

Sustainable use of alpine and pre-alpine grassland soils – effects of climate and land management changes

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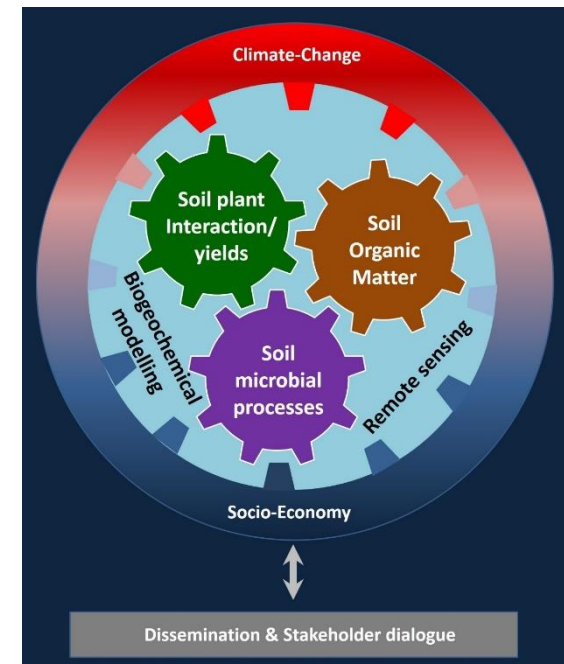


Background, aim & main scientific questions

- Importance of grasslands in the Alpine and pre-Alpine landscape
- Impact of climate and land management changes here very critical

- SUSALPS: holistic, evidence-based and process-focused understanding

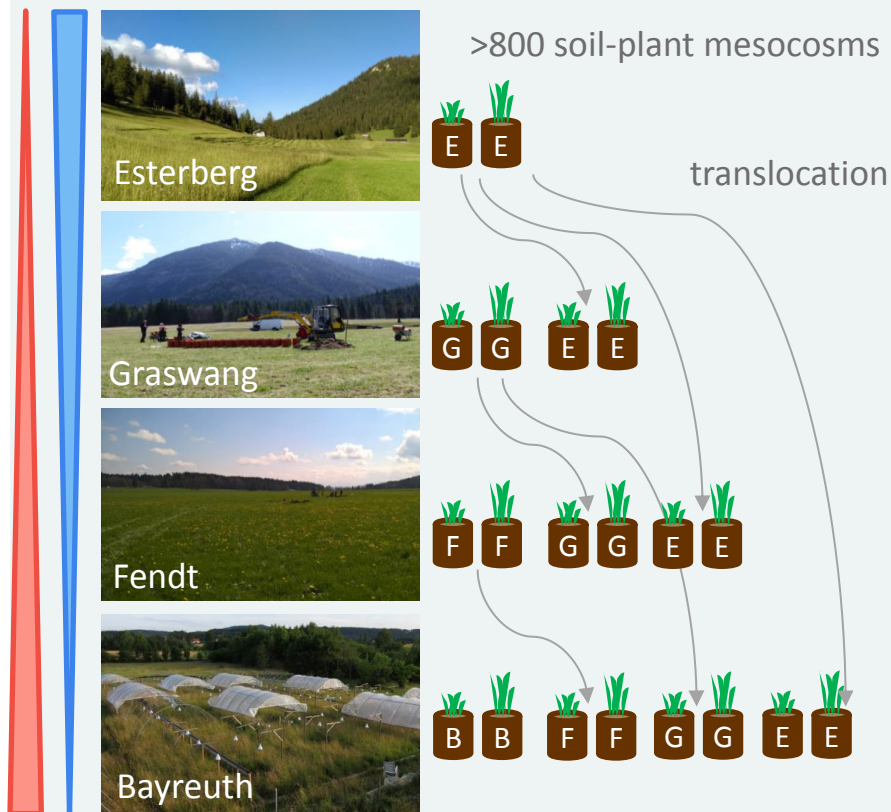
- What are the impacts of climate (change) and land management on
 - soil & plant biodiversity, productivity and feed value
 - the role of grassland soils as large C/N stores
 - GHG (CO₂, N₂O, CH₄) exchange & nutrient retention regulated by plant and soil microbial processes
 under given socio-economic conditions driving farmers decision making?



SUSALPS project

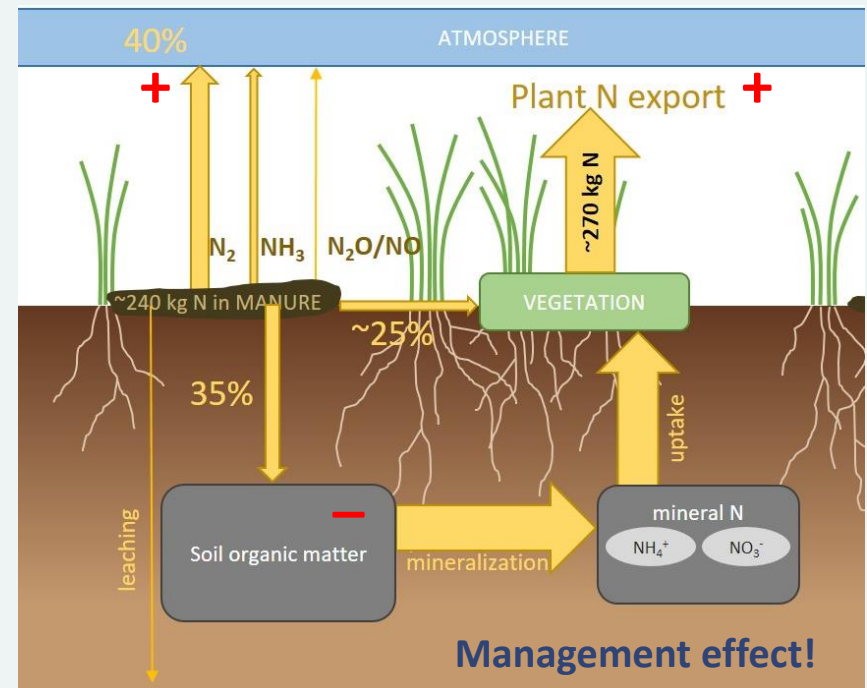
Methods

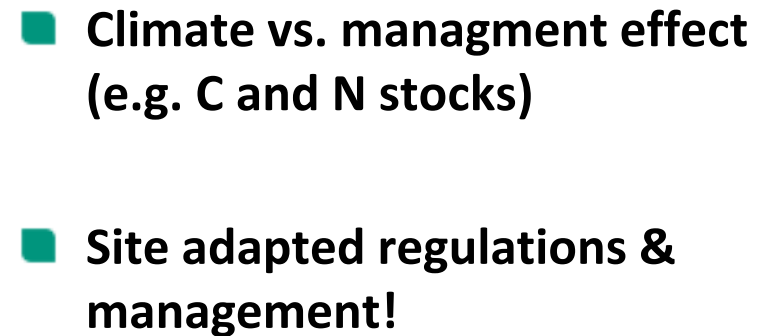
- Experiments, modelling, RS & surveys
- Space-for-time approach



Main results

- Soil → Garcia-Franco
 - Vegetation → Jentsch, Schuchardt & Berauer
 - Re-grazing → von Heßberg
 - Grassland N balance
- climate change





improved process understanding essential for development of environmentally and economically sound management strategies