



T6.2 Efficiency and resilience assessment at farm level

T6.3 Upscaling of efficiency and resilience analysis to community, regional, national and EU-level

Murilo de Almeida Furtado^a; Frederic Ang^a; Miranda P.M. Meuwissen^a

^a **Business Economics, Wageningen University, P.O. Box 8130, 6700, EW, Wageningen, the Netherlands**

Objectives - Deliverables

D6.2 Report and open access paper on efficiency and resilience assessment at farm level.

Status: Paper under review.

D6.3 Report and open access paper on upscaling of efficiency and resilience analysis to community, regional, national and EU-level.
Status: Regional/national (preliminary results) and national/community scale (in progress).

Data and Methods

D6.2

- FADN data for farm inputs and outputs
 - 800k observations, >100k farms, 25 countries
 - Years 2004 to 2017
- Farm-level efficiency and resilience
 - Resilience measure exploring input-output relationships (production functions/frontier)

D6.3

- FBS data for farm inputs and outputs
 - >2.5k observations, >900 farms, England and Wales
 - Years 2015 to 2019
- To what extent can land reallocation improve fertiliser use and nitrogen balance at the aggregate level?

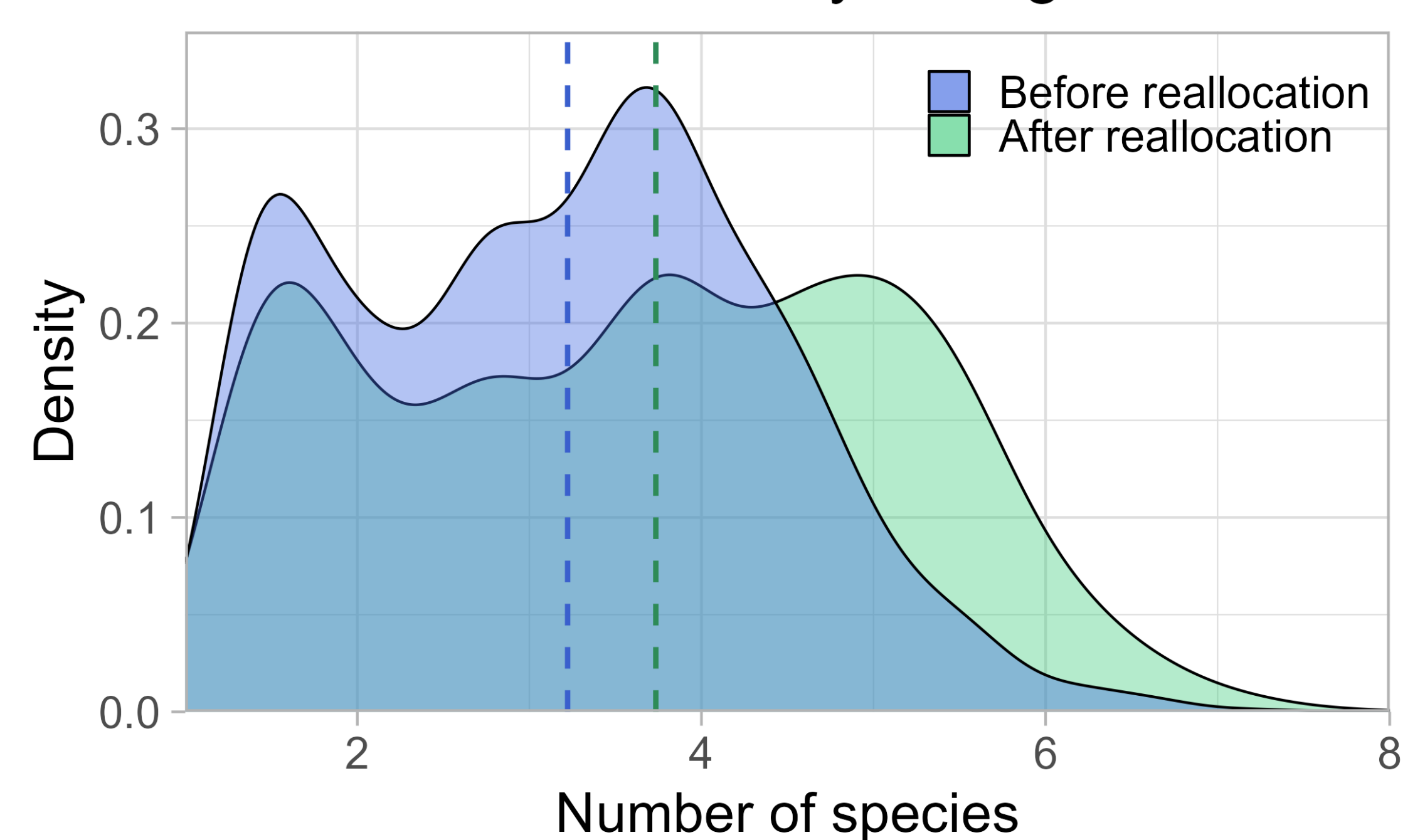
Results

D6.2

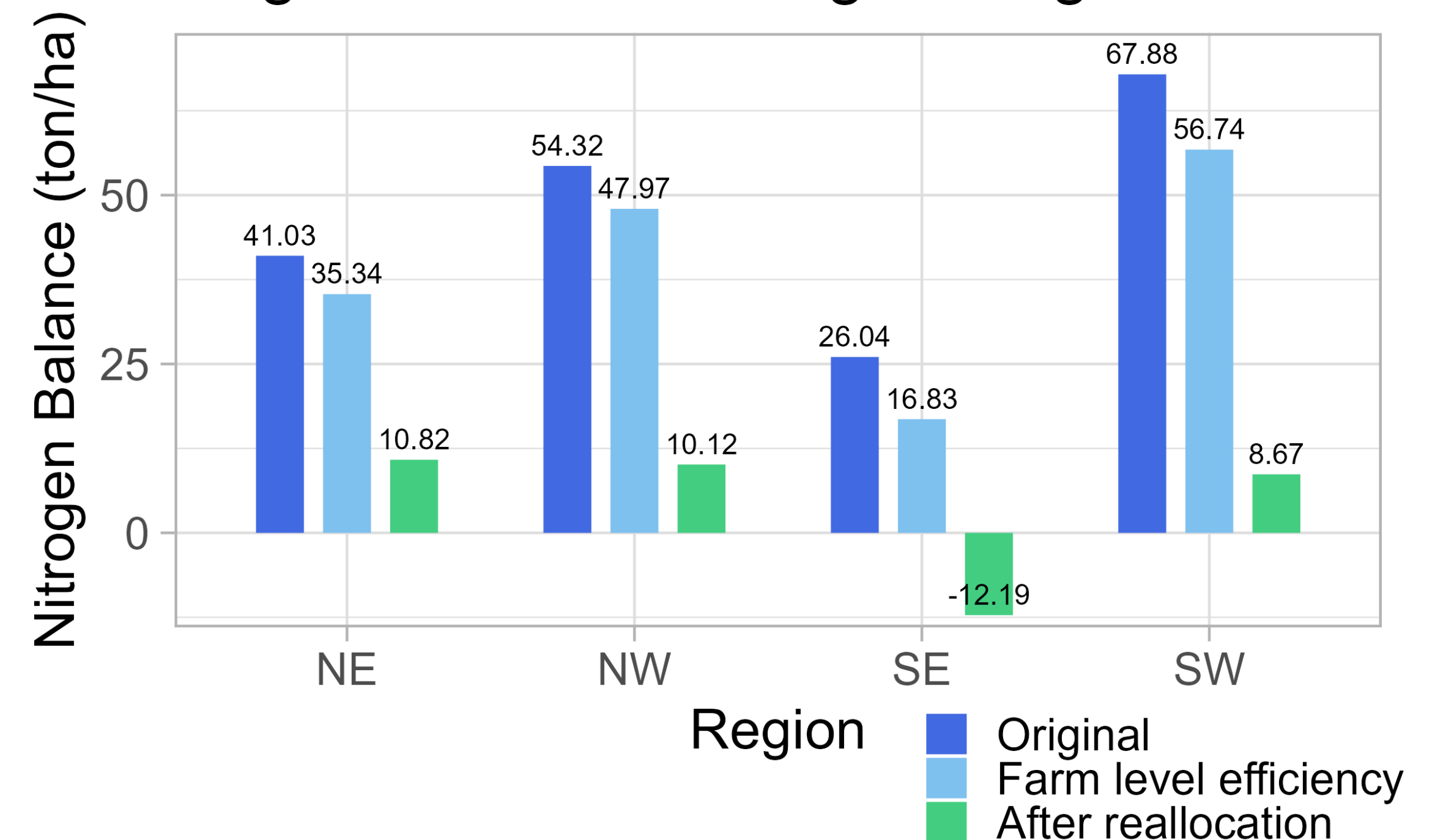
Open access paper (under review)

D6.3 – Preliminary results

Farm level hill diversity changes



Regional level - Average nitrogen balance



- After reallocation
 - similar reduction potential for fertilizers.
 - diversity also increases at the regional level