RESTORE DESERTIFIED AREAS WITH AN INNOVATIVE TREE GROWING METHOD TO INCREASE RESILENCE: THE GREEN LINK PROJECT IN VALENCIAN COMMUNITY (SPAIN)

GIMENO-GARCÍA, Eugenia[1,2]; CAMPO, Julián[1]; MAYMÓ, Ana[1]; ANDREU, Vicente[1]; RUBIO, José Luis[1]

[1] Centro de Investigaciones sobre Desertificación-CIDE (CSIC, UV. GV), Moncada, Valencia, Spain (eugenia.gimeno@uv.es; julian.campo@uv.es; ana.c.maymo@uv.es; vicente.andreu-perez@uv.es; jose.l.rubio@uv.es). [2] Fundació General Universitat de València, Valencia, Spain.

In the Mediterranean area, many semi-arid regions are suffering significant declines in water availability and temperature increases, being necessary to implement adaptation measures aimed at reducing the vulnerability of these ecosystems and strengthening their resilience.

The general objective of the Green Link Project (LIFE15 CCA/ES/000125) is to demonstrate an innovative growing method in desertified areas based on a new 'water bucket' system: The 'Cocoon', which is made out of recycled carton, it is very water-efficient, low-cost and 100% biodegradable.

Under this overall aim, here we present the two trial areas in the Valencian Community (Jijona and Tous) where Cocoons has been already installed with the objective to compare their suitability under contrasted edaphic and climatic conditions.

In Jijona the challenges are (1) to improve the extremely dry and eroded soils in an abandoned cropland on Early Cretacic marls by planting adaptable species (*Quercus ilex, Celtis australis, Tetraclinis articulata, Ceratonia siliqua, Arbutus unedo, Pinus halepensis*) and (2) to offer an economic alternative for land owners by planting mainly *Olea europea* using Cocoon technology.

On the other hand, in Tous trial area, the challenge is to recover the area burned in 2012 (Chromic Luvisol), by using adaptive and economic interest plant species (*Olea europea, Quercus ilex, Celtis australis, Tetraclinis articulata, Ceratonia siliqua, Arbutus unedo, Pinus halepensis*).