oLIVE-CLIMA - Introduction of new olive crop management practices focused on climate change mitigation and adaptation

LIFE11 ENV/GR/000942

Project description Environmental issues Beneficiaries Administrative data Read more

Contact details:

Project Manager: Eutychia KIVRAKIDOU
Tel: +30 2310 463930
Fax: +30 2310 486203
Email: environment@anatoliki.gr

Project description:

Background

Human activities contribute to increasing the level of greenhouse gases (GHG) in the atmosphere by creating new sources of emissions or by removing natural sinks. Agriculture is generally considered to be a source of GHGs, but appropriate farming practices that enhance the capability of plants to capture GHGs and remove them from the atmosphere could change this situation so that farmland becomes a carbon sink.

Objectives

The main aim of the oLIVE-CLIMA project is to trial the introduction of new cultivation practices for tree crops in order to find a cost-effective means of mitigating and adapting to climate change. The project will focus specifically on olive-producing areas in Greece, investigating the potential of these areas to increase carbon sequestration by soils, and to reduce GHG emissions. It will work with farmers from three farmers' organisations that reflect the different socio-economic situations currently prevalent in Greece; from more traditional farming, to innovative environmentally sensitive farming.

Specific objectives of the project include:

- To identify farming practices that lead to increased carbon dioxide (CO2) uptake by plants;

- To reverse the trends of soil organic matter loss, soil erosion and desertification by implementing measures that increase the rate of organic matter build-up;
- To take measures to reduce GHG emissions and other environmental impacts during crop production, including reducing dependence on inorganic fertilisers;
- To provide farmers with methodologies that will enhance biodiversity, reduce CO2 emissions from soil, and are suitable for organic agriculture;
- To demonstrate to farmers that environmentally benign agriculture can be more efficient, can lead to product differentiation and – in the case of olive-oil production – can result in self-sustaining crops;
- To develop a set of easily measurable indicators that can be used to link farming practices to quantifiable carbon storage in the soil;
- To provide farmers and consumers with a clear and robust system for communicating environmental performance during food production e.g. Eco-Management and Audit Scheme (EMAS) statements;
- To promote the incorporation of the project's results into national environmental and agricultural policy and legislation.

Expected results:

- Development of cultivation methods that will make inorganic nitrogen fertilisation unnecessary;
- Reduced resource depletion and GHG emissions in the production phase;
- Lower production costs;
- Improved levels of nutrients in the soil;
- Increased genetic diversity and the enhancement of tools available for organic farming;
- Better management of waste wood derived from pruning, and of oil-mill waste water;
- A soil carbon dynamics model, adapted and calibrated to local conditions, that will demonstrate that farming practices can be linked to increases or decreases in the carbon content of soil. This could, potentially, be used as a basis for the expansion of the EU's emissions trading scheme (ETS) to agriculture;
- Increased awareness among farmers of their contribution to climate-change mitigation and adaptation.

Results

Top

Environmental issues addressed:

Themes

Industry-Production - Agriculture - Fisheries
Climate change Adaptation - Sectoral adaptation (industry-services)
Climate change Mitigation - Carbon sequestration

Keywords

agricultural method, emission reduction, greenhouse gas, soil erosion

Natura 2000 sites

Not applicable

Top

Beneficiaries:

Coordinator	Development Agency of Eastern Thessaloniki's Local Authorities, ANATOLIKI SA
Type of organisation	Development agency
Description	ANATOLIKI S.A. is a development agency set up in 1995 by local authorities and other public bodies in eastern Thessaloniki, Greece. ANATOLIKI's development activities cover the environment and infrastructure, energy, human resources, support for local authorities, business support, rural development, the promotion of innovation and new technologies, and support to networking activities.
Partners	National Agricultural Research Foundation-Institute for Olive Tree & Subtropical Plants of Chania, Crete, Greece National Agricultural Research Foundation-Soil Science Institute of Athens, Greece National Agricultural Research Foundation-Land Reclamation Institute, Thessaloniki, Greece Dipartimento Di Scienze dei Sistemi Colturali, Forestali e dell'Ambiente, Potenza, Italy RodaxAgro Ltd Environment & Quality, Athens, Greece Agriculture Press Publishing Company (AGROTYPOS) S.A., Amaroussion, Greece NILEAS-Agricultural Cooperative for Standardized Products-Nestor Messinia, Greece Union of Agricultural Cooperatives of Peza, Crete, Greece Union of Agricultural Cooperatives of Mirabello, Crete, Greece

Top

Administrative data:

Project reference	LIFE11 ENV/GR/000942
Duration	01-OCT-2012 to 30-SEP -2017
Total budget	3,649,373.00 €
EU contribution	1,822,436.00 €
Project location	Kentriki Makedonia,Peloponnisos,Attiki,Kriti,Basilicata

Top

Read more:

Project web site	Project's website

Top

Project description Environmental issues Beneficiaries Administrative data
Read more