

Adaptation to Climate change Impacts on the Mediterranean islands' Agriculture (ADAPT2CLIMA)

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Agriculture is one of the economic sectors that will likely be hit hardest by climate change, since it directly depends on climatic factors such as temperature, sunlight, and precipitation.

The EU LIFE ADAPT2CLIMA (<http://adapt2clima.eu/en/>) project aims to facilitate the development of adaptation strategies for agriculture by deploying and demonstrating an innovative decision support tool. The ADAPT2CLIMA tool will make it possible to simulate the impacts of climate change on crop production and the effectiveness of selected adaptation options in decreasing vulnerability to climate change in three Mediterranean islands, namely Crete (Greece), Sicily (Italy), and Cyprus.

The islands were selected for two reasons: firstly, they figure among the most important cultivation areas at national level. Secondly, they exhibit similarities in terms of location (climate), size, climate change threats faced (coastal agriculture, own water resources), agricultural practices, and policy relevance. In particular, the tool will provide: i) climate change projections; ii) hydrological conditions related to agriculture; iii) a vulnerability assessment of selected crops; iv) an evaluation of the adaptation options identified.

The project is expected to contribute significantly to increasing climate resilience of agriculture areas in Sicily, Cyprus and Crete as well as at EU and international level by:

- Developing, implementing and demonstrating an innovative and interactive decision support tool (ADAPT2CLIMA tool) for adaptation planning in agriculture that estimates future climate change impacts on local water resources, as well as the climate change vulnerability of the agricultural crop production in the project areas;
- Evaluating the technical and economic viability of the implementation of the ADAPT2CLIMA tool;
- Developing climate change adaptation strategies for agriculture (including a monitoring plan) for the three project areas and presenting them to the competent authorities for adoption;
- Simulating the effectiveness of the implementation of certain adaptation measures to address climate change impacts on agriculture;
- Developing a stakeholder engagement strategy;
- Increasing the knowledge of the impacts of climate change on the agricultural areas covered by the project, thus enabling well informed decision-making and enhancing readiness for early action in order to address the potential damages and minimize threats posed by climate change;
- Developing a framework for mainstreaming agricultural adaptation measures into relevant national and regional policies;
- Promoting the replication of the proposed methodology in order to ensure proper coordination of national and regional policies and between authorities.