

# Do Animal Welfare Measures have an Impact on Animal Health?

## Results of an Evaluation in North-Rhine Westphalia for Dairy Cows

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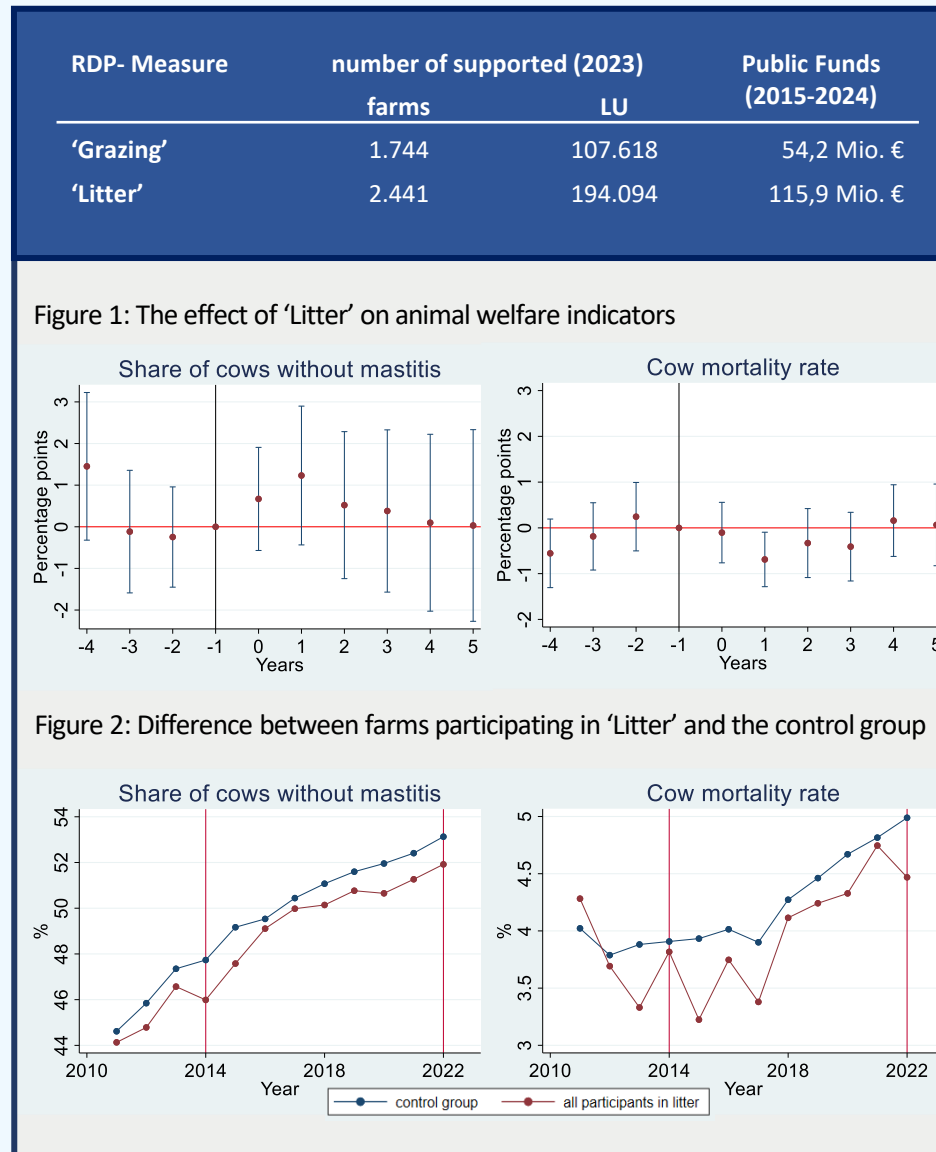
### Background & Objectives

Animal welfare has become increasingly important to European citizens and research studies regularly reveal welfare problems in animal husbandry. The Rural Development Programmes (RDP) 2014-2022 contain one specific measure which aims to improve animal welfare: M14. But while animal welfare support is becoming increasingly important, methods for analysing effectiveness still need to be developed.

### Material & Methods

We used milk recording data to analyse the effect of the M14 sub-measures 'Grazing' and 'Litter' on animal health (one dimension of animal welfare) in the federal state of North-Rhine Westphalia for the RDP-programming period 2014-2023. To establish causality, we applied a panel event study design using two-way fixed effects regressions including year as well as farm-level fixed effects.

Indicators: udder health, metabolic health, mortality and longevity.



### Results

We found no effect of participation on the investigated animal health indicators, but participating farms have better indicator values for the majority of indicators compared to the control group.

### Conclusions & Recommendations

#### Future data infrastructure

- Milk recording data is suitable to analyse relevant animal health indicators in dairy herds.
- No database exists for other important health indicators (e.g. lameness), as well as indicators of animal behaviour and affective states.
- This is a relevant problem not only for the case considered here.

→ A standardized animal welfare database on EU-level would enable more targeted policies and more robust evaluations.

#### Policy design improvements

- Animal welfare measures of the NRW-RDP support farms with better health but do not induce changes in the observed indicators.

→ To achieve substantial improvements in animal welfare, a strategic approach is necessary. It needs to include a tightening of legislation, a compensation of the resulting higher costs and a labeling scheme.