



Horizon 2020
Programme



Cost/Benefit Analysis

Tool / Technology: Virtual fence

Analysis prepared by (country): France

Production type the tool/technology is relevant for: Dairy / Meat / **Both**

Description of the “benchmark” farm for which the analysis is performed:

Country: France

Production type:

Mainly outdoors / Housed 0-3 months a year / **Housed 4-8 months a year** / Mainly indoors

Farm grazing area: 25 ha

Species: Sheep / **Goat**

Number of animals: 150

Breed: Alpine / Saanen

Number of staff: 2

This project has received funding from
the European Union's Horizon 2020
research and innovation programme
under grant agreement N° 101000471.





Costs

Initial set-up

- **Capital costs (Large items e.g. a weigh crate, auto-drafter, etc.):**
 €1 - €500 €501- €1,000 €1,001-€2,500 €2,501-€5,000 €5,001-€15,000 > €15,000
- **Individual costs (Smaller items e.g. per tag, per sample, per collar):**
 €1 - €20 €21- €50 €51-€200 €201-€500 > €500
- **Equipment leasing costs (if not purchased):**
 Annual Monthly Weekly €1 - €50 €51-€200 €201-€500 > €500
- **Lifetime of the technology (approximately how long will it last before needing replaced)?**
 1 – 4 weeks 1-6 months 6 – 12 months 1-2 years 2-5 years > 5 years
- **Farm infrastructure requirements:** Decrease Increase No change
- **Percentage of animals within the flock/herd that use/are equipped/take advantage of the technology? 100%**

Running costs

- **Power source requirements (tick all that apply):**
 Not required Mains Battery Solar Other
- **Subscription fee – Needed? Yes / No**
 ○ If yes

Per flock / herd <input type="checkbox"/>	Per individual animal <input type="checkbox"/>	Per unit <input checked="" type="checkbox"/>	
Annual <input type="checkbox"/>	Monthly <input type="checkbox"/>	Weekly <input type="checkbox"/>	Daily <input checked="" type="checkbox"/>
€1 - €50 <input checked="" type="checkbox"/>	€51 - €200 <input type="checkbox"/>	€201 - €500 <input type="checkbox"/>	Over €500 <input type="checkbox"/>
- **Additional licences or permits required? No / Yes – Annual / Yes – Monthly / Yes - Weekly**
 If yes, cost: €1 - €50 €51 - €200 €201 - €500 Over €500
- **Maintenance cost – included in the subscription? Yes / No / Not applicable**
 If no, cost per month: €1 - €50 €51 - €200 €201 - €500 Over €500
- **Maintenance / replacement parts:**
 Easy to obtain Difficult to obtain Not obtainable Don't know
- **Technical / mechanical support provided on farm, after purchase? Yes / No**

Training requirements

- **Training required to install / use? Yes / No**
 If yes, time range? Up to an hour Half day Full day More
- **Additional technical advice required (e.g. advisor time)? Yes / No**
- **Are there additional costs associated with training and/or technical advice? Yes / No**





Benefits (tick all that apply)

Management

- Labour / time saving.
- Accuracy of records (health, management, movements etc.).
- Management decisions for animal groupings.
- Better individual animal management.
- Improved medicine use.
- Better nutrition / meeting requirements better.
- Improved use of feed resource (grazing, concentrates, etc.).
- Product quality improvements (e.g. hay, carcass, growth, milk, etc.).
- Increased information on production system.
- Opportunity for sharing / moving device (more than one location).

Animal

- Reduced stress to the animal(s).
- Improved welfare of the animals(s).
- Additional information on animal behaviour.
- Information on water intake / water availability.
- Information on food intake / food availability.

Technical

- Compatibility with other devices.
- Ease of data transfer to other software.
- Easy to use once installed.

Other

- Reduced stress to farmer / staff .
- Environmental benefits (e.g. reduced wastage, improved biodiversity, etc.)
- Helps to attract new entrants in to the small ruminant industries.





Another benefit not listed? Please give details:

Overall summary:

- **Ease of use?** *Scale 1 (Complicated) – 10 (Simple)*
1 2 3 4 5 6 7 8 **9** 10

- **Value for money (for this type of benchmark farm)?** Yes / **No** / Maybe

- **Recommend this tool/technology for use on other types of farm?**
Yes / No / Maybe

- **Additional comments?**
Link with the wolf plan and aid in relation to the electric wire?
Developments to be made: mode with GPS only for exemple