

Resource Efficiency in Practice: Closing Mineral Cycles

Aims and wider context of the
project



Agenda

- Why does the project focus on agriculture?
- Why does the project focus on farm-level practices?
- How are the economic realities of European farmers taken into account?
- What does the project not cover?
- Project objectives and structure
- Project scope and stakeholders
- Project timeline
- Project team
- Purpose of the conference



Photo: Bord Bia

Project team



Project Oversight



BIO
(co-leader)

Overall project management
Study content



Ecologic Institute
(co-leader)

Dissemination
Conference organisation



AMEC



DTU



LEI



University of Milan

Regional Experts

Why does the project focus on agriculture?

- Agriculture is responsible for:
 - 94% of the ammonia emissions in the EU-28 in 2011
 - 10% of the GHG emissions in 2008, including 57% of the N₂O emissions and 43% of the CH₄ emissions
 - 53% of the nitrogen leaching to surface water in 2001, from 37% to 81% according the Member State (weighted share for 9 MS)
 - 70-90% of the nitrogen load and 60-80% of the phosphorous load in the Baltic Sea in 2006 (45% of the total load is due to diffuse sources)
 - 24% of the habitat types targeted by the EU Habitat Directive



Photo: G. Provolo



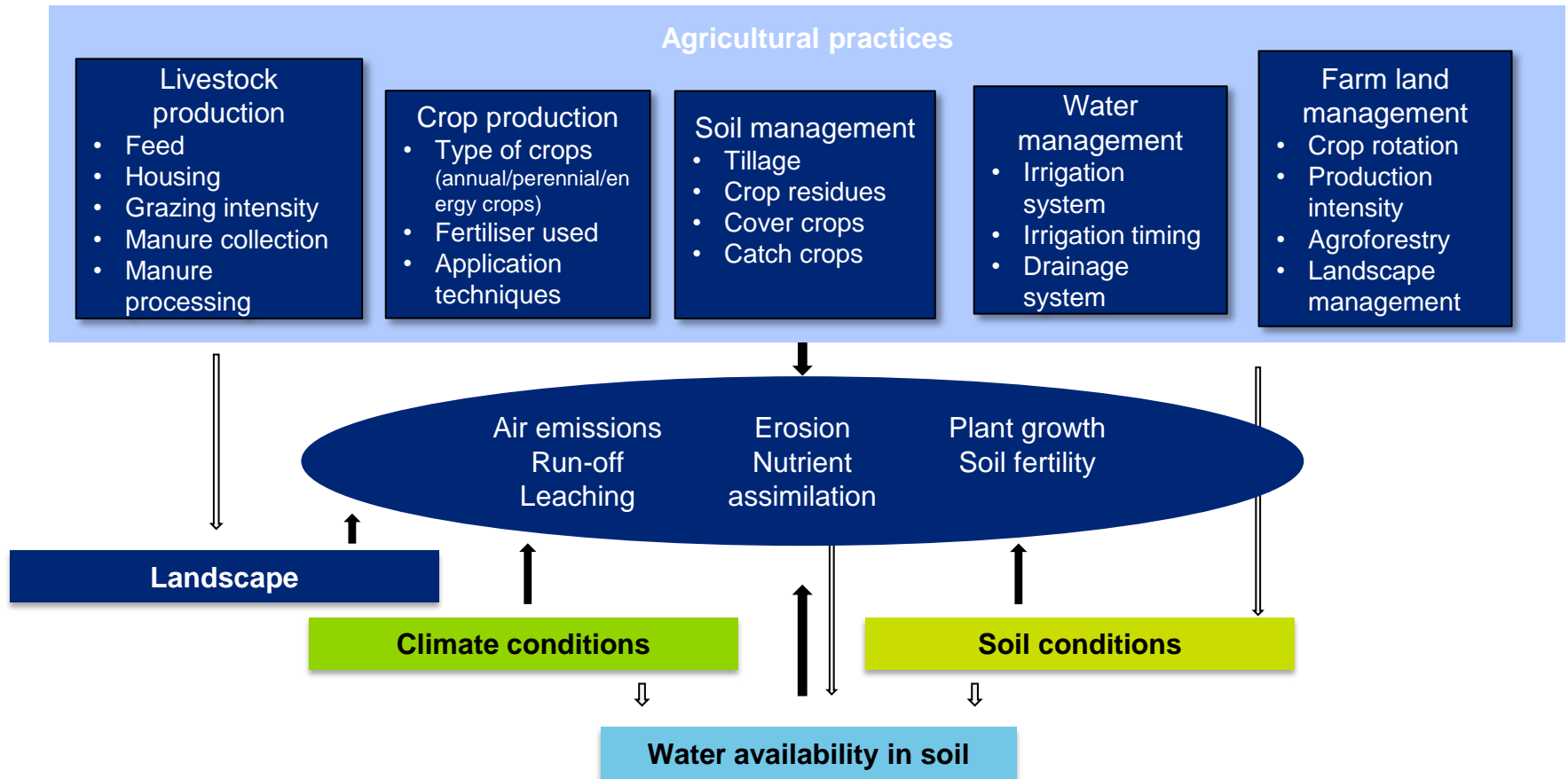
Photo: Marc Shaffner - CRB, 2011



Photo: ICOS

Why does the project focus on farm-level practices?

- Agricultural practices strongly influence the nutrients' fate

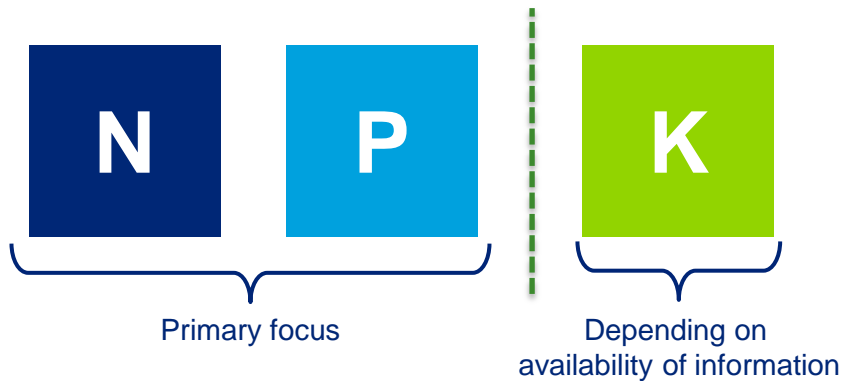


→ Though neither the only source of impacts, nor solutions, but through innovation and intelligent practices, they can have a very positive impact.

Project objectives

With a goal of increasing “resource efficiency at the farm level”, the project aims to **identify the good agricultural practices to reduce the nutrient losses and related negative impacts on climate, air, water, soil, biodiversity and human health.**

Nutrients addressed by the study include:



→ **Focus on regions with highly positive nutrient budget at the territory scale.**



Photo: G. Provolo

How are the economic realities of European farmers taken into account?

- State of art of the **costs of the impacts on the environment and human health** related to the excess of nutrients in the eight selected regions
- Analysis of the **investment costs and the running costs** in the database of solutions
- Assessment of **possible economic benefits/ losses** (other than from the implementation of the measures) in the database of solutions
- In case studies, costs of the practices and **regional financial capacities of farmers** (large farms and small farms) are taken into account in the choices of the good practices



Photo: G. Provolo



Photo: L.G. laverdad.es, 2013

What does the project not cover?

- CAP, Other policies such as Nitrates Directive
- Impacts from agriculture not directly linked to nutrients (e.g. heavy metals)
- Factors other than agriculture practices, landscape, climate and soil conditions on nutrient fate
- Good practices:
 - Compliance with the European, national and regional policy
 - In other sectors (e.g. industry)
 - For other level than farm-level (e.g. policy, financial help)



Photo: Deloitte

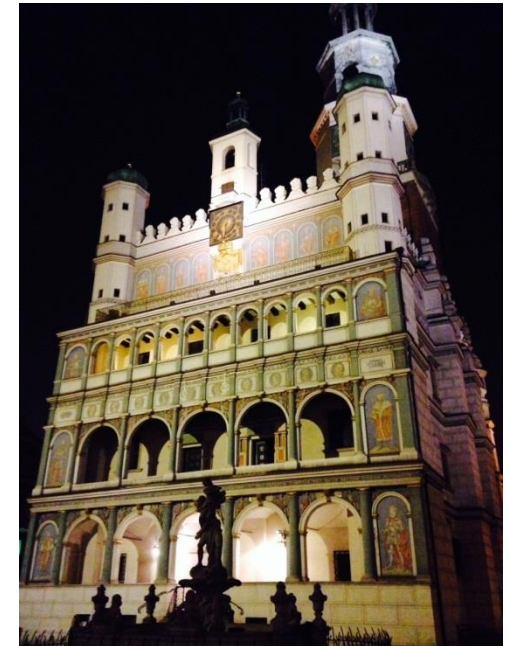
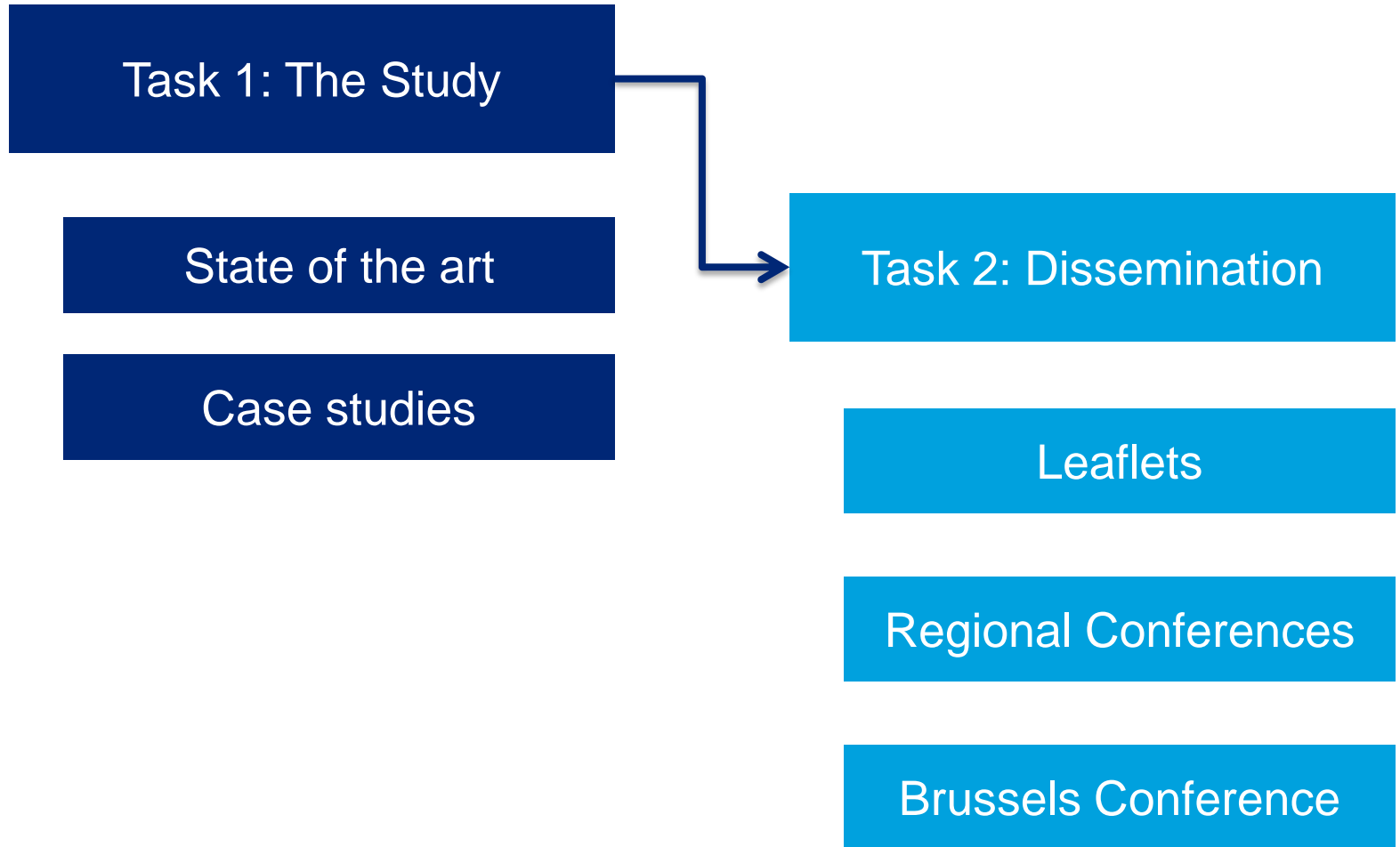


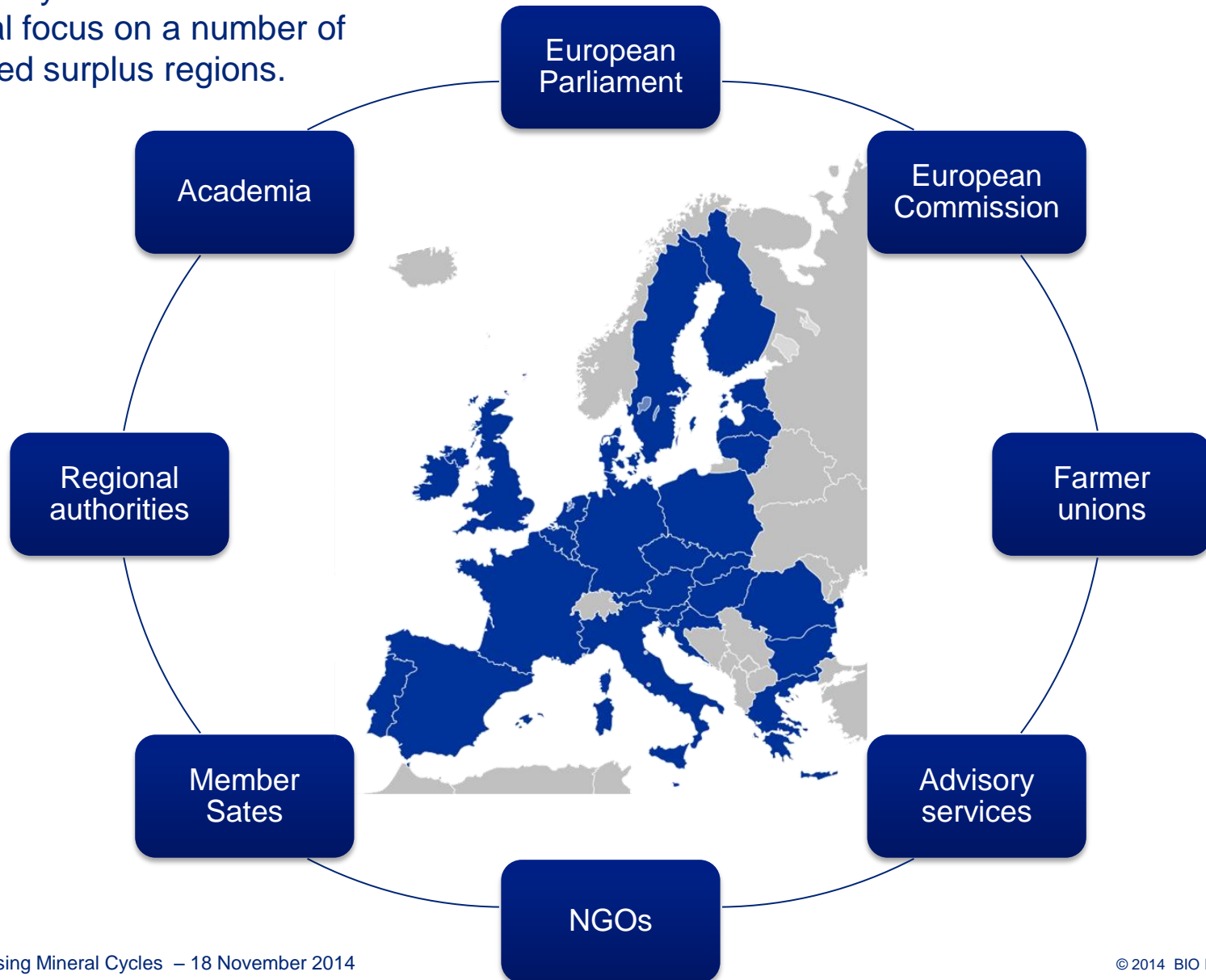
Photo: M. Sarteel

Project structure



Project scope and stakeholders

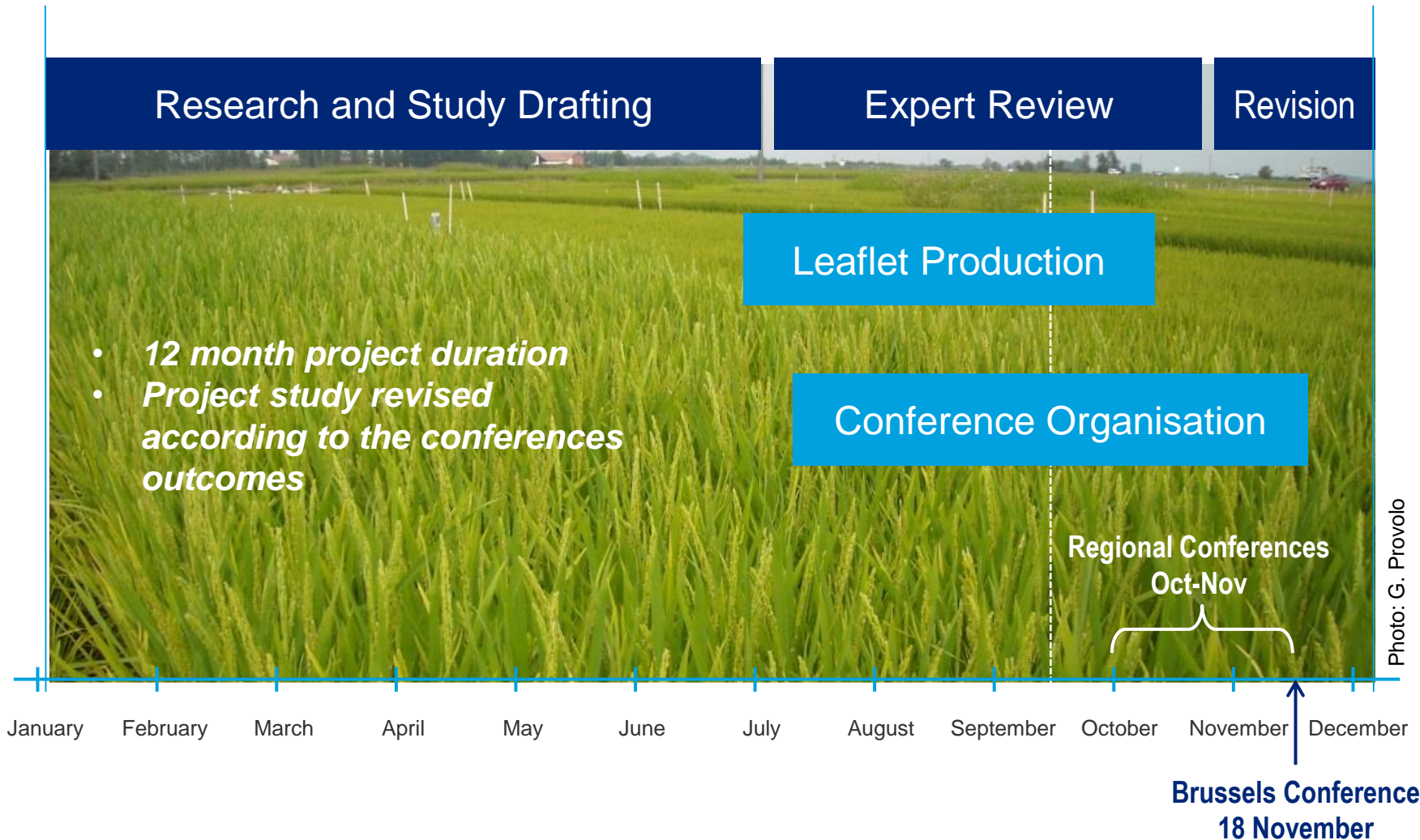
The study covers EU-28 but with a special focus on a number of selected surplus regions.



Project timeline

Project Launch
January

Project End
5 December



Purpose of the conference

To conclude a 1-year project on measures and solutions for increased resource efficiency and use of fertilisers at the regional and farm levels, funded by the European Commission.

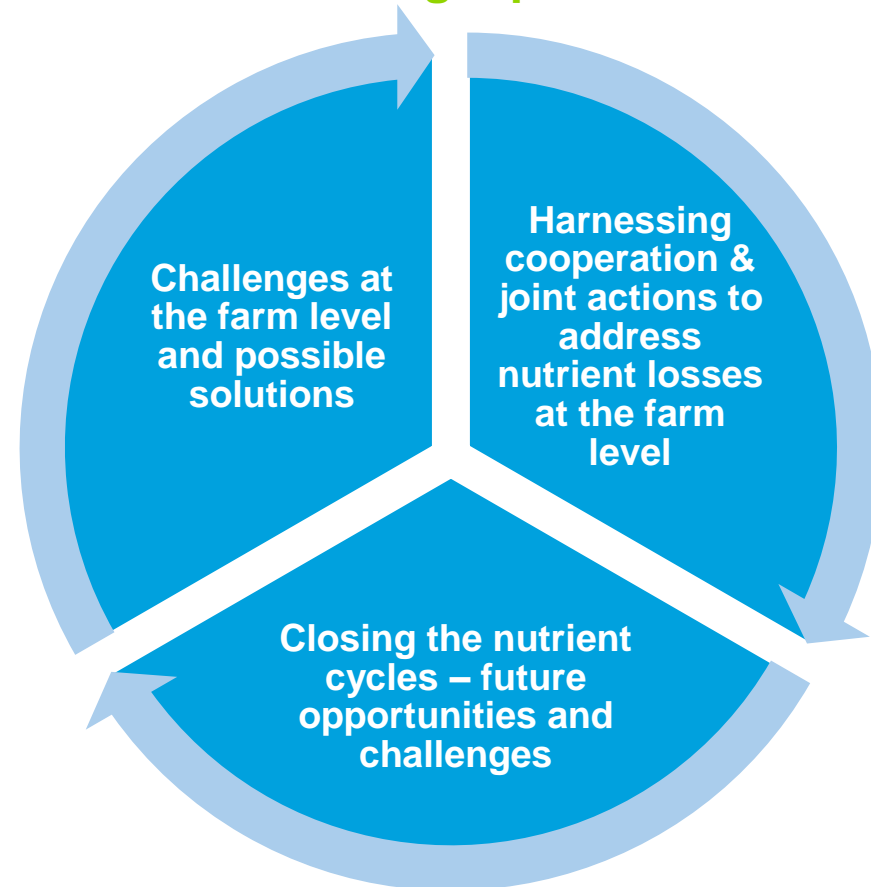
The conference aims to ...

Present the results of the project

Discuss the project findings with the relevant stakeholders and get feedback

Highlight best practices and solutions *at the regional and farm levels*

... with a focus on the following topics





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