

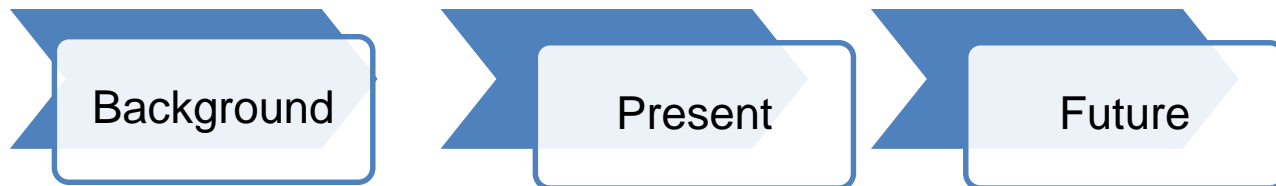


# Application of remote sensing data in agricultural statistics

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# Baseline





# Background

- SURS and remote sensing since the 70s
- Land use-land cover (satellite imagery)
- New sources and changed needs ended the use of RS in 2008
- GIS unit was dissolved



## Feasibility study

- Conducted in 2018
- New available data, technologies and needs
  
- Promising area
- Development costs

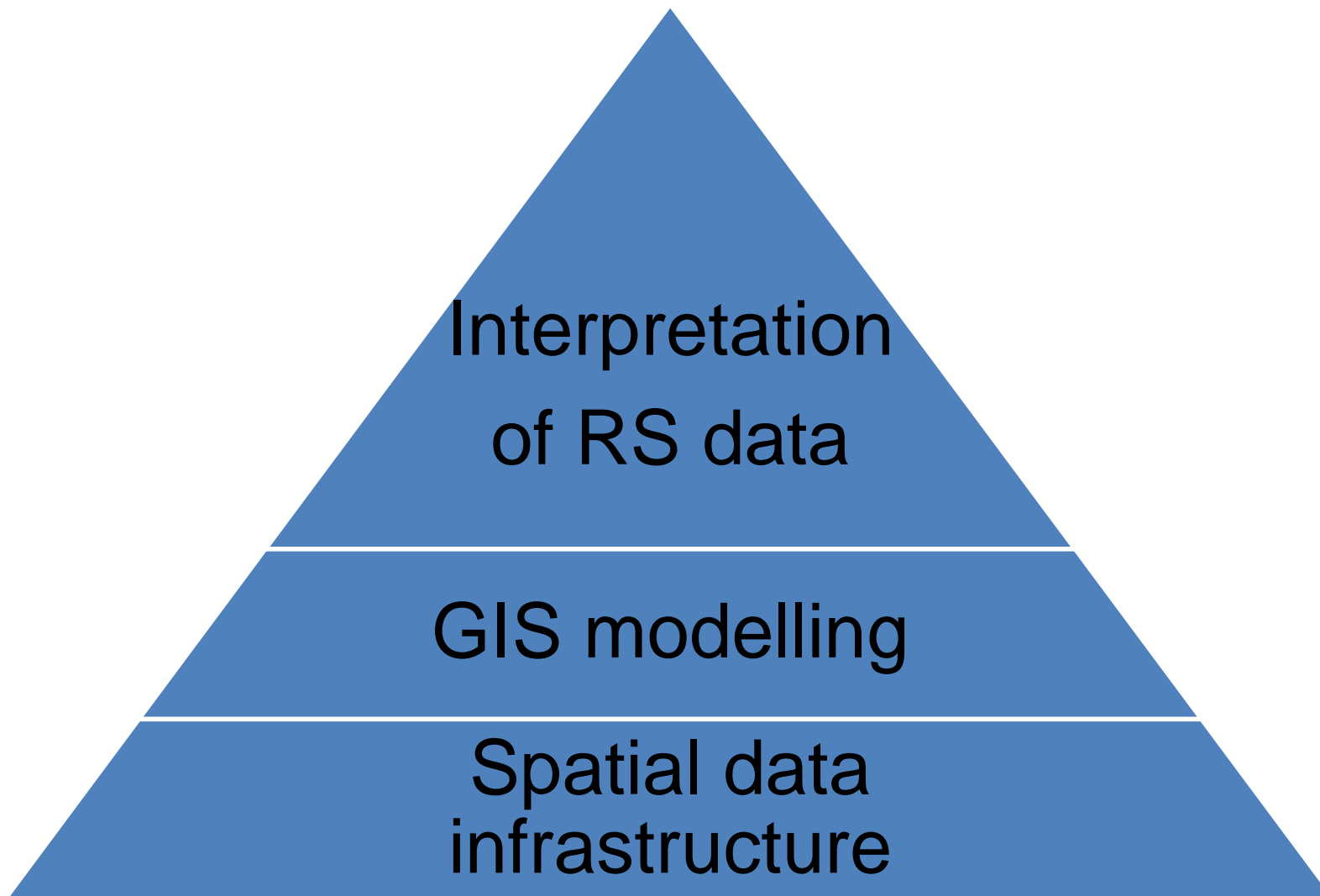


## Use case decision

- **Business need**
  - No alternative data source
- **Business benefit**
  - Cost reduction
  - Quality (Accuracy, relevance, consistency, interpretability, and timeliness)
  - Reduction in provider load

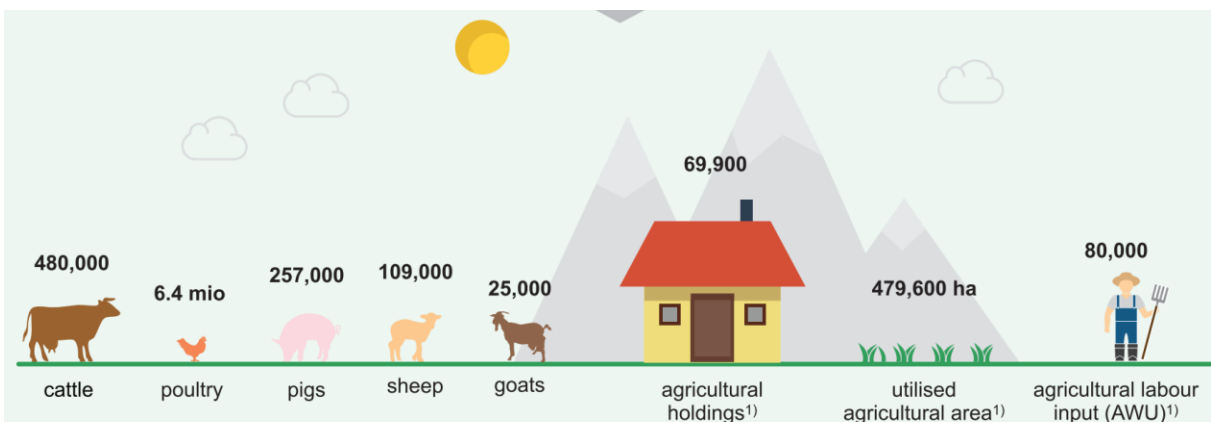


# Complexity of use



# Agricultural Census 2020

- Ownership of agricultural land
- Land structure on agricultural holdings
- Crop rotation analysis
- Rough grazing
- Irrigable land

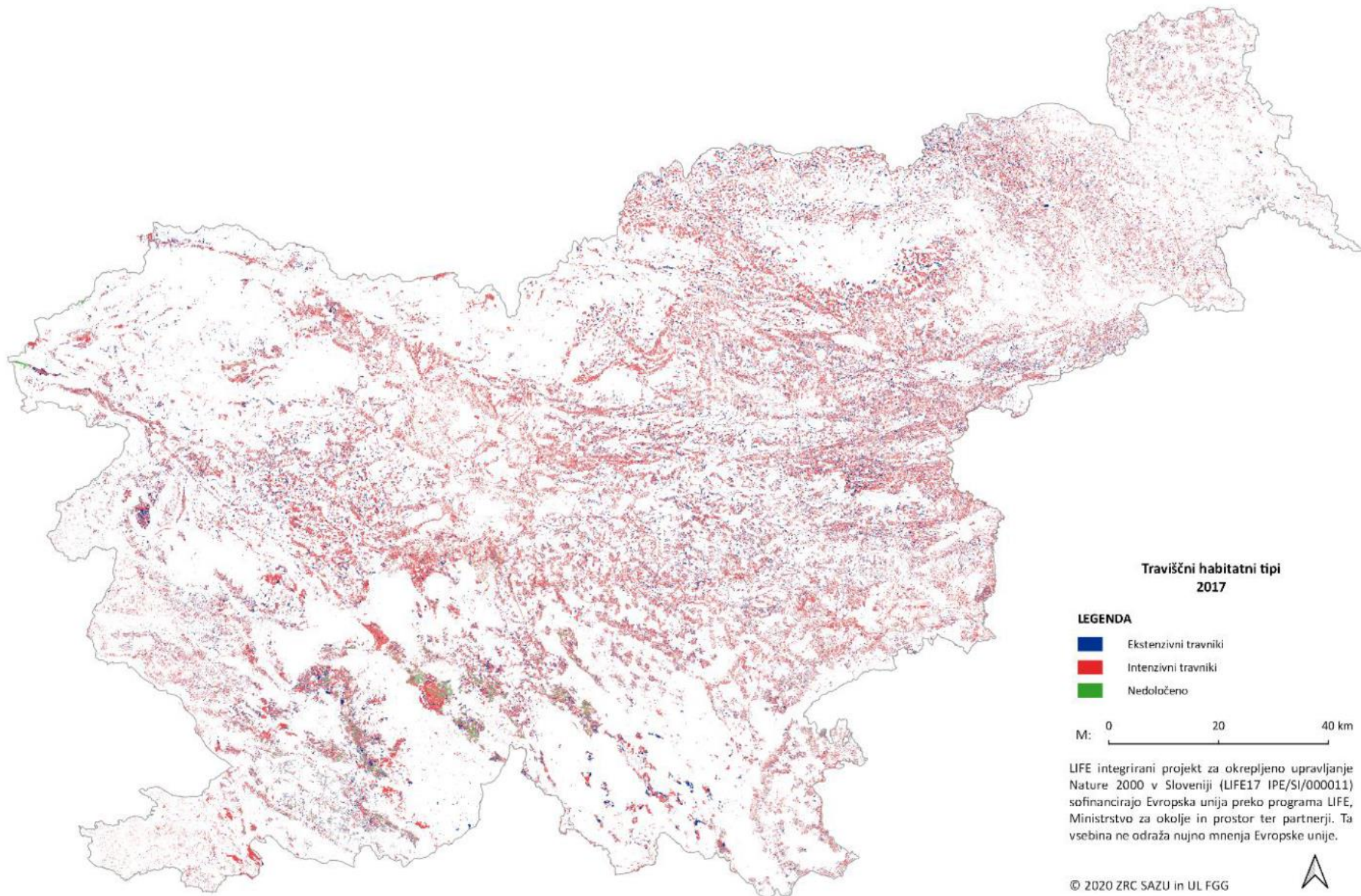




## „Administrative“ RS data

- LPIS – validated by aerial orthophoto
- Grasslands use intensity – Sentinel imagery
- Land cover – various RS sources
- Modelling in combination with other administrative data (spatial and tabular)







## Future needs

- GEOS grant for SAIO Implementation:
  - Age of permanent grassland
  - Rough grazing
  - Managed grassland
  - Irrigated area
- Interpretation of raw satellite data
- Machine learning, statistical data for validation
- Subcontractor



# Conclusions

- High spatial precision
- Reusability
- No respondent burden
- Validation through statistical data
  
- Country specific
- Cost effective development



Thank you!

Comments, questions?