



Using AQUACROP to model the impacts of future climates on crop production and possible adaptation strategies in Sardinia and Tunisia

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A work package in the FP-7 funded CLIMB Project - Climate Induced Changes on the Hydrology of Mediterranean Basins Reducing Uncertainty and Quantifying Risk through an Integrated Monitoring and Modeling System had the goal of assessing socioeconomic vulnerability in two super-sites in future climates (2040-2070). The work package had deliverables to describe of agricultural adaptation measures appropriate to each site under future water availability scenarios and assess the risk of income losses due to water shortages in agriculture. The FAO model AQUACROP was used to estimate losses of agricultural productivity and indicate possible adaptation strategies. The presentation will focus on two interesting crops which show extreme vulnerability to expected changes in climate; irrigated lettuce in Sardinia and irrigated tomatoes in Tunisia. Modelling methodology, results and possible adaptation strategies will be presented.