

MELS and DATAMAN PROJECTS

Identifying cost-effective mitigation strategies for greenhouse gas and ammonia emissions

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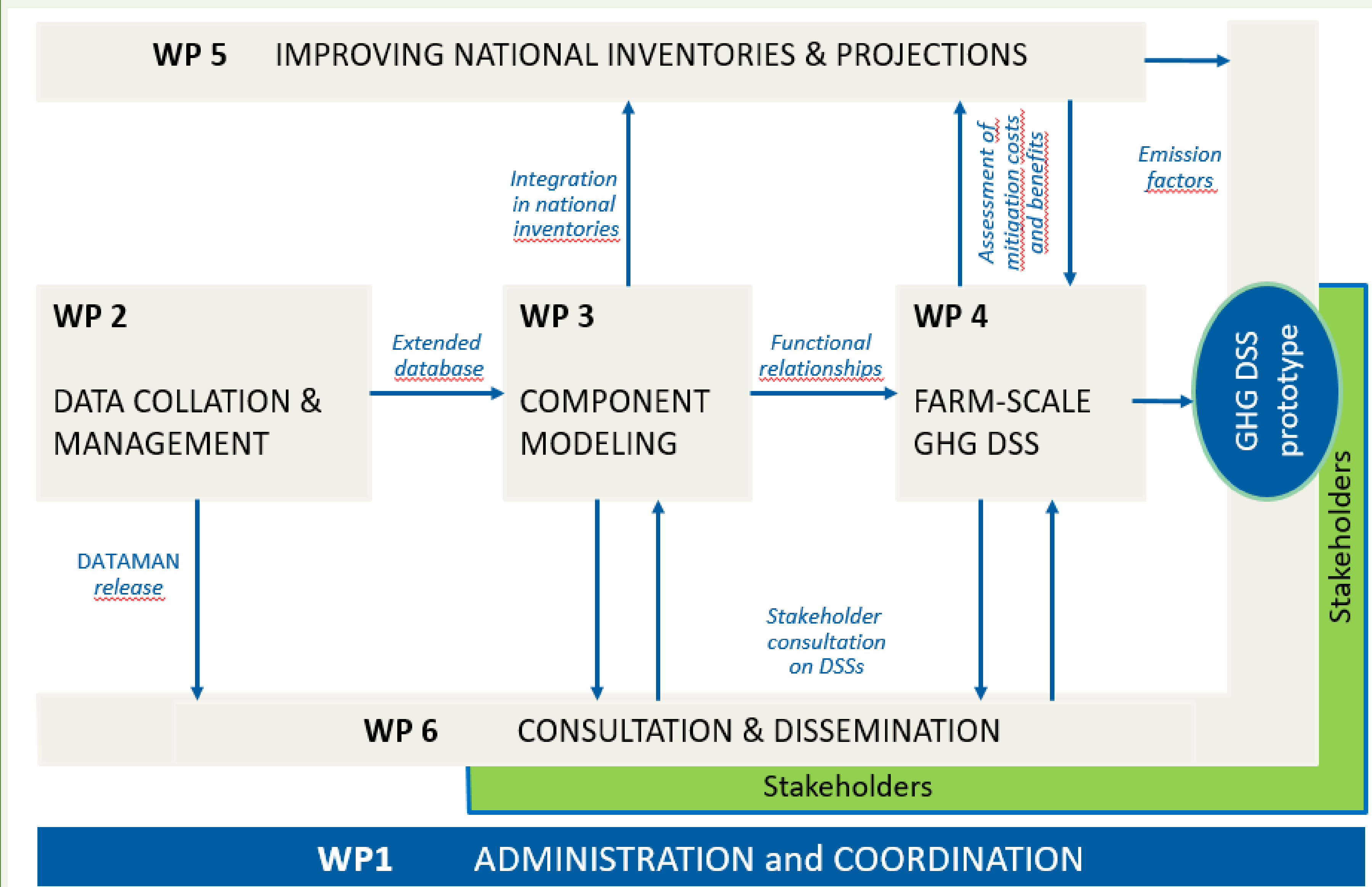
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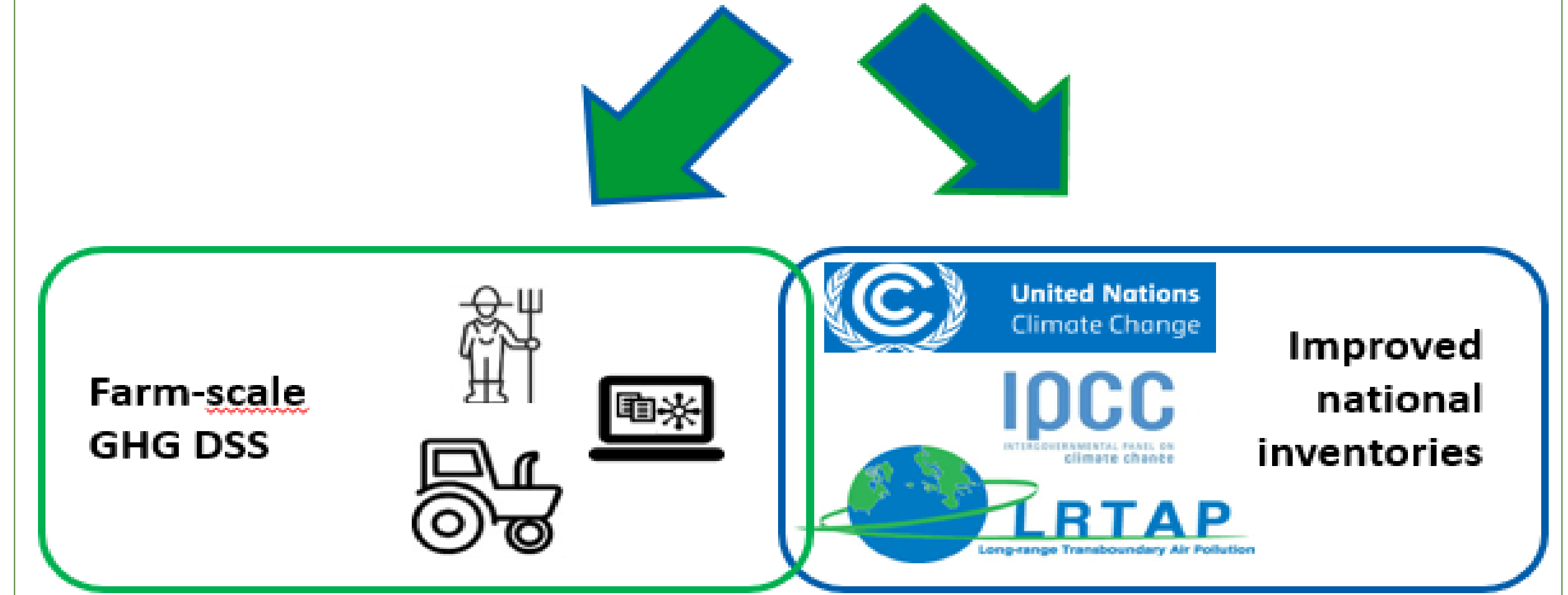
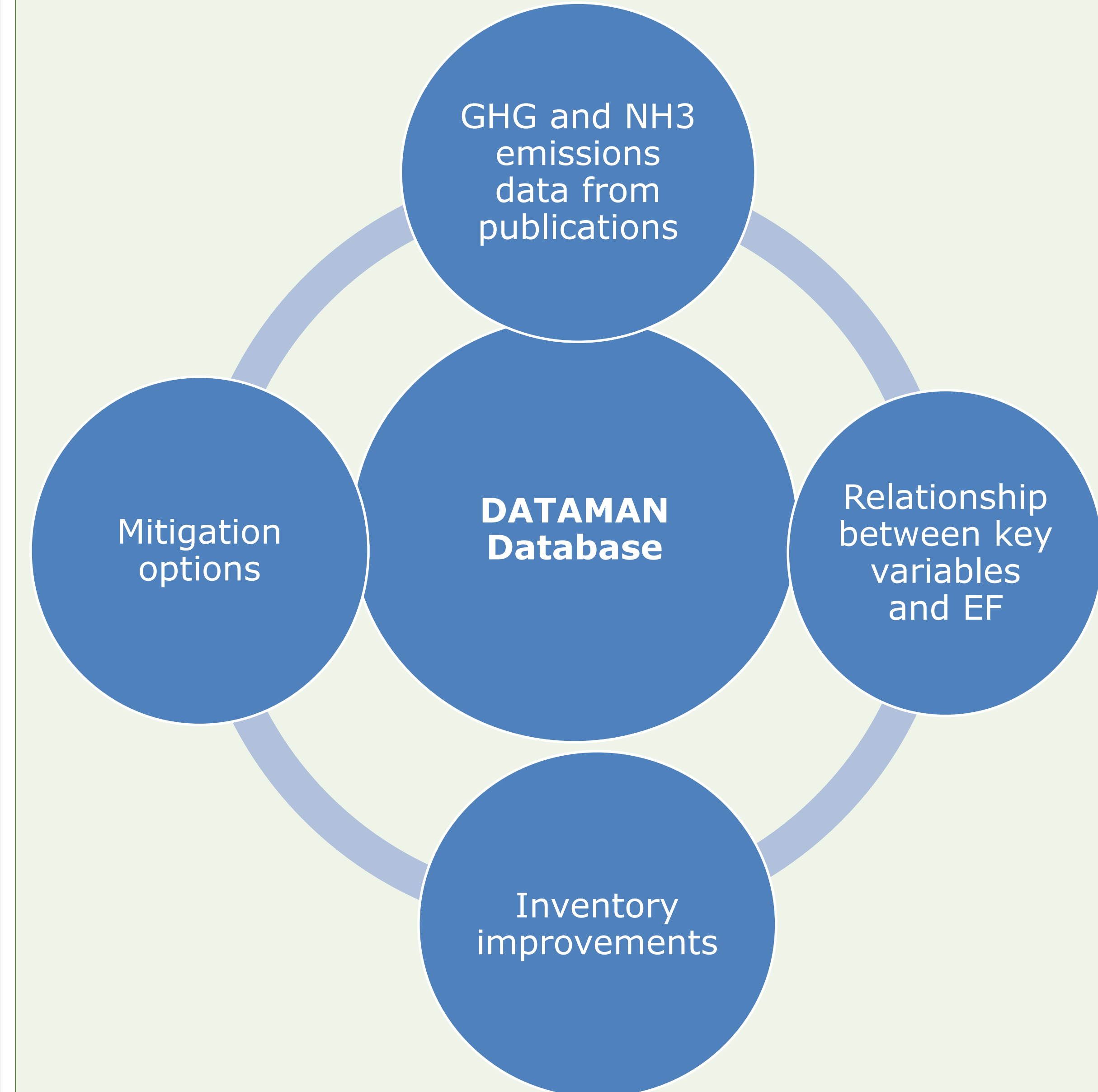


- ### Objectives
- **Collate** direct and indirect GHG emissions associated with manure management in livestock production into a single, on-line database
 - **Generate** functional relationships between emissions and activity variables
 - **Assess** existing farm-scale DSSs (Decision Support Systems) in relation to GHG emissions from livestock production systems
 - **Develop** an open-access farm-scale DSS prototype for countries lacking such a tool
 - **Improve** national emission inventory methodologies for livestock production systems
 - **Provide** an assessment of impact, costs and savings associated with a range of mitigation measures

MELS Workflow



DATAMAN database management



How many emission factor observations do we have?

Data type	N ₂ O	NH ₃	CH ₄
Field	3217	2603	
Housing	386	1366	454
Storage	334	544	152

And counting...



Take-home message

- **Allow** the effect of contrasting manure management practices, climate and soils to be better taken into account at national and farm scales
- **Deliver** more refined decision support to policymakers and farmers, enabling the identification of the most suitable cost-effective mitigation measures
- **Identify** how the collection of activity data for emission inventories can be improved, resulting in less cost-intensive data collection and more detailed inventory calculations.

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