

# The use of simulation models in ex-ante, mid-term and ex-post evaluation

The model PASMA in Austria

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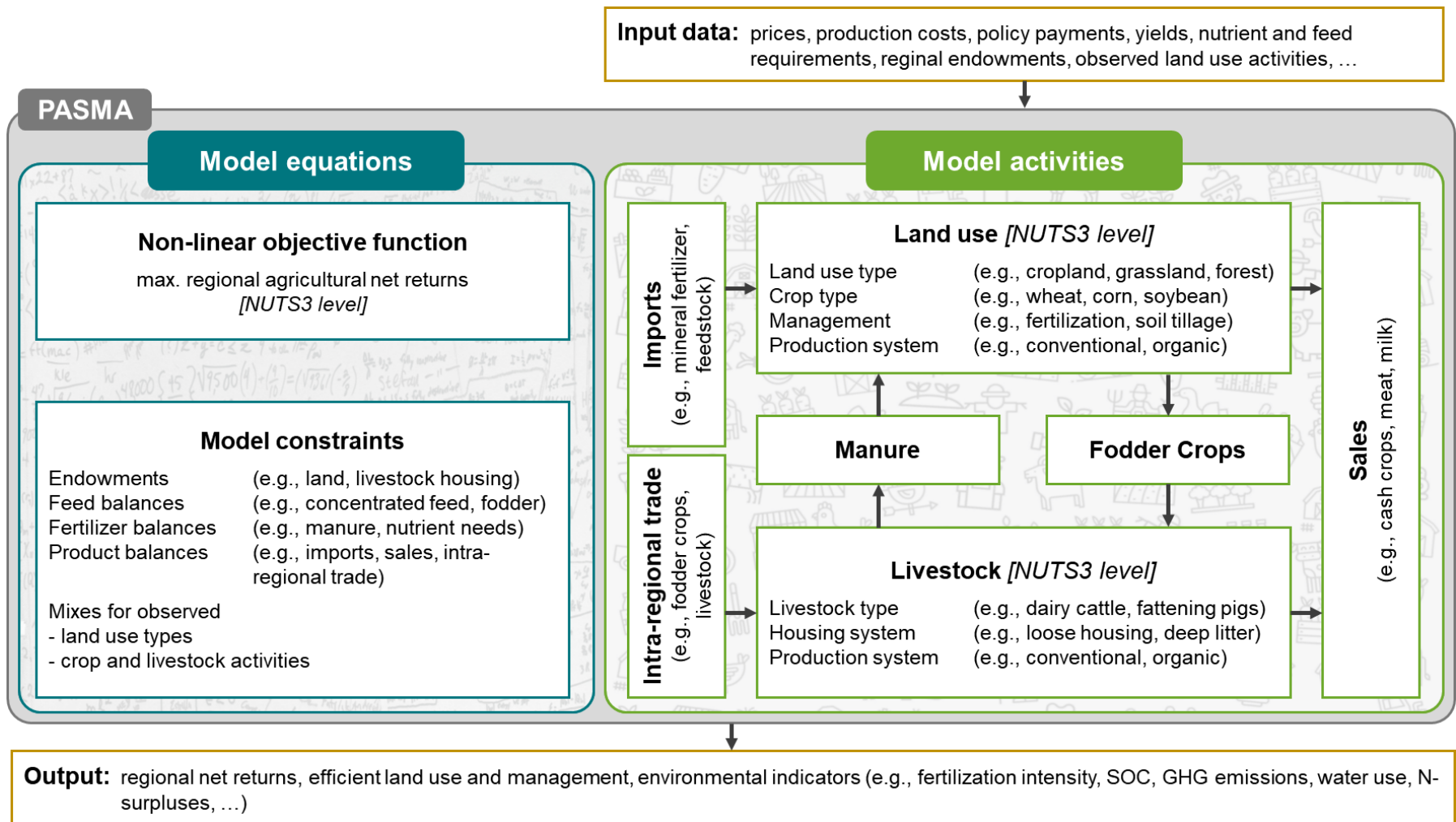
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# Introduction

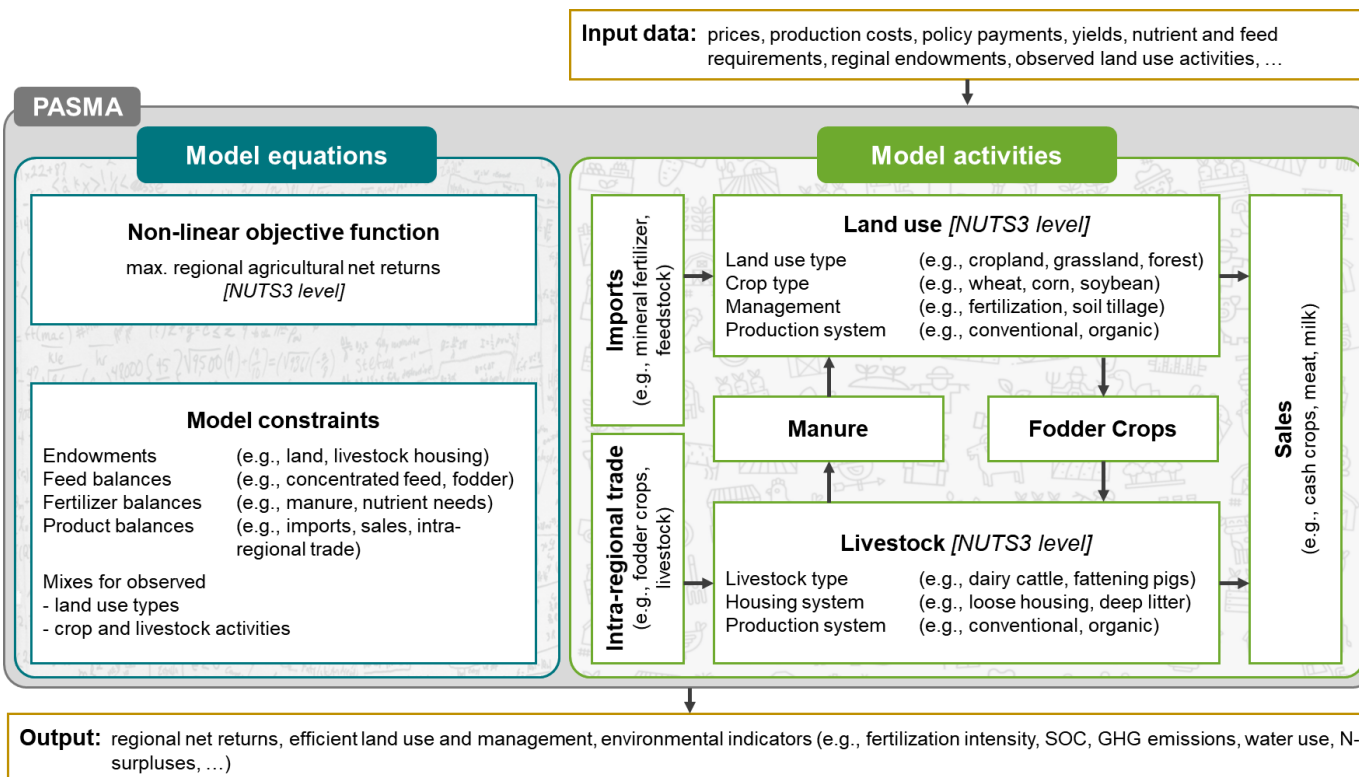
- Why specific simulation models for a (small) country
- PASMA – Positive Agricultural Sector Model of Austria
  - core elements and variants
  - features
  - limitations
- use cases in Austrian agricultural and climate policy making
  - scenario-analyses
  - ex-ante, mid-term evaluation
  - ex-post evaluations
- the way ahead

# What a model needs to capture to be useful



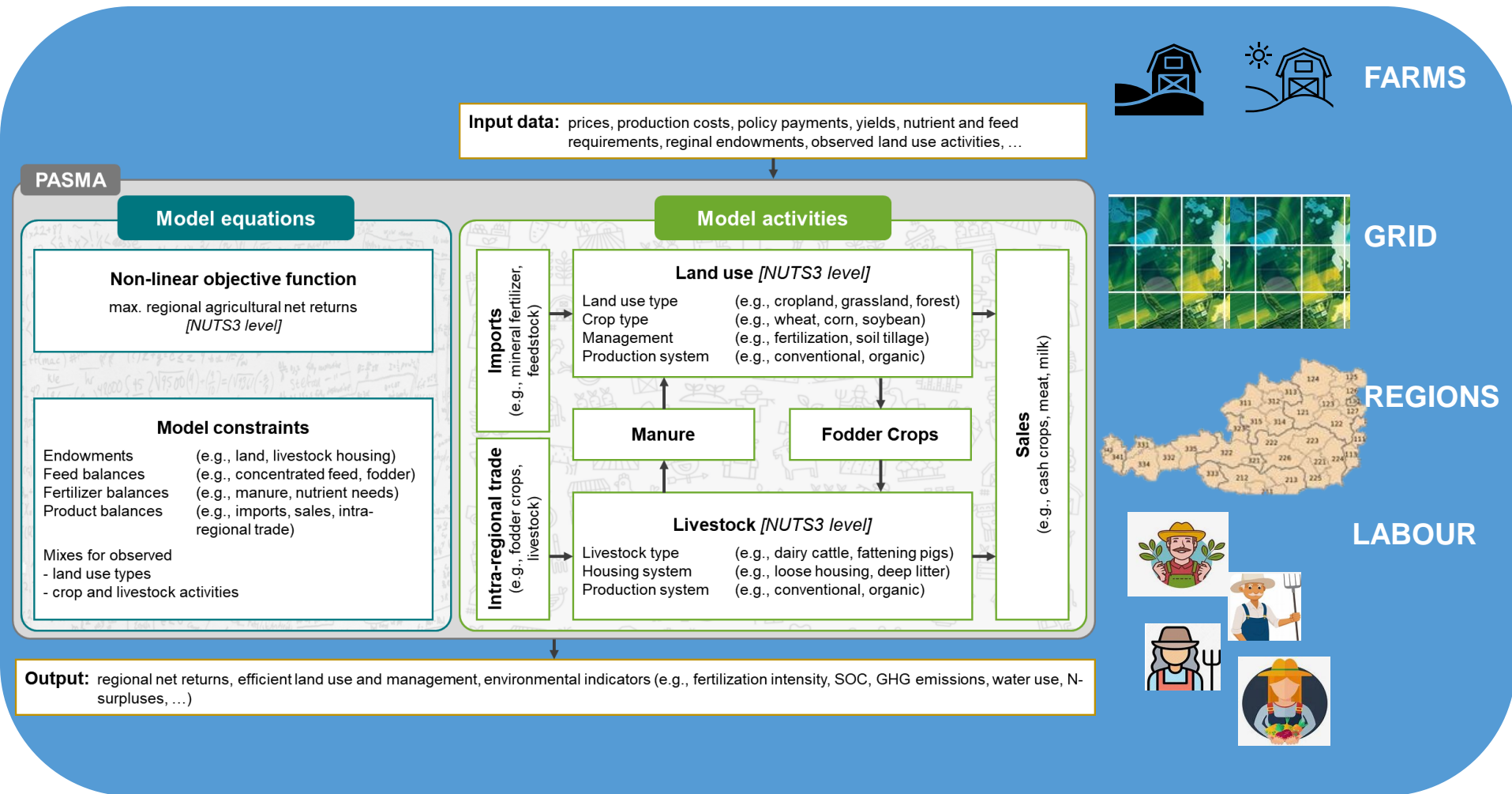
# What a model needs to capture to be **very** useful

## FOCUS ON LABOUR





# What a model needs to capture to be **very very** useful



# Selected use cases of PASMA in Austrian agricultural and climate policy assessment

## ■ scenario – analyses

- agricultural activities for GHG-emission scenarios
- land-use change results for LULUCF-scenarios
- variants of the design of less-favoured area payments

## ■ impact assessments

- consequences of the CAP Luxembourg-policy package
- consequences of  outside of the 

## ■ evaluations

- mid-term and (planned) ex-post-evaluation of RDP 14-20
- land-use change scenario for CSP - evaluation

# Why specific simulation models for a (small) country

- models are simplifications and they have to be useful
- country-expertise has
  - **advantages:** knowledge of situation, connecting to people, data-access and personal skills
  - **disadvantages:** limited pool of experts, time constraints, over-complexity and lock-in-situations
- compared to international models
  - **advantages:** no language barriers, better understanding of specificities, fine-tuning of model to national situations/policies
  - **disadvantages:** frequently not open source, coherence with international model simulations a challenge, difficult to transfer to new environments, skills of experts may be more limited

# The way ahead

## **increase the usefulness**

- cover all types of land uses such as forestry and land-take by other sectors
- integrate biodiversity and other SDG relevant indicators

## **establish better links to other models**

- regional general equilibrium models
- economy wide models and sector models (e.g. energy)

## **improve model features**

- updated-process
- dynamic effects of policies



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# Thank you for your attention!

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