



LIFE agriCOlture (CCM/IT/001093)

Livestock farming against climate change problems posed by soil degradation in the Emilian Apennines



Duration: Start: 02/09/19 - End: 31/08/23

Budget: Total amount: 1,515,276 Euro; % EC Co-funding: 54.98%

Partners: Consorzio di Bonifica dell'Emilia Centrale, Consorzio della Bonifica Burana, Centro Ricerche Produzioni Animali - CRPA S.p.A., Ente Parco nazionale dell'Appennino tosco-emiliano

Demonstration areas/case study areas: Appennino emiliano

Main Goals:

- Testing and evaluating the environmental, socioeconomic and climatic benefits of best practices related to livestock farming indicated by scientific research as effective for the protection of soil organic carbon and the reduction of GHG emissions.
- Systematizing and disseminating these best practices within an innovative territorial contract for the production of agro-climatic-environmental services called “Pact for Soil”.
- Constituting a “Pact for Soil” network with other European territories to discuss and replicate this model.



Main Actions:

- *Ex-ante economic and environmental analysis of the 15 demo-farms*
- *Ex-ante soil characterization of the 15 demo-plots*
- *Design of the 15 work protocols (one for each demo-farm)*
- *Design of accounting tools for GHG emission and carbon sequestration at farm and territorial level*
- *Demonstration activity on the 15 demo-farms*
- *Design of a governance model for sustainable soil management at territorial scale*
- *Demonstration days and educational tour*

Main results:

- Adoption of the best practices proposed in at least 2.5 hectares of UAA for each demonstration farm, with an increase of this area of 5% at the end of the project.
- A reduction of the CO₂ equivalent emissions of 5% at the end of the project, with a reduction of about 1.178 tons of CO₂ emitted by the 15 demo-farms.



Policy implications:

- The EU's Soil Thematic Strategy (COM(2006)231), in particular on conservation of soil functions
- Regulation (EU) 2018/841, on the inclusion of GHG emissions and removals from land use. In particular the project will develop specific tools for monitoring GHG emissions from cultivated fields
- The project will be able to give a contribution to local authorities in order to evaluate how to reduce GHG emissions in agriculture by applying monitoring and accounting tools to a single farm or to a group of farms (micro-geographical level).