in their landscapes and exploring models of participation to provide mediation between communities and landscapes. By working in communities threatened by change, working without directive and uncertain of what will happen in the future, where traditional practices and knowledge are being abandoned, UGR has been working in a participatory manner to organise them. Work has also been undertaken with city-based stakeholders and policy makers to make proposals to preserve and improve rural heritage. Similarly, there is a need to organise these for economic and social benefits, maintaining productive activity to preserve landscapes and cultural, social and environmental values. Here intervention and mediation are the focus in order to overcome social conflicts and lead to social empowerment, sustainable economic development and cultural and social acknowledgement.

A REACH project workshop was organised by UGR and held in Granada, Spain on 26 November 2019 entitled *Participatory approaches for territorial cohesion*. The discussions, especially those covering the protection of historical agrarian territory and rethinking the commons, were drawn on within chapter 3 to provide context and discussion group ideas feature within chapter 5 of this deliverable.⁶

⁶ In these instances, text from REACH D4.2 – *Workshop results and lessons learnt* – has either been replicated or adapted for the purpose of providing valuable context and considerations for this Rural heritage deliverable. <https://www.reach-culture.eu/repository/Deliverables/REACH%20D4.2-Workshops-results-and-lessons-learnt.pdf>



As described previously, the Spanish pilot case studies are positioned after a fifty-year period that has seen the modernisation of agriculture, the rural population exodus and a series of public policies that have had an impact on how farmers use water for irrigation. Abandoning traditional methods of irrigation and terraces have exposed the land, soil and biodiversity to degradation; this has been further aggravated by increasingly frequent extreme weather events and the misconceptions of modernising those systems according to the canon of conventional, industrialised systems. This pilot therefore considers the value of historical and traditional methods of water management and irrigation being recognised and preserved. As such, the pilot has contributed to the development of tools for community building, local empowerment and the awareness of values for preserving both tangible and intangible culture in southern Spain. The pilot has also promoted water use, agricultural production and water governance, as well as the sociocultural, scientific and economic promotion of these traditional systems and, therefore, the corresponding local communities.

In addition to the participatory activities that have been carried out in Sierra Nevada, the pilot has also worked with other rural cultural heritage e.g. traditional crafts, rural archaeological sites (such as the Mojácar La Vieja medieval settlement). Here, activity has been mainly based on a community archaeology approach considering historical relationships between human populations and their environments. This is an important site for the local population, but previously, the local municipality has not been careful with local cultural heritage as a process of touristification.

The Italian case study also aims to raise awareness about the historic agrarian landscape through the example of the *marcita* water meadow at Ticino Valley Regional Park⁷, established in 1983. The Park has initiated action for the protection of *marcita* meadows in recognition of their unique cultural heritage value. Here, the main problems in water management and the preservation of the historical landscape are due to changes to methods of feeding animals and crops cultivation, irrigation systems and attempts to change the timing of the natural cycle. Another significant factor has been the plan to construct a highway to Milan Malpensa airport, cutting through this landscape.

One of the main objectives of Ticino Park is defending, protecting and enhancing the quality of the agrarian landscape. In order to achieve that, it has established a series of active participatory tools for use in primary schools, as well as with university students (digging workshops) and farmers (participating in water management courses). Conferences and walking tours, supported by a travelling exhibition, brochures and videos (history, food products, environment and people), have also been used to raise public awareness and share cultural knowledge. These initiatives have highlighted issues of resilience, tangible and intangible heritage, by connecting people, at local level, and promoting an alternate economic model.

The second Italian case study of Norcia looks towards the resilience of rural cultural heritage when faced with a series of disruptive events – here a series of serious earthquakes in 2016-2017 that have had serious ramifications on both the landscape and associated intangible and tangible heritage. Again, the promotion of alternative, sustainable economic models – where tourism works hand in hand with the local community's local knowledge and agri-food traditions, for example – is seen as a means of 'resilience thinking' (Leitao 2020) for rural heritage.

⁷ Ticino Park website: <http://www.parcoticino.it/> (accessed 5/10/2020)



For both Italian cases, a wide range of stakeholders were identified and interviewed to gain an understanding of their views and opinions of future actions. Stakeholders include local farmers, mayors, representatives of collectives and protest groups and therefore provide varied responses that are used to draw conclusions for each case study.

Specific methodology is introduced in section 3.6 and then detailed together with each specific case study: for instance, section 4.1 details the processes used by the irrigation communities of Sierra Nevada, whereas section 4.4.1 provides an outline of the methodology used ahead of research activity taking place for the Italian cases at Ticino Park and in Norcia.

2.4 STRUCTURE OF THIS DELIVERABLE

Following this Introduction, Chapter 3 provides wider contextualisation for the thinking and practice developed in the Rural heritage pilot by first considering the broader picture as concerns the relationship between agro-ecology, biodiversity and rural cultural health, and then examining how participatory approaches and methodologies for rural heritage might be defined and developed.

Chapter 4 offers detail of the participatory activities carried out through the central case studies, siting these studies within the wider context of promoting participation for safeguarding rural heritage given current socio-political, economic and ecological realities. The first case study will focus on an explanation of work carried out with irrigation communities in southern Spain, systematising the objectives and general methodology undertaken to then develop the specific characteristics of each activity with its irrigation community. Secondly, there will be an analysis of the participation activities related to the archaeological intervention of the Mojácar la Vieja site (in the context of community archaeology). Thirdly, the pilot describes a series of transversal activities of participation and mediation carried out by MEMOLab. The fourth case study is based on the *marcita* meadow at Ticino Park in northern Italy, with the final case featuring Norcia in the centre of the country and how the town and wider rural region has recovered from the impact of devastating earthquakes.

Following these five central case studies, Chapter 5 offers a synopsis of the commonalities and differences between them, and an in-depth analysis of their key themes of participation and local communities, paying particular attention to gender considerations and the role of women as well as to themes of engagement, resilience and ecological climate response. Finally, this deliverable aims to outline how the Rural heritage pilot has tested REACH's theory for participatory models (as defined in REACH deliverable D3.1, see above p. 9: fn. 3) and what future learning can be taken forward as regards participatory approaches for safeguarding rural cultural heritage, ahead of drawing conclusions in chapter 6.



3. CONTEXTUALISATION

The following section provides wider contextualisation for the thinking and practice developed in the Rural heritage pilot. It initially considers the broader picture as concerns the relationship between agro-ecology, biodiversity and rural cultural health, and then looks to the specific context in Spain. It then focuses specifically on the area of Granada – particular to the pilot’s central Spanish case studies - offering examples and some grounding thinking about how the commons in Spain might usefully be re-imagined in order to help define and develop participatory approaches to rural heritage. Finally, the chapter turns to the grounding methodology behind the pilot, demonstrating how it has developed from work on the MEMOLA project.

3.1 AGRO-ECOLOGY, BIODIVERSITY AND CULTURAL HEALTH AND RESILIENCE

In terms of this pilot’s wider context, it is important to first note the relationships between agro-ecology, biodiversity and cultural health and resilience. As pointed out in the RICHES⁸ project deliverable D4.3 - *Structures for community and territorial cohesion*⁹ - although it ‘may not be immediately perceived as a threat to cultural heritage and cohesion, biodiversity is actually of fundamental importance to cultural health’ (p. 88). There have been a number of initiatives¹⁰ to increase awareness about dangers links to climate crisis and the loss of biodiversity: a key point emerging from these is that many forms of cultural heritage develop from human relationships with nature. TerraLingua¹¹, a non-profit organisation, that works to sustain the ‘world’s precious heritage of biological, cultural and linguistic diversity’¹² explains how cultural values are interconnected with human-nature relationships, demonstrating how cultural diversity is directly linked to diversity in nature:

[...] over time human societies have developed detailed local knowledge of plants, animals, and ecological processes [...] and cultural values and practices that stress respect for and reciprocity with nature—taking care of the natural environment that sustains us [...] This is how language, knowledge, and the environment are intimately, in fact inextricably, interrelated: in each place, the local environment sustains people; in turn, people sustain the local environment through the traditional wisdom and practices embedded in their cultures and their languages.¹³

⁸ RICHES project website: <https://www.riches-project.eu/> (accessed 5/10/2020)

⁹ See further https://www.digitalmeetsculture.net/wp-content/uploads/2016/05/RICHES-D4.3-Structures-for-community-and-territorial-cohesion_public.pdf (accessed 5/10/2020)

¹⁰ E.g. United Nations Foundation: Climate change and the future of food (<https://unfoundation.org/blog/post/climate-change-and-the-future-of-food/>) (accessed 28/10/2020); Manifesto on the Future of Seed (http://navdanya.org/attachments/Know_Your_Food1.pdf) (accessed 5/10/2020); Manifesto on the future of knowledge systems - Knowledge sovereignty for a healthy planet (https://www.globalagriculture.org/fileadmin/files/weltagrarbericht/Manifesto_on_Future_Knowledge .pdf.) (accessed 28/10/2020)

¹¹ <https://terralingua.org> (accessed 5/10/2020)

¹² From TerraLingua (<https://terralingua.org>), n.p.

¹³ TerraLingua, n.p.



If this intrinsic connection between cultural diversity and biodiversity is recognised in this way, it is possible to understand why the loss of biodiversity ultimately threatens cultural heritage. Many traditional cultures have developed ways of co-existing with, and ensuring the resilience of, bio-diverse ecosystems through careful management and stewardship of land and resources. As RICHES D4.3 points out, ‘if biodiversity disappears, the knowledge, skills and practices that humans have developed to co-exist with, and sustain biodiversity, will also disappear.’¹⁴ In the end, this poses a threat to food heritage and long-term food security. What is needed is the further development of agro-ecological farming systems, with high social and ethical values that acknowledge, value and work in harmony with local knowledge of the land and rural heritage practices. It is necessary to understand the importance of agricultural diversity for our lives in the wider context of a ‘global simplification that threatens community heritage’ (Salguero Herrera 2018: n.p.).¹⁵

‘In the 20th century we have lost 75% of our agricultural varieties. Historically, human beings have used between 7,000 and 10,000 species, today, we only cultivate about 150, and 70% of human consumption is based on only 12 of them.’¹⁶

Biodiversity loss can affect the viability of ecosystems by decreasing the ability of communities to respond to environmental change and disturbances. In response, there is a need to protect agricultural heritage and consider traditional species and production systems. In addition, communal governance structures – which have tended to disappear with the advance of the nation state – are crucial with participatory decision-making processes required. There is a need for a clear recognition of the cultural value of agriculture (and a need for an acknowledgement of this on the part of farming communities themselves). Without such recognition and acknowledgement, there will be an inevitable loss of heritage landscapes and artefacts. Regarding such processes for the protection of rural and agricultural heritage, two key questions arise:

- who is in charge of these processes – local authorities, farmers or local communities?
- how will the knowledge gained be shared with future generations?

The case studies in this pilot and explored in this document will look to respond to these two questions.

3.2 THE SPANISH CONTEXT: LA ESPAÑA VACIADA

In terms of thinking about Spain’s rural heritage in particular, it is also worth mentioning the specific national context of ‘la España vaciada’ (the hollowed-out Spain), a term used to describe wide areas of the country that have historically suffered from depopulation and underinvestment. This is a decades-old trend – Spain’s new government, a coalition between the Spanish Socialist Workers’ party (PSOE) and the far-left, anti-austerity Unidas Podemos, is attempting to reverse this trend and narrow the gap between urban and rural areas.

¹⁴ RICHES D4.3, p.89

¹⁵ Concha Salguero Herrera (ICCA Consortium) speaking at the REACH Budapest conference, May 2018, Consortium, in a presentation entitled “Diversify or die” The importance of agriculture heritage for our lives’ http://www.reach-culture.eu/wp-content/uploads/2018/05/Day1_02_UGR2_ConchaSalgueroHerrera.pdf (accessed 27/9/2020)

¹⁶ Ibid



While there was an extensive drive in rural Spain to modernise between 1950s and 1970s, many rural areas were abandoned as citizens left the countryside for cities and coastal tourist resorts and gradually rural communities dissolved. According to recent figures in *The Guardian*, Spain's population figures are stark:

90% of its people – about 42 million – are squeezed into 1,500 towns and cities that occupy 30% of the land. The other 10% (4.6 million people) occupy the remaining 70%, giving a population density of barely 14 inhabitants per square kilometre.¹⁷

This 'emptying' or 'hollowing out' is part of a wider European story of youth 'deserts', whole regions where young people have left rural areas for cities. According to Teresa Ribera, Spain's deputy prime minister for the ecological transition and the demographic challenge, one of the most dangerous effects of this 'hollowing out' is the way in which it has given rise to the idea of a clear divide between citizens – between those who move to the city and those who are left behind:

There's been a social trend that has fed an incredibly dangerous sense that there are first-class and second-class citizens [...] If we allow that to grow then we're attacking one of the principal and most basic elements of our democracy. We're feeding very dangerous trends when it comes to people's trust in their institutions' ability to create opportunities and solve problems [...] There's a very stark divide between 'the full Spain' and 'the empty Spain'. People who feel left behind are those who are most likely to look for false alternatives because they've lost trust in their institutions. That's a problem.¹⁸

Despite this divide and recent protests by farmers who feel undervalued and under-remunerated, a shift in perception is occurring. In 2019, thousands rallied in Madrid to defend 'the rural world and its traditions'¹⁹ and these protests were widely and well supported. The new government is exploring measures – some at a national level, some at a local level – to redress the balance between the full Spain and the empty Spain. These measures include improving digital connectivity, encouraging eco-tourism and diversification away from agriculture. The REACH Rural heritage pilot is thus working within this specific Spanish context and this is particularly evident in several of the irrigation community projects.

This section now further introduces the specific Spanish context through three brief contextual case studies ahead of focussing on the pilot's methodology. These three case studies were all presented as part of the third REACH workshop, organised by UGR and held on 26th November 2019 at the University of Granada. The workshop was entitled *Workshop on Participatory Approaches for Territorial Cohesion* and aimed to investigate the value of participatory preservation of CH in terms of research advancement and social innovation.²⁰

¹⁷ Section 3.2 draws upon text and statistics taken from the article <https://www.theguardian.com/world/2020/mar/02/the-hollowing-out-of-spain-minister-trying-reverse-it-teresa-ribera> by Sam Jones, published 2 March 2020 (accessed 27/9/2020)

¹⁸ Teresa Ribera cited in article above.

¹⁹ https://www.elconfidencial.com/espana/2019-03-31/la-espana-vacia-sirve-de-precampana-a-los-partidos-en-la-manifestacion-de-madrid_1914378/ (accessed 27/9/2020)

²⁰ Further details of the workshop are available on the REACH project website: <https://www.reach-culture.eu/events/workshops/workshop-on-participatory-approaches-for-territorial-cohesion>



The case studies together paint a picture of the specific Spanish context as regards agro-ecosystems and participatory approaches towards rural CH and many of the themes that emerge through these examples also underpin the work and methodology of the REACH Rural heritage pilot to be further explored in Chapter 4.

3.3. SALVEMOS LA VEGA (GRANADA, SPAIN)

The first of the three examples is 'Salvemos la Vega'²¹, a social platform experience in defence of Granada's historic agrarian territory. La Vega is agricultural land, the majority of which is privately owned but with some publicly owned areas. Intervegas is a national network of 47 municipalities and includes Granada, covering an approximate area of 1,500 square kilometres. At the workshop, Manuela Martínez outlined that traditionally, la Vega had been both a significant socio-economic and environmental engine, as well as a source of welfare for local communities. During the 1990s, its traditional systems were broken due to urban speculation and increasing population: this in turn led to significant impacts on the agro-ecosystem. To address these impacts, in 2005, the 'Salvemos la Vega' manifesto was founded to defend the agro-ecosystem, with the period from 2007-12 seeing a significant mobilisation of people through marches and demonstrations. The development of the interdisciplinary and intergenerational VegaEduca project in 2008 proved to be another significant turning point, as schools, teachers and universities became more actively involved in defending la Vega. Ultimately, the two organisations merged in 2014. Growing urban development had been difficult to stop, as much money was being invested in construction, but this was at a tremendous cost to the environment. Water is especially important in the south of Spain and it was being used for urban development rather than rural purposes. Groups started to react with some forming collectives, one example being the cooperatives of farmers.

Martínez explained that the objective of the 'Salvemos La Vega' manifesto is to protect both the territory and the local community as well as to enable the Vega to be source of employment and wealth. However, the social movement was faced with abandoned farmland and no state law to protect soils against speculative practices. Work was required at national level in three ways: 1) unions represented the various collectives, 2) pacts were signed as a guiding framework to outline objectives and to measure achievements and compliance, with 3) education raising for social awareness. This was carried out by participatory movements through conferences, concerts and technical roundtable discussions. The 'Salvemos La Vega' social platform/network is now a tool for local communities, involving main stakeholders such as farmers, young people, students and teachers, and its main areas of success have been to increase social awareness. It has been important to gain social and political agreement, and more importantly commitment. The constitution of the Andalusian Parliament pact and Federation is an important acknowledgement of the preservation of La Vega for communities.

(accessed 5/10/2020)

²¹ 'Salvemos La Vega: a social platform experience in defence of Granada's historic agrarian territory' was presented at the REACH Granada workshop by Manuela Martínez (Salvemos La Vega and Intervegas Federation). For further information, please see: <https://www.facebook.com/SalvemosLVEduca/> (accessed 5/10/2020) and also Puente Asuero (2013)

https://www.researchgate.net/publication/298346214_La_Vega_de_Granada_From_an_agrarian_space_in_crisis_to_a_complex_cultural_landscape (accessed 5/10/2020)



Global climate change is a further issue, as air quality is a serious problem in Granada; this is one of many things still to be dealt with, but the priority is first and foremost to recover the landscape.

As Carolina Yacamán Ochoa (Universidad Complutense de Madrid, Agrarian Parc of Fuenlabrada, Intervegas Federation) pointed out in her presentation at the REACH Granada workshop (November 2019), 'Initiatives or the protection and dynamization of the agricultural space: the agrarian park of Fuenlabrada and Intervegas Federation,'²² in general, Spanish agriculture is facing a great crisis: this is due to urban sprawl, agricultural regression and intensive agricultural models that have neither geographical connection, nor link between production and consumption. To address this, it is essential to protect the fertile soils, so that the agriculture can survive, thus ensuring production embedded in the territory. Yacamán Ochoa also discussed the legislative proposal that was presented in Parliament, only for an election to prevent further discussion. There is a need for regional governments to implement their own laws to protect soil and to build on national law so that the agriculture can survive and ensure territorial production supplying both urban and rural populations with fresh and local foods. Yacamán Ochoa described a model featuring territorial governance, planning and management, suggesting that the first priority is to protect the land, to stop urban development and the loss of soil and agricultural opportunities, and to use urban market to sell fresh products. The second is to manage and develop agricultural areas, reducing depopulation and abandonment of agricultural activity. Finally, a third priority would be the promotion of participation and governance for different stakeholders, including decision-making channels for framers, organisations and cooperatives and measures to guarantee the inclusion of young people and women in agricultural activity. Sustainability can be seen as the overlap of social, environmental and economic factors.



Figure 1: Manuela Martínez and Carolina Yacamán Ochoa presenting at the REACH workshop in Granada, November 2019

²² <https://intervegas.org/> (accessed 5/10/2020)



3.4 SUSTAINABILITY IN ACTION: PARQUET AGRARIO DE FUENBRADA (SPAIN)

As an example of this, Yacamán Ochoa presented the role of the Parquet Agrario de Fuenbrada²³ that was established in 2012 to stimulate and support the local agricultural sector and to restore the link between the countryside and the city. The management and strategic plan outlines participatory approaches for the historical reconstruction of the agricultural landscape, with the aim of territorialising the local agri-food system. This bottom-up approach has developed very quickly, and now involves more than 200,000 people. The reconstruction involves use of pictures and books for schools, so that children can understand how their area used to look. This has also been incorporated into a local photography exhibition that has a focus on history rather than the environment, in an attempt to develop an agrarian identity of the space. Further projects with schools promote local production, food security and nutrition, including the creation of a label to identify products as local. This, in turn, supports the local economy and helps farmers to promote local produce, food safety and nutrition. It is also a way of engaging young people with agriculture, as this has become an unattractive career path in recent times.

The next step for this agrarian park is the development of a strategic plan, with an agreed budget and a governance entity that involves different stakeholders and local citizens, and retains the bottom-up participatory approach. The changes made will always be based on viability, including maintaining political support, as this can change after every election. An on-going challenge is to retain this model and stress the importance of the rural landscape, as it is obvious that more money would be made if the land was urbanised.

3.5 THINKING FORWARDS: RE-THINKING THE COMMONS IN SPAIN

The final useful example from the REACH Granada workshop (November 2019) looking at Spanish commons was presented at the REACH Granada workshop by Sergio Couto González (ICCA Consortium and Iniciativa Comunales). Entitled ‘Re-thinking the commons: collective governance as heritage for facing global challenges’, this presentation clearly made the case for communities wanting more of a say in making decisions rural areas. Common (community) governance of natural resources is widespread around the world, despite the growing pressures promoting privatisation and state control. In Spain, the commons (the common property of the community) are strongly represented in the main natural resources management sectors (e.g. fisheries, grazing, forestry, farming and hunting etc). Additionally, the commons play a very important role, mostly in rural areas, from the economic, environmental and social point of views.²⁴ Commons cover public property and common land, and in Spain, laws protect commons, via indivisible, embargoes that will never expire. They involve lots of common grasslands and shared areas. It is also the case that little is known about them by the general public or in the spheres of policy making, media and education, and those that have some knowledge, consider them to be an outdated remnant from the past, with no current value. There is, however, a need to rethink the commons collective governance, as heritage faces globalism.

²³ <https://parqueagrariofuenlabrada.es/> (accessed 6/10/2020)

²⁴ <http://www.icomunales.org/> (accessed 5/10/2020)



Where a close association is found between a specific indigenous people or local community and a specific territory, area or body of natural resources, combined with effective local governance and conservation of nature, it is described as an ICCA. This is an abbreviation for ‘territories and areas conserved by indigenous peoples and local communities’ or ‘territories of life.’²⁵

González explained that a report on the ICCA global concept demonstrated a strong link with community, with areas registered with the UN, even if their own countries did not recognise the collectives. An empowerment mapping exercise that studied 20 countries, including Spain, showed that none of the individual commons had heard of each other and were waging their own battles against municipalities and companies and had no shared knowledge or governance. After looking more closely, greater aspects of very rich and diverse local cultural heritage were identified. Following the report’s recommendations, different commons e.g. fisheries and forestry etc. joined together in 2001. Work has taken place to build consensus and to promote networking and common governance systems in Spain, with a strong focus on preserving and enhancing the social, environmental and economic values of these systems. Some of the main goals were to make these systems visible for society, increase their support and recognition, and improve their management and governance. A regular complaint is that others talk on their behalves e.g. researchers, NGO and companies, and so an important stand was that communities have their own voice. There are now more than 60 Association members and the numbers continue to grow. The General Assembly meets twice a year, with a voting system designed so that community voices are heard, with additional thematic events held to build capacity. There is no budget, other than membership fees, but there is the opportunity for communities to raise issues (often about day-to day and local issues), provide trust and support, and collaborate in many projects and decision-making processes.

3.6 METHODOLOGY

The theoretical approach to Cultural Heritage adopted by this pilot is based on two conceptual pillars: Cultural Landscapes and Agrarian Heritage. These are both based on the historical relationship of humans with their environment. The methodological approach is fundamentally that of a combination of landscape archaeology, community archaeology and participatory research action.

In terms of Cultural Heritage, a valuable definition is provided in the *European Landscape Convention* (2000) where landscape is defined as “an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”²⁶. Landscapes are, indeed, the result of co-evolutionary processes; as such, they are a historical product composed of abiotic, biotic and cultural elements that interacting in the same space. In this sense, culture – and cultural heritage - is composed of both tangible and intangible elements. The tangible elements are quite visible in houses or mills, roads or terraces, even when many of these are not always considered as heritage. Furthermore, intangibility is linked to practices, traditional ecological knowledge, governance systems and symbolic elements (including place names) that are all essential in terms of preserving values and functions in landscapes and which, in terms of conservation, are perhaps even more fragile than tangible elements.

²⁵ <https://www.iccaconsortium.org/> (accessed 5/10/2020)

²⁶ <https://www.coe.int/en/web/landscape/definition-and-legal-recognition-of-landscapes> (accessed 28/10/2020)



The *Charter of Baeza on Agrarian Heritage* (2018)²⁷ focuses on practices, knowledge and governance systems as a base to preserve rural heritage and cultural landscapes. It looks towards the activities and the protagonists, the farmers, as responsible for the maintenance and preservation of values, infrastructures, and agro-diversity. (Re-)use and participation create capacity for resilience and allow for the preservation of heritage. This notion is also at the base of the concept of bio-cultural heritage where in traditional or indigenous cultures there is no separation between biological and cultural elements as they too are the result of co-evolutionary processes. In this sense, farmers become both protagonists and active components in the multifunctional context of diverse agrarian activities. Participation thus becomes an essential part of Cultural Heritage protection and conservation; and conservation becomes a dynamic, active (and not passive) concept. What is needed is a protection both of the activities and the farming communities responsible for those activities, all the while trying to avoid the fossilization and isolation of cultural elements (as conservation usually intends).

This is why participation is at the heart of this pilot's methodology. Theoretical and methodological tools such as Participatory Action Research can be very usefully applied to Agrarian Heritage preservation and, in general, to Cultural Heritage preservation. Participatory Action Research provides tools to work with local communities, particularly farmers, but also with other social groups and stakeholders. The conceptualisation of traditional ecological knowledge and governance systems turns into a real dialogue of knowledge with the academy and gives us the opportunity to transform that dialogue into action that defends, protects and recovers Cultural Heritage.

As part of UGR's participatory approach, with a research team mainly formed by archaeologists working on landscape archaeology and agrarian archaeology, a community archaeology programme has been developed in rural areas. In this framework, archaeological excavations become part of the strategy for a living heritage not only as open excavations but also as part of cultural landscapes that give meaning to sites (and their history) and allow for local communities to actively participate in the research, protection, preservation and use of Cultural Heritage.

3.6.1 THE MEMOLA PROJECT

In terms of its grounding methodology for the Spanish case studies to be explored in Chapter 4, this pilot has, in addition, built on the methodology developed for the MEMOLA project (Mediterranean Mountainous Landscapes: a historical approach to cultural heritage based on traditional agrosystems) that had been coordinated by José María Martín Civantos. This research project aimed to investigate the process of historical landscape formation in relation to natural resources utilisation, in particular soil and water, in terms of a diachronic framework by conducting a historical and archaeological study in four Mediterranean mountain landscapes (including the Sierra Nevada in Spain and along with Monti di Trapani in Italy, Colli Euganei, Padova, Italy and the Viosa Valley in Albania).

The project quantitatively assessed the long-term historical uses of water and soils in the study areas, analysing agrosystems (e.g. crops and livestock) via the collection and examination of historical traces remaining fossilised in the landscape through archaeological fieldwork and ethnographic surveys.

²⁷ https://issuu.com/labparid/docs/wrl_celia_martinez (accessed 28/10/2020)



This was a comparative study of the four historic sample areas to reveal their commonalities and their differences, as well as analyse the productivity and resource use efficiency, through agronomic and hydrological resource-management models, within the context of the global climate crisis and the framework of European policies and strategies (European Landscape Convention, European water policy, Common Agricultural Policy, Joint Programming Initiative [JPI] on Cultural Heritage and Global Change).

The project thus introduced the historical perspective into landscape studies. The MEMOLA project aimed to design context-tailored strategies of preservation, diffusion and valorisation of tangible and intangible, and of the environment, in order to stimulate sustainable development. Strategies included examining the role played by agro-ecosystems in maintaining biodiversity, finding proposals for improving resources-use efficiency and the conservation of cultural landscapes and promoting the promotion of agro-pastoral mountain landscapes (within the framework of the European Landscape Convention) with the aim of proposing some areas to the UNESCO world heritage list. The project also aimed to foster traditional skills and reinforce the local identity of rural communities by involving local communities in the research as 'active members possessing the knowledge that must be preserved as a vehicle to ensure the survival of their own landscapes'.²⁸ MEMOLA also developed new methodologies for the study of cultural landscapes driven by an interdisciplinary research team, combining principles and methods of archaeology with modern hydraulic and soil analysis techniques, remote sensing and terrestrial imaging scanner analysis, archaeo-botanical studies and specific analysis of the isotopic composition of archaeological woods and seeds. The project used a multi-disciplinary approach that widened the range of specialists involved in CH studies to agronomists, hydrologists, botanists, hydro-geologists, geologists, architects, historians and archaeologists.



Figure 2: Annual cleaning of the Jerez del Marquesado historic irrigation channel, 2018

Photograph: Lara Delgado

²⁸ MEMOLA, n.p. (<https://memolaproject.eu/project/stimulate>) (accessed 5/10/2020)



The experience of the MEMOLA project and its community-based approach to rural and agrarian heritage, including the restoration of irrigation channels, demonstrated that there needs to be new and integrated holistic approaches both in terms of practices and from the people involved that considers relationships with nature, the culture of the landscape and environmental values. Heritage should be considered as a social tool that enables people to give something back, to recover the landscape, through a range of participatory approaches and tangible and sustainable results. Although this can take place at a local level, there is also a clear need for national and European level networks to develop a long-term strategy and make a tangible difference. In response to findings from MEMOLA, the REACH pilot on Rural heritage therefore considers rural areas and communities, cultural landscapes, agrarian activities, tangible and intangible heritage, territorial planning, agrarian and environmental policies, global change, climate change, cultural challenges and urbanisation. It involves local ecological knowledge and dialogue of knowledge, older populations and consideration of gender roles, agro-diversity, biodiversity, ecosystem services, governance, land stewardship, production, productivity, economic development and resilience. Projected results at the outset of the pilot included: water policies and water planning, environmental mediation, building and restoring community and identity, inter- and trans-disciplinary epistemology, role of humanities, participation and public/communal/private relationships.

Indeed, as briefly outlined above in the Introduction (p.7), the methodological and theoretical approach developed in the MEMOLA project has been further tested and improved in the REACH project framework. UGR's strategy has focussed mainly on Traditional and Historical Irrigation Agroecosystems (THIAS) among others. THIAS are paradigmatic examples of sustainable, integrated water management. They have survived for centuries throughout Europe and the entire Mediterranean basin, providing multiple functions and services. In several contexts, THIAS are the basis of local economies, community cohesion and identity, and communal governance. They shape cultural landscapes and are the grounds for tangible and intangible heritage with an accredited beneficial effect for local resilience. The REACH project has considered THIAS as a vivid and resilient theme of European rural heritage that is worth preserving. Historical and traditional means of water management and irrigation strategies share long traditions and trajectories of water knowledge and of a careful utilisation of existing resources, particularly in the Southern Europe. Archaeologists, historians and anthropologists study THIAS as an important part of cultural landscape dating to antiquity and Medieval periods, connecting past lifestyles and irrigation techniques with current ones.

This pilot has contributed to develop tools for community building, local empowerment and the awareness of THIAS values, particularly cultural ones, both tangible and intangible. It has also promoted efficient water use, agricultural production and improved water governance, as well as the sociocultural, scientific and economic promotion of these traditional systems and the corresponding local communities.²⁹

²⁹ The MEMOLA project produced two illustrative videos (both accessed 5/10/2020):
What are traditional irrigation systems? <https://youtu.be/YGekmwjodxk>
Why are traditional irrigation system important? <https://youtu.be/-IfIDn8TUCI>



4. RURAL HERITAGE CASE STUDIES

The following chapter provides an outline and analysis of the three Spanish case studies, undertaken by UGR, as well as the Italian case studies, undertaken by the Italian Ministry of Economic Development (MISE), in collaboration with the Department of Architecture, Built Environment and Construction Engineering (DABC) of the Politecnico di Milano.

4.1 IRRIGATOR COMMUNITIES IN THE SIERRA NEVADA, SPAIN

Irrigator communities are groups of farmers that communally manage a specific area's irrigation and water system. The communities' work is not limited to the distribution of water among the members entitled to it, but is also responsible for the operation, cleaning and maintenance of the entire irrigation system and associated hydraulic infrastructure. Their importance lies in the accumulation and renewal of Traditional Ecological Knowledge in both water management and land cultivation. In most cases, the distribution of water has remained practically the same since medieval times. These irrigation communities are therefore the most direct interlocutors when organising participatory activities focused on the conservation and preservation of rural heritage.

The objectives of the participatory activities can be defined as follows:

- to disseminate and spread **the importance of a living rural heritage**
- to **collaborate** with the irrigation communities in **the recovery and protection of their heritage**
- to dignify agrarian work by **defending and increasing the acknowledgment of Traditional Ecological Knowledge.**

In this case study, the methodology used was that originally proposed in the MEMOLA project, but has been implemented and improved over the course of the REACH project. Initially, the activity was based on the community of irrigators, and on their interest and availability to collaborate in it. The choice of those activities detailed below arose as a result of previous contacts and meetings, as well as location; as a result, the communities of irrigators with whom the pilot has worked are based in areas of great patrimonial interest, both agricultural, ecological and environmental.

There are several steps in the execution of the activity:

- i. **election of the irrigation community:** in some cases, initial contact with the irrigators community arose from UGR's experience in previous projects or from areas of interest in its work, although in other cases, it was the community itself that looked to UGR for support in carrying out the activity.
- ii. **previous meetings:** There was no set number of meetings for the organisation of the activity, as the process is defined by several factors:
 - the number of participants
 - their representation
 - internal organisation issues (there can often be internal decision-making mechanisms and/or conflicts that can incur an impediment or slowing down of working deadlines)
 - additional conflicts (with local administration, for example, or with other communities).



Initial meetings were used to decide upon the type of activity to be carried out, the date of execution, the stakeholders and agents with whom it was necessary to make contact (for example, in the case of finding a ditch to be restored within a protected natural space, it is necessary to request permits from responsible entities), and the dissemination of the activity. For example, activities conducted to date have included cleaning and operation of abandoned irrigation channels (*acequia*). Historically, the cleaning and maintenance of ditches has fallen to members of the irrigation community. However, issues such as the aging rural population have caused many of these channels to be abandoned. The chosen criteria for the ditch to be recovered is based on the interests of the irrigation community, either because its operation is necessary for irrigators who work the plots that irrigate that ditch, or because that ditch has a specific functionality. In the case of Lugros, for example, the recovery of the *acequias de careo* has a clear function for recharging the underground aquifer. This is important as aquifer recharge allows the supply of water in the springs at lower levels, avoiding summer shortage.

- iii. **organisation of the activity.** During this stage of the activity, contact with the authorities in charge of the management of protected areas, as well as farmers, local and regional authorities, was essential. On many occasions, for example, UGR requested work tools from the Delegation of Agriculture of the Junta de Andalucía. Another essential aspect has been the **call-out for volunteers:** due to UGR's specific dissemination channels, it is possible to reach a large number of student volunteers from all fields and disciplines. Likewise, collaboration with local authorities (both the community of irrigators, associations and municipalities) has been important in the appeal for volunteers in the more local area. A very important point is the management of insurance for participants, in addition to accommodation (if the activity is due to last more than one day), transportation and maintenance; normally an agreement is reached with the community of irrigators for the management of these elements, taking care of meals for volunteers or their transportation.
- iv. **activity day:** on the agreed day, the cleaning / recovery of the chosen *acequia* is carried out. At first, before starting, instruction is given to explain the work to be done, in addition to distributing tools, gloves and water to the participants. This session is used to discuss the role of the ditch and present the members of the irrigation community. The manual work is undertaken in a chain, with the most knowledgeable participants (usually members of the irrigation community) leading the restoration, and leaving the irrigation canal in perfect condition. The rest of the group then moves forward with simpler and more superficial cleaning. Where there is much weeding to be done and brushcutting machinery is required, professionals are brought in to carry out this specific work. In some cases, it is also necessary to rebuild masonry walls or ground fasteners. Each volunteer is responsible for cleaning a few metres of the route and there is an efficient, rotation system in place to undertake the work. The working day includes breaks for breakfast and lunch, and often concludes with a meal for which the irrigation community takes charge. In all cases, a member of the project is responsible for supplying water and food to the volunteers, in addition to documenting all work and mapping of the channel. One of the most intense moments is when, at the end of the cleaning of the ditch, members of the irrigation community "open" the water (normally, channeling it from a spring, stream or river), letting it run through the freshly recovered canal.



During the REACH project numerous *acequia* cleaning activities related to several irrigator communities have been carried out. The various communities encountered and participatory activities undertaken are outlined at length below.

4.1.1. IRRIGATOR COMMUNITY OF CÁÑAR

Cáñar is a municipality in the Alpujarra of Granada that is part of the Protected Area of Sierra Nevada, and has the highest oak tree in Europe, hence its environmental importance. The community of irrigators of Cáñar is one of the most active in Sierra Nevada and has important archival and historical records. UGR's relationship with this irrigation community dates back to 2014, when the first recovery/restoration of the *acequia* of Barjas was made. From then on, an annual cleaning and water festival has been organised. Initially, the community's attitude to UGR's proposals was somewhat reluctant. However, over time, a fruitful cooperative relationship has been created. On each occasion that the cleaning of the *acequia* of Barjas has been organised, the response has been emotional and enthusiastic, and the community has contributed to the work force and provided maintenance for the volunteers. In return, this activity has enabled the community to be supported in mediation with the authorities of the Protected Space of Sierra Nevada. This has strengthened the community's empowerment capacity when facing other administrative procedures.

Between 2018 and 2019 there have been two further cleaning campaigns in Barjas:

- **17th February 2018 “Cleaning the historical irrigation channel of Barjas (Cáñar, Granada, Spain)”.**
Number of participants: 80 volunteers (64 volunteers and 16 irrigators) from different countries (Spain, France, Italy, Germany and Chile).



Fig. 3: Poster of the February 2018 event in Cáñar



This activity (that is intended to help local farmers to put in use 3km of irrigation channel) had the participation of members from the Cañar Irrigator Community, who manage and use this medieval irrigation channel. The project also involved irrigators from Lanjaron, and members from Environmental and Cultural Associations such as "Mustela", "Salvemos la Vega" and "Vega Educa", who also wished to support the conservation of these historical irrigation channels and the cultural landscape.

- **30th March 2019 “Barjas” Irrigation Channel in Cáñar:** activity with Cáñar Irrigator Community (20 members) and the participation of 50 volunteers. On the occasion of World Water Day, the 5th Annual Cleaning of the medieval irrigation Barjas-Water Party was carried out. In this area, the work of MEMOLAB also plans to support irrigators on their objectives, such as the promotion of agricultural activity, for the next four years.

It must be emphasised that the collaboration with the community of irrigators of Cáñar has gone beyond the annual cleaning of the channels. Due to its involvement and empowerment capacity, which UGR has been promoting as far as possible over the years, UGR has fostered its relationship with the **Association of Community Initiatives-ICCA Consortium** for inclusion as a “Area Conserved by Local Communities”, a milestone which was achieved in July 2019. The **ICCA of the Community of Irrigators of Cáñar-Barjas** is now in charge of the management and use for the irrigation of the water flow. Water management and distribution knowledge has been inherited from medieval times and today the irrigation communities are recognised institutions within Spanish water law and have their own legal personality. The Cáñar-Barjas community manages an irrigation area of 543 hectares. In addition, through the management of historical irrigation systems, it also maintains the landscape’s biodiversity and agrodiversity, performing such significant functions as the artificial recharge of aquifers in addition to preserving chestnut groves and the southernmost oak groves in Europe.

4.1.2 IRRIGATOR COMMUNITY OF POQUIERA

The collaboration with this community of irrigators arose as a result of the popularity of previous activities of restoration of irrigation channels in the region of the Alpujarra (Sierra Nevada). In this case, it was the community of irrigators that initially contacted UGR’s team to organise the activity. The Barranco de Poqueira is one of the most emblematic places in this region of the province of Granada, and has been declared a historic site, both for its historical and landscape and environmental interest. However, one of the main problems that affects this area the most is the influx of growing tourism, causing ‘rural gentrification’, leading to the local population abandoning their traditional living spaces, and agricultural work and being replaced by the tourist industry. Here tourism is a tertiary sector that is causing both the abandonment of the countryside by inhabitants and also traditional cultivation and subsistence techniques. Another phenomenon affecting this area, which could be seen as a consequence of the afore-mentioned challenge posed by tourism, is the arrival of a population of ‘neoruralists’, that is, a foreign population that decides to settle in the area, trying to lead a life closer to local traditions. Situated between these two phenomena are the irrigation systems, partly abandoned by an aging local population, but partly supported by the arrival of new farmers with an interest in recovering agricultural activity.



Within this context, UGR first supported the recovery of the 'New Acequia', carried out between 7-8th April 2018 and a collaboration with 16 members of the irrigators community and a further 50 volunteers (from Spain, France, Italy, UK, Turkey, Argentina, Chile and Australia). This participatory activity was organised in collaboration with the 'Plataforma por la recuperación del paisaje agroganadero del Barranco del Poquiera' [Platform for the Recovery of Agricultural Countryside of the Barranco del Poquiera] association. Furthermore, on 13-14th April 2019, along with the local irrigators community (18 members), the participation of 45 volunteers and the collaboration of the Natural and National Park of Sierra Nevada, Capileria Town Hall, Bubion Town Hall and Pampaneira Town Hall, UGR carried out work to support the irrigators themselves to establish a directive and to start to working as a community.

4.1.3 IRRIGATOR COMMUNITY OF JÉREZ DEL MARQUESADO

This municipality, which is located on the north face of Sierra Nevada, is an area much affected by depopulation and unemployment but whose motivation to undertake restoration and recovery activities of historical irrigation systems is very strong. In this case, the community of irrigators and the town council have worked together to carry out both the recovery itself and the resulting dissemination relating to their rural heritage. In fact, their deep interest has now led them to promote further recovery projects concerning other areas of bio-diverse heritage interest such as the historical chestnut. As concerns, water channel recovery activities, work with this community was carried out as follows:

- 19-20th May, 2018: Recovery and putting in use of the 'Cabañuela' High Mountain Irrigation Channel (1.7 km) in Jerez Del Marquesado with 10 members from the local irrigator community and with the collaboration of the Town Hall and the National and the Natural Park of Sierra Nevada. This irrigation channel was abandoned 15 years ago. 30 volunteers (from Spain, India, China, Colombia, Nicaragua, Brazil, Belgium) and five members from the 'Barranco Alcázar' trekking association participated in this activity.
- 4-5th May, 2019: Cleaning of the historical irrigation channel of Jerez del Marquesado involved 46 volunteers (from Spain, Argentina, Greece, Germany, Colombia) and 16 members from the Local Irrigator Community. Members of the Cañar Irrigator Community, people who manage and use this medieval irrigation channel, also participated, as did irrigators from Lanjaron. This was an **example of collaboration between different irrigators communities** that provided them with the opportunity to get to know each other, to share problems and to act together to find solutions.

4.1.4 IRRIGATOR COMMUNITY OF LUGROS

UGR's collaboration with this community of irrigators was unfortunately interrupted in 2019 by the destruction of its traditional irrigation system, due to a modernisation project. This is one of the great threats affecting historical and traditional irrigation systems: misunderstood modernisation financed by administrations as an effective solutions against water wastage. These large modernisation projects tend not to take into account the historical and heritage value of historical irrigation systems, nor do they value the ecosystem services of traditional irrigation channels. The community in Lugros had been maintaining one of the most important and best preserved water infiltration channel systems (*cereo*) on the north face of Sierra Nevada. However, problems such as the aging population, the difficulties of maintaining the ditch network, finally led the irrigation community to opt for modernisation. UGR's final collaboration with them occurred on May 5th 2018: in cooperation with the municipality of Lugros

(Granada) and the National and Natural Park of Sierra Nevada, UGR organised a day of activity to clean the high mountain historical irrigation channels. The initiative took place in the small municipality of Lugros and in the neighbouring irrigation communities of Guadix and Graena. The event was also attended by 30 volunteers from Spain, France, Slovenia, Chile and Turkey.³⁰

4.1.5. IRRIGATOR COMMUNITY OF ROMAYLA

After the declaration of the ‘Darro River Valley’ as a BIC Patrimonial Zone in March 2017, UGR was keen to work with this community with the intention of further disseminating this landscape and its heritage as one of the clearest ‘identity’ signs of the city of Granada, a cultural and natural landscape configuring urban, historical Granada, and of which this river and its valley are the main features. The activity undertaken through the REACH pilot arose as a result of wanting to promote and disseminate knowledge of, and care for, this valley and its river. The activity also favoured a **citizen-centred approach** to this heritage area with activities, conferences and routes that would connect the city with its valley.



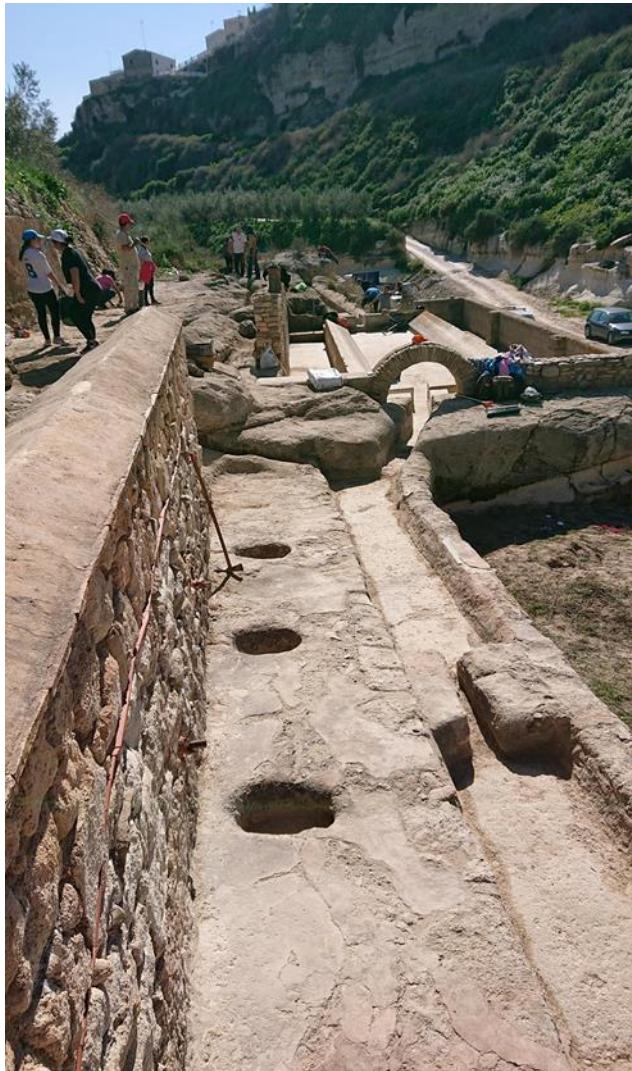
Fig. 4: Fieldwork in the Romayla channel

UGR’s MEMOLab organised the cleaning of the *acequia de Romayla* (Romayla’s historical irrigation channel) on 27th May 2018. This initiative was organised in collaboration with the Museum of Cuevas Del Sacromonte, the Municipality of **Granada**, the Council of the Alhambra and Generalife, and was also part of the rich programme of roundtables and events that was held in the region between 17th - 27th May 2018 and which served to focus on further promotion of, and understanding of the significant rural heritage of the Darro valley.

³⁰ The MEMOLA project created a video detailing the 2017 collaboration in Lugros: https://youtu.be/_tjxs5p_oYE (accessed 5/10/2020)

The following year, on 17th March 2019, further activity took place with the community of local irrigators and the collaboration of the Council of The Alhambra and Generalife, in which 25 volunteers also participated. This activity, which was also carried out by MEMOLab, was also aimed at **engaging the local community** and putting their irrigator communities into contact.

4.1.6 SORBAS (ALMERÍA)



MEMOLab, the REACH project and local associations collaborated in **cleaning the Fuente de los Caños on 15th February 2020**. This monumental fountain, abandoned decades ago, provided water to the town and was used as a laundry. Much of the social life of the community had developed around the fountain. The importance of this water source is that it is supplied by a water mine, the location of which is now unknown. UGR conducted this participatory event in which more than 100 volunteers took part. In addition to further knowledge of rural heritage knowledge dissemination and teamwork, this activity has led to the empowerment of several groups that are trying to locate the mine and put it back into operation.

Fig. 6: Cleaning the Fuente de los Caños, Sorbas, Almería (ES), 2020.

Photograph: E. Aramburu and R. Corselli.



Fig. 5: Cleaning the Fuente de los Caños, Sorbas, Almería (ES), 2020.

Photograph: E. Aramburu and R. Corselli.

4.2 COMMUNITY ARCHAEOLOGY, MOJÁCAR LA VIEJA, SPAIN

The archaeological excavation at the site of Mojácar la Vieja in Mojácar, Almería (ES) began in 2018, initiated by the Town Hall of Almeria. As befitting UGR's other work as a laboratory of Biocultural Archaeology, within this type of intervention, UGR wished to **further promote approaches towards heritage designed for the general public**. Through the means of UGR's archaeological work, the pilot aimed to encourage **citizen participation** in various education and outreach activities that were **aimed towards all types of audiences**. The different activities carried out in Mojácar la Vieja in 2018-2019 were as follows:

- **8th, 22th and 29th July 2018: Guided visits to Mojácar la Vieja** archaeological site were organised at weekends to enable a large number of visitors. Tours were in both English and Spanish, with the collaboration of local associations. In total, 470 people attended. The purpose of the tours was to 'showcase' the work that the archaeological team was undertaking on site, as well as the findings that are obtained day to day. This enabled UGR to disseminate its archaeological work, as well as knowledge about the site itself, thus placing a greater value on the local rural heritage of Mojácar.



- **7-9th July 2018: Archaeologist for a day:** Through this programme, the excavation was open to anyone interested in working for a day with the team of archaeologists, performing the same excavation tasks as the rest of the staff. In total 26 people participated in this programme.



MOJÁCAR LA VIEJA

Julio / July 2018

Programa de actividades Programme of Activities

2	Lunes Monday
8	
22	Domingo Sunday
29	
del 2 al 11	from 2 to 11
del 9 al 27	from 9 to 27
9	Lunes Monday
18 y 25	Miércoles
hasta 24	until Tuesday

Presentación oficial del proyecto "Investigación, conservación y puesta en valor de Mojácar la Vieja".
Official presentation on "The research, conservation and valorisation of Mojácar la vieja project".

Visitas guiadas en Español a las 18:30
Guided tour in English at 19:30

Construyendo caminos más accesibles horario de mañana
Making paths more accessible morning sessions

Arqueólogo por un día horario de mañana
Be an Archaeologist for the day morning sessions

Mapa participativo "El patrimonio de Mojácar"
Participatory mapping "Mojácar Cultural Heritage"

Taller de cerámica arqueológica a las 18:30

Concurso de fotografía por Instagram "Mojácar la vieja"
Instagram Photo Contest "Mojácar la vieja"

- Follow @MEMOLabUGR
- Sube la foto / Upload the photo
- Tag #PatrimonioMojácar
- La foto con más likes ganará una caja sorpresa.
The photo with the most likes wins a surprise gift box



Para más información e inscripción en las actividades:
For more information and to register for the activities:
info@mojacar.es
950615025



- **9th July 2018: Participatory map-making:** this activity aimed to gather the area's older population to identify, on a map, assets that have been lost in recent years and to record them before this collective memory is lost definitely. 10 people participated in this activity.

- **18th and 25th July 2018. Archaeological pottery workshop:** with the support of archaeologist technicians specialising in ceramics, several training sessions were held for a non-expert public, working directly with ceramics recovered in the excavation. The work consisted mainly of washing of ceramics to discover more about their different types and forms. These workshops were attended by approx. 58 people.

Fig 7: Programme of participatory activities in Mojácar La Vieja, 2018

- **24th July 2018. Instagram photography contest:** this activity consisted of a photography contest related to Mojácar's heritage using digital social media platform, Instagram. 166 photographs were presented from 16 participants.
- **18th October 2018. Presentation of the archaeological excavation results** and the work with local communities on the area's rural heritage.



• **3rd July 2019. Geometric drawing workshop.**

Geometric design is present in the local archaeological heritage; 30 school-aged boys and girls participated in a geometric drawing workshop to explore this design. This activity was organised in collaboration with the municipality of Mojácar.

• **4th July 2019. *Esparto* Workshop.** For the first time,

seven *Esparto* craftsmen from Mojácar gathered in the village to teach workshop attendees this traditional craft. More than 90 people attended the workshops. The *esparto* is an element with which utensils of habitual use were woven for both agricultural and domestic tasks. Unfortunately, both the utensils themselves and the art of weaving *esparto* are being lost. Hence the importance of recovering this tradition with workshops like the ones carried out for the pilot.³¹

Fig. 8: Educational activity in Mojácar



Fig. 9: Participants weaving at the *esparto* workshop, Mojácar, July 2019

³¹ Further images from the *esparto* workshop are available: <https://www.reach-culture.eu/pilots-and-best-practices/rural-heritage/ugr-04-july-2019-majocar> (accessed 5/10/2020)



Fig. 10: Participants at the *esparto* workshop, Mojácar, July 2019

- **2019. Do you want to be an archaeologist for a day?** Similar to the activity carried out in 2018, this event once again opened up the archaeological excavation to everyone who wished to participate, with no age limit or previous knowledge or experience required. The aim was again to make the archaeological work known to a wider general public, teaching about how to protect rural and archaeological heritage. In total more than 90 people participated in this particular activity.
- **9th July 2019. Mojaquera Workshop.** Not that many years ago, when there was no running water in homes, the town fountain was essential. Women were usually in charge of collecting water for household chores (cooking, catering, and cleaning). In this participatory workshop, women in traditional local dress explained how life revolved around the fountain and what the fountain was like before its restoration. The local community has demanded the recovery of the fountain as a fundamental heritage asset for its people.³²



Fig.11: Women at the Mojaquera Workshop, Mojácar

³² Further images from the Mojaquera workshop are available: <https://www.reach-culture.eu/pilots-and-best-practices/rural-heritage/ugr-09-july-2019-majocar> (accessed 5/10/2020)



- **11th July 2019. Art session in Mojácar's archaeological excavation site:** This was an artistic event in which local photographers, painters and sculptors visited the archaeological excavation to take photographs and notes. Students from the municipality's School of Art, Mojácar's photography club, artists from the Valparaíso Foundation and sculptor Roberto Manzano attended. An exhibition resulting from this event took place in the town itself and at UGR.
- **Guided visits to the archaeological excavation site in Mojácar la Vieja.** After the success of this activity in 2018, further guided visits/tours to the archaeological site took place and on this occasion, 400 people attended. This demonstrated how interest in the archaeological excavation site has grown, both in the town of Mojácar and also in the surrounding area.
- **16th and 23rd July 2019. Archaeological pottery workshops.** As in 2018, this repeat activity proved a great success. This time, under the supervision of UGR's ceramologist, students who had themselves previously participated in the excavation as volunteers were able to take a role in sharing their knowledge with workshop participants; many of these students were Archaeology graduates, so this was a **key example of knowledge exchange** between the University and the local community.
- **18th July 2019. Participatory map-making of historic irrigation systems.** UGR organised a participatory map-making activity with the local irrigators to map and trace historical irrigation systems in Mojácar. The objective of this participatory activity was to collect information related to the historical irrigation systems of Mojácar. Over time, many traditional elements and infrastructures linked to these systems have been lost due to them being abandoned. The testimonies of the older population are essential to collect this information.³³

The above outline of the diverse activities undertaken in Mojácar highlights the range of participation in local rural heritage approaches. In particular, the success of many of the activities is due to the ongoing and ever-strengthening relationships between archaeologists, local communities and volunteers, whether they be students from the University or further afield. As such, the activities become key examples of **mutual knowledge exchange** – not only from the University to the local community, but from the community back to the University. It is also important to highlight the strong media impact, both in written and audiovisual media³⁴, that this excavation has had as an example of best participatory practice.

³³ Further images from the map making workshop are available: <https://www.reach-culture.eu/ugr-18-july-2019-majocar> (accessed 5/10/2020)

³⁴ See further dedicated blogposts at <https://www.digitalmeetsculture.net/article/participatory-activity-of-rural-heritage-pilot/> (accessed 5/10/2020)



**Excavación arqueológica / Archaeological excavation
Mojácar la Vieja**

2019 Julio / July

2	Presentación oficial "II Excavación arqueológica" 20:00 Centro de Usos Múltiples Official presentation "2 nd Archaeological excavation" 20:00 Centro de Usos Múltiples	
3	Taller infantil "Los dibujos geométricos de Mojácar" 18:30 Centro de Usos Múltiples	
4	Taller ¿Cómo se trabaja el esparto? 19:00 Centro de Usos Múltiples	
8-24	"¿Quieres ser arqueólogo por un día?" horario de mañana "Do you want to be an Archaeologist for a day?" morning sessions	
9	Taller "La mojaquera" 19:00 la fuente Workshop "La mojaquera" 19:00 the font	
11	Jornada de Arte "La excavación arqueológica de Mojácar la Vieja" horario de mañana Art session "Mojácar la Vieja archaeological excavation" morning sessions	
14,21&26	Visitas guiadas en Español a las 20:00 Guided tour in English at 19:00	
16&23	Taller "cerámica arqueológica" 18:30 Centro de Usos Múltiples "Archaeological Pottery" Workshop 18:30 Centro de Usos Múltiples	
18	Mapa participativo "El sistema histórico de regadio" 18:30 Bar Tercera Edad	

i Para más información e inscripción en las actividades: info@mojacar.es / 950615025
For more information and to register for the activities: info@mojacar.es / 950615025

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Fig 12: Programme of participation activities in Mojácar, 2019

4.3 TRANSVERSAL PARTICIPATORY ACTIVITIES (MEMOLAB, SPAIN)

This third Spanish case study section summarises some of the pilot's main activities that can be considered 'transversal', that is, multidisciplinary and focused on promoting the acknowledgment of rural heritage (both tangible and intangible). These transversal activities, run by UGR's MEMOLab, include conferences, scientific meetings and thematic workshops supporting rural communities, providing advice and promoting mediation, etc.

From 27-29th April 2018, UGR's MEMOLab collaborated in the organisation of the General Assembly of Communal Initiatives. Communal Initiatives is an association including territories and areas conserved by local communities whereby 'commons' are waters, lands, rights and uses collectively governed by a community. The objective of communal management is to promote the good coexistence of the neighbours and an equitable use of resources, as well as to ensure their status for future generations. During the Assembly, different stakeholders came together to share their own experiences about **communal management** of rural areas in Spain. In addition, on the first day of the Assembly stakeholders learned about central Granada's ancient water supply system, irrigation ditches and water sources through a tour led by Prof. José María Martín Civantos. Stakeholders also discussed **themes of environmental conflict management, exemplifying experiences of good practice and tools for conflict prevention and mediation**.



The last day of workshop included a visit to the small village of Alpujarra, in Sierra Nevada, in order to learn about its ancient system of water management³⁵. Throughout the Assembly, members analysed the current conditions of collectives managing territory and natural resources. They set out a plan of communication to better visualise agrarian heritage and communal management and also recorded details of collectives management of natural resources. The collaboration between UGR/MEMOLab and the General Assembly of Communal Initiatives is strong and encompasses various fields, both supporting local communities in the province of Granada, as well as at an academic and research level. One of the crucial points of this collaboration was the inclusion of the community of irrigators of Cáñar as ICCA (see above, p. 25).

Further transversal activities organised by UGR over the course of the pilot include the following:

- **7th June 2018: Forum with congressman Juanxto López de Uralde (Unidas Podemos).** At this Forum, UGR presented the problems caused by the modernisation of historical and traditional irrigation systems. 19 different platforms and associations participated in the Forum, presenting the diverse social, cultural and environmental problems occurring as regards Granada's rural heritage.
- **3rd-6th October, 2018:** Rural Heritage Workshop focussing on local communities, proposals and strategies. This brought together Prof. José María Martín Civantos and Dr. Lara Delgado Anés from UGR with National Park members and local community stakeholders and farmers.
- **18th October 2018, Madrid (Spain). ‘Cultural Heritage in the 21st Century: Management and Research from Complutum University in Madrid’:** At this event, Prof. José María Martín Civantos discussed innovation and research in Cultural Heritage. Dr. Lara Delgado Anés also discussed applied approaches to cultural landscapes in terms of community archaeology and participatory archaeology methodologies.
- **18th April 2019, Granada, Spain. ‘Granada La Bella’ award from Oppidum Eleberis Granada.** MEMOLab received the ‘Granada La Bella’ award from Oppidum Eleberis, Granada, for having contributed to the conservation of the Darro Valley and its historical heritage and values, and also involving volunteers in the recovery of ‘Romayla’ and ‘Real de la Alhambra’ medieval irrigation channels in 2017-2018 (all activities carried out in the framework of REACH project outlined above on p.28ff.)³⁶
- **18th October 2019. Granada, Spain:** Prof. José María Martín Civantos participated in a briefing of the H2020 research programme entitled “**Inclusive, Innovative and Reflective Societies” organised by the Office of International Projects of the UGR and the Andalusian Knowledge Agency.** The session consisted of a presentation of the different H2020 calls for *Social Challenge 6: Europe in a changing world, inclusive, innovative and thoughtful societies*. In this content, it was agreed that the REACH project would be set out as an **example of participation** in such calls.

³⁵ This small community has been cooperating with the MEMOLA project and UGR since 2014.

³⁶ Details of the Granada La Bella award: http://www.elindependientedegranada.es/cultura/oppidum-eleberis-concede-piqueta-granada-edil-urbanismo-demoliciones-obras-que-ponen-peligro?fbclid=IwAR1Tv1KAs-Pq9JQecVo0pT5-BCTt764N_QGBDLIt--uiwG0rpTWxgvmI8FY (accessed 5/10/2020)



4.4 TICINO PARK AND NORCIA

The following section describes the Italian rural heritage case studies, those of the Ticino Park and Norcia. These case studies took place with the support of the Italian Ministry of Economic Development (MISE), in collaboration with the Department of Architecture, Built Environment and Construction Engineering (DABC) of the Politecnico di Milano, whose focus was on helping those Italian communities whose cultural identity has either been put in danger by disruptive events (either natural events such as an earthquake, or infrastructure events such as the construction of a new highway) or who have experienced a gradual period of downturn due to changes in the social and economic fabric. The cases explored had the objective **to enhance social cohesion and generate opportunities of renaissance through participatory approaches.**

The community addressed in the first case study is Ticino Park, in northern Italy. In this area, a traditional agricultural productive technique, the *marcita* meadows, is at risk of disappearing due to over-industrialisation and to the construction of new infrastructure, such as the expansion of the highway. The second case study focuses on a network of small towns in Central Italy in the area of Norcia and the surrounding Apennines that were hit by earthquakes in 2016-2017.

The goal of these case studies is to consider how the tangible and intangible CH of these areas of Italy might be preserved, as it is part of the identity of the local communities. It also constitutes a tradition to be handed down from one generation to the next, in terms of the transmission of working skills. The preservation of these cultural identities has positive implications in different settings such as sustainable development, protection of biodiversity and environment, health, quality of life and welfare.

4.4.1 GENERAL METHODOLOGY

Through the case studies, the following research questions were identified and explored:

- what is the inhabitant's perception of their rural landscape heritage before and after a landscape change?
- how far does the legacy of local identity help people recover from a landscape change? How does local people's participation in cultural heritage preservation help the community to consolidate and create new or innovate jobs?
- what understandings do people have of cultural heritage? Is it only tangible or also intangible heritage? Does the heritage perception include both heritage inside and outside of the village? Is the agricultural heritage considered and how?
- do the ideas of preservation held by institutions (e.g. Municipality, Ministry of Culture, and Ministry of Economy) correspond to those of the community? Do they attribute the same values to cultural heritage?
- what is the community's perception about tourism as a leverage for the landscape change?
- Research methods included:
- data collection (a census of initiatives in order to save and promote cultural heritage related to agriculture, typical local food, traditional events, etc. prepared by both local institutions and private stakeholders and involving the population from 2000-2018);



- an analysis of community perception (inhabitants' perception of their urban and rural landscape through interviews with local institutions, private stakeholders and a sample of farmers, inhabitants, etc.)
- a critical analysis of collected data, and following defined indicators: institutional involvement; single or network initiatives; communication tools.

A qualitative analysis of the case studies took place, analysing the relationships with the concept of resilience, a core concept for the case study and for the REACH project overall. In addition, a SWOT analysis was also carried out for both case studies.

4.4.2 TICINO PARK

For the purposes of the Ticino³⁷ case study, a qualitative research method was followed: firstly, the team collected initiatives promoted by institutions, stakeholders and the public mainly through a document analysis (using policy documents, reports, local newspapers, websites and social media); secondly, they carried out 14 semi-structured classic and walking interviews with the main stakeholders.³⁸ The team chose to undertake their field research mainly in Abbiategrasso and Albairate, which are both in the Metropolitan Area of Milan: the former is the biggest small town in the Milanese Ticino Park area (around 32,000 inhabitants), the latter is one of the other affected small towns, that have between 1,500 up to 6,000 inhabitants respectively and are located in the rural area inside or just next to the Regional Park. Interview questions were based on REACH project themes and adapted to the case study:

- what is heritage and what do you consider to be a heritage worth protection?
- which (and what kind of) initiatives are organised for heritage promotion/conservation?
- how is the rural landscape and *marcita* meadows considered in heritage-making processes? What kind of participation is involved?
- what do you think about the highway project, and what kind of impact will it have on heritage and the rural landscape?
- how are heritage and participation in heritage making used to adapt/resist to the disturbances brought with the highway project?

All interviews were transcribed and the collected data manually analysed by theme. The results are organised in three parts:

- what the different stakeholders consider as heritage
- how they perceive their landscape
- how they consider the highway project.

4.4.2.1. Ticino's Rural Heritage

Ticino Park's rural landscape is mainly characterised by *marcita* meadows, an ancient practice based on a thin layer of underground and surface water flowing over the meadows; this flow avoids the grass freezing in wintertime and assures up to seven cuts per year, instead of the usual four or five. It is based on the availability of water in the Po plain and especially in the Ticino Valley.

³⁷ Ticino Park <http://www.parcoticino.it/> (Accessed 28/9/2020/)

³⁸ Geographers and sociologists (Kusenbach 2003; Evans and Jones 2011) have shown the power of walking interviews in highlighting how the relationships between human stakeholders and the surrounding environment can strongly emerge.

The availability of water allows for the creation of a fertile and varied landscape, with a mix of cereal fields and meadows. The water control is allowed by drowner work that constantly checks the water layer and the canal banks. It can be considered a landscape system than interlaces tangible and intangible heritage. Nowadays, it is in danger due to the change in feeding animals, the loss of ability to manage it, the availability of winter water. Since the creation of the Ticino Park, it has been under protection according to the Code of Cultural Heritage and Landscape (490/99)³⁹. The territorial plan (PTC) of the Ticino Park (approved by DGR 5983/2001) protects agriculture for its multifunctional role and for the entrepreneurial activity, which plays an irreplaceable role for the preservation, management and conservation of the territory⁴⁰. Within the territory of the park, there are Natura 2000 sites⁴¹ as well as ecological corridors and priority areas for biodiversity within the Regional Ecological Network. The territory of the Ticino Park has also been recognised since 2002 as a Biosphere Reserve as part of the UNESCO Man and Biosphere (MAB) Programme.⁴² Ticino Park promotes many initiatives in order to spread the knowledge and the value of the *marcita* landscape, as travelling exhibitions, itinerary bicycle path, conferences and a course covering the drowner technique: for that remarkable action, it was awarded in 2018 by the Ministry of Cultural Heritage in the framework of the Landscape Prize established by the Council of Europe. Therefore, this area is essentially characterised by a rural landscape with a high cultural and historical significance, which is endangered by the construction of the highway.

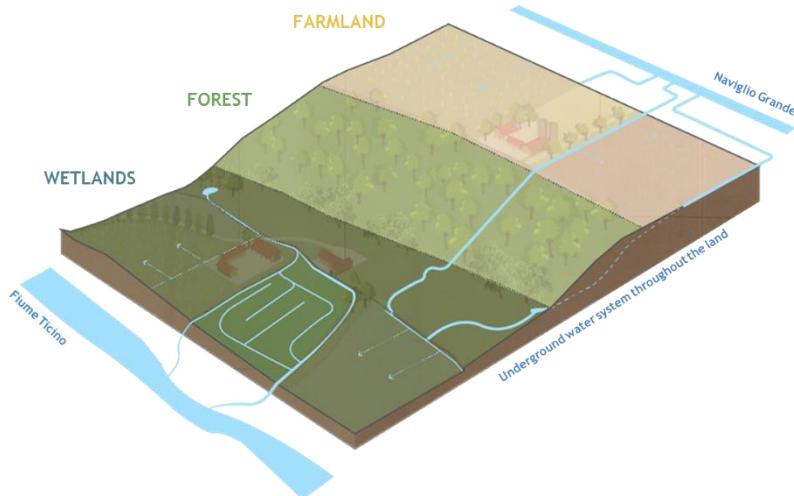


Fig. 13: How a *marcita* meadow functions

³⁹ Code of the Cultural and Landscape Heritage: <https://www.loc.gov/law/foreign-news/article/italy-new-code-of-cultural-heritage-and-landscape/> (Accessed 28/9/2020.)

⁴⁰ Ticino Park territorial plan: <https://ente.parcoticino.it/il-parco/la-tutela-del-paesaggio/abaco-del-territorio-del-parco/> (Accessed 28/9/2020.)

⁴¹ Stretching over 18% of the EU's land area and more than 8% of its marine territory, Natura 2000 is the largest coordinated network of protected areas in the world. It offers a haven to Europe's most valuable and threatened species and habitats. https://ec.europa.eu/environment/nature/natura2000/index_en.htm (Accessed 28/9/2020)

⁴² The UNESCO Man and Biosphere (MAB) an intergovernmental scientific programme that aims to establish a scientific basis for enhancing the relationship between people and their environments. It combines the natural and social sciences with a view to improving human livelihoods and safeguarding natural and managed ecosystems, thus promoting innovative approaches to economic development that are socially and culturally appropriate and environmentally sustainable: <https://en.unesco.org/mab> (Accessed 28/9/2020)



Fig. 14: The landscape of the *marcita* meadows: heritage at risk (photo by Fabio Casale)

4.4.2.2. The Highway Project

The highway project is known as the *Tangenziale Vigevano-Malpensa* project and stems from an idea of development related to the potential growth of Malpensa Airport, designed in the 1990s. This neoliberal idea of development, mainly linked to heavy urbanisation and industrialisation devoted to high movement of people and goods and delocalisation, and with very low consideration of any local environmental and social impacts, is one of the main criticisms put forward by local stakeholders, NGOs and some institutions. The initial project was conceived in the 1990s, foreseen in the 1999 *Piano Territoriale d'Area Malpensa* and finally approved in 2008 within local law *Legge Obiettivo 443/2001*. In parallel, the project has been contested through an appeal at the Regional Administrative Court (TAR) and a petition to the European Parliament, also due to the threats to the UNESCO status of part of this area. Following a lack of funding by the State, the project has been revised and consistently reduced: the route connecting Vigevano and Abbiategrasso (which are regularly used for commuting to Milan) was eliminated, resulting in a different plan, which should connect the International Airport of Malpensa to a rural area of extreme landscape and agricultural value in Ticino Park. In 2015, an alternative proposal to reduce the environmental impact of the project (e.g. by reducing the size of the roadway and renovating existing roads or changing the route) was rejected by the Regional Administration, though substantially supported by local NGOs and institutions, stakeholders, and the Metropolitan Area of Milan together with the Ticino Park. Indeed, several criticisms concerning environmental, landscape, social and also economic aspects have been put forward by a series of different stakeholders at different governance level, (which we be considered as part of the analysis of results.) Although only some municipalities are supporting the project, over the past 30 years the Lombardy Region has been supporting this project, so that the work should finally start in the next months. This will also allow appeals to be effectively discussed by the Regional Court, resulting in a complex interplay, at different political and juridical levels.



Fig. 15: Part of the route close to the case study field research area

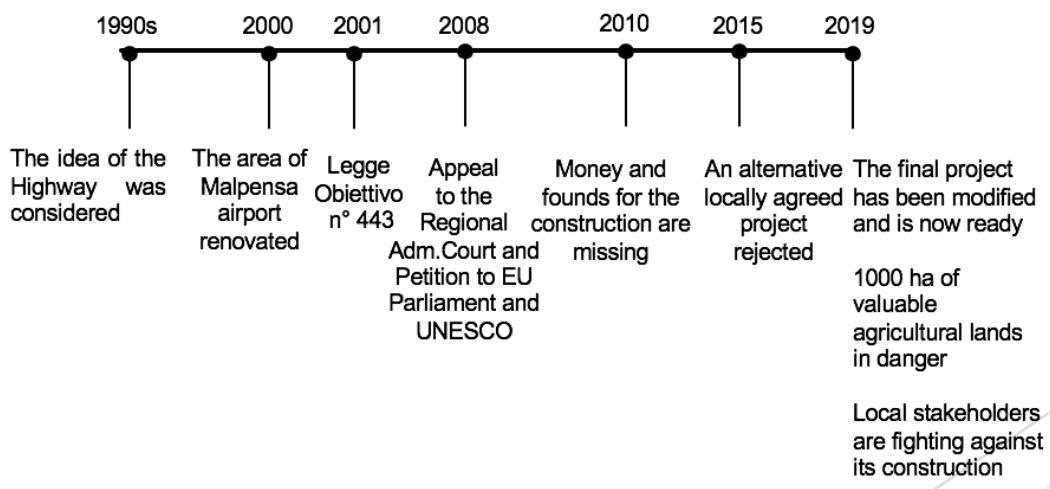


Fig. 16: Timeline of the highway project

Following themes that were manually coded from the interviews and data collection, the research team identified four main foci that will be discussed here:

- the construction of the concept of heritage
- the representation/consideration of rural landscape and *marcita* meadows
- the impact of the highway project on these aspects
- the relationships between these factors in terms of resilience.



The interviewees were also grouped into three political/engagement levels:

- institutions (at local and regional level)
- stakeholders (at local, regional and national level)
- the public (at local level).

Among local institutional stakeholders, those interviewed were; the mayors of Abbiategrasso (from June 2017 and Municipal councillor from 2007 to 2012) and Albairate (May 2014-May 2019), the Deputy-Chair of the Abbiategrasso Proloco, which has been the official agency for cultural heritage and tourism promotion in Abbiategrasso since 1999, and a member of the Abbiategrasso Youth Council, an association of young people (18-30 years old) nominated by the Municipal Council to manage cultural activities in the town since 2014.

At a regional level, a member of the Ticino Park management board was interviewed, as well as the deputy-chair for the Landscape Commission of the Metropolitan City of Milan (2006-2011 and 2014-2015) and current Chair of the Italian Society for Landscape Ecology; and the Deputy-Chair (deputy head of mobility, infrastructures and security) of the Metropolitan City of Milan. Among the stakeholders included, the team interviewed a local officer of Legambiente, the major environmentalist association in Italy, a member of the No-Highway Movement, a local movement, which began 12 years ago. They also collected 15,000 signatures objecting to this project, promoted different petitions and Court appeals, and built up a national network on a number of issues.

Interviews at a local level were conducted with the members of the association running the Agricultural Museum of Albairate and a farmer, whose farm in Albairate would be crossed by the highway and who is also the local representative of a women's association of farmers. Among the public, interviews were conducted with a farmer in Abbiategrasso who is very engaged in the promotion of *marcita* meadows, a local expert and consultant, who has been commissioned by the No-Highway Movement to undertake an agronomic evaluation of the project. Finally, the team also interviewed one of the lawyers who is supporting the appeal to the Regional Administrative Court.

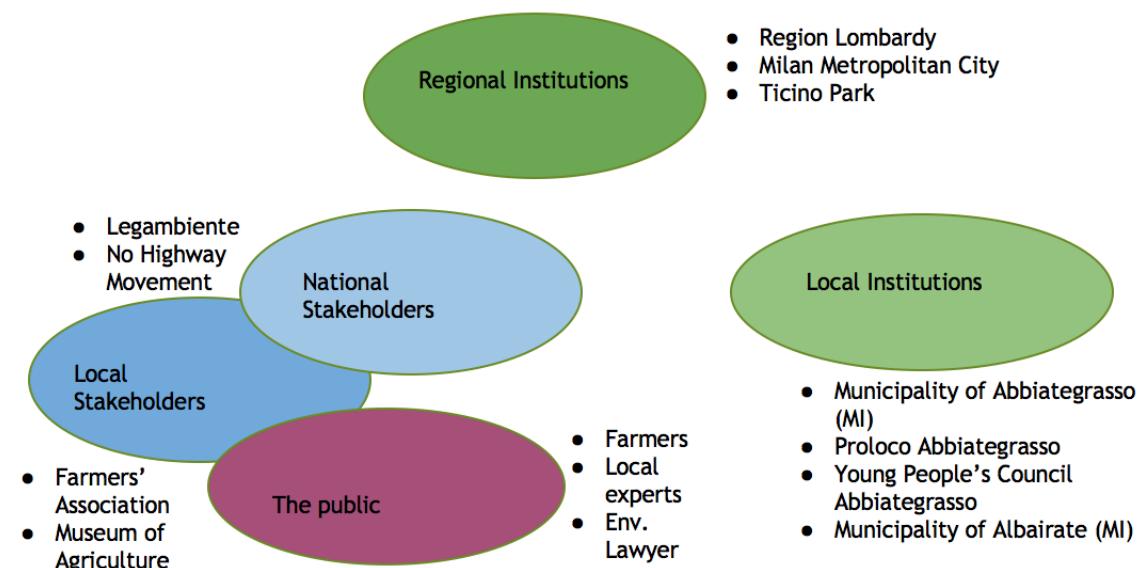


Fig. 17: Stakeholder map



The following section is a report of some excerpts of the interviews, which were undertaken in Italian and then translated into English.

4.4.2.3. Community Perception – How Heritage Is Constructed

A key initial finding from the data collected and analysed is that heritage is constructed in different ways by different stakeholders. It is acknowledged that there is a link between the rural landscape, as heritage, and the local towns, to the extent to which local products, local food initiatives and farmers' markets are considered in heritage preservation local initiatives. Though mainly linked to the urban historic centre, the Abbiategrasso Proloco refers a very interesting idea of heritage, which anticipates what the local stakeholders put forward:

Heritage is the integration between the environment and the people who live there, so it includes almost everything, because nowadays also intangible culture is considered 'heritage' (I'm thinking of UNESCO, for example, which is definitely going in this direction) and I understand it perfectly because of the lifestyles around here, it is clear that it's very difficult to replicate them in other area. Therefore, from this point of view, 'heritage' was born right as a product of human relationships with the space that surrounds them (Abbiategrasso Proloco, 6th May 2019).

Locally built relationships between inhabitants and their surrounding environments turn out to be fundamental in framing the concept of heritage for who has an active relationship with it. Indeed, the Ticino Park considers 'almost everything connected to the landscape as heritage' (Ticino Park, 6th May 2019): the rural landscape with *marcita* meadows (as UNESCO heritage), but also the rural landscape as a whole, including degraded landscape and ruined rural buildings like *cascinas*, the old farmhouses.

All stakeholders interviewed mainly identify heritage as everything connected to the rural landscape, mainly derived from a direct (local) knowledge of it: from a general 'rural culture' (Albairate farmer, 6th May 2019), to 'daily life of farmers as rural heritage' (Agricultural Museum of Albairate, 6th May 2019) to a 'historical rural vocation of the area as a fundamental element of making people aware of their territory" (No Highway Movement, 6th May 2019).

A deep local knowledge of the area and local practices turns out to be to a central factor in creating a **connection between heritage and rural landscape**. Indeed, among the public, an original interpretation of the concept of heritage was found. Similar to the Spanish irrigator community, a farmer from Abbiategrasso considered 'water' (with its huge water network and different uses) to be the heritage of this area, to the extent to which water is the wealth and the historical architect of this landscape and cultural identity: 'Water is a fundamental asset, if there was no more water how would we do?' (Abbiategrasso farmer, 6th May 2019). In this regard, the local agronomist, who carried out the agronomic evaluation, defined heritage as:

a combination of factors that act in an ecosystemic way for the metropolitan area and the local area itself: quality, production, work opportunities and quality (out of 30 hectares, 5-10 people work, while in a single-crop company e.g. in Lomellina [a close rural area, NoAs] an area of 200 hectares has barely 1 person working there, having a ratio 1/100 of employment intensity and employment of a certain quality (Local agronomist, 26th July 2019).



Heritage is here acknowledged as a mix of ecosystem services (Braat and De Groot 2012), which can also have positive benefits on local economy and urban areas.

An exception among local institutions is the opinion of the ex-Mayor of Albairate, who considers soil and water to be the heritage of an area historically founded on agriculture. Unlike in Abbiategrasso, the rural landscape is considered a vivid present value to be preserved, and he also mentioned that, since the 1980s, there had been strong efforts made to stop land consumption and limit the built urbanised area up to the 17% of the administrative area of the town.

The different stakeholders interviewed proposed the following as the main initiatives to be acknowledged as relevant for heritage preservation and promotion:

- Recreational activities (urban and rural) and sharing of knowledge, fairs/markets – Proloco, Abbiategrasso
- A food festival (*Abbiategusto*) and a big agricultural fair in the town (the market), the navigation of Naviglio and bike lanes in the countryside; there's a need for a "re-appropriation" of the Historical Centre – Mayor, Abbiategrasso
- Initiatives promoted by the Ticino Park to promote environmental education and awareness for students and adults – Ticino Park
- Institutional initiatives (food, leisure) and an ecological day - Young People's Council, Abbiategrasso
- His own initiative to restore and maintain *marcita* meadows – Farmer, Abbiategrasso
- A conversion to organic and integrated farming and the use of animals – Farmers' Association, Albairate
- Folk festivals and revivals (e.g. St George's Festival – rural rituals), the navigation of Naviglio in the recent past – Museum of Albairate
- Agricultural market fairs, food events (*Abbiategusto*), leisure activities – Legambiente
- Protest marches/parades, Local food networks, exhibitions and events, lobbying with local and national institutions, raising public awareness - No Highway Movement.

4.4.2.4. The Marcita Meadows

Focusing on the *marcita* meadows, with the exception of Ticino Park itself, institutional stakeholders mainly see these meadows as something dead, 'a relic of the past' (Abbategrasso Proloco, 6th May 2019), linked to its supposed medieval identity, part of a past identity; it is an 'old tradition', with historical and cultural value that is somehow lost and not linked to a present (potentially) productive value. This highlights a lack of local knowledge both of tangible and intangible aspects of this traditional technique and landscape. For some institutional stakeholders, such as the Metropolitan City of Milan, the meadows are clearly part of a collective history that shaped the landscape's overall design, but as heritage, they do not have an active role in the present:

More than being a type, let's say, of agricultural production, it is the story of the collective intelligence of a territory, and the story of the quality and value of the water system in our territory, because then the *marcita* meadows - together with all the canals that brought water, together with the location of the springs in the resurgences - was what generated the design of the landscape. But now I don't think we should duplicate the *marcita* meadows.
(Metropolitan City of Milan, 26th July 2019)



In contrast, the Ticino Park representative highlights the current potentialities of *marcita* meadows, considering them both a unique internationally acknowledged value to be preserved for its eco-systemic continuity and a potential future model for sustainable circular economy for the town:

Alongside landscapes of this kind, we have rural landscapes of great interest because they are traditional landscapes. In particular, the *marcita* meadows, which is a remnant of the medieval period on the one hand but, on the other, opens the door to the model of circular economy. The *marcita* meadows are emblematic for the production of hay for grazing, which in turn gives dairy products, and there is no waste (Ticino Park, 6th May 2019)

Therefore, **a link between past and present is actively woven together in terms of economic practices through traditions.** In farmers' opinions, *marcita* meadows, as heritage, are important for the **identity of place** (which is made up of hard rural work), and 'to make future generations understand "certain" values: the value of water' (Abbiategrasso farmer, 6th May 2019). Again, as in the Spanish case studies, water turns into an identity-making element through past and present rural work, building relationships through practices.

With the exception of the Museum of Agriculture, all other stakeholders see the *marcita* meadows as a heritage that can have an active role in the future:

- for example, heritage of the town to raise awareness of local key characteristics (No Highway Movement);
- as both a symbol and practice of a place identity (already recognised as an internationally acknowledged value for ecosystem continuity), which can have a potential role in terms of the circular economy and sustainable rural practices for the future (Albairate farmer);
- as a symbol of relationships with a rural past, evoking shame (poverty, difficult life conditions, extensive agriculture and hard work), therefore representing a conflict between this rural identity and associated benefits for (present and future) quality of life - mainly compared to Milan and its Metropolitan Area) (Legambiente).

Again, **local knowledge seems to act here as a differential knowledge** (Carnelli 2020), in modelling the landscape as heritage. Heritage is not a noun but a verb (Harvey 2001), a process of remembering and forgetting, which can also act on socio-cultural and economic models as cultural practice (Smith and Akagawa 2018). Indeed, the Museum of Agriculture representative (6th May 2019) sees the *marcita* meadows as 'something [that has] disappeared', to the extent to which it is part of a past rural life that has disappeared. As no longer practiced, and not turned into a symbol, *marcita* meadows stops being heritage as part of an experienced rural landscape. For these reasons, rural landscape can be seen in a transformative way, as a trigger of economic development and socio-cultural aspects:

Heritage is the result, in a reality like ours, of the design of the territory, of the ability of agricultural companies to continue to produce, to have a quality irrigation system, to have ecological connections, ecological passages that are ... the heritage is all these things here, along with the cultural heritage ... the wealth of the Park of Ticino, together with the South Agricultural Park of Milan" (Metropolitan City of Milan, 26th July, 2019).



Therefore, the use of the landscape in terms of heritage initiatives reflects this view. Indeed, in the biggest town, Abbiategrasso, initiatives promoting heritage are mainly linked to either medieval folklore festivals or to symbolically “bring the countryside into the town”: rural markets in the historic centre, food festivals with renowned chefs (here the result is unusual); or the landscape is simply used for recreational purposes: walking or cycling along the Naviglio (a big water channel providing water to Milan). Contrarily, in Albairate some rural folklore festivals are still present to celebrate this culture: e.g. St. George’s festival linked to traditional milk production, or a religious procession with cattle and other animals.

4.4.2.5. The Highway Project and its Impact on Rural Landscape

Whether or not the rural landscape is practised as heritage, the highway project is mainly seen (by every interviewee, apart from the mayor of Abbiategrasso) as a ‘useless project’, ‘a nonsense’. The mayor of Abbiategrasso claims that it will have a bad impact on the environment, but it will benefit citizens (due to a growing lack of infrastructures), local industries and traffic in the area. Contrarily, the Ticino Park representative claims that there is no real need for this highway, as it will not be useful for commuters, but only for private interests; and it will have different negative impacts on soil, water and air quality. It will have a disruptive impact on the water grid draining all the resurgences and springs and it therefore will divide the landscape. He clearly states that:

The project is a 1993 project, made when it was a different world that took nothing into account, and we have never been given the opportunity to rethink it significantly with an approach that was different from that of the engineers of those years. It must be reconsidered because there are terrible and immense junctions, there are very high viaducts, the whole thing is very impactful (Ticino Park, 6th May 2019).

The Deputy-Chair of the Metropolitan City of Milan was even more critical:

I trust the Vigevano-Malpensa won’t be built as planned, because it is a pointless work ... It is not necessary to build that type of infrastructure. The real goal is to connect Vigevano and Milan, not Vigevano and Malpensa, or rather that was a goal of 20 years ago. Intelligence says you can’t persevere just because you have to spend money. I would like there to be an ex post evaluation, in 10 years I will be right, no industrial development, etc. it’s just a matter of parties and politics, it’s right wing against left wing ... It’ll be an environmental and naturalistic damage, and for farmers very substantial, needlessly... harmful - This is really stupid (Metropolitan City of Milan, 26th July 2019).

The farmers, who have a practical local knowledge of the area, clearly explain the detrimental effect that the highway project will have on the rural landscape. For example, the highway will decrease the level of the aquifer and springs, and will disrupt the groundwater system, therefore (rural) identity and local economy. Indeed, from one side it will disrupt the rural landscape by literally dividing and fragmenting farms, fields, local streets, and local relationships between local farmers (as claimed by an Albairate farmer). This point of view, which is shared among the farmers, the local expert, the stakeholders and some institutional stakeholders, the disruption of the rural landscape will affect social relationships, and local economy; the degradation of this landscape is seen as a potential disaster.



From the other side, as the Proloco representative put forward, the project will inevitably change the identity by changing the rural landscape. It will thus affect traditions and daily life of a society particularly tied to its landscape. Technically speaking, as the Ticino Park representative clearly explains:

It will fragment, divide the landscape, you have areas on the side of the roads where there is a problem of soil/water pollution and being this an agricultural landscape this is a major problem, it will provoke air pollution, there will be visual impacts also because this road won't be all at ground level but largely elevated, it will have a disruptive impact on the water grid. We are in an area of resurgences; the springs are formed because there are underground flows that sometimes meet a lens of clay and rise to the surface. When these fragile and sensitive territories find themselves with an infrastructure that is either dug up or loaded with huge weights from roads, embankments, pylons and vehicles, they become crushed and as a result, the territory risks behaving like a dam towards the water and deviates from the water grid, draining all the resurgences and springs (Ticino Park, 6th May 2019).

4.4.3 NORCIA AND THE SURROUNDING APENNINES

The second Italian case study focuses on a network of small towns in Central Italy in the area of Norcia and its surrounding Apennine mountain range that was hit by earthquakes in 2016-2017.

In order to have comparable results, the research methodology adopted was that of the Ticino case study, although the data collection was adapted to this specific case study and its goals. A qualitative research method was followed: first the team collected initiatives promoted by institutions, stakeholders and the public, mainly through a document analysis (using policy documents, reports, local newspapers, websites and social media); secondly, 15 semi-structured classic and walking interviews took place with the main stakeholders.

Field research took place mainly in Norcia and Castelluccio di Norcia: the former has one of the biggest centres (around 5000 inhabitants), with the most important cultural heritage affected by the earthquakes. The latter is the region's biggest mountainous hamlet, located on one of the largest and highest (1452 m s.l.) plateaux in Central Italy, and almost entirely destroyed by the 30th October 2016 shock. Both are located in the rural area inside or just next to the Monti Sibillini National Park.

Interview questions were based on the research questions developed based on REACH project themes and adapted to this case study:

- what is heritage and what do you consider to be a heritage worth protecting?
- which (and what kind of) initiatives are organised for heritage promotion/conservation?
- how is the rural landscape and *marcita* meadow considered in heritage-making processes? What kind of participation?
- how are the 2016-2017 earthquakes (and past earthquakes) seen and what kind of impact have/will they have on heritage and the rural landscape?
- how are heritage and participation in heritage making used to adapt/resist to the disruption brought about by the 2016-2017 earthquakes?



The interviews were then transcribed and the collected data was analysed by theme. The results are organised into four parts:

- what the different stakeholders consider as heritage
- how stakeholders perceive their landscape
- how stakeholders consider the impact of the earthquakes on heritage and rural landscape
- how rural landscape can enhance resilience.

According to the official representation of the Norcia Proloco Association, rural and urban heritage are strictly linked, due to a hugely significant intangible heritage, the origin of which is acknowledged in ancient times:

We, Nursini, are linked to our city in a visceral way, forever and ever, even when we live far away. We sink deep roots in this fertile land. Roots that are fed by an inimitable mixture, made of ancient legends, millenary traditions, precious art. Walking through Norcia means plunging into a history almost three thousand years old. Getting lost on the mountains that surround it means plunging into a magical world, populated by medieval heroes, disturbing sibyls, mysterious witches (Proloco official website 2020)

The rural culture is acknowledged as strictly linked to the urban history, above all through local knowledge, folklore and local products, among them the world-famous art and hand-made pork products:

On one side, there is the Basilica of San Benedetto, there are numerous churches, the Castellina [local civic and church museum], the Palazzo Comunale. On the other side there is a rural, peasant culture, deep and lively, fed by an ancient wisdom and closely linked to nature and its cycles. Two souls that merge and complete each other, creating a town with a multifaceted and seductive personality, where everything is "knowledge": nature and good food, art and work (ibid)

The town centre's historical buildings and churches are officially acknowledged as urban heritage, mainly linked to a medieval origin, strictly connected with the personal history of Saint Benedict from Norcia, Europe's Patron Saint and founder of the religious order of Benedictines.





Fig. 18: The Basilica of Saint Benedict before and after the 2016/2017 earthquakes

4.4.3.1. Norcia's Rural Heritage

As the Proloco points out, Norcia's rural heritage can be readily acknowledged as its food and wine products:

Those who come to visit Norcia are often attracted by the renown of its typical products. And it could not be truer. Our town preserves an ancient and true enogastronomic tradition, made of unique, varied and genuine flavours. Here food is a reason for meeting, for socializing, a real cultural element, which brings people together, educates and nurtures them. Do not dare to refuse a taste or an invitation for lunch, you will miss a unique experience (Proloco official website 2020).

In terms of gastronomic heritage and culture, the products on which the area's tourism promotion is based are pork (ham), sausages, black truffle and the Castelluccio lentil. The link between Norcia and pork processing is an ancient one. The importance of this practice can be seen in that the name was given to the profession: that of a 'norcino', clearly and historically derived from Norcia's inhabitants. There is also an event dedicated to the black truffle, 'Nero Norcia', which is very popular in Italy. The Castelluccio lentil, characteristic for its small size and strong taste, is grown on the Pian Grande, on the slopes of Monte Vettore, and the colourful spectacle of the flowering lentil fields in June attracts hundreds of tourists from all over Italy and abroad. Then there are different kinds of cheese, especially *ricotta* (fresh or salted) and *caciotta*. Furthermore, there are also different types of legumes and cereals produced in the local area, from chickpeas to spelt and *cicerchia*.



The beauty and charm of the landscape are the dominant aspects communicated by tourist websites and the Proloco:

the blue of the summer sky, the green of the gentle hills, the multi-coloured spectacle of the cultivated and flowered fields. In Norcia, nature is the real protagonist, seductive and delicate. Around our village unfurls a sweet relaxing landscape, which conquers at first sight (Proloco official website 2020).

As for the Valnerina and the Sibillini Mountains that surround Norcia, the focus is on their combination of 'beauty and mystery' and on

the charm of the natural resources that embrace Norcia. Beauty is represented by the sinuous profile of the Valnerina, the valley carved out by the course of the river Nera. Mystery is embodied by the chain of the Sibillini Mountains, which has always been the scene of mystical legends. Dominating everything, powerful and uncontested, there is Monte Vettore, with its strong and massive appearance, at the foot of which lies the spectacular plateau of Castelluccio, with its lentil fields and its lunar profile, the Pian Grande, the Pian Piccolo and the Pian Perduto (Proloco official website 2020).

Further downstream, the Piana di Santa Scolastica is the area of the *marcita*, which, as aforementioned in the Ticino case study, is a historical agriculture technique: this was developed by the Benedictine monks and is now in ruins. The *marcita* is described as 'an area of great naturalistic interest, because it is characterised by the abundant presence of groundwater, which makes it extremely fertile' (Proloco official website 2020). The area is crossed by the Torbidone, a stream that reappeared after the 2016 earthquake, after almost forty years of absence.



Fig. 19: The *norcineria* (Ansuini shop in Norcia, photograph from their website)



Fig. 20: The landscape of the *marcita* meadows surrounding the city



Fig. 21: The Castelluccio plain



4.4.3.2. The 2016-2017 Earthquakes and the Recovery Process

In 2016-17, four strong earthquakes struck the central Apennine area and involved four regions: Marche, Umbria, Lazio and Abruzzo. The first earthquake (of a magnitude of 6 on the Richter scale) was on 24th August 2016 at 3.36 a.m. The epicentre was near the town of Accumoli in the province of Rieti, Lazio. 299 people were found dead (237 in Amatrice) and about 600,000 people were affected in an area of almost eight thousand square kilometres (Italian Civil Protection 2018), with 43,623 active companies, 25,939 agro-food companies, 1,939 accommodation facilities and 690 schools (Pitzalis 2019). In each region, an emergency committee linked to local municipalities was established and a special office for reconstruction was set up to deal with urban planning, impact assessment and private reconstruction. These special offices were also responsible for the reconstruction and restoration of cultural heritage sites and first emergency interventions (Pitzalis 2019).

On 26th October 2016, two major shocks (magnitude 5.4 at 19:10 and 5.9 at 21.18) hit the provinces of Macerata, Perugia and Ascoli Piceno: Ussita, Visso, Castelsantangelo Sul Nera, Preci were all badly affected. At 07.40 on the 30th October 2016, a third earthquake of magnitude 6.5 struck the area again. In this earthquake, the town of Norcia suffered great damage: all of its churches collapsed and Castelluccio di Norcia was almost entirely destroyed. 40,000 people were now left displaced. On 18th January 2017, new shocks (magnitude 5.5) hit some municipalities in Abruzzo, killing 29 people in the sadly known disaster of Rigopiano, where an avalanche, caused by these last earthquakes, occurred. As emergency solutions, tent camps, hotels and collective containers were used under the emergency law of the National Department for Civil Protection (DPC).

With almost 50,000 displaced persons, the DPC proposed four solutions to help the affected population in response to the housing emergency:

- 38,184 chose the offer of the Autonomous Housing Contribution (CAS) provided by municipalities that ranged from 600 to 1,000 Euros per month
- 7,782 people were accommodated in emergency housing units (SAE)
- 1,943 were housed in accommodation facilities (hotels on the coast but also in the mountain area)
- 807 in the MAPRE (prefabricated rural emergency housing modules for livestock farmers), 642 in container modules and 486 in municipal facilities. (DPC 2018; Pitzalis 2019).

Three years after the first earthquakes, Pitzalis (2019) reports that:

according to a survey published in La Stampa on 18 August 2019, the applications for contributions for private homes accepted - thus with the contribution released - are just 2,788, 3.5% compared to the 79,454 expected. From 10 August 2017 to 25 June 2019 the funds disbursed by the Cassa for private reconstruction are 200 million Euro, a derisory figure compared to Civil Protection estimates for which the damages would amount to 22 billion Euro



Fig. 22: Castelluccio di Norcia today: no reconstruction has started

Following interviews, four themes were identified:

- the construction of the concept of heritage
- the representation/consideration of rural landscape and *marcita* meadows
- the impact of the earthquakes on both these aspects
- the relationships between these factors in terms of wider resilience.

In terms of their political engagement, interviewees for this case study can be clustered into three levels:

- institutions (at local, and regional level)
- stakeholders (at local, regional and national level)
- the public (at local level).

Fig. 23 shows the mapping of relationships between the different stakeholders and governance levels. Below are a series of extracts from interviews; these were undertaken in Italian and then translated into English.

4.4.3.3. Community Perception – How Heritage is Constructed

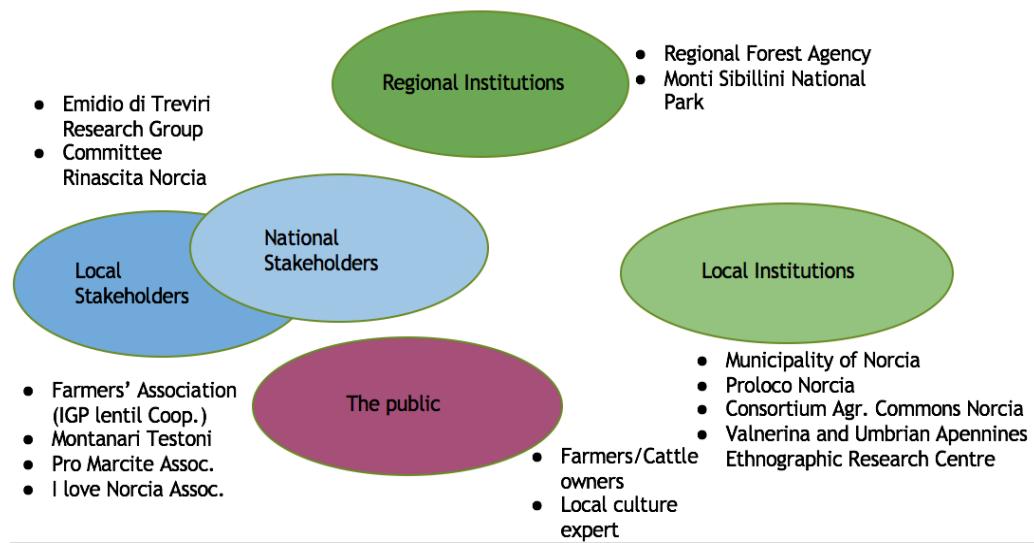


Fig. 23: Mapping stakeholders in Norcia

Among local institutional stakeholders the team interviewed the head of the technical department of the Municipality of Norcia, who is very committed to the post-quake reconstruction process; the Chair of the Norcia Proloco, which is the official agency for cultural, heritage and tourism promotion in Norcia; the Head of the Consortium for Agricultural Commons of Norcia, responsible for Castelluccio di Norcia (a very particular type of collective management of rural land); and the Valnerina and Umbrian Apennines Ethnographic Research Centre, a rich archive of local cultural and ethnographic heritage that was founded in 1990.

At regional level, the team interviewed a member of the Monti Sibillini National Park management board and the manager of the Regional Forest Agency in charge for Valnerina. Interviews also took place with the local committee founded in 2018 to stand up for the reconstruction of the town after the 2016/2017 earthquakes, and a researcher of the interdisciplinary research group *Emidio di Treviri*, which was founded in 2017 to study both the impact of the earthquakes and of emergency and recovery management from different perspectives.

At local level, the team collected the opinions of two local associations, founded after the earthquakes; one of these focuses on productive and cultural aspects (*I love Norcia*); and the other aims to both support local people in tackling the recovery process in a more collective way (*Montanari Testoni*) and also to help those existing associations supporting rural landscape (e.g. one for the preservation of the traditional cultivation of lentils in the Castelluccio plain; another to push forward the *marcita* meadows issue). Among the general public, the team interviewed a farmer and cattle owner, as well as an expert of local culture and a retired full professor from the University of Perugia.

The reciprocal link between urban and rural heritage emerged strongly among the majority of the interviewees, who considered cultural heritage to be both the landscape with its surrounding mountains, as well as the historical buildings of the town centre. The head of the technical department of the Municipality of Norcia explains that: ‘first of all, we have most of the public buildings that are heritage bound buildings, and those buildings, essentially, those more than 50 years old, practically, those of public property, are heritage bound [in the historical centre]’ (Norcia Municipality, 19th



November 2019). It is noteworthy that what has been acknowledged as heritage collapsed after the earthquake. Indeed, the earthquakes damaged all of Norcia's churches, and the values these buildings shared went beyond religious aspects, as one of the local association members highlights:

You used to take everything for granted! Walking through Norcia there were frescoes, there were churches, there were so many, there were more than 100! [Now] nothing, not half of them are left. Even the Virgin Mary niche that stood in Castelluccio, so small!

We, also as Montanari, but I as citizen, now think that the cultural discourse is a social discourse, to feel part of a territory: what linked us to here and that still links us today are the traditions, which are partially carried on..." (Montanari Testoni, 20th November 2019).

The sudden loss of this kind of heritage makes local people consider from where their sense of belonging originates (Carnelli 2012), as they visualise the existence of the historical centre of the small town (or village, in case of Castelluccio) itself as linked to their place of attachment. As one of the farmers interviewed points out:

Cultural heritage is everything that concerns the [collapsed] village...all the houses inside the village, every house has its own history, they were all made in different periods, even the reconstructions that were made" (Farmers' Association IGP lentil, 19th November 2019)

Here cultural heritage turns into its own collective history, which can be experienced in one's own habits and home. Another relevant aspect that emerged was the acknowledgment (by half of the interviewees) of a large repertoire of intangible heritage made up of local food production practices, local knowledge and traditions and religious practices: 'heritage is the environment, the food and wine, especially the pork butchery' (Proloco and *I love Norcia* Association, 19th November 2019).

Indeed, on the one hand, for the farmers and some local associations, cultural heritage is 'everything that concerns the village' (Farmers' Association IGP lentil, 19th November 2019); on the other hand, cultural heritage is also the **productive** landscape, a product of the alternation between the cultivation of legumes and of sheep and cattle pasture (Consortium Agricultural Commons Norcia and Castelluccio, 19th November 2019), and the **visual** landscape: e.g., in particular, the flowering in the Castelluccio plain, which, as the farmers are aware, has also been proclaimed as UNESCO intangible heritage.

Furthermore, a repertoire of local traditions, local food processing, old stories, legends and folklore practices is part of wide intangible heritage:

For example, in December, there is the famous feast of *faoni*, those big bonfires. This is important for Norcia because it is really popular. I think it's always been done; I don't know! Because it's a bit pagan even if it's linked to the nativity; this year for example, the hamlets of Norcia, the districts, are 6, and so every hamlet made a nativity in its own district. I premise that in Norcia the red area⁴³ are almost all open, if not some points really ...

⁴³ Red zones are the area of the city with forbidden access due to the presence or damaged buildings



The bonfires are made in every district, people organise them, the same districts. Informal groups, for example I'm from the eastern gate, I'm helping making the nativity scene... That day there are the men who do it, go to get the broom then they build better the men who do it because they are big and then they also do the nativity scene, with some hot spicy wine and we "make the community" (Regional Forest Agency, 19th November 2019).

Amongst the different stakeholders interviewed, there are several main initiatives acknowledged as relevant for heritage preservation and promotion that are connected primarily to the aforementioned intangible heritage:

- The *faoni* (bonfires): Fires are made in every ward/square, local people organise them, in the same wards.
- St Lucia and the nativity scene in every neighbourhood
- *L'Addolorata* feast (*questua* - alms collection and fireworks)
- *Il maggio* in Campi (*questua* – alms collection; conviviality)
- Good Friday procession
- St Antonio feast with bonfires and benedictions
- The Epiphany, a rural *questua*.
- The *Pasquarelle* in Norcia and Castelluccio: they are rural *questua* with traditional songs, from household to household.
- Summer feasts in Norcia
- *Nero Norcia*, the festival of black truffle
- Benedictine religious celebrations, linked to St. Benedict, the Patron of Europe
- August feasts in Castelluccio
- The flowering of legumes and lentils (and its threshing) in Castelluccio plain

4.4.3.4. The Rural Landscape and the *Marcita* Meadows

Even if generally presented as part of the cultural heritage, for some institutional stakeholders (e.g. Norcia Municipality and Proloco), the rural landscape is considered as the frame surrounding the historical city: 'the landscape is the cake and Norcia is its icing', according to an aesthetic vision (Norcia Municipality, 19th November 2019.) This happened before the earthquake, "We had a city that is practically similar to a *bomboniera* [confectionary wedding favour], before the earthquake 2016, but the beautiful thing was also all these green areas that we have around us" (Norcia municipality, 19th November 2019). It is the **productive** landscape, characterised by the lentil, that makes the territory aesthetically valuable and recognisable. Indeed, the black truffle and pork processing were often presented as the symbol of Norcia, as well as the flowering and the local IGP lentil. For Castelluccio di Norcia,

the lentil here has always been here also in ancient times, then this is a particular one, it is all coloured, the soils make it so, even the climate. 90% of the land here is breezy, so the water here flows away (Farmers' Association IGP lentil, 19th November 2019)



The progressive, slow and evolutionary change of the landscape has been also acknowledged:

the landscape is not a fixed element that we put it there and so we look at it and so it remains in time, it evolves over time in function, it is very dynamic, therefore in function of the presence of man of agricultural activities (Regional Forest Agency, 19th November, 2019).

However, the same agriculture that is fundamental in the construction of the landscape and in its recognition is changeable and responds to market logic: the landscape was previously strongly characterised by the vine that is now almost no longer present. Wine and vineyards are no longer promoted as one of the most popular typical products:

Look at photos of the last 30-40 years and you can see the evolution of the landscape. The territory here was once almost 70% covered by vineyards, now there is no longer a vineyard! There must be 2-3 hectares of vineyards left in total! (Regional Forest Agency, 19th November, 2019)

There have been many initiatives concerning the 'rediscovery of agriculture', especially before the earthquake, even by people who were not previously dedicated to agriculture. However, many initiatives were interrupted by the seismic event and had to find new energy and re-organisation after the earthquake (as the farmer and cattle owner report 19th November 2019).

The rural landscape can be a vehicle for promoting the territory, as long as it is 'usable by the people who actually live in it' (Regional Forest Agency, 19th November 2019). In this sense, it must also address both the local population and tourists. Unfortunately, many of the inhabitants act on their own: 'everyone does what he or she thinks is right for himself or herself, but it does not necessarily mean that it is right overall for one for an organised promotion of the territory' (Regional Forest Agency). The direction towards which many points of view converge, especially from the commercial world, is the agri-food industry, as it was before the earthquake: 'the rural landscape is an opportunity if seen together with the agri-food industry and psychophysical well-being (attracting tourists)' (*I love Norcia* representative committee, 2019).

As regards the *marcita* meadows, it is said that they were invented by the Benedictine monks but others report that 'you think they were there by the Romans ... then they instilled in us the idea that it was the Benedictines who made them...' (Norcia Reconstruction Committee, 18th November 2019), so their origins are not clear. However, they have been recognised as 'great heritage for centuries, reclaimed by the Benedictines, who still worked them' (Montanari Testoni, 20th November 2019). The meadows are generally well known by the local population: 'everyone in Norcia [knows] more or less know what they are...the elderly all know them. Keep in mind that there were 7 mills, they made flour, minor cereals, the skin, the rye, the corn, a local variety'. (ibid) The meadows are considered to be an 'extraordinary place but left a bit like that' (ibid). They are the link with the memory of the landscape, because 'they are a link with what we had before, which in thirty-forty years has disappeared' (ibid). They were places frequented by locals and guides who explained the operation of the *marcita* and the mills: 'before the disaster, the millstone was regularly visited, it was put into operation, there are still shovels in a mill' (Norcia Reconstruction Committee, 18th November 2019).



Numerous interventions have been carried out over the years on the *marcita* meadows but all of them have been temporary: restoration of mills, canals, ditches, etc. As such, these interventions were not long lasting and the work was not maintained. Furthermore, all the mills that had been restored, except one, collapsed after the earthquakes. Interventions always remained linked to singular project funding. These are properties owned by the municipality of the Monti Sibillini Park, as well as by small owners: 'we work with project fundraising [so] when the funding ends, nobody does maintenance anymore' (Regional Forest Agency, 19th November 2019). Today, however, 'nobody take[s] care of them any more [and] the property is very fragmented' (Norcia Proloco, 18th November 2019). Moreover, the traditional *marcita* technique has been lost: 'there is generational change, the technique disappears, so young people don't know it, they should have learnt it from the elderly' (farmer, 19th November 2019). The problem is both management and the lack of connection to livestock production.

4.4.3.5. The Impact of the Earthquakes on Rural Heritage

According to each of the different stakeholders, the impact of the earthquake on rural landscape is fourfold. Firstly, some stakeholders, for example local institutions, do not mention the direct impact of the earthquake on the rural landscape, since what was destroyed were the main historical buildings and the churches. The Consortium for Agr[icultural] Commons reports how 'almost nothing happened to us' (20th November 2019). However, there have been reports about how severe the impact of the earthquake has been on management on the rural landscape:

[the impact] Noteworthy: the installation of prefabricated modules on unbuilt-up areas: 50 hectares of land consumption. The problem is the impact on the landscape that we obtain, starting from Norcia, towards Preci, already from there, especially at night you see large illuminated areas of SAE [recovery housing modules], very invasive interventions with medium-long duration, if not long. Alternatively, in the historical centre the invasive interventions for security reasons (Norcia Municipality, 19th November 2019)

Secondly, it is significant to report that among local associations there is no common idea about the impact of the earthquake on rural landscape, because rural landscape is not intuitively associated with possible damage provoked by the earthquakes. For example:

the rural landscape is there, it has not suffered, indeed, we should ask the farmers, whatever in the first historical centre the rural landscape, even the parks, has been damaged, completely! That is, even the lack of care about things in general! (Montanari Testoni, 20th November 2019)

Indeed, after the earthquake, the landscape, although not directly affected by the earthquake itself, has been devastated by contested urban planning choices and emergency and recovery initiatives: 'They are not considering the landscape at all, because they have made a mess in placing all these houses and all the restaurants in a modern structure close to the historical walls of Norcia' (farmer, 18th November 2019). Therefore, some planning choices, although aimed towards helping local commercial activities to recover, have been criticised for their negative impact on the landscape. The problem of the quality of interventions after the earthquakes has been raised at a national level and on 24th August 2016 a committee was established in order to define methodological and technical guidelines for the reconstruction of heritage damaged by earthquake (following Mibact (Ministry for



Cultural Heritage) 2017). Farmers and farmers' associations are among those who complain more openly about negligence at all levels e.g. during the emergency, recovery and reconstruction phases. They have also reported how terrible the impact of the earthquake has been on their activities:

Ugly, ugly, because the first year after the earthquake the difference has been noticed little, but now considering tourism the difference has been noticed, and here we still have the rubble, they are still taking away the rubble after 3 years after the earthquake, so...!" (Consortium Agr. Commons, 20th November 2019)

The third notable impact of the earthquake, widely shared in Castelluccio, that was badly affected, was the following:

Castelluccio was not accessible for almost 2 years, roads were closed, but open only for buses that came for the flowering, therefore a different use of the same [landscape], repercussion on the activities of farmers and the economy of farmers themselves, flowering has been saved but encouraged for tourism (Emidio di Treviri, 14th January 2020).

For the farmers, the research group and the local expert, the impact was terrible for many reasons including: inaction or excessive bureaucracy in recovery and reconstruction, bad choices in terms of land use, excessive tourism of local food production, a **cultural heritage strictly linked to the landscape but now majorly exploited for tourism**. This is closely linked to the fourth opinion on the impact, shared by local associations, farmers and the Emidio di Treviri, that the earthquake and its management has accelerated on-going processes of depopulation and the loss of public spaces to promote local collective intangible heritage, which was also highlighted by the presence of the historical centres of Norcia and Castelluccio. In Castelluccio the issue is very problematic, since there are now only two inhabitants living there⁴⁴:

[Are you the only one here in Castelluccio?] Yes, in wintertime it's me and another one who's not here today [And was it like that before?] No! Before, there were about twenty of us, my family, the family of another man, one who had a bar down here, then after Ottavio he went back and forth every day, then there was a family down here who had the beasts here, to look after the cattle, he went back and forth from Norcia, so in the end every day there were about twenty of us who were here in Castelluccio...

[Do you think are they considering the landscape?] Not much! Because here last year in Castelluccio they did some temporary structures, but before the earthquake there were 53 activities, let's say, that ... then the people who came up here to go trekking, walking, summer, winter, let's say all year round also had a place to sleep..." (Farmers' association, 19th November 2019)

⁴⁴ The team met one of the two inhabitants during fieldwork - that day he was the only person in Castelluccio



While Castelluccio is already almost completely abandoned, local inhabitants are leaving Norcia as well:

young people are leaving, a restaurant didn't reopen this summer, people don't notice the others are leaving. We know that next year will be like 2019 [i.e. without jobs] [...] now it's a drifting community, it attracts no one any more (*I love Norcia* committee representative 2019)

4.4.3.6 Critical Analysis of the Italian Case Studies: How Rural Heritage Can Enhance Resilience

'When something is uncertain, little known or unpredictable, we look for familiar behaviours or even rituals, which make the "unknown" something finally "known", so that we can evaluate and manage it' (Mugnaini 2015). A disaster usually shows up exactly 'at the point of connection between society, technology and the environment, at the intersection of human practices and environmental materiality' (Gugg 2017), 'when some social vulnerability conditions are at stake' (Blaikie et al. 1994). In the case of the Ticino case study, the highway project creates a potential disaster, as it configures itself as the threat of losing something at this intersection between human practices and environmental materiality. Uncertainty is given both by a long-term planning (which fragments the expectation) and by the breaking of a daily routine and of some symbols with an identity connotation, which are both based on this rural landscape. Indeed, as the lawyer supporting the Court appeal confirms:

The route passes through an area of environmental value, and this is all Park. There are agricultural areas, the last, at present, agricultural areas that we have in Lombardy. In addition, there are areas recognised as UNESCO World Heritage Sites, buffering urban interventions. Residual agricultural environments are the most important - and environment, green and agricultural areas have to be protected to ensure health and quality of life of citizens (Environmental lawyer, 10th June 2019).

The value of the remaining 'environmental materiality', identified in terms of rural landscape, rises with the loss of land, so **enhancing strategies of resilience to preserve is what enhances its value in terms of heritage**. In terms of potential damage to be resisted, the agronomist interviewed reported to the Appeal Court (Molina 2018) a combination of direct and indirect damage that highlights the strong interrelations of socio-cultural and economic factors incorporated in the rural landscape. The role of rural landscape as heritage, with the *marcita* meadows as a key (historical and heritage) element, is acknowledged by the Torcino stakeholders as a tool enhancing resilience when it:

- transmits shared values and local knowledges
- promotes sustainability and raises awareness
- promotes urban regeneration and stronger local networks for a different economic and social system
- is part of a mechanism of a circular economy.

Furthermore, water is a heritage element that has also been shaped at a physical, economic and social level. Indeed, the historical evolution that has led to the current landscape is very much linked to the elements of irrigation designed by Leonardo da Vinci and then developed in the period prior to the Industrial Revolution at the end of the 19th century (from the Naviglio Grande to the Canale Villoresi), so much so as to indicate it as 'Terre dei Navigli'.



The landscape is still varied and harmonious, with important elements indicative of balance between man and nature present in the contexts of traditional agricultural landscapes built over centuries of coexistence: woods, hedge rows, irrigation channels with riparian vegetation, weaving of fields intertwined without dominant mono-cultural elements, plot sizes adequate for a positive relationship between cultivation and elements of ecological balance, presence of permanent meadows and, in some cases, winter irrigation is still active. The point is to acknowledge the existence and development of this supposed balance in terms of creation, maintenance and development of local eco-social relationships, which are incorporated into the rural landscape, as being identified as heritage. This is a heritage which is conceived as the result of a process

through which cultural and natural elements in time receive the status of heritage, elements worthy of being preserved, enhanced and transmitted [...] a construction process inducing both a devaluation, through selection and delimitation, as well as a revaluation involving changes and redefinition, reflecting the needs of the present rather than past configurations (Le Mentec & Zhang 2017: 351).

This is exactly the kind of heritage incorporated in this rural landscape: a network made of cultivated fields, farmers, products and relationships, shaped by a water network, which has historically fuelled economic development, at least since the 17th century. The same water network could drive future sustainable rural and economic practices if, and only if, it is locally acknowledged and culturally practiced (Smith and Akagawa 2018) by stakeholders having a strong local knowledge of the area, such as the farmers and stakeholders that were interviewed.

Furthermore, what has strongly emerged from the Norcia interviews is, first of all, **a conflict between rural heritage and local ‘economy’, between a strong attachment to those places whose heritage is made of rural landscape, local products, oral traditions and historical buildings, and the ways to economically exploit this richness to live with**. The research group, Emidio di Treviri, clearly put forward this point, by also mentioning the construction of a new commercial building, the *Deltaplano*, a new site for restaurants, which opened in 2018 and which is located between the plain and the destroyed village:

I have seen a lot the conflict between nature, value and work: the landscape, from the aesthetic point of view is very much linked to the territory, to Mount Vettore, to the Castelluccio plain, but when it comes to protect it, it becomes a matter of work, therefore not to abandon it we take what they gave us, or rather to make Castelluccio to live again through the construction of the *Deltaplano*... (Emidio di Treviri, 14th January 2020)

On the one hand, this fits the needs of an internal area on the Apennines, but it is a conflict between tourism based on heritage and local needs, after the acceleration of processes due to the earthquakes and recovery management. The *marcita* meadows, for example, can be a productive resource if they are linked either to an economical change or to the tourist activity:



The milk of the *marcita*, for example, is a genuine product that could be promoted in the market with a short supply chain, because the companies are local companies ... a brand linked to Norcia such as the ham or the black truffle, that should be a revival of what are the potentials of the territory under the aspect of agriculture linked to typical products, this should be (Norcia Municipality, 19th November 2019).

According to some local associations, the *marcita* meadows are also an opportunity for tourism linked to wellbeing: 'now the Torbidone has become a river; it would be beautiful as water route' (Norcia Reconstruction Committee, 18th November 2019).

However, it is the huge repertoire of intangible heritage linked to rural landscape and made of local agricultural food processing techniques, folklore traditions and religious festivals, which could fill in the empty spaces left by the collapsed buildings: this **intangible heritage stemming from the rural world could be the glue of a post-seismic community, whose 'being together' has been highly threatened by the recovery and reconstruction management.** Indeed, without people living there, there are obvious consequences of the loss of rural heritage linked to the landscape, as the farmers' IGP Lentil Association clearly states:

If we don't do it, we who cultivate it say, in a short time everything ends. As long as there are us few farmers who still manage to go on, it will go on, then afterwards, once we are no longer able to, everything will end here (Farmers' association, 19th November 2019)

Indeed, the first and second year after the earthquake, **festivals and traditions that were adapted to the status quo (e.g. they found new places to continue) became a sort of symbolic shelter** (as reported by *I love Norcia* Association). Faced with the lack of the physical buildings (e.g. churches) connected to symbolic references, **these re-proposals of folklore practices, festivals and feast days reinforced a sense of belonging to place** (Carnelli and Ventura 2015). In addition, mobile heritage (e.g. furnishings and paintings) was relocated to Santo Chiodo in Foligno and the local population is now afraid of the possibility that it will not return to the area for years or that it will not return to the church buildings, if they are still inaccessible.

The earthquakes have had both direct and indirect influences on the landscape. On the one hand, looking at the *marcita* meadows with the resurfacing of the Torbidone and the collapse of the mills, there can be seen a direct consequence of the action of the earthquake. This is recognised both as an interruption of on-going, albeit occasional, valorisation activities and also considered as a fatality that makes one reflect on the re-appropriation by nature of its spaces (Montanari Testoni and Comitato Rinascita Norcia). On the other hand, the earthquake does not directly damage the landscape, but is affected by human choices, as in the location of the SAE, which has been criticised especially by farmers, because it has damaged the scenic quality of the visual basin of Norcia and its productive agricultural land, factors that contribute to the tourist appeal. It is the emergency recovery housing that has been continuing over time and following emergencies that has become stable, influencing the landscape indefinitely. This problem can be found in many other cases of earthquakes (Sisti, 2018). A central threat highlighted by many different stakeholders is **depopulation**, the abandonment of Norcia by many families and the removal of commercial activities.



How can the landscape influence people to keep living in the area? Norcia's inhabitants consider its landscape as a source of identity, which in terms of the earthquakes, has been damaged more so by the choices of people in recovery/disaster management than by the disaster itself. So, it is those choices – or, indeed, the lack of choices - about reconstruction made by the local authorities that is influencing the growing depopulation.

In the case of earthquakes, **rural landscape and heritage can therefore be a vector of resilience**, especially in the first phase because it is generally less affected by the damage of the earthquake than urban areas, so **it can be configured as an element of continuity, reassurance and connection with life before the traumatic event**. However, in the second phase of reconstruction, rural landscape and heritage is directly threatened by the choices of location of temporary residences made by emergency laws, new commercial buildings or shopping centres to replaced damaged/lost places of commerce which, if not appropriate, can create discomfort and disagreement. Alternatively, **a rethinking of the economic model** could pave the way for a brighter, more resilient future for both tangible and intangible rural heritage, starting from a new **circular, sustainable economy, based on the richness of the particular landscape in question, nourished by local knowledge and practices**. For example, the local expert interviewed offered an exciting proposal:

Because the economy of the forest and pasture, which has not suffered since the earthquake, at the time the forest was the supply of a raw material of excellence, wood, for everything, but this has now dried up, and the pasture, basically sheep, in the largest amount we speak of thousands of sheep, in 1187 perhaps exaggerates counts 40,000 on the plateau of Castelluccio, because there was transhumance, and the butchers/*norcini* who went to Florence: between endogenous laughter and trades that exercised by necessity in other places, have maintained not only the places for the earthquakes that followed, spoliations, in a quantity and importance really impressive, now this mechanism, if we do not rebuild this virtuous mechanism, now what I see, for now I only see it but I try to convince someone: the wood as we see it, a place of protection, of landscape, to see and not to touch, is a productive space: we will cut the part of the forest that we need but it is a minority, the other is pasture, for pigs, which is a wild animal - the forests were measured in the eleventh century with how many pigs they could feed. What to do? We are going into a situation where meat consumption will have to decrease, partly for the population, partly because the immense number of cattle, this immense extension of woods and pastures is now reduced to nothing, gives nothing. Then I would make this leap: let's put the four-legged animals back, without which the two-legged ones have no chance of survival, like the *supravissana* sheep, it was a merino sheep, then the black belted pig. What should we do? Close the concentration of lowland farms where the animal is no longer an animal but a meat machine, and then make a production of particular breeds exclusively ... which gives the product that they make a significant value, otherwise if you have to compete with emerging countries... (Luciano Giacchè, 19 November 2019)



4.4.4 SWOT ANALYSIS - RESULTS

The Italian research team discussed **the potential of rural landscape to be considered as both heritage and a tool to enhance resilience facing disruptive events**. The results of the interviews undertaken in the Ticino area have highlighted different positions about the consideration of rural landscape. These range from it being considered a mere corollary to urban built heritage (e.g. some of the institutional actors: Abbiategrasso Proloco, the Mayor of Abbiategrasso) to a source of production and life (farmers, the local agronomist, Ticino Park), to a fundamental part of historical identity (the Mayor of Albairate, partially Proloco, the Museum of Agriculture, the Metropolitan City of Milan) and, finally, to be a resource for a sustainable future society (Ticino Park, the No Highway Movement, the environmentalist lawyer, and the Legambiente). The results of the interviews undertaken in the Norcia area has enlightened different positions about the consideration of rural landscape, that spans from a mere corollary to the urban built heritage (e.g. some of the institutional stakeholders: Norcia Proloco, Norcia Municipality...) to a source of production and life (farmers, local association, regional institution), to a fundamental part of historical collective identity (Norcia Reconstruction Committee, partially Proloco) and a resource for a sustainable future either based on well-being tourism (local association, Norcia Reconstruction Committee, Norcia Municipality...) or on a completely different sustainable economic model based on the link between local knowledge (local food processing, local landscape and animals) and the rural landscape.

In terms of reacting to disruption, the rural landscape must be considered not just as 'the surroundings' of a 'small town', but rather as **an integral component of the landscape system**. The landscape system can be **a resource of resilience for local people if it is understood and evaluated in terms of local knowledge as a part of the historical and social system**. Furthermore, it can **embody and transmit tangible and intangible aspects that potentially encapsulate a sense of identity and place**: these feelings are essential for recovery from disruption. It can connect people at local level - it both shapes and is shaped by a social network (which is inherently embedded into socio-natural elements e.g. water). It can connect (and visualise) social-ecological systems, so promoting sustainable urban regeneration and raising local knowledge and awareness. It can also work as a source and *locus* of alternative economic models, turning rural landscape as heritage into an active element of continuity between the past and the future.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Heritage: <ul style="list-style-type: none"> ○ transmits shared values and local knowledges; ○ promotes urban regeneration and stronger local networks for a different economic and social system; ○ is part of mechanisms of circular economy. • The role of water in heritage making 	<ul style="list-style-type: none"> • Conflictual relationships with rural heritage in collective history • Old and unsustainable ideas of development supported by some local and Regional institutions • Initiatives promoted are mainly focused on urban heritage, or better, are urban-heritage driven • perceiving traditional agricultural practices (i.e. <i>marcita</i> meadows) as past relics



OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Heritage: <ul style="list-style-type: none"> ◦ promotes sustainability and raise awareness; ◦ promotes urban regeneration and stronger local networks for a different economic and • to acknowledge the existence and development of this supposed balance in terms of creation, maintenance and development of local eco-social relationships, which are incorporated into the rural landscape, as being identified as heritage • The role of water in heritage making and renewing social and productive relationships 	<ul style="list-style-type: none"> • Progressive loss of historical rural landscape • Progressive loss of local relationships due to urbanisation • The landscape system can be a resource of resilience for local people if, and only if, it is understood and evaluated in terms of local knowledge as a part of the historical and social system – it is hardly acknowledged by some deputed institutions

Fig. 24: SWOT analysis: Parco del Ticino *marcita* meadows as resilient rural heritage

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Heritage: <ul style="list-style-type: none"> ◦ transmits shared values and local knowledges; ◦ vehicles a strong link between rural and urban aspects ◦ aesthetic quality of the landscape and excellent local products as potential for tourism ◦ intangible heritage as continuity after the traumatic event • A huge intangible heritage strictly linked to rural landscape • A collective history already present and embedded in daily life 	<ul style="list-style-type: none"> • Lack of organisation and management of the landscape, especially for <i>marcita</i> meadows • Collapsed heritage after earthquake • Neglected heritage due to undefined reconstruction policies and uncertainties • Initiatives promoted are mainly focused on urban heritage, or better, are urban-heritage driven
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • landscape is the means to strengthen the link between agriculture and tourism • landscape as an offer of places for psychophysical well-being • The richness of local knowledges and the link with the rural landscape could promote a completely different and win-win sustainable economic model • Intangible heritage allows locals to recover from the loss of tangible heritage 	<ul style="list-style-type: none"> • Relevant loss of rural landscape quality due to emergency management • Loss of <i>marcita</i> meadows due to undefined management • The loss of mobile heritage • Depopulation and bad disaster management can delete a collective history

Fig. 25: SWOT analysis: Post-quake Norcia and surrounding Apennines as resilient rural heritage



5. RESULTS AND IMPACT

5.1 SYNOPSIS OF COMMON THEMES

The REACH Rural heritage pilot's five case studies from both Spain and Italy demonstrate how it is important to understand that heritage is not only about monuments but also landscapes and natural resources such as soil and water. Natural geographical features, resources and elements in turn connect to traditional agricultural knowledge and practices that must be seen as important cultural heritage. Rural landscapes are thus important places to preserve both tangible and intangible cultural heritage. In considering how heritage can be (re-)used, the pilot's case studies have revealed a central issue of **(self-)governance** of cultural rural landscapes in a period of global change. Governance should support communities, share ecological knowledge and provide conflict resolution. In terms of the Spanish context, the current crisis can be dated back to nineteenth century liberal policies that led to traditional ecological knowledge being lost through water legislation, peasant proletarianisation and attack on the commons. Globalisation, the green revolution, industrialisation, global markets, cultural change and urban consumption have also impacted the current situation. There has been a lack of acknowledgement of traditional practices and no function for conflict resolution.

Recommendations for the future are the recognition of the multi-functionality of agriculture, the need to focus on ecosystem and cultural landscapes, and making changes to the market chain and responsibilities to consume, represented by a strong community voice. These changes can be underpinned through education and the promotion of rural culture, to move forward and embrace a twenty-first century model. In terms of education, eco-museums and/or formal and non-formal approaches and workshops can be part of an overall strategy of supporting bottom-up participatory approaches to rural heritage from within the communities involved.

The Italian case study of the *marcita* meadows further makes an argument for considering rural areas as an integral component of the landscape system. It can then be a resource of resilience for local people if it is understood and evaluated in terms of local knowledge as being a key part of the historical and social system. Significantly, it can embody and transmit tangible and intangible aspects that clearly encapsulate a sense of identity and place: and these feelings are essential for a community – and a landscape's – resilience and recovery from disruptive events such as increasing infrastructure (e.g. the highway project in Ticino), socio-economic disruption (*la España vaciada*) or mismanagement of historic resources.

Rural heritage can also be seen to connect people at local level - it both shapes and is shaped by a social network (which is inherently embedded into socio-natural elements e.g. water and soil). It can also connect social-ecological systems, so promoting sustainable regeneration, vital in terms of biodiversity and the current climate crisis, as well as raising, preserving and disseminating local knowledge and awareness. This awareness raising and education is again central to supporting participatory approaches to rural heritage. Moreover, in addition to education programmes, fostering open spaces and opportunities for knowledge exchange between communities, governance systems and specialist researchers (e.g. archaeologists, historians, and academics etc.) is vital for the preservation and safeguarding of rural cultural heritage.



5.2 PARTICIPATION AND LOCAL COMMUNITIES

The case studies outlined in this deliverable demonstrate that participatory approaches must be recognised as essential tools to socially mobilise people in rural areas. Very often, in rural communities, a lack of opportunities and urban cultural models imposed from mass media, the internet and consumer society has contributed to depopulation of rural areas, leaving behind an ageing group of people to maintain systems and traditional approaches. Rural cultural heritage is often abandoned, fossilised or is under pressure to be destroyed and substituted by something more ‘modern’ and ‘efficient’ (especially in so far as competitive new elements related to agrarian production is concerned). This directly affects the traditional practices, cultural expressions and landscapes that are linked to rural culture. However, **participation can be a powerful social and political tool** and, importantly, new alternatives can arise from participatory approaches, supporting a **community to be able to re-appropriate and re-interpret their own (tangible and intangible) cultural heritage**. As such, that cultural heritage can be not only reclaimed but further developed and also re-used as **part of a new cultural expression**. For example, farming practices are often overlooked and farming communities feel that they have no voice. The agrarian activity in Mojácar, outlined in the second case study, has involved many people from across Europe in a multi-lingual community. The Mojácar activities then become not only about an archaeological excavation, but also about a community’s perception of their heritage. As such, the work can be seen to be successful from environmental, participatory and cultural perspectives. Similarly, the work in Andalusia builds on creating and sustaining relationships with the various irrigation communities encountered, empowering these communities through working with them on several local community agrarian and environmental policies, supporting them through meetings with rural federations, policy makers and lobbying both academics and administrators to ensure that rural areas are given a higher political focus and status⁴⁵. Despite there being several layers to contend with – local, national and regional, with federations and local communities managing resources communally – the main success so far is a proposal for soil and historical agrarian areas protecting soils and fertility that has been discussed in the Spanish National Parliament⁴⁶.

5.2.1 GENDER CONSIDERATIONS (SPAIN)

Gender is a somewhat difficult issue to address, as the agrarian environment has traditionally been unfriendly to women, although efforts have been made to be more inclusive. Women have always been present, but they have not always been visible. There is a need to set examples: the issue remains that those women attending meetings are not usually the farmers. In terms of the Spanish case studies, all of the irrigation communities are composed almost exclusively of men and there are almost no women on the boards leading the communities.

⁴⁵ UGR is well known in local and regional politics, with many years of lobbying experience and a particular approach to reaching policy that foregrounds rural communities and the preservation/safeguarding of their agrarian heritage. Furthermore, an important Common Agrarian policy is the ECA label that provides acknowledgement of territories managed sustainably by indigenous people. This is co-ordinated by the University of Cambridge and managed by local consortia – UGR has been part of the evaluation process and had the first Granada community recognised following a year of evaluation. This is a participatory process, as communities evaluate each other, with the support of experts, and is another example of a bottom-up approach.

⁴⁶ The proposal to parliament was based on policy recommendations made by UGR in the MEMOLA project considering soil as cultural heritage.



UGR has always tried to highlight the role of the women participating in any of the irrigation communities and underline their positive contribution for a generational replacement and the reactivation of rural contexts as farmers and/or leaders. It is important to state that if women have traditionally been excluded from practices of traditional agrarian production, their presence is integral in other rural cultural heritage practices. As such, UGR has also aimed to highlight women's traditional roles usually related to seed preservation, agrarian product conservation, care of animals, or textile production. Furthermore, UGR is involved with local, open participatory excavation, working with agrarian structures, related to traditional practices involving older women from the community. Working with these women is a rare and important example of preserving community memory of rural heritage practices.

The gender balance in terms of participants attending activities focussed on irrigation systems is quite different: in terms of the volunteer work for canal recovery almost 50% of non-local participants were female, while almost all local participants members of the irrigator community were male. Meetings with irrigation communities are attended almost only by men. The only exception is the Jerez del Marquesado community (Granada) whose secretary is female. Despite not being a farmer, this woman is highly respected by the community because of her role as 'glue' for community members and her knowledge of the governance system, as well as the infrastructure and the history of the community. The other interesting exception is in Mojácar (Almería) where, for almost forty years, two generations of women (a mother and a daughter) were responsible for water distribution in the community.⁴⁷

Regarding the community archaeology activities in Mojácar la Vieja, female presence has been more balanced. From an institutional point of view, women lead both the municipality and also the Valparaiso Foundation that owns part of the site and collaborates with the archaeological project. The regional government representative responsible for cultural heritage is also a woman. Women were slightly in the majority of volunteers and people attending activities organised by UGR. At least 60% of participants were female, but their participation was also significant because they were clearly more active in supporting the archaeological team, enquiring about more family-focussed activities and highlighting their historical role in traditional activities (such as during Mojaquera Workshop around the main fountain of the town).

For the Italian Ticino Park case study, a farmer, whose farm in Albairate would be crossed by the highway was interviewed; she is also the local representative of a women's association of farmers. Female voices have been more prevalent in the protest movements and in educational projects that have been instigated to help the general public understand the significance of the loss of traditional systems and processes.

⁴⁷ As both women have now died, it was not possible to interview them.



5.3 ENGAGEMENT, RESILIENCE AND ECOLOGICAL CRISIS RESPONSE

Given the grounding themes of the Rural heritage pilot, and its engagement with issues of water and soil heritage and biodiversity, it seems important to examine rural heritage's resilience as regards the context of the current climate crisis. As conservation architect and risk management professional Rahit Jigyasu (2020) has recently pointed out, especially given the current global climate crisis and the COVID-19 pandemic, the relationship between heritage and resilience is an important one. Jigyasu offers three central questions that are pertinent to the way in which resilience and heritage can be approached:

- how should we understand resilience in the context of heritage?
- how should we relook at heritage in the context of resilience?
- what are the implications of resilience thinking on heritage conservation and management practice?⁴⁸

These questions provide a useful framing for thinking about resilience and rural heritage. Resilience emerged in the 1970s as a concept to help eco-systems react to perturbations and 'bounce back.' The concept has now evolved to mean a sense of 'bouncing forward'; in short, it is the capacity of a system to deal with change and continue to develop. Aspects of resilience include persistence, adaptability and transformability. Whereas, some heritage conservation approaches tend to be based mainly on a past frame of reference aimed at maintaining heritage resources as unchanged as possible, in fact, change occurs constantly and change is inherent to heritage. Thus, heritage scholar Leticia Leitao (2020) argues for resilience thinking; she refers here to 'a conceptual framework for understanding how complex systems change, adapt and evolve across scales of time and space.'⁴⁹ Heritage then calls for **adaptive management** – heritage sites are not static, but are constantly evolving and that evolution can be slow or fast, as well as predictable or unexpected. Resilience is thus about adaptation rather than resistance. As Alessio Re (2020) affirms, heritage can play an active role in resilience, and resilience thinking by strengthening identity and social cohesion by acting as symbols of continuity within a community; by ensuring the continuity of traditional knowledge and skills accumulated over centuries of adaptation to the local environment; by providing occasions to be a source of interpretation and useful information; by giving opportunities for raising awareness, education and knowledge exchange at local, regional and national levels; and by offering room for innovative solutions also in relation to organisational processes.⁵⁰ There has arguably been community resilience in the localities that UGR works with for over 1,000 years, with examples of best practice of adaptive management here being management by irrigator communities. Similarly, the Norcia and Ticino Park case studies highlight the resilience of rural heritage when faced with such a disruptive occurrence as earthquakes/post-disaster management or infrastructure developments such as the highway project, especially when rural heritage is understood and evaluated in terms of local knowledge as being a key part of the historical and social system.

⁴⁸ Rahit Jigyasu speaking at 'Heritage and Resilience: Building a Symbiotic Relationship', ICCROM webinar, 4th June 2020

⁴⁹ Leticia Leitao speaking at 'Heritage and Resilience: Building a Symbiotic Relationship', ICCROM webinar, 4th June 2020

⁵⁰ Alessio Re speaking at 'Heritage and Resilience: Building a Symbiotic Relationship', ICCROM webinar, 4th June 2020



Rural heritage also needs to be resilient, facing strategic challenges of climate change. Farming and the natural environments are co-dependent, and often more traditional, less intensive farming systems are required; this is especially the case in contested landscapes where economic, cultural and ecological values are in placed in competition.⁵¹ There is currently an increasing acknowledgment of traditional systems for water management linked to a growing consciousness as regards global change and climate breakdown, and the important environmental role that these systems play in terms of local production and consumption. Furthermore, as rural communities such as those in Almería and Granada (Spain) or Ticino Park and Norcia (Italy) face significant cultural, natural and ecological challenges, collaborative approaches are needed to enable those communities to ‘bounce forward’ and rebuild stronger after disruptive events. **Joint action and innovative solutions** are ways to approach the role of heritage in empowering communities’ resilience and capacity towards the great changes that are being faced both now and in the future. Furthermore, it is important to build good public policy to drive just transitions where change is needed, that builds on local traditions and skills and that does not replace these but rather energises them. Bottom-up approaches are needed when working together at ground level to co-develop what ‘good’ looks like. Heritage is significant here because it has a lot of meaning and value: this meaning is determined by the community and so its voice must be heard. Heritage sites are complex systems that require knowledge of what is needed to maintain identity; of what needs to persist and what needs to evolve, adapt and transform.⁵²

5.4 FINAL PILOT CONSIDERATIONS

5.4.1 SPANISH CASE STUDIES

This section outlines some of the qualitative and quantitative data results of the Spanish case studies. In so far as the pilot’s Spanish case studies are concerned (e.g. irrigation communities, community archaeology at Mojácar La Vieja; and the MEMOLab programmes), activities have been attended by a very significant number of people from a range of different target groups. At least 3,900 people have been directly impacted. UGR registered 800 attendees for activities involving the irrigation communities; 1,200 for the community archaeology programme; and 1,900 for MEMOLab’s transversal activities. UGR has also calculated an indirect impact of 11,700 people (without taking into account potential further dissemination from social media and press). Indirect impact numbers are indirectly proportional to direct impact. That is, that the most important indirect impact has been calculated for the irrigation communities’ activities, as the decisions were taken by the whole assembly of farmers and almost all the town’s neighbours are part of the community managing the water

⁵¹ For a UK example, see further Bill Kenmir (2020), ‘Lake District as World Heritage Site’, *Heritage and Resilience: Building a Symbiotic Relationship*, ICCROM webinar, 4th June 2020; George Monbiot (2017) <https://www.theguardian.com/commentisfree/2017/may/09/lake-district-world-heritage-site-george-monbiot> (accessed 5/10/2020)

⁵² A useful source of further information is the *World Heritage Leadership Programme* (<https://www.iccrom.org/section/world-heritage-leadership>). (accessed 5/10/2020)

The *World Heritage Leadership Programme* creates an enabling environment for managing change and continuity. Principles for this include: a landscape approach to management of heritage with natural and cultural values; people-centred approaches to management and rights; resilience addressed both in daily context and specific issues areas; good existing resources of manuals and tools; existing tools to be tested, used and disseminated rather than creating new tools; better delivery in diverse formats and making it easier to find the right material/information.



resources. These activities also have a deeper impact on citizens, associations, institutions and administrations. In contrast, UGR's transversal activities (including conferences, workshops or educational activities) have had a more limited indirect impact because of their own nature, including the fact that they are an end unto themselves, and replicability and sustainability are more difficult to reach as objectives. UGR's community archaeology strategy in Mojácar also has an important indirect impact, as the results (people's perceptions, impressions, acknowledgments or transmission of knowledge) are spread by those participating in the activities and public presence has been very strong during the archaeological interventions. Indirect impact can be also measured by the number of communities, municipalities, associations and administrations interested in participating in, or seeking, new activities, new proposals and, significantly, mediation in local conflicts. Both traditional irrigation systems and community archaeology have provoked interest and debate at different levels, including at the legal and administrative level with issues related to participation, conservation, development, investment, etc. Both programmes have also led to the creation of yet further new initiatives, proposals and calls, so much so that the UGR team cannot currently attend to all requests for recovering irrigation canals, mediation, archaeological projects, meetings or conferences.



Figure 26: The irrigation community at Barranco de Poqueira, July 2018

However, the most important results are qualitative, derived from the interest the pilot's activities have aroused in different sectors. Activities oriented towards the irrigator communities and the traditional irrigation systems have resulted in an increase of acknowledgment and awareness of their **importance from a cultural, environmental, social and agronomic point of view**. The number and quality of debates have increased due to the public policies oriented to the destruction/substitution of traditional systems by modern pressured irrigation and intensive industrial production. As aforementioned, there is also an acknowledgment of the important environmental role that traditional systems play; this can be linked to a growing consciousness as regards global change and climate breakdown.



Important local institutions as rural development groups, the National Park of Sierra Nevada, ecologists and cultural associations and many municipalities are now supporting traditional communities managing water and lobbying against industrial agriculture. Traditional irrigation areas are defended as identity elements for the local population and their cultural values are being used more and more as an argument to protect them.

Changes in attitudes of those responsible for hydrological planning in the Guadalquivir valley and the Andalusian Mediterranean basin can be perceived, as they have called UGR team and the Andalusian Association of Traditional Irrigators Communities to participate in the new planning programme 2021-2027. Some innovations can also be detected in the regional administration for agriculture that, in 2019, for the very first time announced a new measure supporting traditional irrigation after one of their meetings. At the time of writing, the measure had not yet been approved due to political changes in the regional government, but the new administration has announced the call will be published in late 2020. As part of the Rural heritage pilot, the UGR team has also supported the revitalisation of the Association of Traditional and Historical Irrigator Communities of Andalusia, promoting participation and empowerment for these communities. Meetings and the association's Annual General Assembly have provided a good opportunity to work together co-creating common arguments to defend traditional irrigation and the community's heritage values. UGR has also accompanied the association to several meetings with local/regional administration. As such, UGR has been witness to the positive evolution of the association and the irrigator communities' learning and capacities.

UGR's community archaeology strategy has also had a positive effect in the local population and beyond. In Mojácar (Almería), people's perception has changed dramatically as a result of the open excavation and the participatory activities developed. The community's attitudes towards the archaeological site and the research team have been transformed into enthusiastic support and a very high level of interest and participation. Local people have also been very critical of the local institutions responsible for heritage and landscape protection and have requested more cultural activities related to their past history, their memory and their identity places. At a wider level, the strategy has had a very interesting impact due to social networks and press coverage. This impact translated several proposals from local authorities and the regional government to replicate the research and participatory activity in several archaeological sites in provinces throughout Almería and Granada. From an academic point of view, UGR has also noted an increase of interest from colleagues towards this kind of approach, and Mojácar has been transformed into a model for new projects and for students as an important case study in promoting participatory approaches towards rural cultural heritage.

5.4.2 ITALIAN CASE STUDIES

These case studies have revealed the potential of rural landscape to be considered as both heritage and a tool to enhance resilience when faced with disruptive events such as earthquakes or changing infrastructure. In terms of reacting to a disruption, the rural landscape system can be a resource of resilience for local people if it is understood and evaluated in terms of local knowledge as a part of the historical and social system. Furthermore, it can **embody and transmit tangible and intangible aspects which potentially encapsulate a sense of identity and place**: these feelings are essential to recover from disruption. Rural heritage can **connect people** at a local level - it both shapes and is shaped by a social network (which is inherently embedded into socio-natural elements e.g. water or food).



It can also connect and visualise social-ecological systems, thus promoting **sustainable regeneration** and **raising local knowledge and awareness**. It can also work as a resource and place of alternative economic models, **turning rural landscape as heritage into an active element of continuity between past and future**.

One of the main objectives of Ticino Park is defending, protecting and enhancing the quality of the agrarian landscape. In order to achieve that, it has established a series of active participatory tools for use in primary schools (30 schools to date), with university students (100 so far joining digging workshops) and farmers (15 participating in water management courses). A more passive approach has involved conferences and walking tours, supported by a travelling exhibition, brochures and videos (history, food products, environment and people), used to raise public awareness and share traditional knowledge. These initiatives have highlighted issues of resilience for both tangible and intangible heritage, by connecting people, at local level, and promoting an alternate economic model.

5.4.3 SUMMARY OF KEY ISSUES

5.4.3.1 Pilot Observations

In addition to sustainability, there are a number of key issues and themes that the pilot has identified in terms of developing participatory approaches to rural CH.

Viability: The lack of a community a voice can be a barrier for participation. Funding for participatory activity is often made available via specific projects. However, especially with farming communities, there is often the question of their incentive to take part, given that there is usually no financial return for their involvement. In addition, the project will have specific expectations/requirements to fulfil, but equally, local communities will have their own agendas and it can be frustrating for both parties if these do not match. A solution to this problem is to offer to **increased visibility of communities' own issues**. Participatory projects can therefore support through **interlocution, providing a more powerful encouragement and co-ordination role** between the community, (the university) and the municipality. The key is for all parties to work together to find common solutions for safeguarding rural heritage.

Mediation: Rural irrigator communities can be more important than municipalities in terms of resource management, as they are more efficient, local and can manage and promote their own resources. There is often a strong, traditional relationships between the municipality and community (often the municipality is part of the community, as it owns the land). There is not always harmony within communities, but conflict; conflict resolution is necessary, as it can further cement a sense of community. What is needed in terms of sustaining bottom-up participatory approaches toward rural heritage is **intervention and mediation** as an important focus **to overcome social conflicts, to lead to social empowerment and sustainable economic development and cultural/social acknowledgement**. Models of participation need to incorporate mediation, including proposals for solutions e.g. the history of the irrigator community is of them not being used to working together – using isolation as a mechanism for self-protection – so collaborative approaches can be extremely valuable, as can finding ways of coordinating large groups and communities to defend their rights and ecological knowledge. This can again be a means for **communities to self-organise and exchange knowledge**.



Dependency: A challenge identified (at least as far as concerns the Spanish case studies) is one of dependency on the University of Granada as an initiator for projects, as this brings with it the danger of creating expectations that cannot be fulfilled. UGR has therefore created a ‘spin-off’ to complement REACH that is designed for **capacity building**, to create autonomy for local leaders in terms of developing **co-governance** strategies and to reduce dependency upon the University/research project. The Academy can provide academic support, defend landscape and culture and promote work but it is not responsible for working on river and canals – that is the role of farmers. There is also disconnect, given that farmers and universities work on different time-scales and have different priorities; there is also the changing nature of research projects coming and going. Rural communities need to be able to defend their own rights with legislators: UGR can stand with them but they should not cede responsibility. There is also a growing frustration amongst the communities themselves that others are speaking on their behalves (municipalities, universities, and NGOs) and that they want their own voices and views to be heard. Empowering communities towards recognising their own autonomy, capacity and responsibility is then a key issue. This **capacity building** also feeds into themes of **adaptation and resilience**. The more communities see capacity building as a success, the more they want to be involved, and the more resilient the community and rural cultural heritage becomes.

5.4.3.1 Discussion Points from the REACH Granada Workshop

As regards these central concerns, group discussion at the REACH Granada workshop in November 2019⁵³ also highlighted these issues as regards the wider participatory cultural heritage of rural communities. In particular, it was noted that this is primarily about issues of connection with communities (in terms of top-down approaches), and the sharing of skills, knowledge and expertise in building towards a broadening of ‘**collective understanding**’ (Yacamán Ochoa). A first step towards, and a notable challenge in achieving this, is to **mobilise** local communities and groups, especially farmers. Furthermore, participation itself is not a concept that many local people would use: self-governance might be a more appropriate term. Thirdly, there needs to be some much longer-term strategising for supporting local communities: currently, many projects are short-term and dissolve once funding finishes. Some longer-term strategies might include the creation of tools and provision for rural actors to address what they consider to be their cultural heritage and related issues, **through cooperation, collaboration and effective governance systems**.

However, in terms of governance, certain contradictions must be taken into account and certain assumptions challenged. For example, if global markets decide prices, how much control is there actually at a local level? Are there aspects of landscape that are protected, but no longer in use? Are assumptions about communities’ rural heritage based on tradition or current needs and desires? How do farmers want to use heritage and how should that be adapted? It is also important that there be **clear prioritisation** about what should be promoted when lobbying for preservation. What are modern and efficient approaches to soil and water management? Decisions need to be made about **which traditions and practices are the best, most resilient practices to (re)-use and preserve for future generations** and which practices should be disregarded as no longer relevant.

⁵³ The REACH project Granada workshop: <https://www.reach-culture.eu/events/workshops/workshop-on-participatory-approaches-for-territorial-cohesion> (accessed 5/10/2020)

Changes of expectation mean that some acceptable practices can be seen as negative when reviewed several years later: for example, while urban development and modern touristification were initially seen as positive, traditional links with the land were lost, as awareness of cultural heritage and/or local values diminished.



An approach that could be taken to rebuild these connections to promote the recommendations of the commons; however, contradictions between public, private and commons also need unpacking.⁵⁴ **Resilience** is an important factor here: e.g. the resilient role of rural heritage following a disaster. Often rural areas are less damaged and can play an important role in socio-economic recovery, even if part of a town has been destroyed. Houses and churches may be damaged, but there is permanence of land that can continue to be cultivated.

Figure 27: José María Martín Civantos (right) and Sergio Couto González participating in group discussion at the REACH project workshop in Granada, November 2019.

5.4.3.3 Education

Although currently there is a prevalence of more top-down approaches to rural cultural heritage and participation, again **education** can also be seen as an effective way to create awareness. To return to the example of urban development and increasing touristification in Spain in the 1990s which led to the breaking-down of many traditional practices with the land, many different stakeholder groups fought to have their views and voices heard – manifestos were launched and collectives involved – but the most successful approach in awareness-raising was through education to transmit and exchange traditional knowledge and practices.

⁵⁴ For example, some traditional systems and place names are based on local languages: does this lead to conflict with modern practices? What about local laws and customary laws?



Interdisciplinary approaches and intergenerational learning were used to target schools, student and farmers, conferences took place and articles were published to raise awareness within the general public, in order to change mind-sets and make people realise that agricultural practices and production cycles are not outdated, but have endured for centuries for sound ecological and socio-economic reason. However, in such educational programmes, what is required is a **mediatory (rather than a 'talking-down' problem-solving) approach** that engages stakeholders in knowledge exchange rather than imposes activities on them from outside.

The pilot has seen the importance of working with communities, schools, children and taking urban groups into the countryside to appreciate rural heritage. The consideration of the **transmission** of knowledge about intangible cultural heritage, traditional foods and familiarity with food practices is seen as important. However, while education is important, it is not one-sided, from 'outside' researchers going in to teach the community about their rural heritage. Transmission works both ways and researchers have much to learn from the communities themselves and their knowledge of traditions and skills. The pilot has also considered the importance of developing a deeper dialogue between academic and practical knowledge – as both need to be recognised, overcoming conflict for the use of water including areas of concern and communal uses, as well as environmental planning. Therefore, in addition to educational programming, **knowledge exchange opportunities** are of great value and can further empower the community in recognising the value of, and taking greater ownership of, their own cultural heritage.

5.5 REACH PROJECT EVALUATION

The full title of the REACH project is RE-designing Access to Cultural Heritage for a wider participation in preservation, (re-)use and management of European culture. The Rural heritage pilot has explored the preservation of rural areas, stressing the importance of protecting them from further urban development, championed the (re-)use of traditional methods and ecological systems and been integral in managing the response through education and organisation of stakeholders to increase their voice to enable them to share their important message with politicians and the general public.

REACH deliverable D3.1 – *Participatory models*⁵⁵ - evaluated the results of the assessment of prior projects and messages from REACH conference and workshop presentations and, at an early stage of the project, drew a number of conclusions. One of the roles of each of the four REACH pilots was to test them, to see how applicable they were in very different fields of cultural heritage. Although the following italicised bullet points provide brief summaries taken from those conclusions, it is possible to identify themes that feature in the Rural heritage pilot:

- *cultural heritage participatory activities are often overlooked, but have intrinsic, economic and societal benefits*
- *they must be promoted as an asset rather than a liability, and as an investment instead of a cost*

55 REACH Deliverable D3.1 – *Participatory Models*, chapter 6, URL: <https://www.reach-culture.eu/wp-content/uploads/2019/12/REACH-D3.1-Participatory-Models.pdf>, accessed spring 2020.



If mainstream society considers heritage to comprise buildings, paintings and monuments, then the case for rural heritage has to be powerfully made. It is clear from years of decline due to policy making, modernisation, rural depopulation and climate change, along with other factors, that knowledge of rural heritage and biodiversity is gradually being lost. However, as the cases studies have shown, there are certainly intrinsic, economic and societal benefits from preventing the disappearance of traditional methods and approaches. Local communities understand this better than politicians, who might consider them to be outdated, but these communities have often lacked a voice and the ability to self-govern local resources. This is the agenda that is currently being fought for, through the protection of soil and the optimum use of water, as this could prevent significant issues for society in the future.

- *cultural heritage participatory activities can boost confidence, build transferable, soft and work-related skills, leading to positive attitudes*
- *for activities to become transformative, both short- and longer-term plans / strategies are needed to embed activities*
- *they need to involve local people in planning and decision-making phases to maximise benefits*

The case studies have confirmed the validity of these statements. Participation, as part of an (international) community of irrigators, has given people the opportunity to interact with others, to gain experience and confidence. The tangible skills of clearing a ditch are important, as this will be an annual activity, but equally the intangible aspects including teamwork, positivity and a sense of achievement, as well as taking responsibility and decision-making help to generate more critical reflection and enhanced interpersonal skills, all of which are transferable life skills. The importance of the UGR case studies is that they are based on partnership, with local communities integral in planning, managing and undertaking activities to maximise benefits and celebrated each year as an event of community significance.

Participation is clearly at the centre of the pilot's actions and therefore theoretical and methodological tools such as Participatory Action Research⁵⁶ become very useful when applied to agrarian heritage preservation. Participatory Action Research provides tools to work with local communities, particularly farmers, but also other social groups and stakeholders. Conceptualisation of traditional ecological knowledge and governance systems enable knowledge-based exchange to take place, that leads to opportunities to transform dialogue into action, to defend, protect and recover Cultural Heritage.

- *need to engage young people to maintain traditions and to safeguard (in)tangible heritage*

It is clear that the abandonment of rural areas with people leaving for towns and cities has to stop, if rural heritage is to be reclaimed and maximised. It is therefore important to share traditions with young people, highlighting the importance of the connection between urban and rural society. The Spanish case studies, in particular, stress the importance of education through schools, VegaEduca, university activities, integrating histories of local areas with awareness of their function and how, for the good of society, they need to be maintained.

⁵⁶ REACH D3.1, section 5.2.1 on page 28: "Participatory Action Research is a qualitative methodology that aims to integrate methods and techniques of planning, observing, documenting, analysing, evaluating and interpreting the participatory pilots. This approach seeks to develop collaborations between stakeholders through using applied research methods."



D3.1 also considered different types of cultural heritage related participatory models. Four have been selected from that list that particularly fit with rural heritage:

- *Intergenerational – sharing of traditions, stories, memory, oral histories*
- *Community – workshops, demonstration, role-play, non-formal education to both share and challenge perceptions*
- *Revitalise/Rebuild – questions of authenticity*
- *Reappraisal – of an area or era, after time passes*

The Rural heritage pilot has adopted multiple approaches to pass on memory and traditions, working closely with communities. Workshops such as 'Do you want to be an archaeologist for a day?', 'the traditional roles of women' and 'participatory map making' are all ways that messages are shared in Mojácar. Similarly, in Ticino Park, digging workshops are held for students and water management courses for farmers that are more proactive approaches, complemented by the use of conferences, brochures and videos.

The earthquake case in Norcia fits with the rebuilding of an area and the question of authenticity, asking whether the tourism and gentrification of the area has been placed above the needs of the people that have lost their homes, significant buildings and ways of life.

Finally, reappraisal of a mindset as time passes is pertinent. As recently as the 1970s, some areas in Spain did not have domestic running water: the subsequent drive for modernisation, that had begun 20 years earlier, propelled the country to become a modern developed European country by the early 1990s. This would have been viewed with pride at the time and yet, as demonstrated in this deliverable, opinions changed, the development has been seen as too great, and as a consequence, traditional systems had been, and continue to be, lost, at a great cost for society.

The Rural heritage pilot raises a further dimension that will be considered when drawing REACH project conclusions: that is, the participatory model of building a community voice, initially acting as an interlocutor, but then helping communities to take a step further to be heard directly and not through an intermediary (however well meaning.)

D3.1 described participatory characteristics of REACH pilots, in terms of top-down and bottom-up approaches. Although brief introductory statements are presented here, it is acknowledged that this is a nuanced debate that draws on highly personal perspectives. They are therefore useful starting points for wider consideration, something that the REACH project, as a social platform, is keen to initiate.

The REACH pilots were loosely grouped into pairs:

1) Minority and Rural heritage

- *complex community relationships, built on trust, with a desire for a bottom-up approaches, but not always having the authority to fulfil objectives*

2) Institutions and Small towns' heritage

- *although innovating, a more traditional, restricted approach is taken (due to laws, rules and regulations); there may need to be top-down initiation to enable activities to begin.*



Each of the case studies examined demonstrate that building general awareness has been a success, but more work is needed to improve water and natural resource management and implement associations, for farmers and rural residents, that would ideally be recognised by the ministries of culture and agriculture. In many respects, the current approach is still top-down, with institutions involving citizens, rather than citizens organising themselves, but the engagement is needed now to save rural heritage. This deliverable has outlined the work of the Rural heritage pilot and multiple stakeholders, that have organised themselves to overcome challenges, instigating a range of activities, to shift the balance, to enable the achievement of objectives and protection of the landscape through more bottom-up initiatives. There has clearly been success, although further work is needed, especially to embed the message into the consciousness of wider society, which will be required to achieve sustainable change.

As the project set out to test participatory approaches to cultural heritage, through four very different pilots that worked in different sectors and political environments, a final task for the project will be to compare findings. This activity will be described in one of the final deliverables of the REACH project: D3.3 – *Project evaluation report*.



6. CONCLUSION

In order to draw final conclusions on the Rural heritage pilot, it is useful to recall the pilot's general objectives in examining how the impact of participatory methodologies, current and future, and associated with rural CH, can enhance its potential for social good. The pilot's objectives were as follows:

- **To trial participative mediation processes between local stakeholders**, farmers, local communities and local/regional administration and institutions involved in the cultural, territorial and environmental management.
- To discuss **the creation of a co-governance initiative for the territorial safe-keeping as the best way to protect agrarian heritage** (tangible and intangible) and rural landscapes;
- **To promote a more resilient rural CH improving local engagement and public participation in policy making**, economic, cultural and social initiatives and territorial and environmental management.

Underpinning all three of these objectives is an understanding of **community** itself. Communities correspond, in the first place, to the people of a certain localities. That is to say, to the community of local residents, whether permanent or not, who share a territory, a landscape, a space and an identity. This does not imply homogeneity. Communities, in fact, are characterised, among other things, by their **heterogeneity and dynamism**. A community evolves over time, its interests, circumstances and members change. Moreover, there are many sub-communities within each wider entity, that is, groups or sectors organise or identify themselves with certain specific aspects. There are, for example, communities of irrigators, farmers and herders; women; children; adolescents; neo-rurals or foreigners; older people; tertiary sector workers (especially tourism); part-time residents, etc. Among these communities within the larger community there are also overlaps, so that a person can belong simultaneously to one or several sectors depending on their circumstances. Understanding the type of social context is essential when approaching rural heritage: not all sectors will reveal the same interests towards what can be offered, and not all will uphold similar levels of dynamics. There may even be those that consider cultural heritage to be useless and negative. The starting point to any assessment of participatory approaches must therefore be an understanding of an **inclusive, open, complex and dynamic community comprising different actors and characterised by a diversity of approaches and interests**. The project may thus be oriented to a collaboration with the whole community in general yet, at the same time, be focused on certain particular sectors. Each will have to be treated differently. Moreover, certain sectors may also act as prompts to energise other segments of the population. The strategies adopted for working with participatory approaches for rural heritage must therefore be diversified and flexible.

An assessment of the pilot can be seen as enormously positive in terms of the project's capacity **for generating a social impact beyond the scientific results**, as the quantitative and qualitative data reveal. The project has managed to mobilise significant section of the local populations involved, leading to attendance in one or more scheduled activities and a following of the news in the press and social networks. The response from local authorities and different associations, collectives and stakeholders have likewise been significant, as evidenced by the level of change in the perception of heritage in general, and of cultural landscapes and archaeological features in particular, leading rural communities to develop new relationships with their history.



A significant change has also been perceived among local administrations themselves: this is reflected in their sensitivity towards and development of new strategies for safeguarding rural heritage. However, it is more difficult to determine if this will result in an enduring change beyond completion of the REACH project. The last issue of **longer-term sustainability** is a fundamental one and concerns what is left behind when interventions and projects end, how future research will continue and which lasting social dynamics the project has been able to put into place.

The pilot has identified a number of key issues and themes for future consideration when developing participatory approaches to rural CH:

- **giving communities a voice**, with participatory projects providing support through interlocution; bringing parties together to find common solutions for safeguarding rural heritage
- incorporating **intervention and mediation**, to overcome social conflicts and generate social empowerment, sustainable economic development and cultural/social acknowledgement
- **building capacity** to overcome dependency, to enable rural communities can defend their own rights with legislators
- providing formal and non-formal **education** for communities, schools, children, including taking urban groups into the countryside to appreciate rural heritage and promote the **transmission and exchange** of knowledge and practices.

In addition to the key themes and challenges outlined above, differences in participation in, and the impact of, each activity are not due exclusively to obvious factors such as the type of residents or the socio-economic context. There are other influencing factors that must be taken into account that condition a community's availability to participate or even the number of residents present in the locality. Not all these factors can be externally controlled. Multiplying the number of campaigns can allow for the introduction of improvements to participatory approaches, yet what has worked once will not necessarily have the same success the following year and *vice versa*. There must be a flexibility and openness to avoid frustration when certain activities are not successful or do not generate the expected reaction. It is especially fruitful to collaborate directly with associations and local groups that are already working on the ground: again, a bottom-up approach. Regardless of their core mission, their common denominator is that they are already organised, accustomed to carrying out and arranging activities, and are concerned not only at a personal level but a wider level, with the future of the town and region. The range of possibilities is vast, either working directly with groups or combining the action of local associations or groups (participation of the elderly, of irrigator communities etc.) with schools and educational centres to develop *fora for knowledge exchange around local rural heritage*.

The open and participatory approach of each of the Rural heritage pilot case studies outlined here has also revealed something quite striking: and that is a community's **emotional connection to place**. Each community has developed a link with its heritage and with former populations and societies. The current population, in fact, recognises the populations that once inhabited the place as their ancestors, founders of their towns and creators of cultural landscapes. In each of the Spanish case studies, for example, a high value was placed on the possibility of securing historic information about the irrigation system or the progress of the excavation, as well as actively participating in the work and in the investigation.



This has, in turn, generated an even greater demand for knowledge and curiosity about local rural heritage. The impact of the Mojácar excavation and its participatory programming is striking: the work has provoked a deep change in the community's perception of their history and heritage. The team of archaeologists is consistently welcomed by each of the communities and has been invited to participate in other activities, such as local festivities. The Italian case studies have clearly demonstrated that a rural landscape system can be a resource of resilience for local people if it is understood and evaluated in terms of local knowledge as a part of the historical and social system. Furthermore, each study shows how a landscape **embodies and transmits tangible and intangible aspects of heritage that encapsulate a deep sense of identity and place**. These feelings are essential in terms of a community's and, indeed, heritage's resilience to recover from disruptive events. Rural heritage **connects people** at a local level and it can also connect and visualise social-ecological systems, thereby promoting **sustainable regeneration as well as promoting local awareness and knowledge**. It can also work as a resource and place of alternative economic models, **turning rural landscape as heritage into an active element of continuity between past and future**.

It is clear that each case study has resulted in communities developing **a deeper sense of the belonging to and ownership of the landscape**. This has led to social monitoring to prevent pillage and deterioration of rural heritage landscapes, and the development of strategies by local and regional administrations to continue investigating, conserving and valuing rural heritage sites. Another outcome is that the research too begins to be perceived by the community as something that is close, familiar and comprehensible to them. The research itself becomes a part of the community, giving place to its integration within community life as a space for enjoyment, learning and even leisure. In short, it grants communities the possibility of approaching cultural heritage and archaeology itself not only with fascination (due to the 'discovery' aspect) but also with greater curiosity about, and recognition of, the more scientific aspects of interpretation, as well as questions of management, development, conservation and musealisation. UGR is therefore strongly convinced that opening its disciplines and activities to different communities through a range of participatory approaches has positive effects not only on rural heritage and archaeology itself, but above all, for a social, cultural and economic development of the areas and the communities with and for whom this pilot has worked.



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APPENDIX: DEFINITIONS OF TERMS AND ABBREVIATIONS

Glossary of terms and abbreviations used in the document

CH – cultural heritage

FP7 – Framework Programme 7 (European Commission Research and Innovation)

ICCA – Territories and areas conserved by indigenous peoples and local communities

MEMOLA - Mediterranean Mountainous Landscapes project

NGO – Non-Governmental Organisation

SWOT – Strengths, Weaknesses, Opportunities and Threat analysis

THIAS - Traditional and Historical Irrigation Agroecosystems

UGR – University of Granada

UNESCO - The United Nations Educational, Scientific and Cultural Organization