

Integrated crop livestock systems (ICLS)

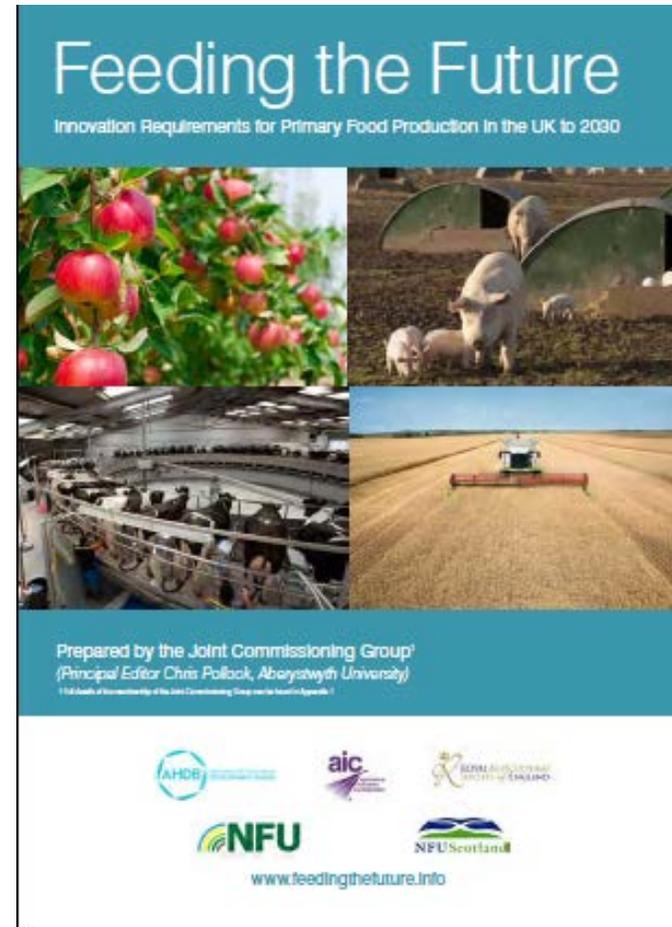
- taking a more holistic view

Christine Watson

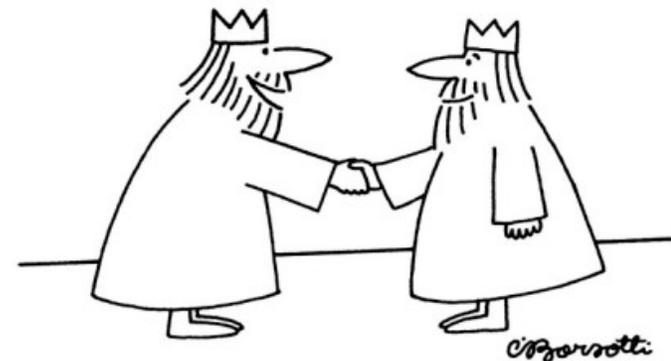
Spatial component of NUE



- “Develop new models for integrated mixed farming, based around co-location of specialist enterprises, optimising value from crop diversification and co-products, and thereby generating a safe and sustainable ‘circular agricultural economy’ “

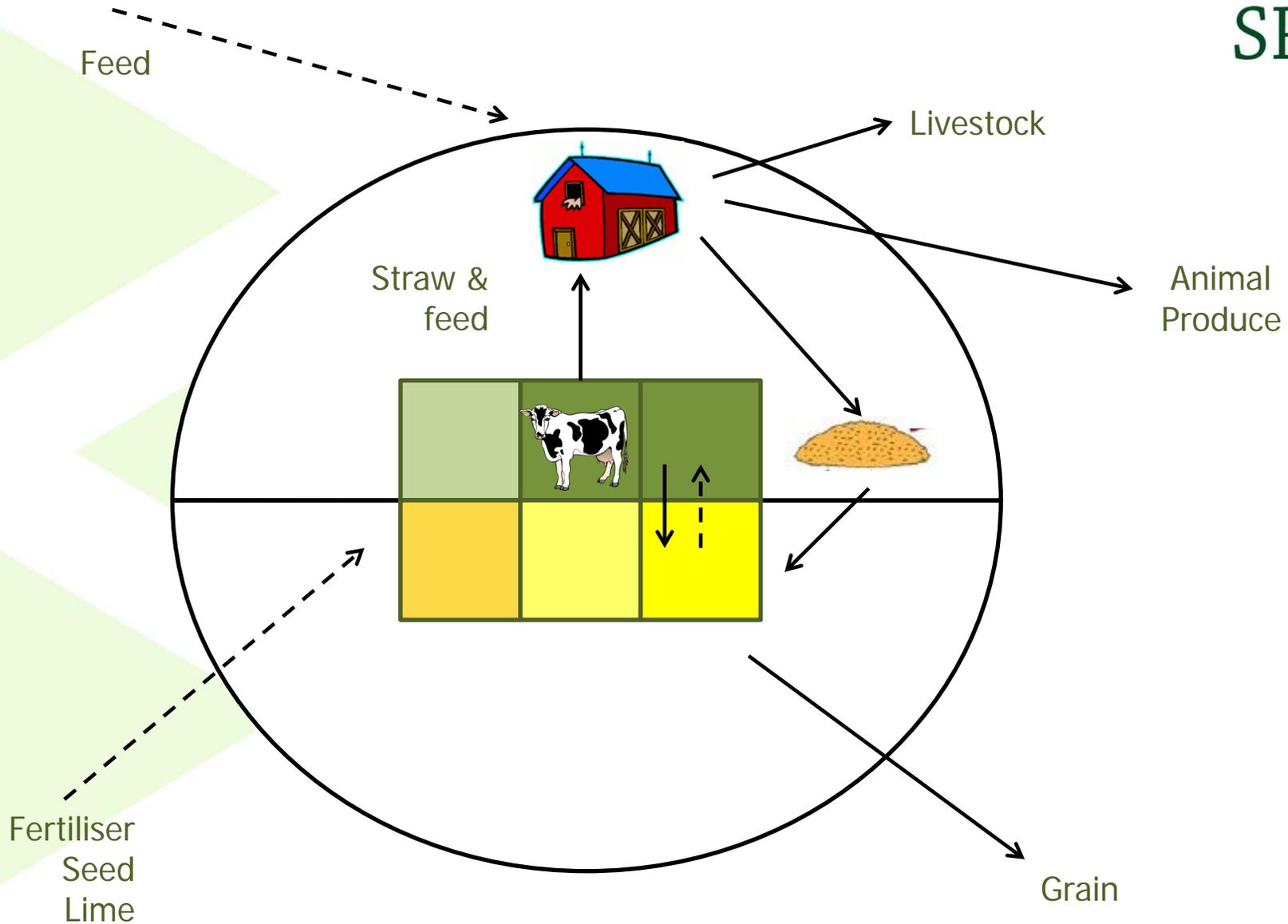


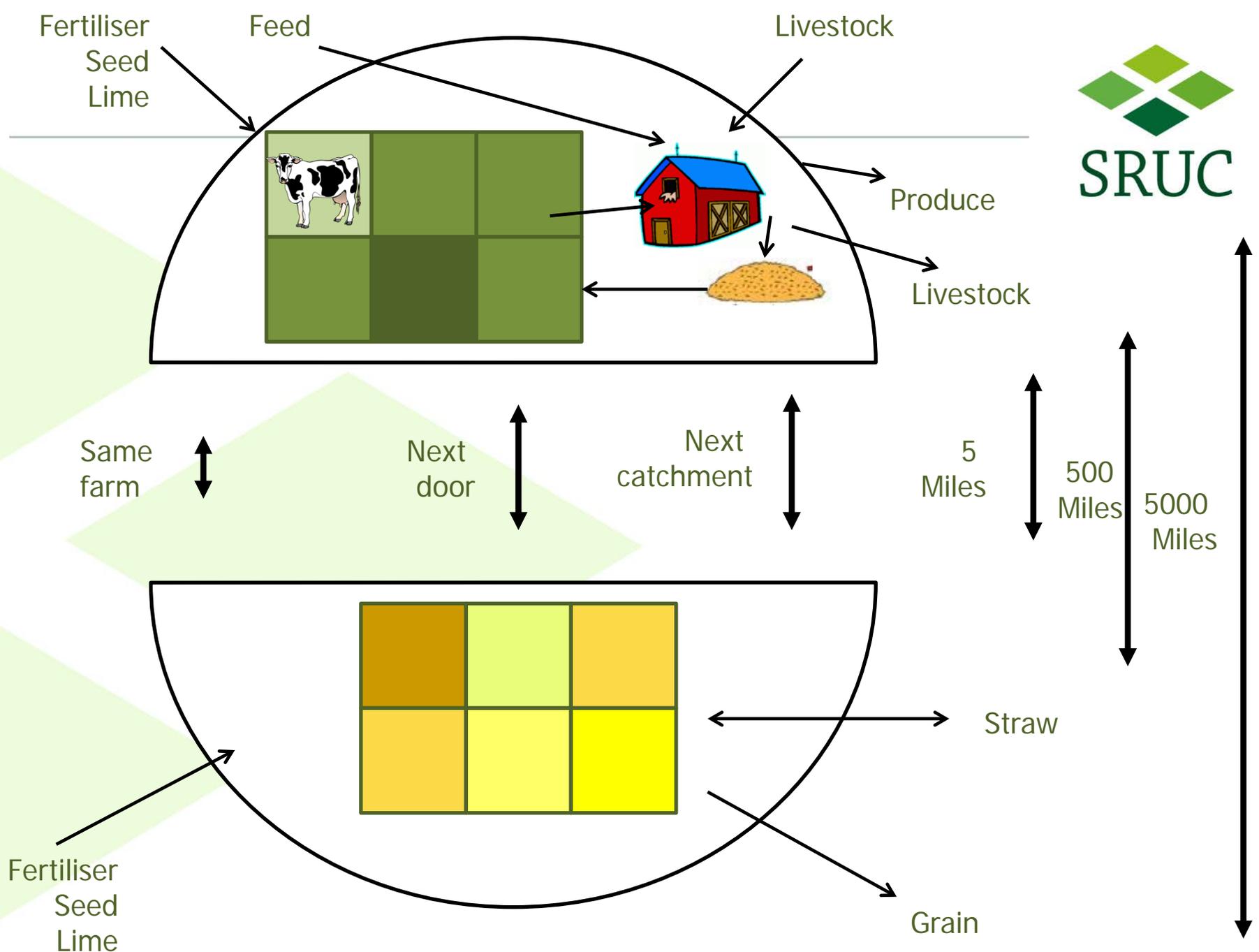
- Characterised by integration of enterprises
- Does the degree of synergy between enterprises determine the efficiency?
- Villano et al. (2010) “if no evidence of dis-synergies then no benefit to specialisation”



“Wow! I can feel the synergy already.”

Traditional mixed farm





So, how to proceed?



- "We can't solve problems by using the same kind of thinking we used when we created them."
Einstein
- One size does not fit all!
- There are a range of solutions which will suit individual farms, regions and countries
 - restructuring of farms at different spatial scales
 - different approaches (organic, conventional etc)



EIP Agri focus groups



http://ec.europa.eu/eip/agriculture/en/content/focus-groups



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You can read more about how Focus Groups work and their expected results in the EIP-AGRI [Focus Group charter](#) and the [Focus Group brochure](#).

EIP-AGRI Focus Groups are temporary groups of selected experts focusing on a specific subject, sharing knowledge and experience.

Each group explores practical innovative solutions to problems or opportunities in the field, and draws on experience derived from related useful projects. Each EIP-AGRI Focus Group meets twice and produces a recommendations and outcomes report.

The EIP-AGRI Focus Groups also discuss and document research results, best practices and identify the implications for further research activities that will help to solve practical problems in the sector. These may be related to production, processing, consumption, transport or other issues.

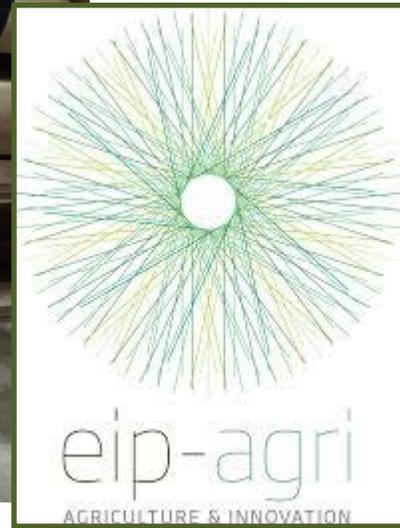
In short, the **objectives** of an EIP-AGRI Focus Group are:

- **Taking stock** of the state of the art of practice in the field of the EIP-AGRI Focus Group activity, listing problems and opportunities;
- **Taking stock** of the state of the art of research in this field, summarising possible solutions to the problems listed;
- **Identifying** needs from practice and possible directions for further research;
- **Highlighting** priorities for innovative actions by suggesting potential practical Operational Groups or other project formats to test solutions and opportunities, including ways to disseminate the practical knowledge gathered.

Do you have an idea for an EIP-AGRI Focus Group? Is the topic focused and the question well defined? Then why not suggest a [new EIP-AGRI Focus Group topic](#).

Related content:

EIP Focus Group



Adapt educational and advisory systems to consider the specificities of ICLS



- Knowledge exchange and peer learning tools to enhance farmers' skills on MFS
- Adapt specialised education, training and advisory systems for more participative and 'holistic' teaching and advising
- Develop farmers knowledge on MFS strategic management to motivate young farmers
- Develop advisory systems to favour regional co-operation between specialised farms and enhance ecosystem services provision

Research needs: Implement participative and holistic research to improve ICLS



- Participative design approach to test new combinations of managing practices for crops and livestock
- Interactive design approaches to consider socio-economic aspects of ICLS

Main topic	Needs for research
Evaluation of MFS sustainability	Multicriteria evaluation on economic, environmental benefits of adopting MFS as compared to specialised systems.
Labour organisation and complexity management	Identify and adapt tools for the analysis of labour requirements throughout the year and time spent in management.
Mapping of technical efficiency of MFS	Mapping different MFS models across EU to identify pedoclimatic and economic conditions where MFS can have the highest economic and environmental benefits as compared to specialised systems.
Soil quality	Research on better nutrient cycling efficiency through MFS
Animal feeding efficiency	Research on how farm byproducts, cover-crops and dual purpose crops could be efficient for animal feeding.
Knowledge exchange	Explore the knowledge aspects involved in maintaining or developing MFS.
Cooperation between farms	Explore organization, cooperation or management strategies to counter risks and manage complexity in MFS.
Marketing and labeling MFS advantages	Develop marketing and labeling strategies for MFS products aimed at raising consumers' and farmers' awareness on the benefits of MFS.
Landscape	Evaluate the benefits of MFS at landscape level (landscape mosaic as alternative to specialisation) to provide multiple ecosystem services

