

RESULT 2: OPEN PLATFORM FOR SHARING KNOWLEDGE

WP 1: Learning Environment for SMEs

CASE STUDIES DEVELOPMENT

APPLICATION OF DIGITAL CONNECTED COLLAR FOR ANIMAL HEALTH MONITORING IN DAIRY COWS

Part 1: General information for the enterprise

1. Nam: José WAVREILLE
2. Location: Gembloux
3. Subject of activity
4. Legal status
5. Management
 - a. Gender: Male
 - b. Age: 56-65
 - c. Education: higher
6. Farm size
 - a. cultivated land
 - b. species and numbers of animals: 50 productive dairy cows, 100 cattle heads in total

Part 2: Smart technologies used on the farm

What smart technologies does the farm have? When and where are they applied? Is the accumulated data used and how?

Connected collar technique has been applied in dairy cows since the beginning of 2023 at the center with a purpose to ensure an optimal productivity, maximising animal welfare and efficient management.

The collar ALLFLEX with a tag indicated cow number was attached around the neck of an individual cow which connects to a radar and automatically track signs of cow then communicate cow's parameters on reproductive cycle, rumination patterns and health status to a computer. The collar with helps of a software will then analyse this information and show results on connected computer. The owner can access related information through a smart phone at any location.

The collar accumulates data and transfers to virtual cloud.

Part 3: Owners' satisfaction with the use of smart technologies

1. Utility assessment

Is the farm manager satisfied with the smart technologies used? What benefits and advantages have they brought him?

The owner responded that the technique is very useful which helps to determine cow's status problem from distance, better manage the farm and prepare precaution.

2. Observed difficulties and problems

What difficulties have they encountered or are encountering in using the new technologies? How did they learn to work with them? Do they have maintenance and consumables issues?

The technique works with a help of a software and connected which usually has problem. This should be solved by suppliers as soon as possible otherwise owner is often very stressful to manage.

3. Potential risks

Are they worried about issues such as post-warranty service, integration with next-generation technology, and being tied to a specific supplier or brand?

Technical workers might lose their competences on the sector due to non-practice and the manual techniques have no more applied

Part 4: Financing the investment in smart technologies

How is the purchase of the new technologies financially secured - own funds, bank loan, financing under a particular program? Do they think that the prices of these technologies are beyond the means of most farmers? Do they feel that the decision to purchase their devices was astute and effective?

The technique was only in Wallonia and was funded under a particular programme. The budget could be beyond of the means of most farmers in Wallonia. Even the technique usually has problem with software, the benefit is clear and confirmed, so the decision to purchase was astute and effective.

Part 5: Future intentions towards smart technologies

Do they intend to continue using new technologies? Do they plan to purchase new types, and if so, what kinds? What are their intentions with the devices they own - do they plan to replace them with more recent generations as they become available?

The technique is very newly applied and very advanced. The owner thinks that it is difficult to imagine further innovation.

Part 6: Some photos



ITFARM



Collars attached round cow's neck



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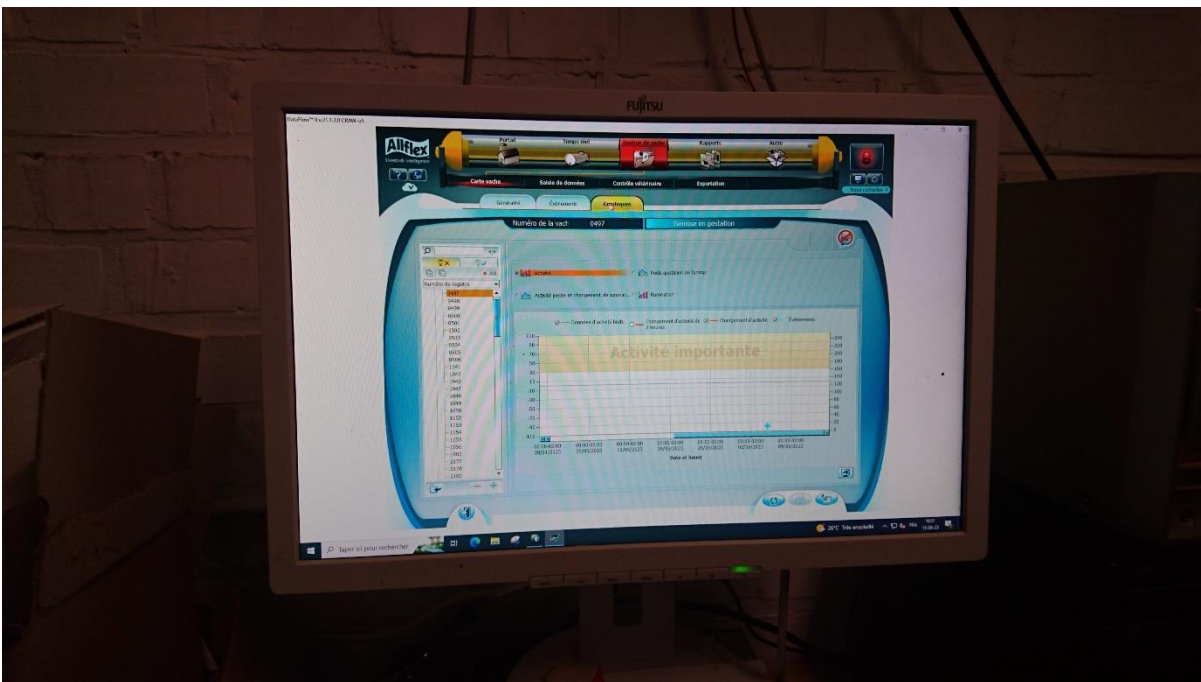


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Radar detects the cow's signs



Computer with software indicates related information on cow's health