



Alliance for
**Mediterranean
Nature & Culture**

Many Paths • One Mediterranean

Impact Report 2017-2022

Prepared by:



Funded by:



Credits

Produced by: IUCN Centre for Mediterranean Cooperation (IUCN-Med)

Funded by: MAVA Foundation

Project: Measuring the impact in cultural landscapes of the M6 OAP

The designation of geographical entities in this report, and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or other participating organisations concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. The views expressed in this publication do not necessarily reflect those of IUCN or other participating organisations.

Recommended citation: Alliance for Mediterranean Nature & Culture (2022). Impact Report 2017-2022

Written by: Alessia Iovinelli (IUCN-Med)

Reviewed by: Wouter Plouvier (IUCN-Med) and Mercedes Muñoz Cañas (IUCN-Med)

Layout by: Catherine Perry (cath@swim2birds.co.uk)

Front cover photo: © Stamos Abatis - MedINA

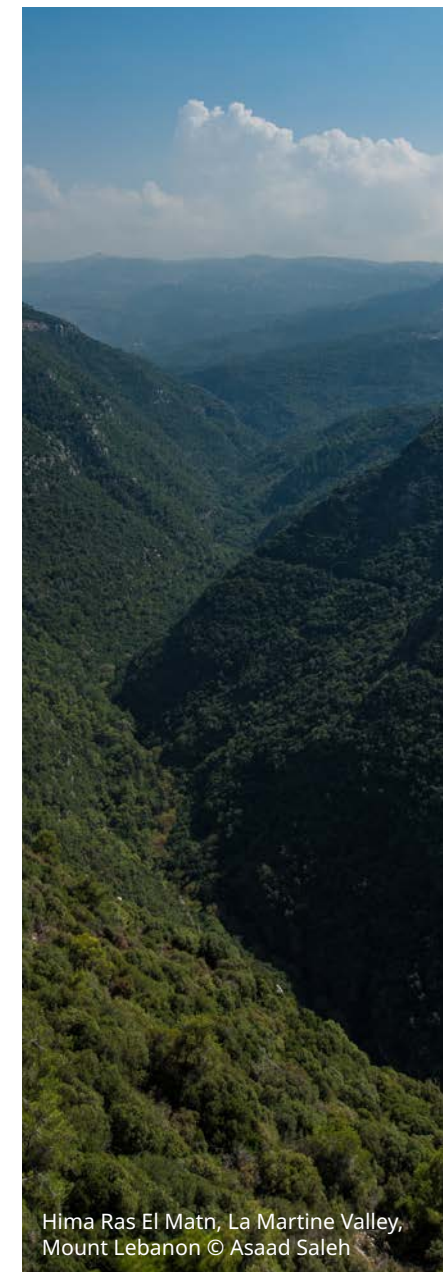
Back cover photo: © Pommelien Da Silva Cosme - GDF

An interactive web version of the document is available at: www.iucn.org/mediterranean

Contributors and members of the AMNC:



Table of Contents



Hima Ras El Matn, La Martine Valley, Mount Lebanon © Asaad Saleh

1. Background	2
2. Objective and methodology	4
3. The impact of AMNC and the strategies for achieving it	8
4. The impact of AMNC through the project partners and the pilot sites (2017-2022)	10
4.1 The impact of AMNC on biodiversity conservation	10
4.2 The impact of AMNC on economic resilience	15
4.3 The impact of AMNC on social sustainability	19
5. Additional results beyond the ToC	26
6. Threats reduction	27
7. Conclusions	28
References	30
Annexes	32
Annex 1. Knowledge	32
Annex 2. Economics and finance	36
Annex 3. Policy, governance and local capacity and management	40
Annex 4. Threats reduction	46
Annex 5. Survey	49

1. Background

Agricultural landscapes produce food, fuel, fibre and if well managed, they have the opportunity to provide other ecosystem services, enhance biodiversity and mitigate climate change. Abandonment of beneficial land use practices such as transhumance and terrace cultivation that have shaped the Mediterranean natural environment over millennia can result in massive loss of biodiversity and of those ecosystem services they provide.

The Alliance for Mediterranean Nature and Culture (AMNC), created in 2021, englobes 13 organisations which joint forces to support the conservation of Mediterranean cultural landscapes after seeing the benefits they have for the ecosystem and biodiversity, and for the people who live and work sustainably on the sites. The aim of the AMNC is to strengthen the knowledge on linkages between biodiversity and cultural land use practices around the Mediterranean basin, and advocate for the enhanced environmental, social and economic benefits for biodiversity and the livelihoods of local people.

Funded by the MAVA Foundation to implement its Outcome Action Plan OAP M6 on [promoting sustainable land-use practices](#), the partners of the AMNC have been working together since 2017 to deliver better social, economic and environmental outcomes. It supports sustainable management of lands and resources across sites in 7 geographies representing landscapes of mountains and agro-silvopastoral areas in lowlands and islands, and works to amplify learning and share experiences regarding the links between cultural practices and biodiversity, and about how local traditions, governance systems and national and regional economic and development policies influence the landscapes' management.

Nowadays, in terms of geographies the AMNC includes three landscape types: Mountain landscapes, lowland agro-silvo-pastoral systems and island landscapes.

THE MOUNTAIN LANDSCAPES AREAS ARE:

- High Atlas Mountains of Morocco
- Shouf Mountain of Lebanon (Al-Shouf Biosphere Reserve, West Bekaa and Mount Lebanon)
- Taurus mountains in central and southern Anatolia, Turkey, with gradient going down to the Mediterranean shores in Mersin Province Sarıkeçili transhumance routes

THE LOWLAND AGRO-SILVO-PASTORAL SYSTEMS AREAS ARE:

- Corridor stretching from Extremadura and Córdoba, Spain, to Coruche in Santarém, Portugal
- Kroumirie Mogod, Northwestern Tunisia

THE ISLAND LANDSCAPES AREAS ARE:

- Lemnos in the Aegean Sea, Greece
- Menorca, Balearic Islands, Spain

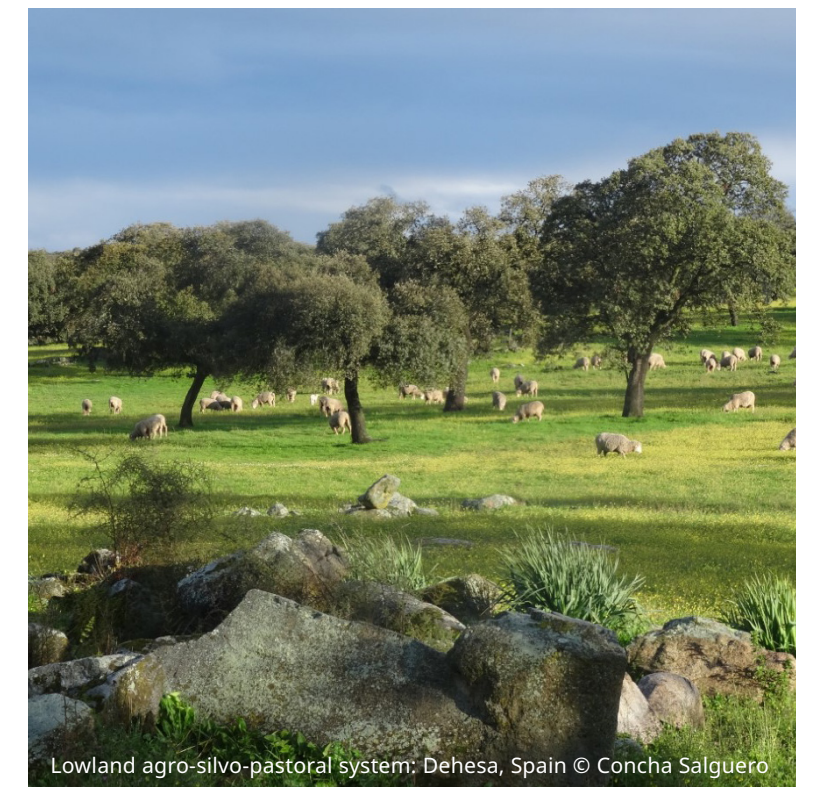
In addition, through an initiative focusing on mobile pastoralism in the Mediterranean, sites from Greece (Pindos range) and the Balkans are also included.



Mountain landscape: Shouf Mountain, Lebanon © Al-Shouf Biosphere Reserve



Island landscape: Lemnos, Greece © MedINA



Lowland agro-silvo-pastoral system: Dehesa, Spain © Concha Salguero

The AMNC promotes the improvement of enabling conditions such as favourable governance frameworks, supportive value chains and greater market access for products from cultural landscapes, and promotes greater public, decision-makers' and consumer awareness on the value of sustainable production

systems for biodiversity and ecosystem conservation. Its ultimate goal is to increase the surface area of selected cultural landscapes, as well as to halt the loss of beneficial traditional land use practices and demonstrate their role in supporting biodiversity conservation, social wellbeing and economic sustainability.

2. Objective and methodology

Cultural Landscapes are complex systems where evolution of socio-cultural patterns, cultural values, governance structures and natural elements are interconnected.

Partners of the AMNC have been working since 2017 to promote and protect cultural landscapes. The aim of this impact assessment is to gauge the regional and local level impact of AMNC on cultural landscapes of high ecological value, and to provide useful information for devising suitable future strategies.



Clover growing at Mongofra Nou farm, a multiannual rain-fed cover crop © GOB Menorca

Partners of the AMNC developed a common Theory of Change (ToC, **Figure 1**) which divided its desired and expected change using different strategies. This impact report shows results combining those strategies to reflect the change in the three pillars of sustainability: environmental benefits (biodiversity conservation), economic resilience and social sustainability in cultural landscapes.

The reduction of the threats that should be achieved by the different impacts, based on the ToC, was also analysed.

The primary methods chosen for collecting data were a review of the technical reports of the project partners reflecting work and results of the period 2017-2022 and the use of a qualitative and quantitative questionnaire. The survey was designed to collect information from the pilot sites, based on the indicators of the ToC, and was discussed through consultations and meetings with the project partners. The final questions included in the questionnaire are listed in **Annex 5**.

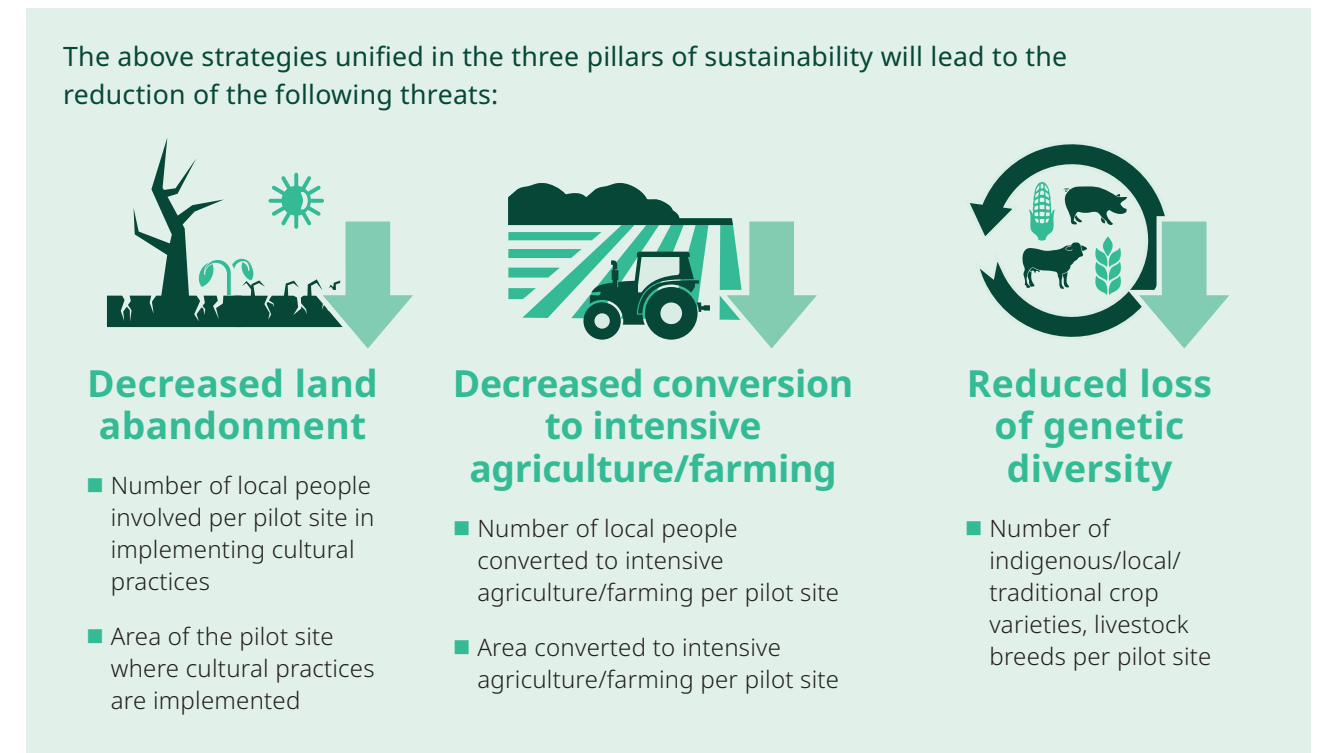
Figure 1. Theory of Change (ToC)

PILLARS	STRATEGIES	OUTCOMES	INDICATORS	IMPACT
BIODIVERSITY CONSERVATION	Knowledge	Improved knowledge about the links between cultural practices and biodiversity in Mediterranean cultural landscapes	Scientific evidence of the link between cultural practices and biodiversity is available for each landscape type (e.g. including plants, insects, small mammals, birds, soil biodiversity)	The biodiversity conservation in Mediterranean cultural landscapes is enhanced
		Assessment of the benefits of biodiversity-friendly cultural practices for the human wellbeing of communities living in the Mediterranean basin	Scientific evidence of the benefits of biodiversity-friendly cultural practices for the human wellbeing of communities of Mediterranean cultural landscapes (e.g. for their food security, health, water security)	
ECONOMIC RESILIENCE	Economics and finance	Better understanding about the economics of cultural practices, including on topics such as: <ul style="list-style-type: none"> ■ Incentives and disincentives ■ Value chains ■ Economies of scale ■ Contributions to local income ■ Factors of practices' profitability and resilience 	Study about lessons learnt from the economic aspects of cultural practices is produced	The financial sustainability of cultural practices-based economies is ensured
		Assessment of economic mechanisms for maintaining and expanding cultural practices in pilot sites (e.g. labelling, new market tools, creation or expansion of niche markets, etc.)	Economic options for maintaining cultural practices in pilot sites are identified and promoted	
		Better positioning of cultural practices-based products and services from pilot sites in the market chain, including through increased efficiency and profitability	Number of new products or product lines, or services that have been improved or enhanced, in the pilot sites	
		Promotion of pilot mechanisms for encouraging investment in support of cultural practices at national and site levels	Number of mechanisms that have been explored and promoted	

Figure 1. Theory of Change (ToC) cont.

PILLARS	STRATEGIES	OUTCOMES	INDICATORS	IMPACT
SOCIAL SUSTAINABILITY	Policy	Adoption of key international policies in key sectors (agriculture, land use and land governance, water, economic and fiscal policy) that support the maintenance of cultural practices beneficial for biodiversity in the Mediterranean	Number of declarations or resolutions, recognising the value of cultural landscapes and practices by national fora and organisations as well as by international conventions	The social wellbeing, local capacity and governance systems of Mediterranean cultural landscapes are improved
		Adoption of key sectoral policies at national and subnational levels that support the maintenance of cultural practices beneficial for biodiversity in pilot landscapes	Number of positive subsidies achieved (implemented)	
	Governance	Development of land governance and land-use plans at national, subnational and local levels in pilot sites' countries that recognise the value of cultural practices	Number of pilot sites where land governance action plans are adopted	
		Improvement of institutional governance systems at national, subnational and local levels in pilot sites' countries for participatory cultural landscapes' management	Presence/absence of institutional governance systems that support the implementation of cultural practices that are beneficial for biodiversity in pilot sites	
	Local Capacity and Management	Strengthening of local stakeholders' capacities (administrative, legal, socio-economic and technical skills) for the implementation of cultural practices in pilot sites	Number of local practitioners and other stakeholders in pilot sites who have benefitted from knowledge transfer through trainings, capacity building events, exchanges of good practices, visits and other actions	

Figure 2. Threats reduced by the strategies of the ToC



3. The impact of AMNC and the strategies for achieving it

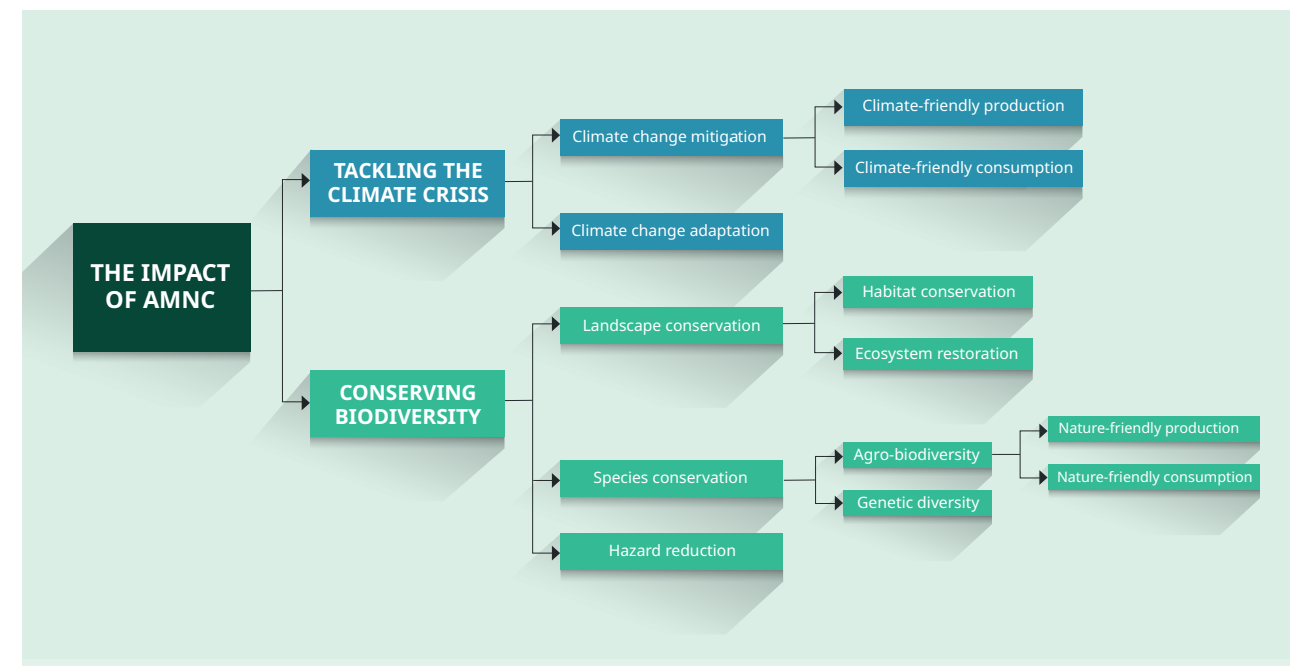
Since 2017, partners of the AMNC have been working to foster cultural practices as a way to contribute to the environmental, social and economic sustainability of Mediterranean cultural landscapes. Partners work in different project sites that include a wide range of landscapes (rangelands-grasslands, steppes, forests, mountains, wetlands, drylands, deserts) and cultural practices.

Those sites involve mobile pastoralism (nomadic pastoralism, transhumance) in Turkey; agro-silvo-pastoralism in Spain, Portugal and Tunisia; agricultural terraces, dry stone walls, architecture and other bio-climatic construction techniques, water management systems, traditional agriculture and grazing systems, traditional harvesting of food and edible-medicinal plants in Morocco and Lebanon;

traditional farming and grazing in the islands of Lemnos and Menorca.

Thanks to the local and regional projects carried out, partners of the AMNC were able to generate a meaningful impact towards reducing the loss of biodiversity through forest and agro-ecosystem protection, land restoration, soil and water management, and climate change mitigation/adaptation.

Figure 3. The overall impact of AMNC



The AMNC leveraged several strategies to achieve its impact. Building **partnerships** and fostering regional and international collaborations helped mobilise funds and broaden the network of partners. **Enhancing knowledge** about the links between cultural practices and biodiversity was built upon the exchange of methodologies and innovative ideas between the pilot sites, and the development of a common monitoring framework. Through **communicating** and promoting the importance of cultural practices for biodiversity conservation and the wellbeing of communities, the results of the Alliance's research and practice were disseminated. **Ensuring economic and financial sustainability** of cultural practices-based economies was made possible through sustainable production and consumption, sustainable food systems, sustainable certification and labelling, food security and sovereignty, economic inclusion, agricultural transition and circular economy as local solutions.

Advocating policies that support cultural practices and cultural landscapes at local, national and international level was key to ensure long-term impact and policy changes regarding land and climate justice, gender balance, and Other Effective area-based Conservation Measures (OECMs) protected areas. **Strengthening governance systems** was ensured through participatory cultural landscapes' management thanks to traditional governance systems (Agdals, Himas, etc.), traditional communities (such as nomadic pastoralists, transhumants, traditional forestry communities, etc.), indigenous communities, and community-based conservation. **Strengthening local capacities** for improved and sustainable management practices helped build resilient communities and celebrate local knowledge. Finally, **scaling up** the Cultural Landscapes approach was made possible by gathering knowledge from the project sites in order to enhance heritage learning.

Figure 4. AMNC strategies



4. The impact of AMNC through the project partners and the pilot sites (2017-2022)

4.1 THE IMPACT OF AMNC ON BIODIVERSITY CONSERVATION

As a result of the thorough work of the pilot sites (detailed results in **Annex 1**), the Alliance was able to improve the biodiversity conservation and recover habitats and ecosystem functions of the cultural landscapes. By gathering scientific evidence, the project partners documented the cultural practices that best support conservation and demonstrated that these practices can increase habitats and wildlife populations. The Alliance's efforts tackled many challenges that are currently threatening biodiversity in the cultural landscape, such as the unsustainable collection of wild edible plants, intensive agriculture, forest fires due to climate change and land abandonment.

In **Al-Shouf Biosphere Reserve**, an area of high biodiversity value of the Eastern Mediterranean, the flora and fauna species that mark the different agro-silvo-pastoral ecosystems in the landscape were defined and mapped as baseline biodiversity and eco-cultural indicators. This was an innovative activity, as for the first time an inventory of species was performed and could be used as baseline to compare future results. In order to strengthen the cultural practices of the landscape, a 5-year management plan for assessing the habitats and key wildlife species was designed and implemented.

The project also adapted and applied the *Land Stewardship* approach pioneered by the pilot site in Menorca, working in close collaboration with them. In order to restore the landscape, private landowners were identified for the restoration of stone-wall agricultural terraces in sites threatened by land degradation and soil loss, in the villages of Niha,

Baadaran, Jbaa, Khreibeh, Maasser, Botmeh, Barouk and Mrusti with a special focus on the traditional grazing economy and the reintroduction of the Nubian ibex. Twelve specimens of the species Nubian ibex (*Capra nubiana*) were translocated from Wadi Rum Nature Reserve (Jordan), reintroduced in the Al-Shouf Biosphere Reserve in 2017 and kept into the Aana enclosure in the Bekaa Valley until release in the wild in 2020. It was the first time ever that a big mammal was reintroduced in Lebanon.¹ In order to scale up the cultural landscape approach, all the tools and collective knowledge for the implementation of cultural practices developed in Al-Shouf were compiled, disseminated and promoted.²

The project in **West Bekaa and Mount Lebanon** focused on the eastern slopes of the Shouf Mountain landscape in addition to other Hima sites in Mount Lebanon. A monitoring of species (720 plants, 225 birds, 27 mammals) was performed in 5 sites. Of the monitored species, 1, the Greek Tortoise (*Testudo graeca*), could be highlighted as bio-indicator. In addition, pilot restoration actions of high mountain pastures were implemented in collaboration with selected local municipalities and shepherds, in the pilot Hima sites of Kherbet Kanafar, Ain Zebdeh, and Aitanit.

Partners assessed and evaluated the economics of the ecosystem services in Hammana and Ras El Matn. The study introduced a unique feature to ecosystem services evaluation by emphasizing cultural landscapes and practices (i.e. transhumance activity, harvesting of Medicinal and Aromatic Plants (MAPs) and agricultural terraces) and recognizing their socio-ecological values, showcasing the importance of maintaining them in terms of their impacts on climate change, cultural heritage, socio-economic welfare and human well-being, and

AMNC PARTNERS PILOT SITES (2017-2022)



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN or the experts and partner organisations that contributed to this work.

biodiversity. Finally, in 2020, four new Hima sites were identified in Mount Lebanon in order to scale-up and replicate best practices.

In the island of **Lemnos**, the assessment focused on the status and threats of the main land use practices, including a comprehensive record of the traditional agro-pastoral *mandra* system and its main constituent elements (extensive farming and stockbreeding, maintenance of semi-natural vegetation and

traditional farming structures).³ The project's foundation was the concept of *Land Stewardship*, with 12 farmers (from Lemnos) and 32 olive oil growers (from Kythera island, identified as pilot site for scaling-up of best practices and project's results in 2020) participating in the land stewards network, implementing sustainable farming practices.

The project also focused on the assessment and monitoring of the impacts of different agro-pastoral

practices, developed around the mandra system, on biodiversity, soil and the landscape in representative agro-pastoral areas.⁴ Bio-indicator species that are suitable for long-term monitoring were identified, to understand vegetation dynamics and ecology (focusing on wild arable, ruderal and grazing land plants, and crop wild relatives), entomofauna (focusing on arthropods) and farmland birds. A total of 142 new flora species were recorded for the first time in Lemnos, raising the number of total taxa (species and subspecies) of the island to 1,050. Based on the results, three species that were recorded during 2020-2022, were first records at a national level.

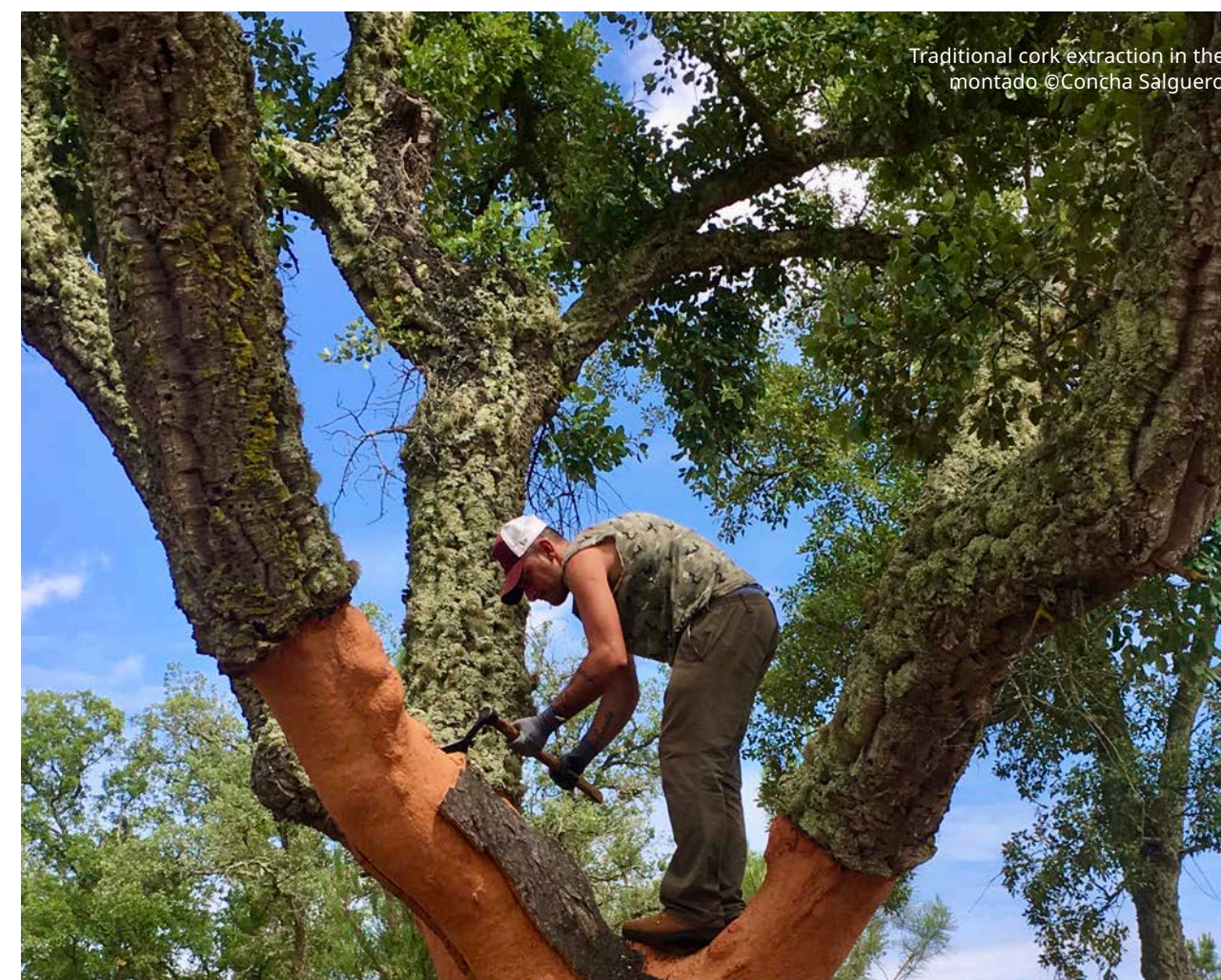
The project in **High Atlas** focused on *agdals* (extensive highland pastures) and terraced agroecosystems, assessing relationships between cultural practices and biodiversity, and supporting community management of cultural landscapes in situ. The knowledge of the conservation status of plant diversity was enhanced, thanks to the monitoring of 29 different bio-indicator plant species in 11 sites. Actions to halt the loss of plant biodiversity were implemented, such as the establishment, expansion and re-design of 2 community nurseries, according to permaculture principles, where new seedlings of valuable, threatened and endemic plant species were planted. Hundred thousands of plants of more than 200 different species plus 500 seed accessions have been distributed to local communities for enrichment planting or retained in the nursery to ensure continued cultivation of all species during subsequent years and for seed production. The community members then planted these wild species in their agricultural terraces or semi-wild areas, thus boosting wild populations of overharvested species and reducing harvesting pressure on them.⁵ In order to improve the knowledge of plant population dynamics and ecosystem composition, and evaluate the impact of anthropogenic management and potential success of restoration actions, an ecological monitoring was performed. It aimed at better understanding 1) the conservation potential of traditional/community managed enclosures (*agdals*) versus artificial closures; 2) the environmental impacts of grazing; and 3) habitat dynamics in the High Atlas. Having compared non-grazed and grazed pastures as well as between

community and artificial enclosures, results indicated that the traditional management system of the *agdal* generates a greater floristic diversity over time than the artificial enclosure.⁶

In **Menorca**, the project aimed at sustaining the “virtuous mosaic”, an agricultural approach that preserves the cultural landscape and biodiversity of the island, based on voluntary land management agreements for *Land Stewardship*. The agreements included commitments for sustainable management of the main structural elements of the territory (dry walls, mosaics of wild vegetation), as well as the management of crops and livestock.⁷ Until 2020, the actions were carried out and coordinated with a network of 30 farms. Since 2020, the representative farm network was expanded with 6 new incorporations. The purpose was the replication of cultural practices in 36 emblematic farms and landscapes of the pilot site. Also, soil fertility was improved, thanks to the completion of a research on different regenerative agriculture methods (planned grazing, redileo and keyline) and soil analytics that helped adapt fertilisation to the real soil needs.

The project in **Dehesas/Montados** sought to demonstrate the links between cultural practices and biodiversity conservation. The assessment focused on the monitoring of soil biological quality indicators (ants and coprophagous activity), as well as biodiversity indicators (vegetation and butterflies) in 3 monitoring sites (two in Spain and one in Portugal). The partners monitored 6 farms in Extremadura (Spain), where cultural practices were implemented: rotational grazing, sheep folding and change from cow into sheep, transhumance. They have also been supporting extensive grazing farmers in tree regeneration and diversification.

Several Indexes were designed to evaluate the links between cultural landscapes and biodiversity: High Nature Value Index (high potential for biodiversity with GIS system), Grass Health Index (adapted to Dehesas from the Rangeland Health Index) and Structural Complexity Index (adapted to Dehesas). Since 2020, efforts focused on capitalising on the progress already achieved, scaling up, and replicating the Dehesas/Montados approach in other sites.

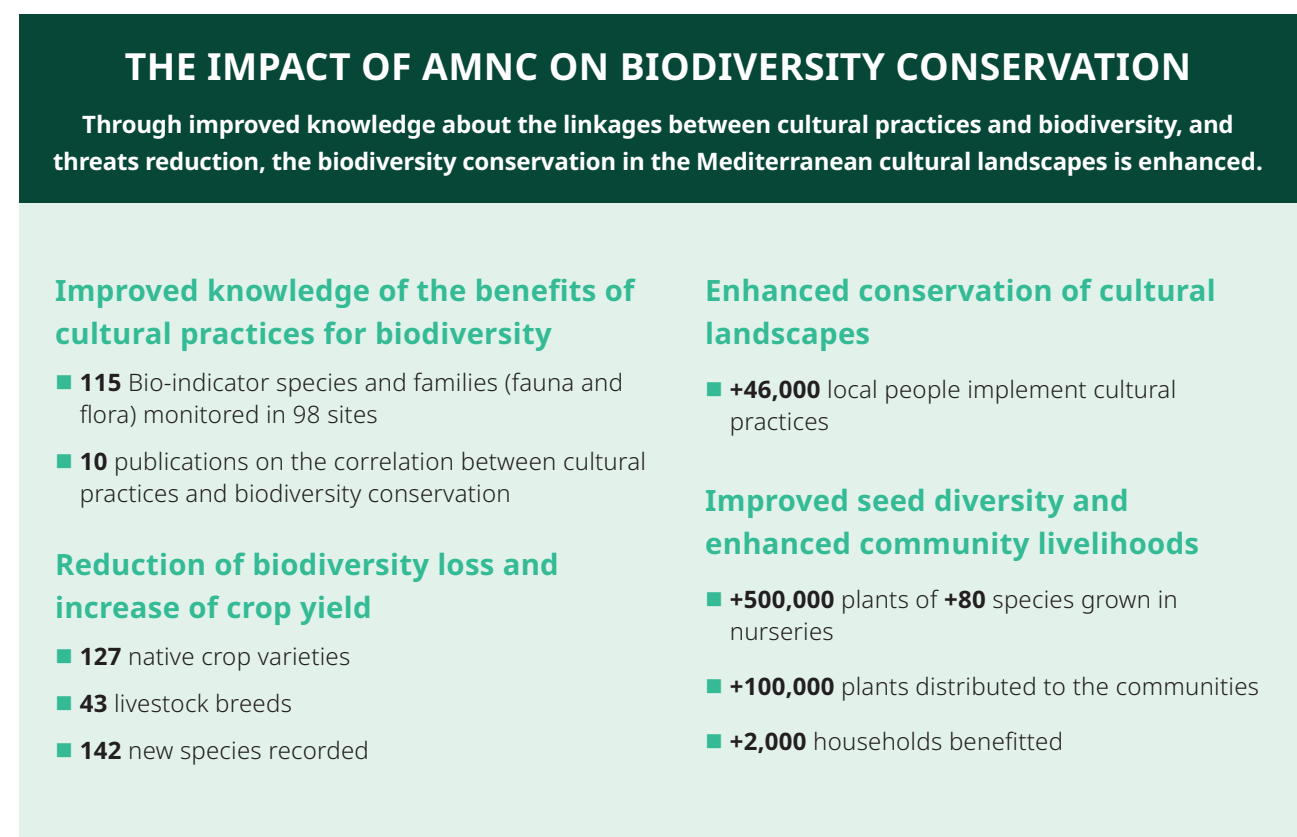


In **Kroumirie Mogod**, a cork-oak natural forest landscape, with traditional farming and pastoralism, in the northwest of Tunisia, a new monitoring scheme on biodiversity and management practices was put in place. No reforestation actions were undertaken, but the project sought to encourage the local population to make a sustainable use of existing forest resources, in this case the by-products of cork oak.

In the **Taurus Mountains**, the project focused on mobile pastoralism as a traditional cultural practice that benefits biodiversity and the wellbeing of communities. The pilot landscape is the broad geographical area in the central and southern Anatolia in Turkey utilised by Sarikeçili nomadic pastoralist communities as wintering, summering pastures and migration itineraries. The number of local people involved was measured through the number of tents (150) of the nomadic pastoralist

community, which did not change, thanks to the project partner’s implementations and monitoring efforts. The project supported mobile pastoralist communities to maintain their lifestyles, moving freely through the landscapes for nature, climate, and living. Furthermore, through detailed research, it was aimed to understand and disseminate the beneficial role of the practice as a vector for plant species and as facilitating dispersal and ensuring both structural and functional connectivity between areas of high biodiversity and wider landscapes. Spatial assessments were carried out to assess the impact of mobile pastoralism on enhancing habitat diversity and connectivity through spatial mapping. Besides, the project partner also contributed to systematising the experiences regarding mobile pastoralism and biodiversity and developing linkages with other pilot sites on mobile pastoralism,⁸ scaling up the results.

Figure 5. Summary of the results on biodiversity conservation



A common initiative on “**Knowledge and monitoring**” provided support to the pilot sites to enhance the sharing of ideas and methodologies, and improve the common knowledge and the scalability of the results. The initiative is developing a common monitoring framework for assessing the linkages between cultural practices and biodiversity and for long term monitoring, in order to scale up the results from all project partners. At the beginning, this common initiative led to the development of monitoring campaigns in each pilot site, using significantly different methodologies, due to the specific local needs and data availability.⁹ The objectives of the monitoring campaigns were the following:

- **Establish a biodiversity baseline:** this was done through a full inventory of fauna and flora taxa as baseline indicators. For instance, in **Lemnos** the assessment focused on the impact of the traditional agro-pastoral mandra system on biodiversity, and a monitoring system was established based on selected bio-indicator species. In **Al-Shouf**, when assessing the impact of agriculture stone wall-terraces and

pastures on biodiversity, a first inventory of taxa that could be used as baseline (ants, butterflies, bees, amphibians, reptiles, small mammals and plants) was developed, in order to identify a possible link between abundance and quantity of these species and the targeted cultural practices. In **Menorca**, inventories of habitats and natural values were and are carried out as well as the monitoring of bioindicators (plants indicating nitrogen soil content, butterflies following the Butterfly Monitoring Scheme methodology).

- **Demonstrate the linkages between cultural practices and biodiversity:** this was achieved through a monitoring on control plots and concrete practices contrasted against other practices or versus no-practice. As an example, in **Dehesas/Montados**, the assessment focused on the impact of 2 cultural practices (Extensive grazing and sheep folding) on biodiversity, plus transhumance practice and cow versus sheep grazing. Dehesas/Montado site also used the High Natural Value Index. This index proposes the automatic obtaining of two indicators scalable at national level and repeatable in time.

Those indicators are 1) the High Natural Value Dehesa indicator (DHS-AVN), as a result of the proposed silvo-pastoral management indicators at site level (agricultural parcel), and 2) the High Natural Value Systems of Dehesa indicator (SAVN-DHS), as a result of the elevation at landscape level of the DHS-AVN indicator, for measuring the potential biodiversity of an area, based on structural elements, thus simplifying the data collection.

- For **High Atlas**, support and capacity building were provided in order to develop a biodiversity monitoring protocol and a soil index. Thanks to this support, the pilot site was able to generate evidence on the linkages between the selected cultural practices (pastoral agdals, enrichment planting areas and agricultural terraces) and biodiversity.
- In the **Taurus Mountains**, a detailed research study permitted demonstrating the beneficial role of mobile pastoralism as a vector for plant species and as facilitating dispersal and ensuring both structural and functional connectivity between areas of high biodiversity and wider landscapes.

During community exchanges, the partners shared findings, success and failure stories, benefitting from cross learning. Notably, biodiversity monitoring indexes used from different pilot sites to monitor biodiversity were shared, allowing some pilot sites to adjust their methodology and/or adapt the ones used by other partners. As each pilot site started from a different knowledge level, and used its own methodologies, the purpose of the general biodiversity framework is to provide a benchmark and show how to keep building a common monitoring methodology through integrating several indexes.

Overall, this initiative contributed to enhancing the knowledge on the strong interdependence between cultural practices and biodiversity conservation in the Mediterranean basin, by documenting the cases across the AMNC pilot landscapes. In addition, information about sites, practices and methodologies used by the different partners as well as the results of the studies at the Mediterranean level were compiled for dissemination.¹⁰

4.2 THE IMPACT OF AMNC ON ECONOMIC RESILIENCE

By increasing the market value and enhancing the incomes from the sustainable commercialisation of local products from native plant species (detailed results in **Annex 2**), the Alliance was able to support the socio-economic viability of cultural practices, and improve the socio-economic conditions of local communities. Economic resilience and biodiversity conservation in cultural landscapes are deeply interconnected, as the sustainable flow of benefits from ecosystem services hugely depend on the conservation measures that are implemented to tackle the current threats of wildfires, soil erosion, invasive pest species, waste littering, and intensive agriculture. Therefore, any ecosystem degradation will indirectly generate an economic loss for the local communities.¹¹

In **Al-Shouf Biosphere Reserve**, the project aimed at devising sustainable marketing strategies for local products with a high economic value and strong territorial identity, developed and implemented in collaboration with local communities (including women and youth). For this purpose, all the existing crop varieties were mapped and assessed; subsequently a limited number of products and value chains with high potential economic value on the national and/or international markets was selected to be produced in the traditional restored agricultural terraces. In addition, local stakeholders were trained on all the stages of the value chain, from organic production, to processing, marketing, and business development. 8 new value chains of high-quality products from medicinal/edible plants harvested in the wild and/or produced in the terraces were selected. The aim was the generation of income for local actors thanks to the commercial agreements between producers and buyer companies active in the European and Middle East markets of organic and fair-trade products, which were identified and engaged in the development of the value chains.

Furthermore, new infrastructures were built, such as:

Locally made Sumac, Shouf
© Al-Shouf Biosphere Reserve



Sumac
سَمَاق



- two tourist agro-silvo-pastoral trails, linking the cultural heritage and biodiversity values of restored agricultural terraces;
- the “House of Biodiversity”, an educational facility composed of: a large enclosure with a small herd of Nubian ibex, and a small museum where visitors can learn about the biodiversity of the landscape in Mount Lebanon, and purchase local traditional goods and products;
- a Botanic Garden (plant nursery) in an area with stone terraces in the western landscape, including a trail with panels about plant species, their ecocultural values and flora/fauna interactions.

Since 2020, the project partner assessed existing services and economic options to improve them and ensure sustainable profitability. The local products linked to the protection of biodiversity were evaluated based on several factors:

- locally made, organically grown or following strict compliance to good and sustainable agricultural practices;
- not sold widely in supermarket chains;
- supporting small scale farmers and producers from the Al-Shouf area;
- made in the traditional way with practices that preserve the biodiversity. Furthermore, marketing training sessions for producers (mainly women) were organised, taking into account the European Standards and certifications for food production for potential export. The production started in June 2021, with new labels, brand and packaging available. Finally, after a previous assessment of the current needs, and demands, the existing Cedar Loan, that allow locals to finance small environmental and socioeconomic projects, was updated with the aim of supporting the local communities (120 beneficiaries) in the sustainable implementation of cultural practices.¹²

In **Lemnos**, the local value chains were assessed through market and stakeholder analyses, and

studies were performed to increase the marketability of local products. The market and stakeholder analyses highlighted several economic options for maintaining local cultural practices (developing a labelling system, strengthening or creating cooperative structures, building new infrastructures for product packaging). Based on these results, the design of a certification and labelling system, and the development of a wide local alliance around the certified products (as an informal local quality agreement) were selected as the best options. Since 2020, the Terra Vita certification and labelling system was designed and implemented in both Lemnos and Kythera. In Lemnos, it involves 12 farmers and 2 food processing industries, producing a total of 14 certified products (melichloro/melipasto cheese, kalathaki cheese, wheat flour, 7 types of wheat and barley rusks, and 4 types of local pasta).¹³ The project partner supports local stakeholders to establish an informal local quality agreement around the *Terra Vita* products, preparing a roadmap for the local network marketing strategy post-2022. In Kythera, a market and stakeholder analysis were carried out to assess the current market potential and local value chain for olive oil. Here, the *Terra Vita* certification and labelling system is being implemented in collaboration with 32 farmers and 2 olive oil cooperatives to produce Terra Vita certified olive oil by the end of 2022.

In **High Atlas**, after conducting feasibility studies and developing business plans for the sustainable commercialisation of local products, a selection of 5 native products was made (thyme, saffron, lavender, walnut, honey), and the commercialisation was kick-started through community enterprises. The project partner participated in the creation of *EthnoBotanica*, a social enterprise that works towards the placement of local products derived from useful plant species in the high-end niche market in a way that rewards small-scale producers. Other economic options were also explored to maintain cultural practices, such as the organisation of High Atlas Food Markets to connect rural entrepreneurs with urban customers, and raise awareness about High Atlas cultural landscapes derived products. An online market place, called *Digital Tiwizi*, where High Atlas cultural products are listed for purchase in support of rural

communities, is in the process of being developed. Furthermore, thanks to the successful plants' growth rate in the community nurseries, commercially valuable plants were distributed to the community members, benefitting over 1,500 households in 70 hamlets (douars).

Furthermore, a socio-economic impact assessment of cultural practices in Imegdral and Ait M'hamed was performed. Key results showed that 80% of participants mentioned that the plant distributions (from the plant nurseries) had helped them save money and increase their understanding of planting threatened species for biodiversity conservation. Besides, food markets to sell High Atlas cultural food products offer great opportunities for cooperative sales and rural livelihoods. In 2021, the sales increased by 38%, thanks to capacity building efforts and access to urban customers.¹⁴

In **Menorca**, the focus was on generating demand for the project farms' products. The project partner coordinated the programme's producers and the farms in the *Land Stewardship Network*, who joined efforts through a common offer of products (marketing clusters), delivered to different island's areas. This initiative was able to benefit farmers and bring about a great demand from consumers.¹⁵

In **Dehesas/Montados**, the project focused on the extensive livestock characterisation process, especially in the determination of some objective criteria that allow differentiating the various livestock systems and establishing a gradation of their level of extensiveness. That characterisation would be the previous step to be able to articulate measures aimed at extensive livestock farming, especially in the framework of the debate for the design of the Common Agricultural Policy beyond 2020. The project also promoted the benefits of the local products deriving from extensive grazing, pastoralism and transhumance. Economic options explored to maintain these cultural practices included: 1) the direct sale of grass-fed meat and transhumant wool; 2) the development of market tools (certification, labelling) to promote the market differentiation of pastoral products and the benefits they provide; 3) the development of the first national map of pastoral

products in Spain where producers can be reached out for direct sale. In addition, an economic analysis of the sheep and goat sector was undertaken, and as a result, a report on “Small slaughterhouses”¹⁶ was produced. This issue was identified as one of the main bottlenecks in the commercialisation of extensive grazing meat produced in cultural landscapes.

In **Kroumirie Mogod**, the project partners implemented measures to improve the economic performance of local practices of cork harvesting and other non-timber forest products. Notably, a mapping of cultural practices related to the enhancement of the landscape of the cork oak forest was conducted, as well as a study for enhancement of 25 value chains deriving from cultural practices. The project also supported two economic initiatives for the promotion of local products.

In the **Taurus Mountains**, the economics of the mobile pastoralism (incentives and disincentives, value chains economies of scale, contributions to local income, factors of mobile pastoralism’s profitability and resilience, etc.) were analysed with a focus on Sarikeçili nomadic pastoralist community. 33 local products were promoted, such as meat and meat products, hair and wool products, cosmetics and wild herbs. Furthermore, 4 economic options for maintaining cultural practices were explored: community-based entrepreneurship, development of online marketing, product range development, slaughterhouse and product processing infrastructure (in progress). Finally, the project partners conducted fieldwork to assess consumption patterns (self-consumption included), pastoralist system inputs; supply chain actors trade, and working conditions; local job opportunities; food sovereignty, quality and health; social cohesion including gender issue and local development (the assessment is currently in progress).

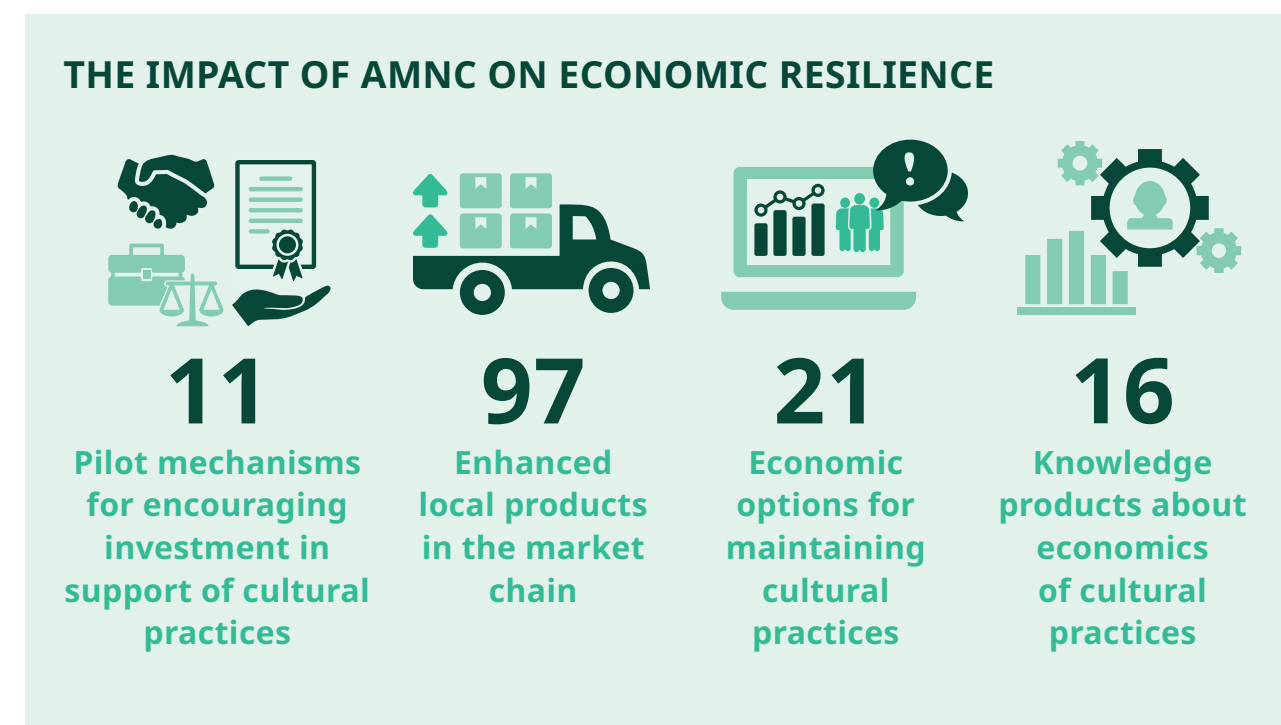
In **West Bekaa and Mount Lebanon Hima sites**, the project partner focused on value chains and sustainable local economies. 5 local products were selected and enhanced (honey, thyme, herbal infusion/tea, cherry liquor, and olive oil soap). Other economic options were assessed for maintaining cultural practices: 1) development and implementation of a marketing plan (branding, labelling, packaging), distribution and communication

plan; 2) setup of an online shop; 3) direct sales, fairs and events, community kitchens; 4) development of partnerships and marketing channels with the private sector; 5) design of educational and ecotourism trails as income generating activities for the local community to continue strengthening and promoting sustainable cultural practices. All in addition to capacity development using a butterfly garden.

Since the beginning of 2020, several products were purchased by the local community for a total price of 15,000 Euros. Moreover, the food provisioning service of pine nuts, honey, Medicinal and Aromatic Plants (MAPs), field crops as well as fuelwood and biomass for energy production, accounts for 59% of the total economic value delivered to the community on a yearly basis by the ecosystem services. This is made possible by the presence of the stone pine trees, which contribute to the livelihood of the local community by generating revenues from selling the products and by-products, and providing subsistence food for the households.¹⁷

The common Initiative “**Supporting the socio-economic sustainability of cultural practices in selected Mediterranean cultural landscapes**” focused on working towards ensuring the sustainability of local economies. Practitioners were interviewed about the sustainability of their products, in order to identify economic barriers and drivers of change in cultural practices, and a study on niche markets for local products was produced. In addition, a bio-cultural mapping of farmers and their products was conducted, following a capacity-building workshop for producers on the agro-biodiversity mapping methodology, and the mapping work that collected information on 33 plant varieties, 12 animal breeds and over 52 processed products linked to the Dehesa ecosystem in Extremadura (Spain). These studies formed the basis for regional guidelines that were developed to provide economic solutions for the viability of local products from cultural practices in the Mediterranean.¹⁸

Figure 6. The impact of the AMNC on economic resilience



4.3 THE IMPACT OF AMNC ON SOCIAL SUSTAINABILITY

The Alliance managed to build local practitioners’ and community members’ capacities and skills, enhance the management of cultural practices, strengthen supportive policies and land governance systems, and promote the ecological and economic value of cultural practices with decision-makers (detailed results in **Annex 3**).

Regarding **Al-Shouf Biosphere Reserve**, the project partners had previously assessed the existing Lebanese legislation and regulations, identifying gaps in laws related to the cultural practices implemented in the pilot sites. They also produced policy papers featuring best practices stemming from the work in Al-Shouf, and developed an advocacy process including meetings, workshops, public events, visits of policy makers to the field, press trips and conferences. Since 2020, two out of the four targeted land use plans were developed and adopted by the corresponding villages (Bmohray and Niha).

The most outstanding result at stakeholders’ engagement level was the development of two types of land stewardship agreements. The first one, based on the Menorca’s model, was signed with the individual farmers, following the launch of a call for proposals and the evaluation by the project partners. The second land stewardship model was the result of adaptive management, and signed with the mayors of the villages, to save abandoned terraces and agricultural lands from further degradation, restore the stonewalls to support fire prevention (given the high risk of forest fires in the region due to climate change) and use them as models of sustainable agriculture.

Capacity-building activities were also organised and trained 579 local practitioners. The sessions leveraged a mix of theoretical lessons and field work using local champions and available best practices, in the fields of protection (e.g. temporary enclosures), management (e.g. rotational grazing practices; forest thinning and pruning; stone wall terrace restoration), and direct restoration actions for the improvement of agro-silvo-pasture

ecosystems functionality at the landscape-level. Besides, a set of manuals and guidelines on best management practices to reduce climate-risk and build resilience of agro-silvo-pastoral systems was consolidated and disseminated among practitioners and stakeholders at national level. Since 2020, the project partners initiated an innovative learning-by-doing methodology for self-evaluation for practitioners. It is based on six toolboxes: 1) cultivation techniques; 2) pests and diseases; 3) the human factor; 4) the animal factor; 5) biodiversity; 6) fertility. It entails an assessment questionnaire, tools for continuous self-monitoring and eventually a self-certification.

In **Lemnos**, in the absence of institutional governance systems supporting cultural practices, the project developed the Land Stewards Network, as a vehicle for implementation of sustainable farming practices based on the concept of land stewardship. It currently operates in Lemnos with 12 farmers, implementing sustainable farming practices in accordance with the requirements of the Terra Vita certification and labelling system, supported by precision farming tools and supervised by a local agronomist. Special land management plans were also developed for each farm. The Land Stewards Network in Kythera started its pilot operation with 32 olive oil producers under 2 local cooperatives.

At policy level, the project partner advocated for Common Agriculture Policy -related reforms maintaining cultural practices (especially High Nature Value Farming systems), as part of the common Initiative on Policy; in parallel, they participated in the public consultation of the new EU Biodiversity Strategy for 2030.

At national level, after assessing the current institutional framework, advocacy efforts focused on making the case for the establishment of agri-environment schemes for Lemnos and the North Aegean. Since 2020, the project partner participated in the public consultation for the new Common Agriculture Policy 2021-2027, submitting proposals in support of cultural practices and agri-environment measures. Among the national policies that were advocated for and adopted, there were the inscription of crop landraces in the National Register of the Ministry of Rural Development and Food ('aspromytika' beans inscribed in 2020, local barley 'Panagias'

inscribed in summer 2022, three more applications submitted in 2020-2022). In addition, there were the inscription of the traditional *mandra* system (2022) and 'melichloro/melipasto' cheese (2020) in the National Inventory of Intangible Cultural Heritage. The submission of application for designation of 'melipasto/melichloro' cheese as Protected Designation of Origin (PDO), the submission of petition for recognition of Lemnian breed of sheep as 'rare breed', policy proposals for monitoring and controlling wild rabbit populations, advocacy and proposals in support of traditional farming constructions are also other ongoing initiatives.

Local practitioners' skills in agro-pastoral practices of the traditional *mandra* system were enhanced through field trips, capacity building workshops, on-farm training, and online seminars, with 170 farmers trained and 30 farmers benefitting from regular technical support in Lemnos. Capacity building and regular technical support was provided to 40 olive oil producers in Kythera since 2020.

In **High Atlas**, the project supported and implemented several international policies and agreements (such as the International Treaty on Plant Genetic Resources for Food and Agriculture), to strengthen and protect sustainable cultural landscape management, thanks to case studies shared through local and national workshops. Through community seed banking, plant nurseries and support of local products and sustainable livelihoods throughout the High Atlas, the project contributed to the Treaty's mission in tangible ways. The project also contributed to all five strategic goals of the Aichi targets of the Convention on Biological Diversity (CBD) by safeguarding biodiversity, advocating for community environmental governance and promotion of traditional practices, and organising capacity building for the local communities. Yearly national workshops were organised for academics, NGO and government representatives, and community members, in the form of dialogues to enhance national policy frameworks governing cultural landscapes. In Morocco, the National Sustainable Development Strategy (NSDS), adopted in 2017, and the agricultural Green Generation Strategy, adopted in 2020, focused on scaling up biodiversity conservation and reducing poverty across the High Atlas and central Moroccan



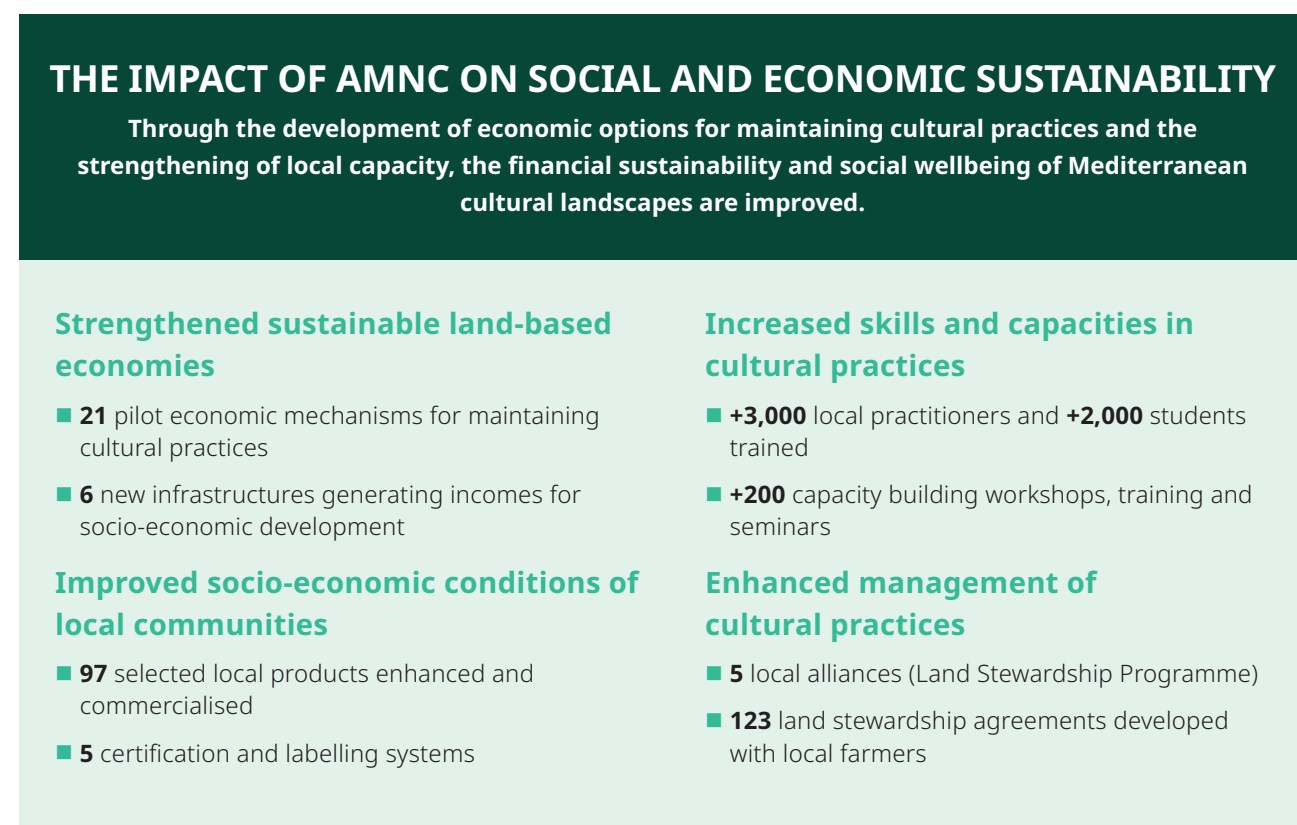
region. The project also supported these national policies, contributing to the implementation of the conservation targets of NSDS through community-based regenerative approaches to achieve biodiversity conservation and cultural landscape restoration, while supporting communities in increasing agro-ecological productivity. The Green Generation Strategy 2020 – 2030 promotes the transition towards a 'green economy', through the commercialisation of local agro-ecological products via community-led rural cooperatives. In fact, cooperatives have a significant economic potential, especially for women in rural areas with limited access to revenue streams, and are a key pathway for sustainable livelihoods and economic development. This strategy builds on the implementation of the Green Morocco Plan (2008 - 2020) which had solidarity agriculture as one of its pillars. The project's goals were aligned with the efforts on solidarity agriculture, through trainings for small producers in the "Farmers' Field School" and activities related to agro-biodiversity. Besides, an assessment of strengths and gaps in current national policies and laws pertaining to cultural landscape management, including recognition of *agdals*, an Indigenous Peoples' and *Community Conserved Territories and Areas (ICCA)* in Morocco, was conducted.¹⁹

At governance level, the project partner collaborated with community stakeholders to develop two community action plans (one in Imegdalen and one in Ait M'hamed) to strengthen participatory governance systems for sustainable land use practices in High Atlas. These plans included land management goals

(integration of issues of ICCAs and traditional practices of conservation) and biodiversity monitoring actions. Besides, more than 250 community members were trained in sustainable water management, nursery management, value adding and marketing of aromatic and medicinal plants, sustainable harvesting practices and seed collection, permaculture, agro-ecology and sustainable agricultural practices, beekeeping and bee products. This ensured ownership of the project by the local communities and their engagement in actions that sustain livelihoods and agro-ecological production. Furthermore, intra- and inter-community exchanges were organised and allowed community members to share experiences and discuss approaches for strengthening communal governance systems, in particular those relating to the *agdal* management.

The project also supported *Dar Taliba*, an all girls' boarding house that provides Amazigh girls (ages 13 – 18) from remote villages of surrounding High Atlas communes an opportunity to access secondary school and gain employability. This support ensured its continued operation, and included building 6,000 m² of ethnobotanical, vegetable and demonstration gardens as well as a community nursery and more efficient water management infrastructure, and delivering more than 40 trainings for over 250 students from 20 different villages. Finally, a capacity-building programme was launched for young Moroccan undergraduate and postgraduate students, as well as researchers, on conservation and ethnobiology techniques, ecological monitoring and climate change effects.²⁰

Figure 7. Summary of results for social and economic sustainability



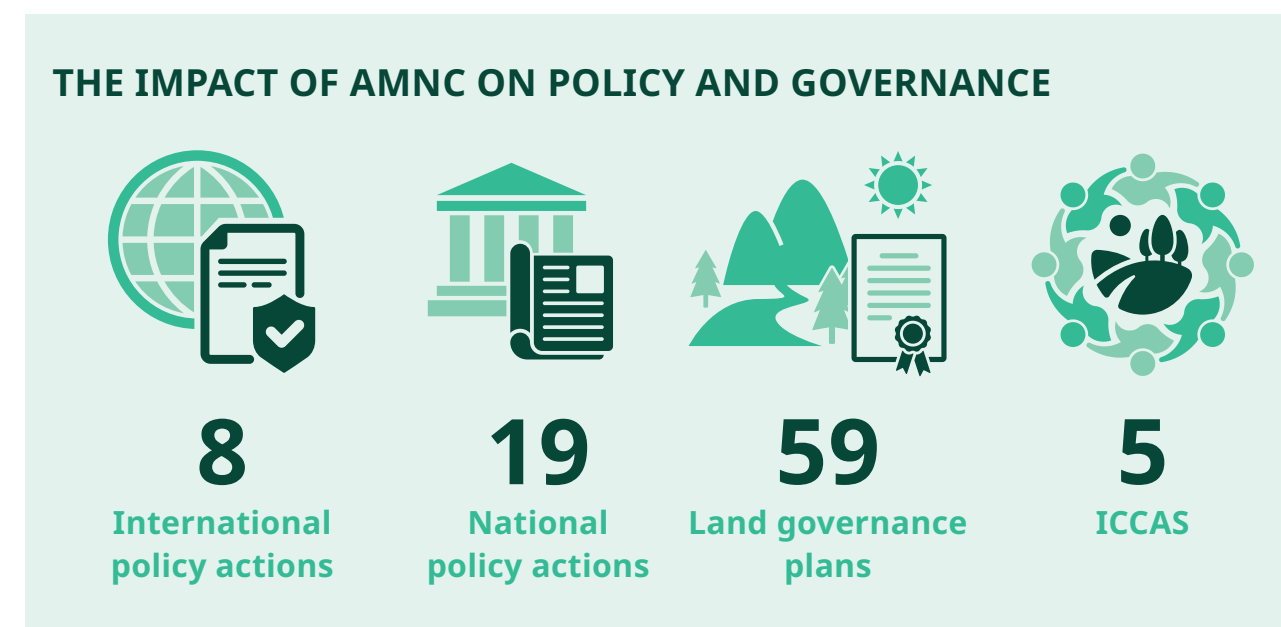
In **Menorca**, the project advocated for policies that support cultural practices, by submitting proposals for the revision of the Balearic Agrarian Law, for the inclusion of land stewardship schemes in the Insular Territorial Plan and Rural Development Plan, and of sustainability measures in the Menorca Biosphere Reserve Law. The Land Stewardship model for land governance was strengthened through the improvement of the agreements with the farms and the training of 370 farmers. Furthermore, an educational programme on the island's economic model targeting young people was developed and carried out. Several capacity building workshops about the benefits of sustainable agricultural practices involved considerable local stakeholders.

In **Dehesas/Montados**, the project partner advocated for the complete implementation of the major EU regulations into national and regional laws (Common Agriculture Policy, Birds and Habitat Directives, EU Farm to Fork and Biodiversity Strategies) in order to create the favourable

conditions for implementing specific tools to enhance pastoralism's viability. Before the beginning of the project, extensive grazing and pastoralism were excluded from all political agendas and only occasionally supported by secondary measures. In accordance with the lessons learnt derived from the socio-economic impact assessment of these cultural practices, the project developed two policy proposals and submitted them to the authorities: 1) the legal characterisation of extensive grazing and pastoral systems, and 2) the National Strategy for Extensive Grazing and Pastoralism. Thanks to the project's support, wood pastures (the predominant type of pastures in the Mediterranean) were legally recognised at EU level.

Based on the High Nature Value Farming (HNVF) concept, which is recognised and regulated by EU and national/regional laws, the project developed the HNVF Dehesas methodology, including indicators, which was implemented by a few regions in Spain. The practice of pastoralism was supported through

Figure 8. Results at policy and governance level per pilot site



the HNVF concept, as well as communal systems and Dehesas, where the governance bodies have been implementing cultural practices. In addition, the adoption of national and regional pastoral management plans, and the development and implementation of the Declaration of Transhumance of UNESCO Intangible Heritage were promoted.

In **West Bekaa and Mount Lebanon**, before the start of the project, the *Hima* was adopted and recognised at international level as a form of community-based conservation by the International Union for Conservation of Nature (IUCN) Resolution 122 (2012). The project mostly supported local policies through *Hima* municipal decisions for sustainable land-use management and national policies, such as the Lebanon's National Action Plan (NAP), and the National Afforestation Reforestation Plan (NARP), aiming at increasing Lebanon's forest cover from 13% to 20% by the year 2030. Thanks to the project's advocacy, the *Hima* was adopted at national level as a fourth category by the new Protected Areas Law (Law 130/2019). *Hima* decisions with the local authorities (municipalities) for sustainable land use management, community-based conservation, and sustainable development were supported. So far, 26 *Himas*-community-based protected areas were declared, since 2020 it was up-scaled, at national

level, from West Bekaa to Mount Lebanon (4 new *Hima* communal governance and management decisions were declared and adopted) and, at landscape level, in West Bekaa, whereby 1 new *Hima* was declared.²¹

The **common Initiative "Policy actions in favour of Mediterranean cultural landscapes"** focused on the European Common Agriculture Policy (CAP) to address the promotion of the High Nature Value Farming (HNVF), specifically for the EU countries.

In the context of the **common Initiative "Capacity Building and Transformational Education"**, the first *European Community Exchange on Seed Diversity and Access* was organised in 2017 (33 participants). The purpose of the peer-to-peer learning event was to respond to the need of the European "seed actors" (practitioners, farmers, academics, seed breeders) to exchange and network in order to develop new collaborations. The event hosted grassroots initiatives (community seed banks, local seed networks, and seed savers associations), organic seed breeding projects, as well as high-level policy advocacy movements to protect farmers' rights and the genetic integrity of seeds. The major result of this event was the development of a collective roadmap for the protection of seed diversity and sovereignty



Three-toothed orchid (*Neotinea tridentata*)
© Al-Shouf Biosphere Reserve

in Europe and neighbouring countries, which is key to ensuring the sustainable management of Mediterranean cultural landscapes, especially those that rely on local agrobiodiversity (e.g. agro-silvo-pastoral systems and terraces).²²

The **common Initiative “Communal Governance Systems”** worked towards analysing and supporting approaches of existing Communal Governance Systems (CGSs) that sustain biodiversity conservation (particularly *Agdal/Dehesa/Montado/Hima*, in the

Mediterranean Basin). In Lebanon and Spain, a selection of *Himas* and *Dehesas/Montados* under CGSs was studied in terms of their governance quality. Legal advice was provided to support communities in addressing the identified threats and limitations, in order to improve their governance system and their social, economic and environmental results. Another important result of this initiative was the development of a biodiversity threats matrix at regional level relevant to the CGSs in selected pilot landscapes. This served as a reference for the comparison of existing community-based systems based on the types and degree of biodiversity threats faced by CGSs in the Mediterranean Basin. Finally, after a capacity building training on the methodology process of *Indigenous Peoples’ and Community Conserved Territories and Areas (ICCA)*, national/regional case studies were conducted and potential ICCA cases were identified in Lebanon, Morocco and Portugal. The studies provided general recommendations for the support and recognition of ICCAs in these countries.²³

In the context of the **common Initiative “Mobile Pastoralism in the Mediterranean”**, in collaboration with the global coalition, project partners have been very active and successful in ensuring the support of the UN member states and organisations for the declaration of 2026 as the International Year of Rangelands and Pastoralists (IYRP). Through all the work, the milestone achievement was ensuring endorsement of the IYRP 2026 at the UN General Assembly following successful lobbying work at FAO COAG meeting, FAO Council and FAO Conference. Besides the major success within the IYRP Global Initiative, the policy work of this project resulted in the declaration of various international statements, resolutions and policy reports: Cancun Statement, UNEP 4 Resolution, Conclusion Declaration of European Shepherds Meeting, UNEP Benign Neglect Report and “Protecting and restoring endangered grassland and savannah ecosystems” resolution at IUCN World Conservation Congress (WCC) 2021.



Cultural practices recommendations workshop in Imegdaj, Morocco
© Pomelien Da Silva Cosme - GDF

5. Additional results beyond the ToC

Several project partners took the initiative to explore other strategies beyond the common Theory of Change. The project partners in Spain (Dehesas/Montados), Lebanon (Al-Shouf) and Morocco (High Atlas) explored the gender dimensions of cultural practices. In Morocco, they also started an initiative to enhance health services for local communities.

The gender dimensions of cultural practices were also explored and enhanced, thanks to a study on the role of women, undertaken by the project partners in Spain (Dehesas/Montados) and Lebanon (Al-Shouf). The study included the roles, responsibilities, constraints and opportunities for women pastoralists and wool producers, and recommended solutions that contributed toward sustaining important cultural practices for environmental, economic and social gains at local and national level.^{24,25}



© David Arquimbau Sintés - GOB Menorca

Besides, gender equality was also strongly supported through the collaboration with cooperatives and the boost in women's economic development in High Atlas. The above-mentioned environmental education program for young girls through Dar Taliba also contributed to gender equality and young girls' access to quality education.

The **health** of local communities was also enhanced, thanks to a successful initiative developed in High Atlas (in the communes of Imegdâl and Ait M'hamed) with the aim of improving the access to health services in mountainous areas. Yearly health caravans provide medical care to vulnerable families and communities. In 2018, a temporary medical centre and pharmacy were established in the local primary school, where more than 400 free consultations were carried out and over 1,000 free medicines were provided each year. Over the course of just one day, a medical team of 50 people (including paediatricians, gynaecologists and general practitioners, amongst others) carried out more than 1,800 free medical exams for men, women and children (reaching 7.5% of the population of Azilal Province). The impact of this intervention was remarkable, as it enhanced the wellbeing of the rural communities, through a significant reduction in health issues among the most vulnerable community members. In 2019, a second annual caravan was organised with a medical team of 40 people who carried out 400 free medical exams in 2 days.

6. Threats reduction

Partners of the AMNC decreased land abandonment by restoring traditional water management infrastructure or stone wall agricultural terraces.

Over 45,000 people in the different pilot sites of the AMNC implement cultural practices. The work of the AMNC also decreased the conversion to intensive agriculture/framing and reduced the loss of genetic diversity (detailed results in **Annex 4**). Therefore, thanks to all the work of

partners following the strategies of the ToC, the AMNC was able to work towards the reduction of several of the threats and demonstrated the need to promote and protect those Mediterranean agricultural areas as biodiverse ecosystems integrated in cultural landscapes.



Restored traditional water troughs for livestock © GOB Menorca

7. Conclusions

Building on the contributions of the project partners, the Alliance for Mediterranean Nature and Culture was able to generate a broad impact, as pictured in the ToC, on biodiversity conservation, governance systems, economic, social and political sustainability of cultural landscapes.

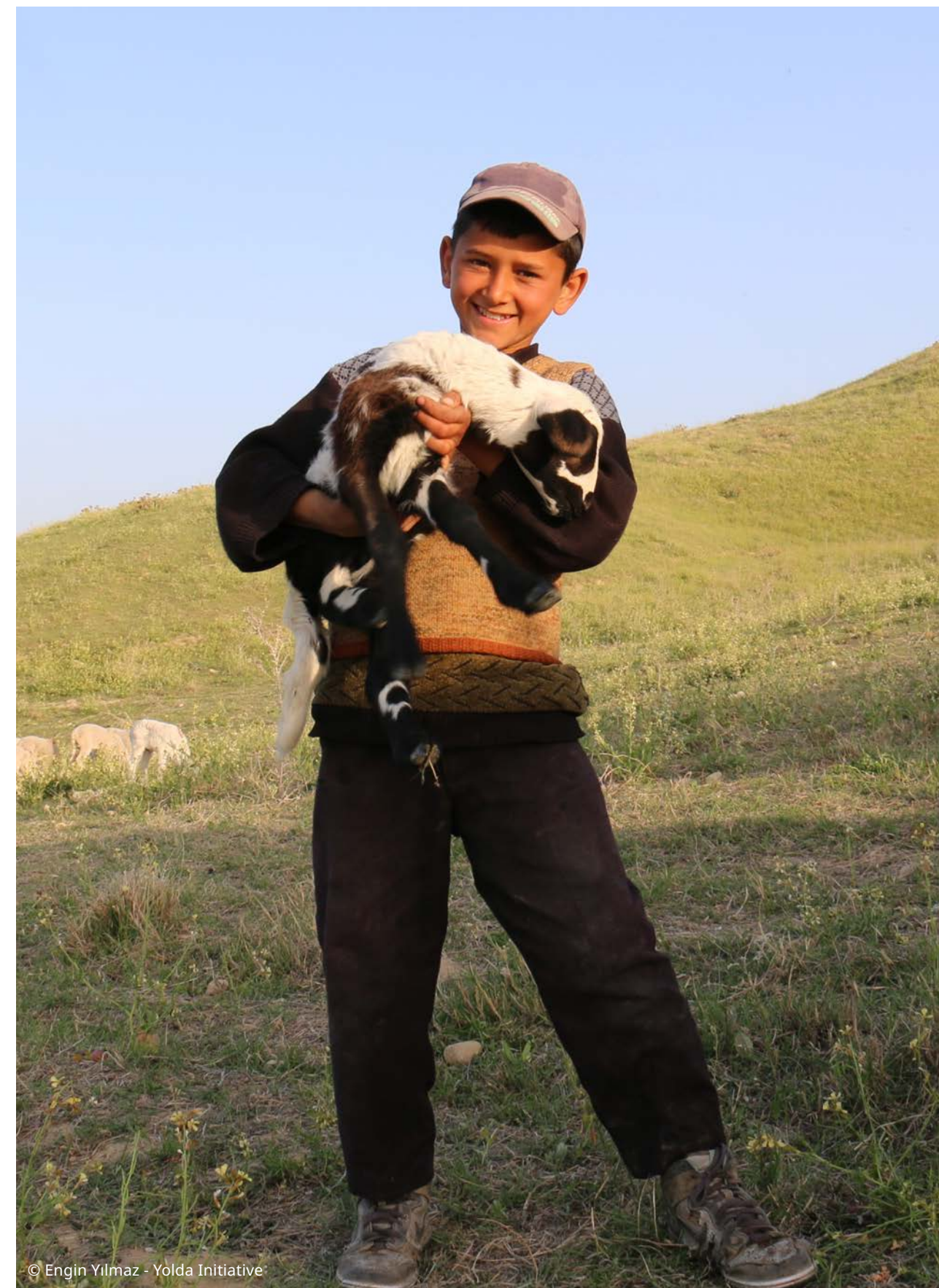
Leveraging the work conducted in the pilot sites, the Alliance deepened the knowledge on the relationships between cultural practices, biodiversity and human wellbeing, carried out advocacy actions to build an enabling international, national and subnational policy environment and strengthened communal governance systems for the maintenance of cultural landscapes, as well as enhanced community management of cultural landscapes in situ. The project's conservation activities – seed banking, enrichment planting, biodiversity monitoring – contributed strongly to biodiversity conservation and sustainable land management.

It also supported the successful commercialisation of local cultural products, including through the development of business plans and improved marketing, promotion of high value niche markets and exploration of investment mechanisms for cultural products at subnational or national level. An inclusive green growth was strengthened through the support of rural entrepreneurship and the promotion of sustainable livelihoods. By running trainings and creating opportunities for community cooperatives and small-scale producers, the Alliance also contributed to poverty and inequality reduction. In order to preserve the cultural practices in the context of biodiversity and climate crisis, the Alliance devoted a particular focus to capacity building for practitioners and local stakeholders, and youth engagement.

The integrated approach to cultural landscape management was also scaled up and other sites in Mediterranean cultural landscapes were included.

With a considerable number of new species and traditional crop varieties recorded, as well as an increasing number of local people implementing cultural practices and an increased surface area restored or where sustainable farming practices are implemented, the Alliance was able to reduce biodiversity loss and boost the conservation of Mediterranean cultural landscapes and their communities' livelihoods. Other significant results were the improved socio-economic conditions of local communities, thanks to the local value chains enhanced and commercialised, and the extensive number of local practitioners and students that were trained and increased their skills. Finally, as a result of the Land Stewardship approach and the involvement of the local farmers through land use agreements, the management of cultural practices was effectively reinforced.

In conclusion, the AMNC cultural landscapes are promoting ecosystem services such as carbon storage and sequestration, water, climate regulation, food, genetic resources, etc. while protecting biodiversity and increasing human wellbeing: food security, cultural identity, physical health and safety, spiritual and cultural health.



© Engin Yılmaz - Yolda Initiative

8. References

- Actyva, University of Extremadura (2019). A practical guide for measuring the Ecological Health Index of the dehesa ecosystem. Trashumancia y Naturaleza, WWF España.
- Actyva and University of Extremadura (2019). Adaptive rotational grazing: a guide to its application. Trashumancia y Naturaleza, WWF España,
- Al-Shouf Technical Report 2018
- Al-Shouf Technical Report 2019
- Al-Shouf Technical Report 2020
- Al-Shouf Cedar Society, CEPF. (2020). Assessment of Cultural Practices in the High Mountain Eastern Mediterranean Landscape
- Bendella A. (2019). Rapport sur l'analyse juridique de l'impact des lois, politiques et institutions sur les aires et territoires du patrimoine communautaire au Maroc. GDF/MBLA
- Couto, S. (2019). Extensive grazing and habitats conservation. Trashumancia y Naturaleza.
- Dimopoulos T., Dimitropoulos G., Georgiadis N. (2018). The land use systems of Lemnos Island
- Georgiadis N. et al. (2019). Assessment report for the interconnections of land use practices and land abandonment with biodiversity and soil characteristics
- Herrero, M.T. (2020). Women and wool in Dehesas: Gender overview of the wool supply chain in Spain. Cultural landscapes and biodiversity in the Mediterranean
- Basin. Washington, DC: IUCN.
- High Atlas Technical Report 2018
- High Atlas Technical Report 2019
- Lemnos Technical Report 2019
- Lemnos Technical Report 2020
- Lemnos Technical Report 2021
- Martinez-Agirre, A., Astrain, C., (2020). El sistema agrario de alto valor natural de la dehesa española: Indicadores de manejo y resultado. Gestión Ambiental de Navarra (GAN-NIK) y WWF-España. Informe Técnico.
- Mattei, F., Conte, D. and Maggi, L. (2020). Bio-cultural mapping of the Dehesa Ecosystem in Extremadura, Spain: Cultural Landscapes and Biodiversity in the Mediterranean Basin. Washington, DC: IUCN.
- Mattei, F., Swiderska, K. and Nakangu, B. (2020). Linking Economic Vitality, Cultural Heritage and Biodiversity Conservation: Recommendations and Lessons Learnt: Cultural Landscapes and Biodiversity in the Mediterranean Basin. Washington, DC: IUCN.
- Menorca Technical Report 2018
- Menorca Technical Report 2019
- Menorca Technical Report 2020
- Moroccan Biodiversity and Livelihoods Association, Global Diversity Foundation. (2020). Traditional land use practices, biodiversity and community wellbeing in a Mediterranean cultural landscape
- OI Capacity Building Technical Report 2018
- OI Communal Governance Systems Technical Report 2018
- OI Connecting practices across landscapes Technical Reports 2018
- OI Connecting practices across landscapes Technical Reports 2019
- OI Knowledge and monitoring of biodiversity Technical Report 2019
- Pontijas, B. & Salguero, C. (2021). Small Slaughterhouses: the key to viability for extensive livestock farming. Trashumancia y Naturaleza
- Regato, P. (2019). Forest and Landscape Restoration Guidelines. Al-Shouf Biosphere Reserve
- Sabater, L. (2020). Gender, culture, and sustainability in the Mediterranean. Cultural landscapes and biodiversity in the Mediterranean Basin. Washington, DC: IUCN.
- Salguero, C (2018). Commons and the CAP
- Synthesis of methodology and activities in each of the pilot sites (2020)
- Urivelarrea, P. y Linares, L. (2020). Propuesta de caracterización de la ganadería extensiva. Aproximación a la diferenciación del grado de extensividad. WWF España, Trashumancia y Naturaleza, Sociedad Española de Pastos y Plataforma por la Ganadería Extensiva y el Pastoralismo.
- Velado, E. et al. (2021). Spatial analysis of the CAP payments distribution in Spain (2014-2018). Trashumancia y Naturaleza
- Zabalza, S et al. (2021). Identifying barriers and opportunities in the value chain of extensive sheep and goat farming. Trashumancia y Naturaleza, WWF Spain.

END NOTES

1. Regato, P. (2019). Forest and Landscape Restoration Guidelines. Al-Shouf Biosphere Reserve
2. Al-Shouf Cedar Society, CEPF. (2020). Assessment of Cultural Practices in the High Mountain Eastern Mediterranean Landscape
3. Dimopoulos T., Dimitropoulos G., Georgiadis N. (2018). The land use systems of Lemnos island
4. Georgiadis N. et al. (2019). Assessment report for the interconnections of land use practices and land abandonment with biodiversity and soil characteristics
5. High Atlas Technical Reports 2018 and 2019
6. Moroccan Biodiversity and Livelihoods Association, Global Diversity Foundation. (2020). Traditional land use practices, biodiversity and community wellbeing in a Mediterranean cultural landscape
7. Menorca Technical Report 2020
8. OI Connecting practices across landscapes Technical Reports 2018 and 2019
9. OI Knowledge and monitoring of biodiversity Technical Report 2019
10. Synthesis of methodologies and activities in each of the pilot sites (2020)
11. Mattei, F., Swiderska, K. and Nakangu, B. (2020). Linking Economic Vitality, Cultural Heritage and Biodiversity Conservation: Recommendations and Lessons Learnt: Cultural Landscapes and Biodiversity in the Mediterranean Basin. Washington, DC: IUCN.
12. Al-Shouf Technical Report 2020
13. Lemnos Technical Reports 2019, 2020 and 2021.
14. Results of the surveys to the project partners
15. Menorca Technical Reports 2018 and 2019
16. Pontijas, B. & Salguero, C. (2021) Small Slaughterhouses: the key to viability for extensive livestock farming. Trashumancia y Naturaleza
17. Economic evaluation of the ecosystems services of Hammana and Ras El Matn (results of the surveys to the project partners)
18. Mattei, F., Conte, D. and Maggi, L. (2020). Bio-cultural mapping of the Dehesa Ecosystem in Extremadura, Spain: Cultural Landscapes and Biodiversity in the Mediterranean Basin. Washington, DC : IUCN.
19. Bendella A. (2019). Rapport sur l'analyse juridique de l'impact des lois, politiques et institutions sur les aires et territoires du patrimoine communautaire au Maroc. GDF/MBLA
20. High Atlas Technical Report 2019
21. Results of the surveys to the project partners
22. OI Capacity Building Technical Report 2018
23. OI Communal Governance Systems Technical report 2018
24. Herrero, M.T. (2020). Women and wool in Dehesas: Gender overview of the wool supply chain in Spain. Cultural landscapes and biodiversity in the Mediterranean Basin. Washington, DC: IUCN.
25. Sabater, L. (2020). Gender, culture, and sustainability in the Mediterranean. Cultural landscapes and biodiversity in the Mediterranean Basin. Washington, DC: IUCN.

Annexes

ANNEX 1.

IMPACT 1: THE BIODIVERSITY CONSERVATION IN MEDITERRANEAN CULTURAL LANDSCAPES IS ENHANCED				
KNOWLEDGE				
Outcome: Improved knowledge about the links between cultural practices and biodiversity in Mediterranean cultural landscapes				
	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
AL-SHOUF	Database of monitored taxa as biodiversity indicators in 28 monitoring sites. More than 200 plant species were collected. In 2020, the number of bio-indicator species was reduced from 6 to 2. In total, 2 published reports and one underway.	No biodiversity and ecocultural indicators have ever been selected or studied	Scientific evidence of the link between cultural practices and biodiversity is available for each landscape type (e.g. number of monitoring sites and indicator fauna and flora species)	Biodiversity and habitats of interest conserved and recovered
DEHESAS/MONTADOS	Soil biological quality indicators and biodiversity indicators	None		
HIGH ATLAS	Monitoring of 29 different bioindicator plant species in 11 monitoring sites. Up to 2020, comprehensive vegetation and soil monitoring were performed. Since 2020 butterflies were incorporated and the process was simplified by choosing bioindicator plant species and making a visual soil monitoring. Community researchers started participating in the process (participatory monitoring).	None		
LEMNOS	Biodiversity monitoring in Lemnos: 408 sampling plots (flora) + 108 sampling plots (entomofauna) + 108 bird sampling points Semi-detailed soil map of Lemnos (including 61 sampling plots). Soil monitoring in 12 farms	Scattered and outdated reports and studies		

	Landscape features (natural vegetation, water ponds, traditional farming structures) recorded in 12 farms (761 fields > 848 ha total)			
	Kythera Island: Biodiversity monitoring: 24 sampling plots (flora) + 12 sampling plots (entomofauna) Landscape features recorded in 30 farms (404 fields > 152 ha total)			
	Recording of 142 new species in the floristic inventory of Lemnos	908		
	Monitoring of bio-indicator species in Lemnos (20 species of flora, 11 bird species, and 10 families of insects)	None		
MENORCA	Biodiversity monitoring of bioindicator species (22 butterflies, 9 groups of plants + 9 groups of coprophagous) in 26 farms	None		
	Digitalized inventories about birds, plants and habitats in 3 farms			
	13 Biodiversity boxes installed in 4 farms for habitats improvement			
WEST BEKAA AND MOUNT LEBANON	Monitoring of species (720 plants, 225 birds, 27 mammals) in 5 sites. 1 species used as bio-indicator	1 report published on biodiversity indicators		

Outcome: Improved knowledge about the links between cultural practices and biodiversity in Mediterranean cultural landscapes

	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
AL-SHOUF	5 - year management plan for assessing the silvo-pastoral habitats and key wildlife species	No management plan with a focus on the reintroduction of a wild animal	Scientific evidence of the benefits of biodiversity-friendly cultural practices for the human wellbeing of communities of Mediterranean cultural landscapes	Improved conservation of biodiversity and ecosystem functions
	Publication "Assessment of Cultural Practices in the High Mountain Eastern Mediterranean Landscape" adopted by CEPF as a basis for its projects			
	3 scientific papers			
	Sustainable Agriculture Roadmap			
	Guidelines for sustainable farming and living in the Shouf Biosphere Reserve Development Zone			
CENTRAL AND SOUTHERN ANATOLIA (TAURUS MOUNTAINS)	Article on vulture foraging in relation to livestock movements in transhumance	None		
	Publication on mobile pastoralism and protected areas			
	Publication on how rewilding traditional grazing areas affects scavenger assemblages and carcass consumption patterns			
	Publication on a novel mechanism for the dispersal of plant diaspores: diploepizoochory (under peer review)			
HIGH ATLAS	Assessment of the impacts of climate change through Ecological niche models (ENMs), completed for over 60 species	No publication of climate change impacts		
	One peer-reviewed book chapter published on Amazigh cultural practices of conservation	Initial documentation of land use practices		

	One peer-reviewed article published on plant biodiversity, conservation assessments and local communities.	Relevant literature limited in the region and absent in the study sites		
LEMNOS	1 peer-reviewed article on links between farming practices and biodiversity	Relevant literature limited and outdated		
	1 book publication "The plant wealth of Lemnos Island - A source of prosperity for the local community"	No systematic record of local phytogenetic resources and their links to local livelihoods		
MENORCA	Replication of cultural practices in 34 emblematic farms	None		
WEST BEKAA AND MOUNT LEBANON	1 booklet published on medicinal/ edible plants	None		

ANNEX 2.

IMPACT 2: THE FINANCIAL SUSTAINABILITY OF CULTURAL PRACTICES-BASED ECONOMIES IS ENSURED				
ECONOMICS AND FINANCE				
Outcome: Improved knowledge about the economics of cultural practices				
	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
AL-SHOUF	Mapping of existing services and economic options	None	Study about lessons learnt from the economic aspects of cultural practices is produced	Strengthened sustainable land-based economies
CENTRAL AND SOUTHERN ANATOLIA (TAURUS MOUNTAINS)	Global footprint network (GFN) methodology on ecological footprint Methodology	None		
	SlowFood monitoring framework			
DEHESAS/ MONTADOS	Proposal for the characterization of extensive livestock farming	None		
	Proposal for a National Plan of Extensive Livestock and Transhumance			
	Report: Identifying barriers and opportunities in the value chain of extensive sheep and goat farming.			
	Report: Small slaughterhouses: the key to viability for extensive livestock farming			
	Scientific paper: Spatial analysis of the distribution of CAP payments			
HIGH ATLAS	Feasibility studies and business plans for sustainable commercialisation of native plant species	No participatory business plans exist for local plants or products		
	Socioeconomic impact assessment of cultural practices: increase of sales in food markets by 38% in 2021	None		
KROUMIRIE MOGOD	Mapping of cultural practices and study of value chains	None		

LEMNOS	Lemnos: Market and stakeholder analysis + Marketing and stakeholder engagement plan.	None				
	Kythera: Market and stakeholder analysis + Olive oil marketing plan					
MENORCA	Annual economic survey for producers	Some initiatives				
	Formulation of economic indicators for product marketability					
WEST BEKAA AND MOUNT LEBANON	Marketing plan	None				
Outcome: Assessment of economic mechanisms for maintaining and expanding cultural practices in pilot sites						
	OUTPUTS	BASELINE DATA			INDICATORS	RESULTS
AL-SHOUF	Database of sales of Al-Shouf Biosphere Reserve products	None			Economic options for maintaining cultural practices in pilot sites are identified and promoted	Improved socio-economic conditions of local community groups
	Sale at local farmers' markets					
CENTRAL AND SOUTHERN ANATOLIA (TAURUS MOUNTAINS)	4 economic options (community-based entrepreneurship, development of online marketing, product range development, slaughterhouse and product processing infrastructure -an ongoing process)	None				
DEHESAS/ MONTADOS	Certification and labelling for pastoral products	None				
	Direct sale					
	First national map of pastoral products for direct sale					
HIGH ATLAS	Organisation of High Atlas Food Markets	None				
	Development of online market place (in progress)	None				
	Distribution of over 40,000 plants of more than 30 species to members of local cooperatives	Extensive distribution of fruit and nut trees but limited distribution of medicinal and aromatic species				

KROUMIRIE MOGOD	Support of 2 economic initiatives for the promotion of products deriving from cultural practices	None		
LEMNOS	Terra Vita certification and labelling system: In Lemnos: 12 farmers & 2 local food processing industries; In Kythera: 32 olive oil growers organised in 2 cooperatives; 2 olive oil mills	None		
MENORCA	Custòdia Agrària «brand» - labelling and agreement on brand use	None		
	Dynamization actions for demand generation e.g. (products' raffle, social networks, videos, public talks)			
	Economic initiatives for promotion (excursions, cultural and artistic events)			
WEST BEKAA AND MOUNT LEBANON	Direct sale, fairs, events	None		
	Educational and ecotourism trails			

Outcome: Better positioning of cultural practices-based products and services from pilot sites in the market chain

	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
AL-SHOUF	8 value chains of high-quality products from medicinal/edible plants harvested in the wild and/or produced in the terraces	Previous ACS' track record in working with local actors to promote and support the marketing of high-quality local products	Number of new products or product lines, or services that have been improved or enhanced, in the pilot sites	Enhanced incomes and wellbeing from sustainable commercialisation of local products from native plant species
CENTRAL AND SOUTHERN ANATOLIA (TAURUS MOUNTAINS)	33 value chains enhanced	None		
HIGH ATLAS	5 selected products for improvement	None		
KROUMIRIE MOGOD	25 values chains enhanced	2		

LEMNOS	14 certified products in Lemnos; 1 product in Kythera	None		
MENORCA	New products offer in farms recently incorporated to the Land Stewardship Programme. Campaigns/events for 6 products (beef, vegetables, fruit, olive oil, wine, raw meat)	None		
WEST BEKAA AND MOUNT LEBANON	5 value chains promoted	None		

Outcome: Promotion of pilot mechanisms for encouraging investment in support of cultural practices at national and site levels

	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
AL-SHOUF	Assessment and update of the existing Cedar Loan to support local communities in the sustainable implementation of cultural practices (120 beneficiaries)	None	Number of mechanisms that have been explored and promoted	Generation of incomes feeding into socio-economic development and biodiversity management
	6 new infrastructures and facilities set up for the valorisation of biodiversity and for socio-economic development (agro-silvo-pastoral mountain trail, House of Biodiversity, botanic garden)	Lack of a botanic; Lack of a proper visitors' centre where tourists can learn about the biodiversity and ecocultural values of Al-Shouf Biosphere Reserve		
DEHESAS/ MONTADOS	1 Payment for Ecosystem Services Project rewarding good forestry and farming practices	None		
LEMNOS	Local alliance (informal local quality agreement)	None		
MENORCA	ICTIB (Balearic Islands initiative for land stewardship)	None		
	Collaboration with Menorca Preservation Fund			
	Collaboration with municipalities and island council for investment in the Land Stewardship programme			
WEST BEKAA AND MOUNT LEBANON	Partnerships with the private sector	None		

ANNEX 3.

IMPACT 3: THE SOCIAL WELLBEING, LOCAL CAPACITY AND GOVERNANCE SYSTEMS OF MEDITERRANEAN CULTURAL LANDSCAPES ARE IMPROVED				
POLICY				
Outcome: Adoption of key international policies that support the maintenance of cultural practices beneficial for biodiversity in the Mediterranean				
	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
CENTRAL AND SOUTHERN ANATOLIA (TAURUS MOUNTAINS)	IYRP 2026 (including all resolutions and declarations related to endorsement of IYRP 2026)	None	Number of international conventions recognising the value of cultural landscapes and practices	International agreements in support of cultural landscape management are implemented
	Cancun Statement			
	UNEP 4 Resolution			
	UNEP Benign Neglect Report			
	"Protecting and restoring endangered grassland and savannah ecosystems" resolution at IUCN WCC 2021			
DEHESAS/ MONTADOS	Advocacy for all the national and regional regulations that transpose the EU CAP	None		
HIGH ATLAS	Implementation of international agreements (CBD, ITPGRFA)	None		
Outcome: Adoption of key sectoral policies at national and local level that support the maintenance of cultural practices beneficial for biodiversity				
	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
AL-SHOUF	2 new regulations approved by the Ministry of Agriculture and Ministry of the Environment on best management practices supporting traditional agro-silvo-pastoral practices	None	Number of positive subsidies achieved (implemented)	Favourable policies recognising the value of cultural practices are adopted and/or implemented
DEHESAS/ MONTADOS	Proposal for a National Strategy for Extensive Grazing and Pastoralism	None		
	Legal characterisation of extensive grazing and wood pastures			
	Development of the HNVF Dehesas methodology			

HIGH ATLAS	Implementation of national policies (NSDS and Green Generation Strategy)	Few municipal and community leaders with working knowledge of policy frameworks		
	1 Legal and Policy Review of national policies and laws on cultural landscape management	Public discussion of current national policies and laws on cultural landscape management relatively new		
LEMNOS	Inscription of 2 crop landraces in the National Register of the Ministry of Rural Development and Food	None		
	Inscription of the traditional mandra system and 'melichloro/melipasto' cheese in the National Inventory of Intangible Cultural Heritage			
	Proposal for designation of 'melichloro/melipasto' cheese as PDO			
	Proposal for recognition of Lemnian breed of sheep as 'rare'			
	Proposal for agri-environmental scheme			
	Proposals for monitoring and controlling wild rabbit populations			
MENORCA	Proposals to the revision of the Balearic Agrarian Law	None		
	CARB (Biosphere Reserve Agrarian Contract)			
WEST BEKAA AND MOUNT LEBANON	Adoption of the Hima by the new protected areas law of Lebanon (Law 130/2019)	Adoption of the Hima at international level by IUCN Resolution 122 (2012)		
	Support to the Lebanon's National Action Plan (NAP) and National Afforestation Reforestation Plan (NARP)	None		

GOVERNANCE				
Outcome: Development of land governance plans at national and local levels in pilot sites' countries that recognise the value of cultural practices				
	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
HIGH ATLAS	Development of 2 land management plans in collaboration with community stakeholders	None	Number of pilot sites where land governance action plans are adopted	Land governance solutions that support the implementation of cultural practices are adopted
LEMNOS	Development of land management plans for each farm of the Land Stewards Network (12 in Lemnos, 32 in Kythera)	None		
MENORCA	Proposals to include land stewardship schemes in the Insular Territorial Plan and Rural Development Plan	None		
	Proposals to include sustainability measures in the Menorca Biosphere Reserve law project	None		
WEST BEKAA AND MOUNT LEBANON	4 Hima-based land management plans developed and applied in 4 different villages	Work initiated by SPNL with municipalities in West Bekaa region and Hima decisions were issued		
	4 Hima decisions adopted and endorsing sustainable practices and biodiversity conservation	Hima decisions at local level (with local authorities)		
Outcome: Improvement of institutional governance systems at national and local levels for participatory cultural landscapes' management				
	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
AL-SHOUF	Forest Management Committees (FMCs) created and active in 14 municipalities	None	Presence/absence of institutional governance systems that support the implementation of cultural practices that are beneficial for biodiversity in pilot sites	Territorial governance is strengthened through participatory community engagement
	Development of land stewardship agreements			
	Agreements with 13 farmers were signed (Menorca's model)			
	Agreements for 12 lands were signed (new model)			

LEMNOS	Land Stewards Network in Lemnos with 12 farmers and in Kythera with 32 olive oil producers	None		
MENORCA	Lands Stewards Network model (agreements with 36 farmers signed)	None		
		Improvements in the clauses of the stewardship agreement with the farms		
WEST BEKAA AND MOUNT LEBANON	26 "Himas"- community-based protected areas declared	Hima communal governance and management system		
LOCAL CAPACITY AND MANAGEMENT				
Outcome: Strengthening of local stakeholders' capacities for the implementation of cultural practices in pilot sites				
	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
AL-SHOUF	Capacity building of local practitioners	None	Number of local practitioners and other stakeholders in pilot sites who have benefitted from knowledge transfer through trainings, capacity building events, exchanges of good practices, visits and other actions	Community members are trained in biodiversity-related skills and practices and gain more employability. The management of cultural practices is enhanced
	4 capacity building workshops on agriculture for farmers from cooperatives of 3 villages			
	1 workshop on composting methods for 17 local farmers			
	1 queen rearing workshop for 25 professional beekeepers			
	1 workshop on stone wall rehabilitation for 20 beneficiaries from the local and refugee communities			
	2 workshops on agroecology in restored terraces and farmlands			
	5 trainings for practitioners with "Learning -by-doing" methodology on the effective implementation of cultural practices (17 farmers)			
	2 trainings for sustainable marketing strategies for local products			
	2 trainings on value chains			
	Total amount of workshop beyond 75			
Set of 3 manuals with guidelines on best management practices and lessons learned on the conservation and enhancement of the high value traditional agro-silvo-pastoral systems	Previous publications on the Forest Landscape Restoration experience of ACS			

CENTRAL AND SOUTHERN ANATOLIA (TAURUS MOUNTAINS)	9 capacity building workshops	None			
	150 local people trained				
DEHESAS/ MONTADOS	277 local practitioners trained	None			
	More than 60 capacity building workshops				
HIGH ATLAS	6 capacity-building workshops for practitioners (more than 250 participants)	None			
	Educational programme for community members (over 40 trainings for over 250 students and 8 community researchers)				Community researchers received 3 years of training in plant collection, nursery management and other skills
	2 inter- and intra-community exchanges (over 30 community members)				No formal intra-community exchanges implemented; previous inter-community exchanges limited in scope
	Training workshops for over 70 Moroccan university students and 19 researchers in plant conservation theory and practice, ecological monitoring and climate change				A few students trained in ecological monitoring but none in climate change modelling
KROUMIRIE MOGOD	4 Regional Workshops (20-25 people)	None			
	1 Capitalisation Workshop (20 people)				
LEMNOS	170 farmers trained (Lemnos & Kythera)	None			
	120 stakeholders engaged (Lemnos & Kythera)				
	70 farmers benefit from regular technical support (Lemnos & Kythera)				
	20 students trained on nature restoration (Lemnos)				

	Lemnos: 14 capacity building workshops for farmers, 1 field trip, 1 stakeholder workshop, 1 capacity building session on the field for students			
	Kythera: 3 online capacity building workshops for farmers and other stakeholders			
MENORCA	370 farmers trained	20		
	4 educational seminars for young people to learn on the island's economic model: the values of land stewardship in the food system	None		
	1 Training about added value agricultural practices (57 participants)			
	1 Agriculture and Environment Workshop (47 participants)			
	15 editions of Agriculture and Environment seminar (each edition 2 days)			
WEST BEKAA AND MOUNT LEBANON	49 capacity-building workshops	None		
	1,550 local people trained	500		

ANNEX 4.

THREATS REDUCTION				
Outcome: Decreased land abandonment				
	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
AL-SHOUF	200 local people implement cultural practices	None	Surface area that is restored or where cultural practices are implemented / Number of local people involved per pilot site in implementing cultural practices	Increased population of indicator fauna and flora species in the restored areas
	Pilot restoration actions of more than 100 hectares of land (stone-wall agricultural terraces and additional land)	Preliminary stage of this process already started by ACS		
	Pilot restoration actions of 3 high mountain pasture sites	Since 2012 ACS is active in the adaptive restoration of forest ecosystems in the SBR		
CENTRAL AND SOUTHERN ANATOLIA (TAURUS MOUNTAINS)	150 tents (approximately 600 people) of the Sarikeçili nomadic pastoralist community	150 tents		
	13,000 km ² surface area where cultural practices are implemented	13,000 km ²		
DEHESAS/ MONTADOS	Monitoring of 6 farms for a total of 9,000 ha where cultural practices are implemented	None		
HIGH ATLAS	44,600 people in the pilot site implement cultural practices	30,000 people		
	Restoration of 31,260 ha (312.6 km ²)	17,000 ha		
	Restoration of traditional water management infrastructure, including new and efficient drip irrigation systems to both plant nurseries + restoration of 2 water reservoirs	Some experimentation with drip irrigation but not on a large scale reservoirs		
KROUMIRIE MOGOD	1,200 local people implement cultural practices	None		
LEMNOS	Implementation of sustainable farming practices across 848 ha in Lemnos	Approx. 400 ha		
	Kythera (phase 2 upscaling site): Pilot implementation of sustainable farming practices across 151 ha			
	12 farmers (Lemnos) and 32 olive oil growers (Kythera, phase 2 upscaling site) participate in the Land Stewards network, and Terra Vita certification and labelling system, implementing sustainable farming practices	None		

MENORCA	72 local people implement cultural practices (2 in each of 36 farm)	20 people		
	24 ha restored	18 ha		
	2,729 ha of land where cultural practices are implemented	None		
WEST BEKAA AND MOUNT LEBANON	1 report published on mountain pasture restoration in Lebanon	None		
	50 local people implement cultural practices			
	25 ha restored			
Outcome: Decreased conversion to intensive agriculture/farming				
	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
KROUMIRIE MOGOD	No agriculture intensification (only family farming is practiced in the area)	None	Area converted to intensive agriculture/ farming per pilot site	Increased crop yield and/ or natural vegetation
HIGH ATLAS	No intensive agriculture observed (focus on Amazigh smallholders)	None		
Outcome: Reduced loss of genetic diversity				
	OUTPUTS	BASELINE DATA	INDICATORS	RESULTS
AL-SHOUF	33 traditional crop varieties recorded	None	Number of native crop varieties and livestock breeds per pilot site	Reduced loss of biodiversity and reduced pressure on wild plant species
	Enrichment planting in community nurseries (30,000 plants have been distributed to local communities benefiting over 550 households)			
	23 Nubian Ibex are now in Shouf. Some are ready to be released in the wild. The operation was delayed due to the recent crises	No big mammal has ever been reintroduced in Lebanon		
CENTRAL AND SOUTHERN ANATOLIA (TAURUS MOUNTAINS)	6 livestock breeds	6		
HIGH ATLAS	Characterization and conservation of over 30 different crops and landraces, and 20 livestock breeds	None		

	Enrichment planting in community nurseries (100,000 plants have been distributed to local communities, cooperatives and schools, benefiting over 1,500 households in 70 hamlets (douars))	GDF/MBLA initiated the community nursery in Imegdal		
	3 community seed banks for conservation of wild and cultivated plant seeds (over 200 species and 500 seed accessions)	No previous seed bank or collection		
LEMNOS	40 crop landraces recorded; in situ conservation and seed production to support wide distribution to local farmers	None		
	4 local livestock breeds recorded			
	1st genetic identification of local breeds of sheep; proposal for recognition of Lemnian breed of sheep as 'rare' submitted			
	Recognition of crop landraces; inscription of 2 landraces ('aspromytika' beans and barley 'Panagias') in the National Register; proposals for inscription of 3 more landraces submitted.			
MENORCA	24 crop landraces recorded (4 cereal, 1 leguminous, 11 vegetables and 8 fruit trees)	None		
	5 local livestock breeds recorded (1 cow, 1 hen, 1 sheep, 1 pig and 1 turkey)			

ANNEX 5.

Impact of AMNC on biodiversity conservation

The aim of this survey is to collect data for the impact assessment report that will measure the impact of AMNC on cultural landscapes of high ecological value. Based on the Theory of Change (ToC) and its strategies, the impact of AMNC will be measured under three pillars: environmental benefits (biodiversity conservation), economic resilience and social sustainability in cultural landscapes.

NAME OF THE ORGANISATION	
ECONOMIC PILOT SITE	
How many monitoring sites have been used to collect data?	
DURING THE FIRST PHASE (IF APPLICABLE)	
DURING THE SECOND PHASE	
How many indicator fauna and flora species have been recorded (name, number of species and number of individuals)?	
DURING THE FIRST PHASE (IF APPLICABLE)	
DURING THE SECOND PHASE	
What is the surface area that has been restored or where cultural practices have been implemented?	
BEFORE THE START OF THE PROJECT	
DURING THE FIRST PHASE (IF APPLICABLE)	
DURING THE SECOND PHASE	

HOW MANY LOCAL PEOPLE HAVE BEEN INVOLVED IN IMPLEMENTING CULTURAL PRACTICES?	
BEFORE THE START OF THE PROJECT	
DURING THE FIRST PHASE (IF APPLICABLE)	
DURING THE SECOND PHASE	
What is the surface area converted to intensive agriculture/farming?	
BEFORE THE START OF THE PROJECT	
DURING THE FIRST PHASE (IF APPLICABLE)	
DURING THE SECOND PHASE	
What is the surface area converted to intensive agriculture/farming?	
BEFORE THE START OF THE PROJECT	
DURING THE FIRST PHASE (IF APPLICABLE)	
DURING THE SECOND PHASE	
How many native crop varieties and livestock breeds have been recorded?	
BEFORE THE START OF THE PROJECT	
DURING THE FIRST PHASE (IF APPLICABLE)	
DURING THE SECOND PHASE	



Alliance for
**Mediterranean
Nature & Culture**

Many Paths • One Mediterranean



E: info@mednatureculture.org
W: mednatureculture.org

Funded by:

