



Muensterland, Germany, an intensive used agricultural area. Most of the maize is converted to biogas.

SALBES - Scenarios for Agricultural Landscapes' Biodiversity and Ecosystem Services

Context

European agricultural landscapes are undergoing profound changes, but no schemes exist to identify landscape specific ecological infrastructures and adapted crop management which are needed to safeguard biodiversity and ESS, and the respective adaptability to changes.

Main objectives

The aim of the project is to develop a comprehensive protocol, with a focus on the agricultural systems, to develop and characterise the potential and impact of conservation strategies. The guiding principle is the "safe operating space" for development, here specified and advanced for agricultural landscapes. This includes an expanded definition of green infrastructure, adaptive land management, and stakeholder involvements. A coherent set of economic and ecological models will be combined to design scenarios, in close cooperation with stakeholders, integrating various spatial scales, e.g. from field to landscape. To support appropriate policies fostering an integrated landscape development, the project will develop guidelines and platforms to include regional biodiversity and ESS objectives into policy support schemes at national and international levels.

Case study areas in four European countries will be used. The primary focus is on stakeholder initiatives which have begun implementing biodiversity and ESS conservation schemes into the agricultural production processes.

Main activities

Research activities, including stakeholder input, will analyse the current agricultural production systems and future options, including adaptations to climatic changes and other driving forces. The results will reveal potentials and limitations on what agriculture can do to maintain the ecological infrastructure within a landscape. This includes various levels, from farms to policy, offering paths to the most efficient implementation of resilient ecological infrastructures.

This approach will lead to scientific advancement and will raise political interest by identifying goals and actions on the scale of various fields of action to safeguard sustainable development of agricultural landscapes. Through a number of workshops, local and EU policy-makers and administrators will be involved in the development of scenarios for an improved biodiversity based on adapted agricultural practices taking into account the region specific green infrastructure, value chains, national agro-environmental schemes and EU-policy goals.

Partners of the project:

Leibniz Centre for Agricultural Landscape Research, Müncheberg, GERMANY

Potsdam Institute for Climate Impact Research, GERMANY

Stiftung Westfälische Kulturlandschaft, Münster, GERMANY

University of Natural Resources and Applied Life Sciences, Vienna, AUSTRIA

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