



# ResKuh - development of tools, diagnoses and recommendations for better herd management

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# Background and Aim

## Background:

• Livestock systems are particularly vulnerable to the impacts of climate change:

- ✓ Significantly contribution to greenhouse gas emissions (GHG), (i.e. CO<sub>2</sub>, CH<sub>4</sub>, NH<sub>3</sub>).
- ✓ Concurrence with other production systems regarding the resource-use.



The project: ***"Resource optimization and development of sustainable livestock systems in the Upper Rhine region,"*** is a European project co-funded through Interreg

## Aim:

- ✓ To enhance the resilience ("Res") of the dairy ("Kuh" in German) sector in the Upper Rhine region concerning resource management and farm sustainability.
- ✓ To optimize the pasture and water management besides the management of animal health, energy and GHG, taking into consideration the cultural landscape of the area.



# Working Groups - Challenges

## Animal welfare

- cows suffer from heat stress, with multi-layered negative effects (e.g. lower production)



## Pasture management

- global warming with more intense and more frequent dry periods



## Energy management

- farms need to lower their energy consumption as energy resources are limited and expensive



## Water management

- low groundwater level
- increase of water shortage, especially on pasture



## Reduction of GHG emissions

- new EU Climate Law aims for a net reduction of 55% compared to 1990 and climate neutrality by the middle of the century.
- livestock farming contributes to the global GHG emissions



# Expected Results



- **Identification of tools to measure and analyze heat tolerance, resource efficiency, and environmental impact of dairy herds**
- **Development of methods, references & recommendations in the five working groups and research fields**
- **Fact sheets, advise and workshops for farmers to adapt dairy farm management regarding the challenges posed by climate change and resource availability**
- **Improve the sustainability of dairy farms in the Upper Rhine region across borders**



# Thank you for your attention!

