

Introductory information:

Location: Finca La Orden-Valdesequera, Coria, Extremadura, Spain

Area: 15000 ha

Climate: Mediterranean

MarginUp! proposal: Introducing hemp and kenaf cultivation in existing field crop rotation



Finca La Orden-Valdesequera, Extremadura, Spain.
Photo: CICYTEX (Carlos Campillo)

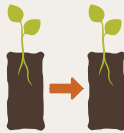
Benefits:



Biodiversity enhancement



Circular use of biomass



Replication potential



Improved soil quality and productivity



Water optimised production



New regional business models



GHG emissions reduction

Replication potential:

Mediterranean region and other regions with comparable marginality attributes, water stress levels and climate conditions.

Feedstock:



Kenaf plantation. Photo: CICYTEX (Juan Cabanillas)



Hemp plantation. Photo: CICYTEX (Juan Cabanillas)

Supporting the development of the bioeconomy:

The proposed value chain will contribute to the creation of new regional business models and to developing sustainable products that decrease GHG emissions by 20%.

Stakeholder engagement:

Research and environmental organisations, public authorities, private companies, and local farmers will all be involved in the use case through the different stages: Crop cultivation, monitoring of the biodiversity and ecosystems services resilience, biomass processing, bioenergy and bio-fertiliser production, crop trials development and soil characterisation.

Circularity and biomass cascade use:

The biomass produced will be employed for prefabricated construction panels. The residual material combined with pig manure will be used for anaerobic digestion to obtain biogas and organic fertilisers, which are returned to the farm.

Bio-based products:



Wood pellets



Organic fertilisers

Land, biodiversity, and ecosystem resilience:

Hemp and kenaf species provides land cover during the crops growth seasons that feed and shelter wildlife, sequesters carbon, improves soil quality and minimises use water, fertiliser, and pesticide use.