



FACCE MACSUR

Modelling climate change adaptation in European agriculture: Definitions and Current Modelling

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Abstract

Climate change presents major challenges for European agriculture, and the speed, nature and extent of the responses to such challenges will have far-reaching social, economic and environmental consequences. Agricultural modelling has an important role in helping decision makers better understand the costs and benefits of different adaptation strategies, as well as trade-offs and win-wins between those strategies, mitigation measures and other economic, social and environmental goals (Kipling et al. 2016). Incorporating adaptation strategies into biophysical, bio-economic and economic model is essential to gaining a more holistic understanding of their impacts, beyond the context of specific changes and purposes. Here, the ability and potential of agricultural models to characterise different adaptation strategies was explored, using the expertise represented within the Modelling European Agriculture with Climate Change for Food Security (MACSUR) project. In two workshops, modellers identified adaptation strategies, modelling challenges and knowledge gaps. A survey was conducted to understand current modelling capacity. Report L2.3.1 describes the challenges to modelling adaptation identified in the first workshop. The current report provides a summary of other outcomes from the task, including the second workshop and survey of modellers.

The full report from this activity will be made available following the publication of a paper currently under development.