

5<sup>th</sup> December 2019

Leibniz Centre for Agricultural Landscape Research (ZALF)

Page | 1

“SALBES” project launch:

## Agriculture and Biodiversity – In Search of Balance

The “SALBES” project has been launched at the Leibniz Centre for Agricultural Landscape Research (ZALF). Partners from Germany, Estonia, Austria and Switzerland will work together over the next three years to develop concepts for the protection of biodiversity in four exemplary agricultural landscapes in Europe. Using computer-aided models, the researchers will look into the future of agriculture and calculate how agricultural intensification, climate change and the protection of species and habitats can be better harmonized in the future. The project is coordinated by the Leibniz Centre for Agricultural Landscape Research (ZALF).

Agricultural landscapes cover large parts of Europe. In Germany alone, more than half of the land is used for agricultural purposes. However, agricultural land is not only a prerequisite for our food production and a source of income for many people working in agriculture, it is also an important habitat for animals and plants that deserves protection. In order to achieve an even better balance between protection and use in the future, the partners in the “SALBES” project are developing possible future scenarios for agriculture. The aim is to determine realistic operating spaces both for producers and for nature conservation.

### How big is the safe operating space?

What is the impact of climate change and a growing world population on agricultural production? What challenges will arise from this for biodiversity in the fields and in adjacent ecosystems? Using models to assess the impact of climate change and of farm economic decision making on biodiversity as well as interviews and workshops with actors from the pilot regions, the project will develop various scenarios for the future of agriculture over the next three years. In combination with the concept of a “Safe Operating Space”, these scenarios are intended to provide information on where the boundaries of the human use of agricultural

landscapes lie and from what point in time biodiversity will be irreparably damaged.

The "Safe Operating Space" is an internationally recognized concept that was first proposed by environmental researchers in 2009. Nine "planetary boundaries" define the safe operating space for humanity on earth. If these boundaries are transgressed, it can lead to an irreversible change in our environment. One of these planetary boundaries is the loss of biodiversity, which is considered as having already been transgressed by the founders of the concept. One reason for this is the change in land use in recent centuries, including the intensification of agriculture. However, the relationship between agricultural landscapes and biodiversity still raises many questions. Therefore, the researchers in the "SALBES" project want to determine a "safe operating space" for the interface between agriculture and biodiversity. On this basis, scientifically sound proposals for action could be developed for both policymakers and practitioners.

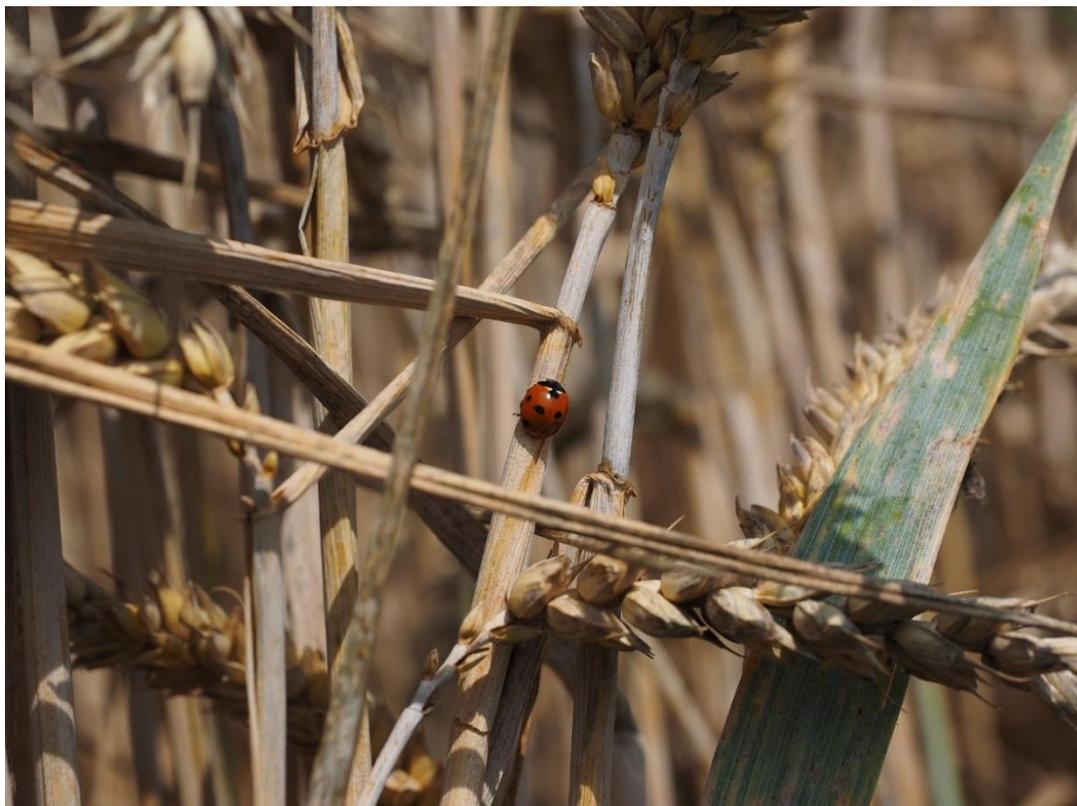
Further information can be found here: <https://salbes.eu/>

Funding notice:

The project is funded by the German Federal Ministry of Education and Research (BMBF).

Project Partners:

- Leibniz Centre for Agricultural Landscape Research (ZALF), (Coordinator, Germany)
- Agroscope (Zurich, Switzerland)
- University of Natural Resources and Life Sciences, Vienna (Austria)
- Estonian University of Life Sciences (Tartu, Estonia)
- Potsdam Institute for Climate Impact Research (Germany)
- Westphalian Cultural Landscape Foundation (Germany)
- University of Vienna (Austria)



Agriculture and Biodiversity – the interactions will be examined in more detail in the SALBES project. | Source: © Free commercial use. No image credits required. | Image source in color and print quality: <http://www.zalf.de/de/aktuelles>

**Press contact:**

Hendrik Schneider  
Head of press and public relations  
Phone: + 49 (0) 33432 82-405  
Mobile: + 49 (0) 151 405 455 00  
E-mail: [public.relations@zalf.de](mailto:public.relations@zalf.de)

**Scientific contact:**

Dr. Peter Zander  
Research Area 2  
Working Group: Farm Economics and  
Ecosystem Services  
Telephone: + 49 (0) 33432 82-214  
E-mail: [peter.zander@zalf.de](mailto:peter.zander@zalf.de)

**About the Leibniz Centre for Agricultural Landscape Research (ZALF) in Muencheberg, one of the institutes of the Leibniz Association:**

Mission of ZALF is to deliver solutions for an economically, environmentally and socially sustainable agriculture –together with society.

As a contribution to overcoming global challenges such as climate change, food security, biodiversity conservation and resource scarcity, we develop and design

crop systems, integrated in their landscape contexts, that combine food security with sustainability. Therefore we process complex landscape data with a unique set of experimental methods, new technologies and models as well as socio-economic approaches.

ZALF research is integrated systems research: starting from processes in soils and plants to causal relationships on the field and landscape level up to global impacts and complex interactions between landscapes, society and economy. [www.zalf.de](http://www.zalf.de)