

Exploring 'lighthouses' to support on-farm research in the organic livestock sector in Flanders (Belgium)

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Problem statement:

Flanders lacks specific infrastructure for organic livestock research.

- Farmers experiment through their everyday practice.
- Researchers rely on ad hoc collaboration on a voluntary basis within individual research projects.

Research questions:

How can on-farm research evolve from *ad hoc*, project-based initiatives into long-term collaborations of farmers and researchers through the establishment of a network of 'lighthouses'? What conditions are needed for such collaboration?

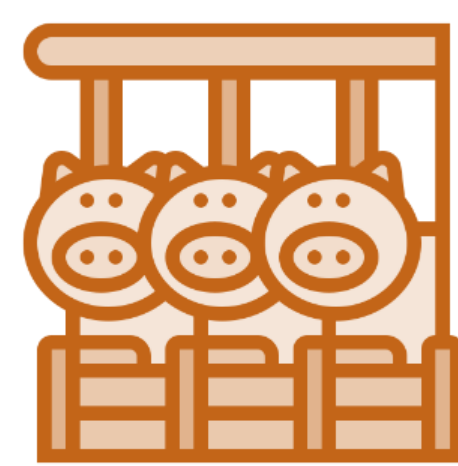


Lighthouses are commercial farms combining agricultural production with on-farm monitoring, research and demonstration activities. Farmers, researchers and other actors learn and experiment together in a real-life setting.



Methodology: Literature review, (international) expert interviews, practitioner interviews (farmers, researchers & advisors), focus group validation

Lighthouse constellation



Farm:

Financially & agronomically sound, with stable management and healthy livestock. No need to be representative but its context must be clear.

Farmer:

Equal and active partner in research. Motivated to gain knowledge. Willing to invest time and able to record data. Communicative.



Researcher:

Understands day-to-day farm practices, livestock behaviour and biosecurity. Respects farmers and their farms, communicate clearly.

Coordinator:

Main contact across studies on one farm or multiple farms. Facilitator. Speaks the language of both farmers and researchers.



Farmer compensation



Lighthouse farmers contribute their farms, time and tacit knowledge. Fair payment recognises this contribution. Agree compensation based on a realistic workload assessment.

On-farm research in fixed-term projects:

Remuneration can take various forms and depends on the terms and conditions set by the project funders. This may include:

- Payment for time spent (including meetings and consultations);
- In-kind support, e.g. feed, seeds, analyses or advice.
- Contributions to research-related investments, e.g. infrastructure, registration tools.
- Compensation for yield or animal losses, or unavailability of a plot;
- Research results, such as soil or feed analyses..

Long-term monitoring requires more stable remuneration, such as a flat-rate monthly fee. A variable top-up can account for changes in workload.

Demonstration: remuneration reflects preparation time and involvement, from answering questions to leading activities.

Collaboration agreement



A thoroughly discussed agreement provides peace of mind during research, monitoring and demonstration activities. A clear, practical framework is often enough, without lengthy or complex legal terms.

1. **Goal:** research question and objectives.
2. **Partners:** farm, research institute, sector organisation or intermediary, and any other stakeholders (veterinarian, advisor, etc.).
3. **Duration:** start and end dates, conditions under which the collaboration may be terminated, and arrangements regarding any extension.
4. **Roles and responsibilities:** detailed description of each partner's tasks in the subsequent steps of research/monitoring/demo.
5. **Biosecurity:** rules applicable on-farm and arrangements for visitors.
6. **Planning and practical arrangements:** number and timing of visits or measurements, practical arrangements on the farm.
7. **Data collection, storage and use:** which data, how it is stored, who has access, and how it is used.
8. **Communication and results:** feedback first, publications and demonstrations, the farmer's role and/or recognition in communication.
9. **Financial arrangements:** compensation for participation, extra work or investments.

Lighthouses are **co-creation environments**, where farmers are co-owners of the research and equal partners in its implementation. A continuous exchange between researchers and farmers – and any other partners – is therefore crucial at every stage of research/monitoring/demonstration.

Key conditions for successful lighthouse collaboration:

- **Build strong relationships:** Sustainable collaboration requires mutual trust and respect, open communication, and recognition of each other's knowledge, expertise and interests.
- **Relevance and value for farmers:** Research activities should address practical needs, adapt flexibly to the farm context, and provide clear benefits and financial remuneration for the farmer's efforts.
- **Structure and support:** Clear agreements and responsibilities, appropriate compensation, effective coordination, high-quality data collection, and a clear framework ensures a workable and reliable partnership.