



Cranfield University

WHO WE ARE

- Cranfield University is a research-intensive postgraduate university in which teaching, research and consultancy are integrated and undertaken in an environment and culture of innovation and applicability;
- 25% of all agricultural and environmental sciences postgraduates in the UK graduate from Cranfield University;
- The Environmental Science and Technology (ES&T) Department is internationally renowned for its multidisciplinary research towards sustaining the global environment, land, soil and water resources;
- We are the UK National Reference Centre for soils, and hold the national soil archive.

WHAT OUR EXPERIENCE IS

- Cranfield have long standing expertise in predicting the location-specific environmental impact of different farm systems, future regional land use and the impact of current and future climate and socio-economic conditions on farmer decision-making. Research at Cranfield University has underpinned much of the planning and policy development for agricultural water resources in England and Wales over the last 20 years.
- Experience in:
 - Regional integrated assessment and location-specific modelling (RegIS, RegIS2, CLIMSAVE)
 - Scenario-based modelling of future land use (AgFutures, ChReam)
 - Model integration
 - Crop, farm systems and environmental impact modelling (MEASURES)
 - Soil and land management
 - Multiple objective modelling (RELU)
 - Hydrological modelling

WHAT WE DO IN IMPRESSIONS

- Co-leader of WP4 on Adaptation and Mitigation Pathways
- Lead for European case study (WP3)
- Lead for T3.3 on the representation of adaptation processes in Climate Change Impact Adaptation and Vulnerability models
- Lead for agricultural modelling in the WP3 European case study
- Contribute to:
 - WP2: Integrated multi-scale scenarios
 - WP5: Risks, opportunities, costs and benefits

RegIS
"Regional Impact Simulator"

The CLIMSAVE project
Climate Change Integrated Assessment Methodology for Cross-Sectoral Adaptation and Vulnerability in Europe

The CLIMSAVE IA Platform is a unique interactive tool to enable you to explore the complex issues surrounding impacts, adaptation and vulnerability to climate change at regional to EU scales.

The Platform contains 4 screens :

- Impacts** - Investigate how different amounts of future climate and socio-economic change may affect urban, rural and coastal areas, agriculture, forestry, water and biodiversity.
- Vulnerability** - Identify which areas or 'hot spots' in Europe are vulnerable to climate change in your socio-economic scenario, before and/or after adaptation
- Adaptation** - Investigate how adaptation can reduce the impacts of climate change, within the constraints of your socio-economic scenario
- Cost effectiveness** - Identify which adaptation measures will most cost-effectively reduce the impacts of climate change.

The CLIMSAVE IA Platform is based on a series of simplified models to facilitate the extensive cross-sectoral linkages and quick user interactivity. It should not be used as a Decision Support Tool nor to investigate local scale behaviour

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WE ARE ALSO INVOLVED IN

- MACSUR
- National research council projects (NERC, EPSRC, BBSRC)

Ian Holman



- Reader in Integrated Land and Water Management
- Soil and water management
- Catchment modelling

Eric Audsley



- Principal Research Fellow
- Mathematical and operational research decision modelling techniques
- Climate Adaptation and Environmental Risk
- Modelling Agri-food Systems

Victoria Janes



- Research Fellow
- Environmental modelling

Daniel Sandars



- Research Fellow
- Environmental systems modelling
- Life cycle analysis (LCA)