LIFE The Green Link: Restoring desertified areas across the Mediterranean Basin

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ECCA 3rd European Climate Change Adaptation Conference
OUR CLIMATE READY FUTURE Glasgow, 5th-9th June 2017
WWW.ECCA2017.EU/CONFERENCE

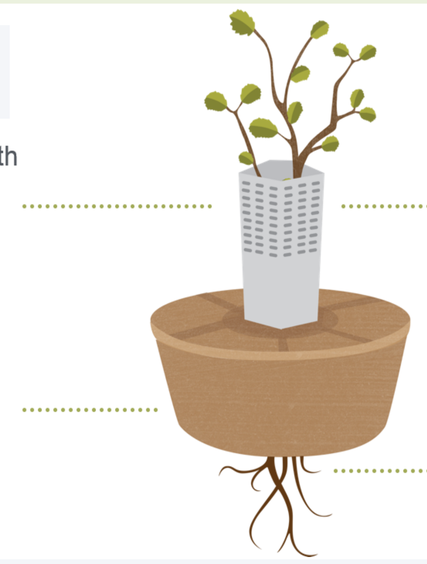
1. Why?

Mediterranean societies are increasingly facing floods, water scarcity, heat waves, prolonged droughts, stream flow variability, temperature rises and decreased rainfall.

The impact of these phenomena is expected to intensify the existing risks of desertification and forest fires, particularly in regions where water scarcity is already a concern. It is therefore of crucial importance to develop adaptation measures that are aimed at the reduction of the vulnerability of these ecosystems and the increment of their resilience.

LIFE The Green Link aims to compensate impacts of climate change and contribute to more resilient Mediterranean ecosystems, specifically in Spain, Greece and Italy.

2. How?



We plant with the Cocoon technology, an effective and sustainable method to plant trees without the use of irrigation in order to combat desertification and climate change.

3. Where?







4. Challenges



Tifaracás, Gran Canaria (Spain): Part of a natural park; trials with novel agricultural varieties.
Challenge: Enhance connectivity between green patches in the park



El Bruc, Catalonia (Spain): In August 2015, 1,277 Ha. burned down in a forest fire
Challenge: Reforest part of degraded area using adaptive and economically interesting plant species



Almería (Spain): Part of a natural park; trials with novel agricultural varieties
Challenge: Enhance connectivity between areas



Soveria Mannelli, Calabria (Italy): Abandoned farmland
Challenge: Converting eroded soils into fertile soils & support plants in the first growth stages



Jijona & Tous (Spain): Abandoned farmland
Challenge: Converting eroded soil into fertile soil, offer an economic alternative for land-owner and farmers



Ptolemaida (Greece): Lignite mining site owned and operated by Public Power Corporation
Challenge: Converting eroded soils into fertile soils & support plants in the first growth stages

5. Methodology

Above ground parameters:
- Tree survival
- Tree development
- Tree vigour
- Vegetation structure
- Biodiversity
- Biomass stock

Below ground parameters:
- Edaphic parameters top & sub soil
- Root development
- Mycorrhizal infestation

Socio-economic impact:
- Stakeholder consultation



6. Achieved

Number of trees platned in the demostration areas of the project (2016)



8.570 trees of 20 different species have been planted including fruit trees, timber trees and native trees.



7. Expected results

24,000	Trees planted in 3 EU countries
>80%	Survival rate
15%	Enhancement of ecosystem services
20%	Savings in planting costs
20%	Improvement of soil quality

Impacts of climate change addressed:

- ✓ **Adaptation** to the risk of **desertification:** Enhance the ecosystem services and stop degradation of European soils, improving soil quality and water retention.
- ✓ **Adaptation** to the risk of **biodiversity loss:** Contribute to the creation of a diverse mosaic of (micro)habitats.
- ✓ **Adaptation to the increase of water scarcity:** Demonstrate that the Cocoon is a feasible option for planting trees without irrigation.

Acknowledgements. This project is co-financed by the European Union through the **LIFE Programme. LIFE15/CCA/ES/000125. Jul. 2016 – Mar. 2020**

Project partners: