

## Best agricultural practices for climate change: integrating strategies for mitigation and adaptation (CLIMAGRI)



### Resumen:

This project aims contribute to the adaptation of field irrigation crops to climate change at the same time as mitigating the effects of this phenomenon.

The contribution is through the design and implementation of agronomic management systems based on the combined use of Best Management Practices the effectiveness of which in the mitigation of climate change and the adaptation of crops to the effects thereof has been verified on an experimental level.

The management system will be implemented on a pilot scale on a demonstration farm and on small demonstration plots in the South of Spain, and on a global scale in a European Network of Demonstration Farms located in Portugal, Greece, Spain and Italy. We invite you to find out more about the project's goals, the work to be carried out, the Network of Demonstration Farms on which the work is to take place and the results expected within the framework of the project.

### Objetivos:

- To demonstrate the viability of management systems based on the integration of measures for the mitigation of climate change and the adaptation of irrigation crops thereto in the Mediterranean Basin.
- To verify the impact on a global scale of the combined mitigation-adaptation strategies adopted through the creation of a European Network of Demonstration Farms (ENDF).
- To establish an action protocol that, based on the mitigation-adaptation strategies identified, will allow technical recommendations to be given for the adoption thereof and allow the implementation thereof to be monitored, additionally serving to check the implementation of agro-environmental measures and other programmes in relation to climate change.
- To disseminate and transfer the experience gained and the management philosophy to other areas with similar characteristics, boosting the communication channels between research, administration and farmers and technicians.

### Objetivos contribución:

- A1 Design of the pilot scale demonstration model under current and future climatic conditions.
- A3 Identification of climate change adaptation and mitigation measures. Definition of monitoring indicators.
- B1 Implementation of mitigation-adaptation strategies on a pilot scale.
- C2 Monitoring of pilot scale mitigation measures related to GHG emissions from energy consumption.
- D3 Participation in national and international events and scientific-technical publications.

### Entregables:

- A1: Agreement with the owner of the demonstration farm and Notice board of the demonstration farm.
- A3: Compilation report of indicators for monitoring the mitigating and adaptive aptitude to climate change of agronomic management measures.
- B1: Production quality and quantity maps during the years 2015, 2016, 2017 and 2018.
- C2: Harvest map in the demonstration farm (2015/2016/2017/2018 seasons) and annual summary of energy consumption and CO2 emissions from each corn crop management system (2015/2016/2017/2018 seasons)
- D3: Scientific-technical publications published in 2015 - 2018

### Impacto:

#### Objective 1

- Agronomy management model based on the integration of measures to mitigate and adapt to climate change in extensive agriculture (successful and study case), which can be extrapolated to irrigated farms in the Mediterranean Basin.
- Increase the resilience of extensive irrigated crops located in the Mediterranean Basin in view of the foreseeable changes in weather conditions using the adaptation measures adopted.
- Reduce net GHG emissions into the atmosphere of extensive irrigated crops located in the Mediterranean Basin using the Climate Change mitigation measures adopted.
- Low-carbon economy farm management systems based on less energy dependence.

#### Objective 2

- ENDF with at least 12 farms using the combined strategies to mitigate and adapt to climate change.
- Geographical Information System to manage the information generated on the potential of farms to reduce and adapt to climate change, characterised by web-based tools to aid decision making.

#### Objective 3

- Procedure handbook with technical recommendations to adopt the best agricultural practices that simultaneously mitigate climate change and allow farms to adapt their crops to the climate scenarios expected.
- Series of technical and strategic indicators to monitor the strategies aimed at mitigating and adapting to climate change in extensive irrigated agriculture.
- Identify measures to be adopted at European level to reinforce policies aimed at mitigating and adapting to climate change.

#### Objective 4

- Enhance the professional training of agricultural collectives, measurable in terms of the number of impacts of the training programs undertaken.
- Raise awareness of the current environmental problem, measurable in terms of the number of impacts of the dissemination actions carried out.
- Documentation on farming strategies based on the integration of measures aimed at mitigating and adapting to Climate Change that can be applied to extensive irrigated farming in the Mediterranean Basin.

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**Enlace:** <http://www.climagri.eu/index.php/en/>

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