



# Drive dairy cows with a drone



## 1 Description of the innovation

Stührenberg is a dairy farmer on the Harriersand peninsula in northern Germany. He and his wife own a 67 ha farm with 120 dairy cows.

Since they are the only two workers on the farm, they have to keep the work as simple as possible. The cows are milked with the Automatic Milking System (AMS), silage and slurry are transported automatically. Bernd Stührenberg likes to work with modern technology and so he decided to drive his herd with his drone from the pasture back into the barn. Since it worked very well, he is now using this technology for the second year in a row.

The drone can reach a maximum height of 120 m and weighs 1.2 kg so he does not need a license for the drone yet. But it is necessary that his name is written on the drone. The purchase cost more than 1000 euro.





### 2 Results obtained with the adoption of the innovation

The drone is controlled very carefully and is therefore no agnst factor for the cows. Cows are also common animals that can quickly learn and implement. But he approaches consciously, not approaching then maximum 3 meters. The distances to the herd are short because the grassland paddocks are around the barn.

For him the driving of cows with the drone is an enormous work facilitation. He also has a good overview of whether, for example, a cow cannot get up or whether something else is going on in his areas. This saves him time and allows him to do his work from home. However, the drone cannot be used in strong winds because it is too light for high wind speeds.

There are a few tourists in his region, so it is not a big problem for privacy reasons. But the farmer makes sure that he only flies his airplanes and that his drone does not disturb other people.



#### Advantages

- Saves time
- Good overview
- Relatively large range
- Easy to use



#### Disadvantages

- High purchase cost
- Be aware of data protection and not disturb people