

LIFE MycoRestore (LIFE18 CCA / ES / 1110)

Innovative use of mycological resources for resilient and productive Mediterranean forests threatened by climate change

PROJECT LOCATION: Spain, Italy, Portugal

BUDGET INFO:

Total amount: 3,045,717 €

% EC Co-funding: 1,575,135 €



DURATION: Start: 01/07/2019 - **End:** 30/06/2023

PROJECT'S IMPLEMENTORS:

Coordinating Beneficiary:

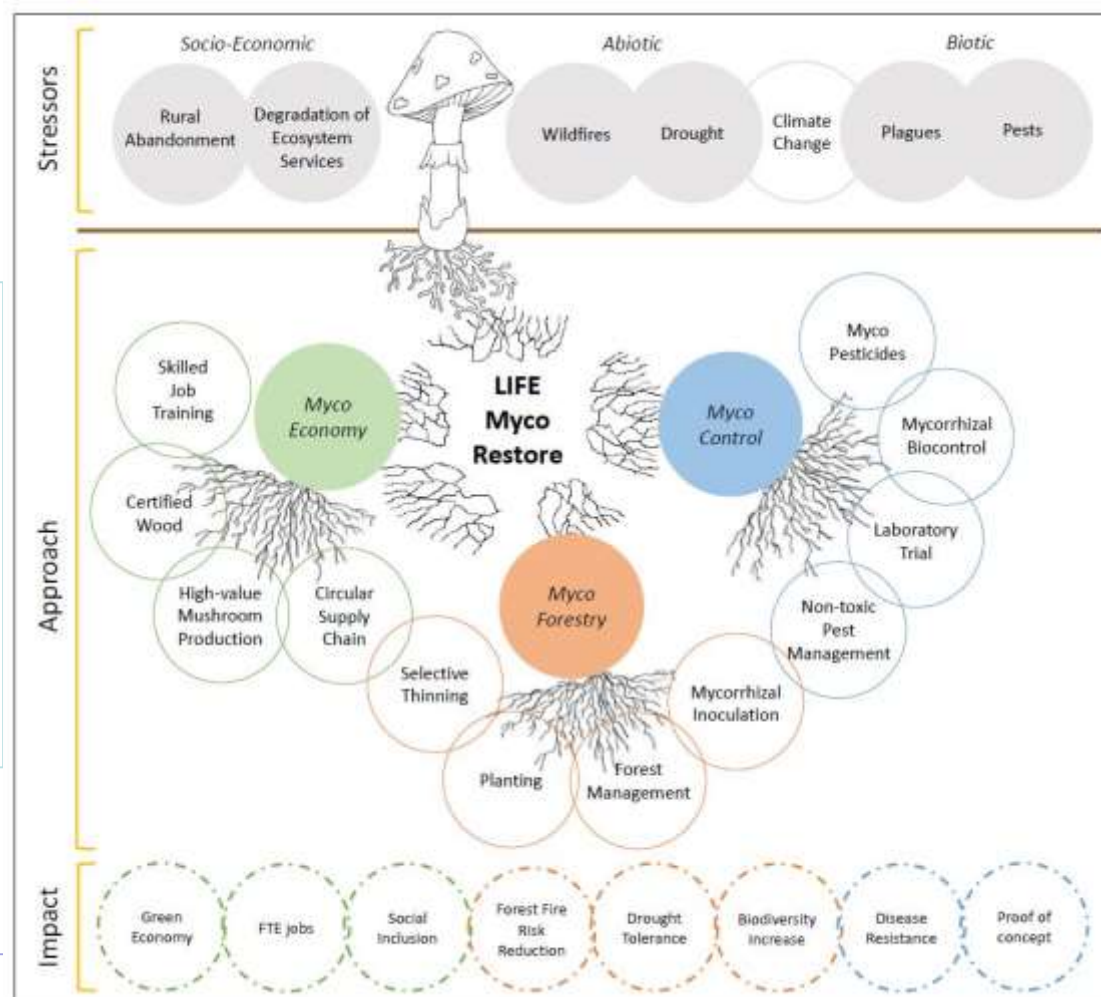


Associated Beneficiary(ies):



OBJECTIVES & SCOPE

LIFE MycoRestore seeks to utilize diverse mycological resources and forest management practices to add value to and aid in the biological resilience of forests in Spain, Italy, and Portugal, generating new sources of income and ensuring the stability of forest ecosystem services while addressing the effects of CC.



Project Objectives:

1. **MycoForestry:** Demonstrate sustainable mycological and forestry management practices for wildfire & drought-resistant forests
2. **MycoEconomy:** Promote green jobs for people at risk of social exclusion by training them to replace traditionally low-value biomass production with high skilled work: processing wood and producing innovative high value mushrooms. It will demonstrate a circular economy approach to mushroom & substrate production supply chains, stimulating rural economies
3. **MycoControl:** Provide proof of concept on the use of natural myco-control products and native fungal species for reduced pest/pathogen presence in forests

EXPECTED IMPACTS

Myco Forestry:

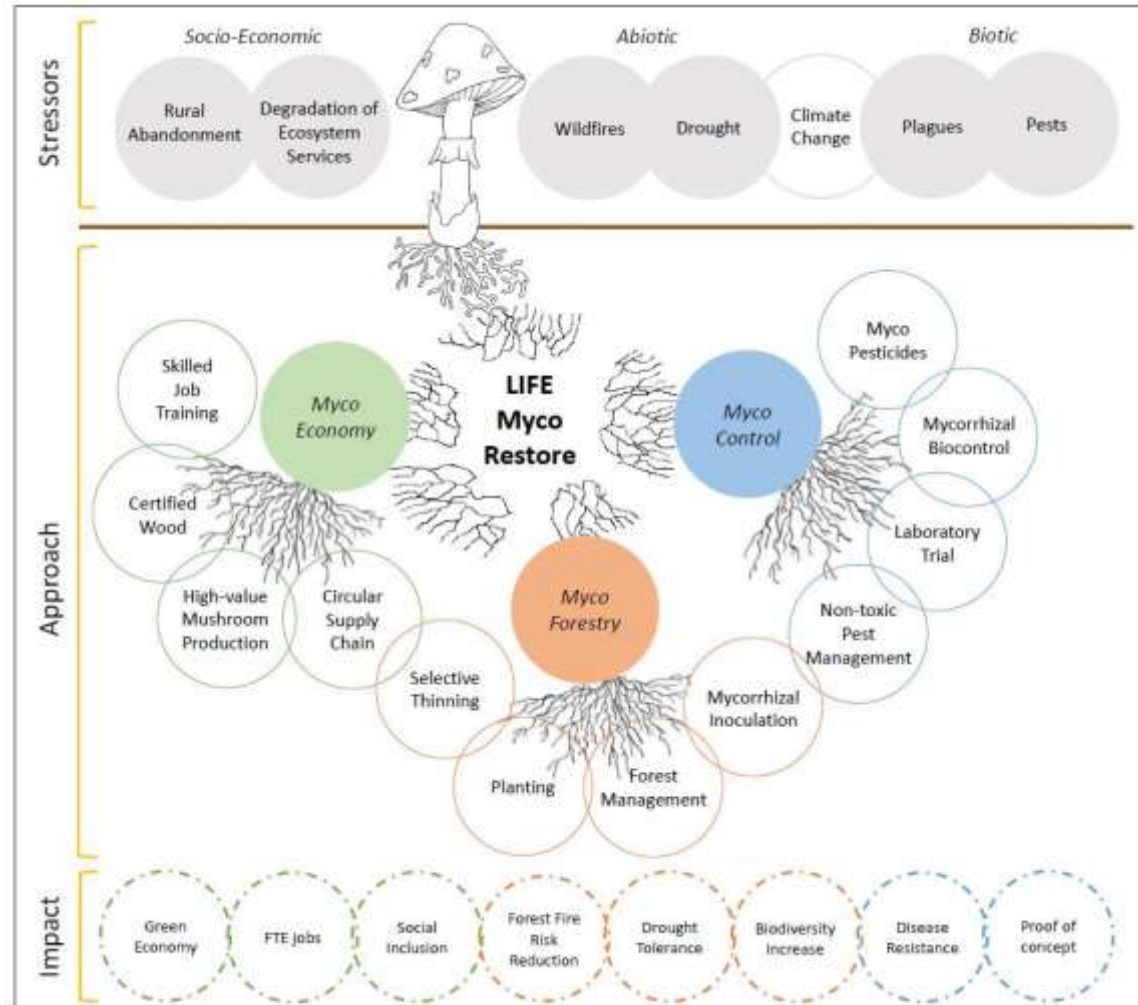
- Improve soil health (average 13%)
- Increase in biodiversity (15%)
- Diminish available fuel load by 45 tons/ha

Myco Economy:

- Generate revenue of €333,000
- Create at least 29 FTE Green jobs
- 1505 tons of CO2 emissions

Myco Control:

- Reduce presence of pests and pathogens (25%)
- **Across all actions**, ecosystem services will be augmented
- Visibility and perception of ecosystems services will improve.
- During replication, the area size will be scaled 10 times, to a total of at least 3,015 ha



POLICY IMPLICATIONS: *main policies targeted*

LIFE MycoRestore addresses the priorities defined for the 2018 Climate Action call, areas:

- CC Adaptation (mainly)
- CC Mitigation

The project targets the policy priority of **resilient forestry and tourism sectors**. Resilient forests in the Mediterranean will be created improving myco-tourism through the inoculation of edible mushrooms. At the same time, the through the **Sustainable Forest Management** and cascading use of solid biomass, long term storage of carbon in the forest is ensured, providing benefits for CC Mitigation.

LIFE MycoRestore delivers multipurpose strategies targeting the areas of climate action, environmental resource management and biodiversity. The project will contribute to:

Strategy for Rural Development by increasing the economic resilience/employment in rural areas,

Roadmap to a Resource Efficient Europe through its circular economy approach to mushroom production

The New EU Forest Strategy by sustainability managing forests and their resources, improving the forest's climate resilience

CONTINUATION (REPLICATION, TRANSFER, MARKET UPTAKE)

LIFE MycoRestore strategy to ensure continuation entails the continuation of actions beyond the project's timeframe:

- **Action A.2: Plan, Design and Training:** Forest holders interested will use training materials and Best Practice Handbook to implement mycorestoration techniques
- **Action A.3: Preparing strategy for Mycoeconomy.** Beneficiary companies will ensure the success of the new business models in the after-LIFE period
- **Action C.1 Mycoforestry.** Forest maintenance to be continued (thinning, etc) to keep reduced fire risk. Mycelio inoculated area to be expanded
- **Action C.2 Mycoeconomy.** Companies involved (Mycelio, Social Forest, Volterra...) will continue using the products generated/obtained in the project context in their business schemes in the after.LIFE period.
- **Action C.3 Mycocontrol.** Proof of concept (if obtained) for native fungal species and for registered products will lead to registration of project Myco-pesticides in collaboration of other collaborative partners (SEIPASA...)
- **Action C.4 Replication.** The replicating activities will be spread to the consortium partners network in their countries to adapt Mediterranean forests to CC.
- **Actions E.1/E.2 Communication, dissemination & awareness raising.** The communication and dissemination will continue to relevant stakeholders by all the partners. Conclusions and recommendations produced in action D.2 together with the Best Practice Handbook and Replication Plan will be published at the end of the project and will serve for future replication efforts.

ECOSYSTEM SERVICES

Cultural Services

- Diversity
- Educational values
- Aesthetics
- Social relations
- Sense of place
- Cultural heritage landscapes (Dehesa)
- Recreation and Ecotourism

Provisioning Services

- Wood
- Cork
- Edible mushrooms
- Chestnuts
- Truffles
- Fruit
- Entomopathogenic fungi
- Hypo-virulent fungi
- Telluric fungi



Regulating Services

- Air quality maintenance
- Sequestering of GHGs
- Water storage to prevent runoff and flooding
- Vegetative cover for erosion control
- Biological control

Supporting Services

- Nutrient cycling
- Habitats
- Soil formation
- Oxygen production