



CENT.OLI.MED. Project

Identification and conservation of the high nature value of ancient olive groves in the Mediterranean region



Habitat Directive

improving biodiversity

management tools

preservation techniques

PROJECT DESCRIPTION

The intensive agricultural practices, the uprooting of ancient olive trees for ornamental purposes, the missing or insufficient compensation of the cultivation costs, the limited knowledge about their environmental value, the reduced sensibility towards their cultural heritage constitute the threats to which the ancient olive groves are exposed and which are the background of the project. The ancient olive groves, cultivated by using traditional low environmental impact techniques, are a real treasure trove of biodiversity for animal and vegetal species, playing a strategic role in ensuring the ecological services and counteracting the effects of wind and water erosion, as well as those consequent to the loss of soil organic matter. Their habitat is an important ecosystem, as well as a vital refuge for the nesting of many animal species. In recent years the ancient olive orchards have suffered various threats that have endangered their biological diversity. If agriculture often determines the modification of landscape and habitats and has a negative impact on the ecosystems, such activity may result in the creation of areas that serve as areas at high level of intermediate naturalness with connection and/or buffer functions between areas at high level of naturalness and areas at zero naturalness content (urban or industrial areas, etc.). The main objective of CENT.OLI.MED. was to contribute to the identification, preservation, improvement and management of areas designated as High Nature Value Farmlands (HNVF) putting in place, at the same time, concrete actions aimed at halting the loss of biodiversity in these areas.



The project takes into account the three objectives of the Convention on Biological Diversity and its programme of work aimed at supporting the interactions between agricultural practices, conservation and sustainable use of biodiversity components (as defined in Annex I of the Convention), from the genetic level to the eco-systemic one.

OBJECTIVES

The specific objectives were:

- **identification and assessment** of the elements characterizing the Mediterranean ancient olive groves as **High Natural Value Farmlands**;
- **improvement and protection** of the biodiversity in the ancient olive groves through actions of re-naturalization, as well as definition and implementation of Guidelines;
- **development and application** of an innovative governance model of the abovementioned areas;



- **concerted definition** of common policies for the protection and enhancement of the ancient olive groves in the Mediterranean region.

PROJECT PHASES

The project activities were carried out in the Apulia region and on the island of Crete. The different target areas were, as regards to Apulia region, Calenelle (Municipality of Vico del Gargano) in the National Park of Gargano; the Regional Nature Park of Dune Costiere (Municipality of Fasano) and the State Nature Reserve of Torre Guaceto and Nature Reserve Le Cesine (Municipality of Vernole). The project area in Crete was Palaia Roumata (Municipality of Voukolies) in the Northern part of the Prefecture of Chania, Crete Region.

In the preliminary phases preparatory studies were carried out for the morpho-genetic and environmental characterization of the ancient olive groves of the target areas aimed at **the identification and assessment of their biodiversity**. This made it possible to identify and measure the structures suitable to host the wild fauna and flora (drystone walls and other stone works, water polls, etc.). The existing flora has been accurately assessed and studied in order to evaluate the level of agro-biodiversity in these areas; the monitoring of the fauna (especially chiropters, reptiles and birds) allowed to gather in-depth information about the role of olive groves in the life cycle of each species. The concrete conservation actions, which addressed in particular the areas of Torre Guaceto (Apulia region, Italy) and Bugiukliana (Chania, Grecia) were aimed at:

- **enhancing the biodiversity** through actions of re-naturalisation, creating micro-habitats with the plantation of shrubs and trees, the practice of the grassing and the construction of dry stonewalls;
- **developing and implementing guidelines** to support farmers in the protection of biodiversity;
- **developing an economic enhancement plan** for the ancient olive groves;
- **developing and implementing an innovative governance model**;
- **developing an Euro-Mediterranean Action Plan** for the protection of the ancient olive groves.

PROJECT RESULTS

The CENT.OLI.MED project was focused on the implementation of actions designed to preserve the genetic diversity, the species diversity and the biodiversity in the landscape, to build a sustainable and integrated management system based on an approach that integrates the environmental, social, economic and institutional dimensions of the involved territories. The project helped to define the criteria to include the traditionally managed ancient olive groves among the High Nature Value Farmlands, emphasizing how a truly sustainable environmental development is only possible if based on an integrated view of the entire territory, including agricultural areas. In details the following results were achieved:

- **geo-referenced inventory ([WEBGIS](#)) on more than 500 ancient olive trees** for the morpho-genetic and environmental characterization of the biodiversity, accessible from the project's website;
- **realization of the Study on [biodiversity study in the ancient olive groves](#)**;
- **collection of germplasm** from the different target areas for genetic characterization purposes;
- **propagation** of the plant material collected from the ancient olive trees in Apulia region with more than **9.000 2-3-year old seedlings** of the different selected varieties kept in the greenhouse and in the collection field established in the area of Torre Guaceto;
- **building and restoration**, with traditional materials and techniques, of **1000 meters of dry-stone walls** in the olive groves of Voukolies and Torre Guaceto, to give home to small vertebrates and to preserve the moisture required for the survival of shrubs of the Mediterranean *maquis*;
- **plantation**, along the dry-stone walls, of **2000 meters of hedges with over 3000 shrubs of native species** (lentisk, myrtle, Mediterranean buckthorn, thornless blackberry and hawthorn) to give home to useful insects of olive trees and provide shelter and feed to animals, especially in the winter season;
- **improvement** of the biodiversity of the herbaceous cover through reconstructing, over a **1-hectare** surface in both areas, the turf grass degraded because of tillage or weeding;
- **completion**, within the Visitors' Centre of Torre Guaceto, of the area to be used for promoting and disseminating on the territory the project initiatives, with an **exhibition area**, which gathers the olive products, and a **meeting room**, where to meet local stakeholders;
- **setting up** of a laboratory for making **olive oil-based soaps**, flavored with aromatic plants of the Mediterranean *maquis*;
- **marking out of a pedestrian path of approx. 3 kilometers** to make more usable and to increase the recreational value of the territory crossing the area of ancient olive groves in the State Nature Reserve of Torre Guaceto and connecting the Visitors' Centre "Al Gawsit" of Serranova with the Service Area and Punta Penna Grossa shore.



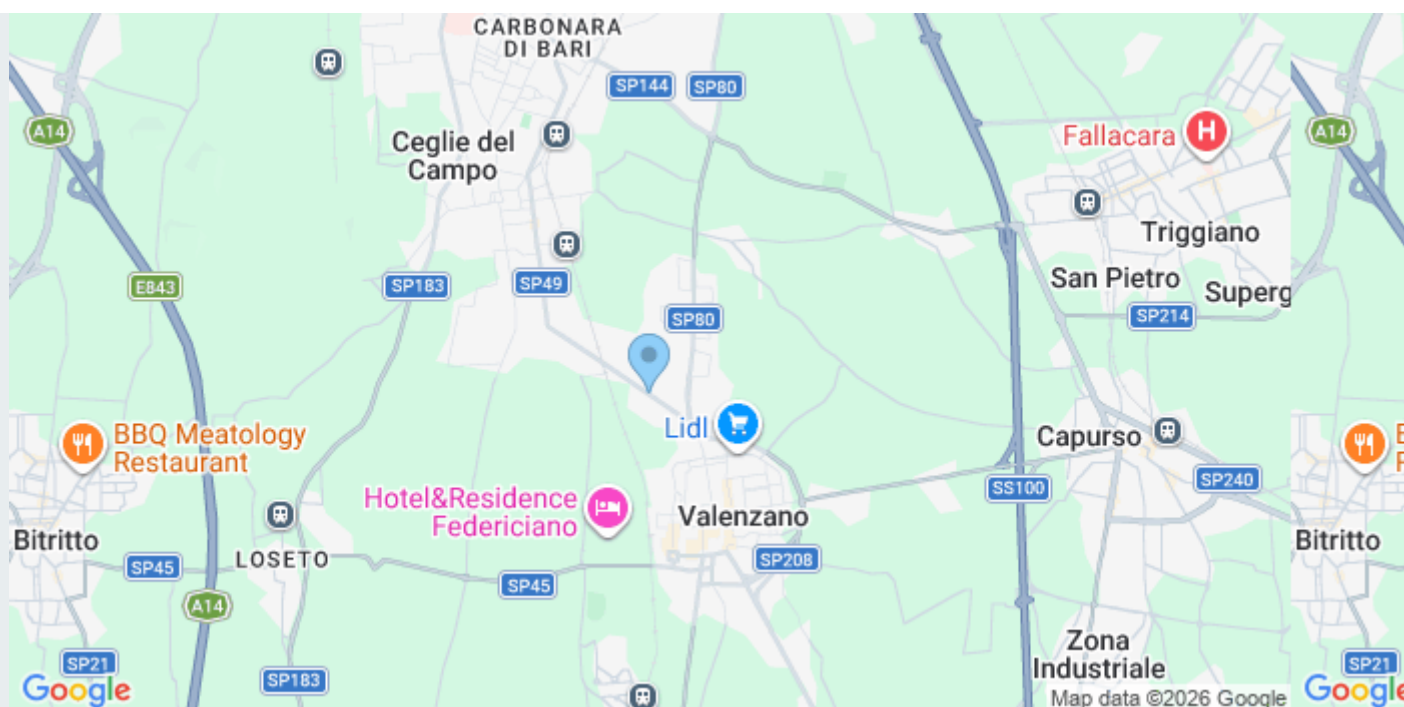
- **development of Guidelines for the sustainable management of the ancient olive groves**, in three languages ([IT](#), [ENG](#) e [GR](#)), meant for the **farmers and local actors** in order to protect and enhance the biodiversity of the ancient olive groves;
- preparation of a **Governance model** for the ancient olive groves of the State Nature Reserve of Torre Guaceto;
- **elaboration of an Integrated socio-economic and environmental enhancement plan** of the ancient olive groves of the State Nature Reserve of Torre Guaceto;
- **realization** of a comics "**Grandpa Olive-Tree and his friends**" (**Italian**) for explaining to children the objectives and implemented actions of the CENT.OLI.MED project, besides getting them familiarized with the habitat of ancient olive groves;
- **elaboration** of a **support tool** for policy makers who, at supranational, national and local level within the Euro-Mediterranean area, intend to know, preserve and valorize the agro-ecosystem of the ancient olive groves.

Following the example of work carried out in Voukolies and Torre Guaceto, the regional government of Apulia organized **interactive workshops** by involving technicians and local players of the project areas, to identify the problems and define the possible solutions for the sustainable management of the ancient olive groves, based on the **Socio-Economic and Environmental Plan** established for the Nature Reserve of Torre Guaceto.

Limitedly to the same area a course for farmers was held which provided instruments and examples for farm re-organization based on agro-ecological criteria.

In 2015 the CENT.OLI.MED. project was awarded the "Best Sustainable Development Practice" prize.

The European Commission has published a thematic monograph "**LIFE among the olive trees**" where collected good practices, including also the LIFE CENT.OLI.MED project, to improve the environmental performance in the olive oil sector.



Acronym

CENT.OLI.MED.

Number of reference

LIFE 07 NAT/IT/000450

Reference Programme

[LIFE](#)



**PIATTAFORMA
delle CONOSCENZE**
Buone pratiche per l'ambiente e il clima



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GOVERNANCE
E CAPACITÀ
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2014-2020

METTIAMOCI
IN RIGA



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Beneficiary Coordinator

C.I.H.E.A.M. Istituto agronomico
Mediterraneo di Bari

Contacts

Giancarlo Mimiola
Generosa Jenny Calabrese

EU contribution

703135,00

Call Year

2007

Start Year

2009

End Year

2012

Beneficiary headquarters

Via Ceglie, 9
70100 Valenzano BA
Italy

Region

Puglia