

**Eleni Karali**

Research Associate, The University of Edinburgh, UK

**Claire Vos**

Senior Researcher, Alterra Wageningen, The Netherlands

**Mark Rounsevell**

Professor, The University of Edinburgh, UK

**Pytrik Reidsma**

The University of Edinburgh, UK

## **Climate Change Adaptation Measures in the Sectors of Agriculture, Water and Nature Management-A Review for Cool Temperate Regions**

Land managers' capacity to implement autonomous adaptation strategies is largely dependent on access to resources and the possession of skills and knowledge. Given that climate change will increase the rate, scale and magnitude of climatic uncertainty, it is important to a) identify adaptation strategies that will reduce the negative impacts of climate change and exploit the opportunities arising from it in different regions and b) make this knowledge available to land managers and policy makers in order to minimise the potential for mal-adaptation. To contribute to this aim, we conducted a systematic review of the literature on adaptation measures that are already or likely to be applied in cool temperate regions. Systematic reviews offer a transparent and comparable method for literature searches. The scope of the review included the sectors of agriculture, water and nature management. The five capitals (i.e. human, social, manufactured, natural and economic capital) were used as a framework to classify the identified measures. This classification allowed a sectoral and cross-sectoral comparison of the adaptation measures, and the identification of trade-off and synergy situations. This information can contribute to the holistic enhancement of the capacity of socio-ecological systems to adapt to climate changes.