

# Bridging the gap – The IMPRO project

Impact matrix analysis and cost-benefit calculations to improve management practices regarding health status in organic dairy farming

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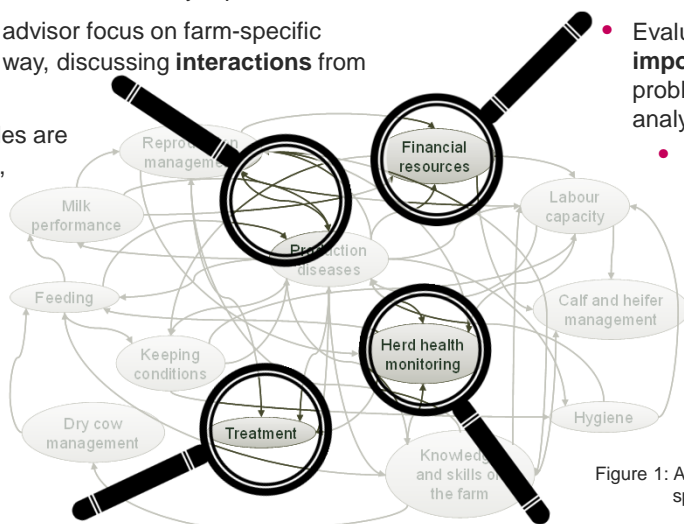
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## Animal Health, an emergent property of the farm system

- Dairy farmers are challenged to understand the **predominant processes in the farm system**, influencing the occurrence of diseases.
- Mono-factorial patterns of thought are contradictory to explain **multifactorial** production diseases.
- The high level of **complexity** requires to focus on the interactions between the most relevant factors and a systemic approach.

## WP2: On-farm assessment by an impact matrix

- 200 organic dairy farms in France, Germany, Spain and Sweden
- Farmer, veterinarian, and advisor focus on farm-specific processes in a structured way, discussing **interactions** from **different perspectives**.
- Functional roles of variables are mathematically evaluated, leading to a **new picture** of the farm.
- In combination with information on the animal health status for each farm, measures are identified that are most likely to improve animal health in the **farm specific** situation.



## WP5: Socio-economic implications of changes in the management

- Evaluation of the **perceived importance** of animal health problems by an adaptive conjoint analysis.
- Assessment of **intention and motivation** to implement recommendations.
- Development of cost-benefit calculation models to **optimise** the allocation of available resources.

Figure 1: Animal health status emerges from farm specific interactions and feedback loops.

## WP4: Manageability of Alternative treatments

- 60 farms in France, Germany and Spain
- Assessing **preconditions** for an effective use of alternative treatments by protocols and decision trees.
- Estimating **costs and efforts** needed to ensure preconditions and treatments according to the state-of-the-art.

## WP3: Improving monitoring and prevention on the herd level

- 40 farms in France and Sweden
- Development of **monitoring protocols** with indicators and alert levels for reproduction, mastitis, metabolic diseases, lameness and calf health.
- Development of **preventive protocols** for the same health complexes, dealing with risk factors in more detail.
- Establishing monitoring and prevention on farm to assess **acceptance and effectiveness**.

## WP6: Decision-support-tool

- Integration of tools, deriving from all workpackages into a **software based toolbox**.

## Conclusions

- IMPRO integrates information and knowledge gained from **different sources** into a **coherent concept**.
- IMPRO strives for a high level of **fitting accuracy** to the specific health problems and **farm specific conditions**.

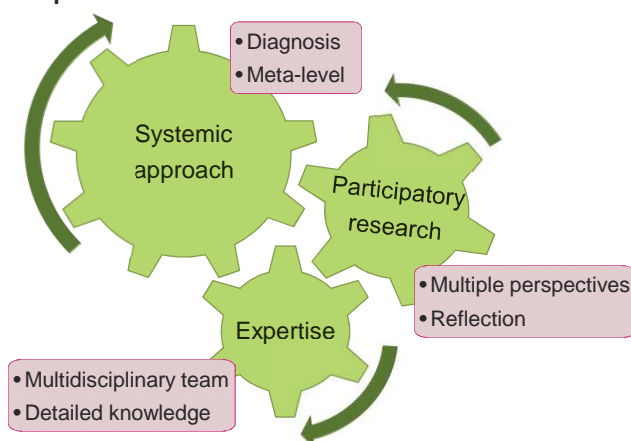


Figure 2: Core elements of the IMPRO project

