

# Innovation Project

Food and Agriculture Cluster



## The Oldenburg Münsterland Agriculture and Food Forum: Climate Adaptation Management from a Cluster and Network Perspective

The establishment of a consciousness for climate change processes and the necessary changes for climate-adapted agriculture and a climate-adapted food industry will require communications and interaction at the level of economic clusters, in order to initiate exchange and cooperation alliances by means of targeting network formation. The Oldenburg Münsterland Agriculture and Food Forum (AEF) is an association of 75 businesses in the agriculture and food sector which operates as an interface between the scientific community and everyday practice. In close cooperation with the Carl von Ossietzky University of Oldenburg, key issues for regional climate adaptation measures have been developed on the basis of scientific ascertainments and practice-oriented needs.



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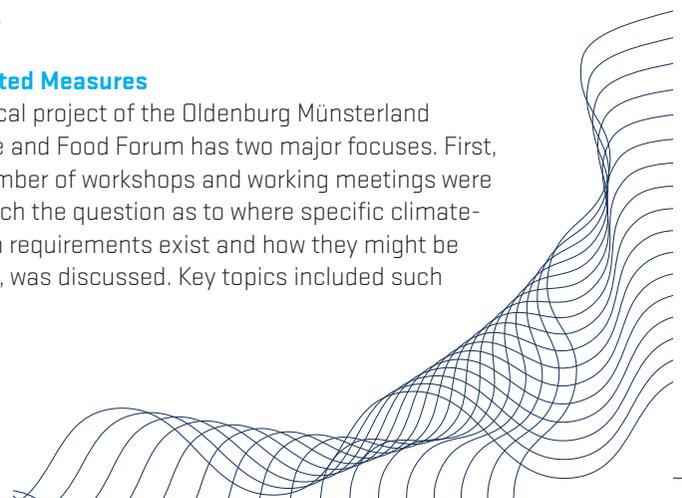
### The Need for Climate Adaptation

A vulnerability analysis by **nordwest2050** has shown that the vulnerability of value-added chains in the food sector is low to medium. Specific vulnerabilities include delivery delays or interruptions due to increased extreme weather events, or cost increases, e.g., due to high refrigeration requirements in hot summers. The effects of this climate change are very complex, and often impact on the actors in the value-adding chains only via second or third-degree effects. Actors and their institutionalized connections, learning processes and networking systems, as well as the transfer and incorporation of information, may significantly represent a flexible and early adapta-

tion to these challenges. The extent to which global and regional climate change-cause challenges will affect the member businesses, and what issues can be considered relevant for sensitizing actors were the focus of the work of the AEF.

### Implemented Measures

The practical project of the Oldenburg Münsterland Agriculture and Food Forum has two major focuses. First, a large number of workshops and working meetings were held in which the question as to where specific climate-adaptation requirements exist and how they might be addressed, was discussed. Key topics included such



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issues as a protein strategy, the liquid-manure problem, bio-energy and network-building. Second, the AEF performed an important task by making contacts to regional companies for the **nordwest2050** project.

These working meetings specifically outlined the topics relevant for decision-making on the regional situation, and drafted practical points of approach for climate adaptation along the stages of the value-added chain. For example, particularly water or energy-intensive businesses were included, in which business processes could be outlined for such purposes as the drafting of dynamic models.

#### Method and State of Implementation

For the substantive development of the contexts which need to be addressed in a climate adapted regional cluster-management system, a network meeting with other regional and food-sector networks was carried out, in cooperation with the Carl von Ossietzky University of Oldenburg. The goal was to strengthen network formation in the context of climate adaptation. Moreover, the Carl von Ossietzky University of Oldenburg obtained insights into network processes of the AEF. All in all, the joint networking process permitted many involved actors to present the empirical results on vulnerability on a sector-specific basis at the working meeting. The application orientation of the scientific results in the food-sector cluster of the **nordwest2050** project profited greatly from this. Moreover, technical forums with selected companies undertook a selection of the topics that would need to be permanently rooted in the networking of the AEF beyond the term of the project, so as to be able to achieve successful regional climate adaptation.

#### Results and Transferability

Climate adaptation requires the linkage of long and short-term, and of regional and global decisions. It needs that new topics are incorporated into the cluster-management process. The continual further development - both substantive and organizational - of the network structures is therefore necessary. A high level of competence thus constitute a significant contribution to regional resilience.



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**nordwest2050** is one of a total of seven projects funded by the Federal Ministry of Education and Research (BMBF) in the context of the KLIMZUG Program (Klimawandel in Regionen zukunftsfähig gestalten - Creating Climate Change-Ready Regions). In 2012 **nordwest2050** was awarded as an official project of the United Nations' World Decade on Education for Sustainable Development. The goal of the adaptation research is to develop strategies and measures by means of which regions and industries can be better prepared for life and business under the conditions of climate change. This is on the one hand designed to strengthen future competitiveness, and on the other to promote the development and use of new technologies and procedures for adaptation to climate change.

