LIFE Agromitiga project: Development of climate change mitigation strategies through carbon-smart agriculture

In agricultural systems, one of the most relevant natural resources for combating climate change is soil, thanks to its potential to capture CO₂ from the atmosphere. Some agricultural practices, such as conservation agriculture, can increase CO₂ sequestration in soils. In that sense, this practice is considered by the 4per1000 initiative as one of the most effective practices to combat climate change, thanks to its ability to increase carbon sequestration in the soil. On this basis, LIFE Agromitiga, a European project financed by the EU LIFE Program, will promote a low-carbon agricultural system to combat climate change from the agricultural sector, through the use of Conservation Agriculture in agroecosystems.

Objectives
LIFE Agromitiga aims to decouple CO₂ emissions regarding the use of raw materials and natural resources, through Conservation Agriculture (CA). The project will promote the implementation of agricultural practices, like no-till and groundcovers, that promote circular agrarian economy respectful to the environment, improvement of natural capital and ecosystem services.

Key actions
• To design and implement a method to calculate C footprint in the cultivation stage of crops, eligible for international verification standards and C footprint calculation. To do so, the project will establish a network of demos farms at three scales, in where the Soil Organic Carbon stock the first 30 cm of depth will be measured:
  • Pilot scale: ‘Rabanales’ farm.
  • Regional scale: 35 demos farms located in Andalusia (Spain).
  • International scale: At least, 5 demos farms located in Portugal, Spain, Italy and Greece.
• To develop a technological tool to evaluate and quantify the increase of C in soils due to better soil management practices, as a basis for the development and monitoring of policies linked to climate change and emissions trading.

Outcomes
• Increase of soil organic carbon compared to conventional tillage:
  • 12,485 tons/year (anual crops) (↑2%).
  • 15,092 tons/year (permanent crops) (↑4%).
• Reduction of greenhouse gas emissions (GHG): 2,732 tons/year (↓20%).
• Areas of agricultural land under sustainable management: 73,500 ha (↑4%).
• Reduced energy consumption: 10276 Mwh/ year (↓20%).
• Number of entities/ individuals reached/ made aware:1,000,000.

Contact
Asociación Española Agricultura de Conservación Suelos Vivos. Spain.
www.lifegromitiga.eu
www.agriculturaconservacion.org
IFAPA Centro «Alameda del Obispo». Avda. Menéndez Pidal s/n. 14004 Córdoba (Spain).
overoz@agriculturaconservacion.org

The LIFE Agromitiga project has received funding from the LIFE Programme of the European Union.

3rd «4per1000» Initiative Day – Madrid (Spain)
December 11, 2019