

DENMARK

Farm's performance, restructuring & modernisation

Location
Bøgballe

Programming period
2014 – 2020

Priority
P2 – Competitiveness

Measure
M04 – Investments in
physical assets

Funding (EUR)
Total budget 129 732
EAFRD 38 920
National/Regional 12 973
Private 77 839

Project duration
2015 – 2019

Project promoter
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Rural Development Programme investment support enabled a conventional broiler farmer to construct a new energy efficient broiler house.

Summary

The beneficiary is a conventional farmer managing 96 ha of land and breeding broilers for slaughtering. Before this investment he bred the animals in three broiler houses of 3 500 m² that could accommodate 369 Livestock Units (LU). The expansion of the boiler production capacity was necessary to reduce the production costs per unit.



The farmer received Rural Development Programme (RDP) investment to build a new broiler house covering 2 500 m², installing a new heat exchanger and a ventilation system, LED lights and a gender separated feeding system.

Results

Thanks to the investment, production can now take place in four broiler chambers totalling an area of 6 000 m², which shelters 519 LU.

With the new heat exchanger, the new broiler house is 80% more energy efficient compared with the original facilities.

The 33 LED light units installed improved the energy efficiency by 33% compared with conventional solutions.

The low energy consumption ventilation system is very efficient, reducing energy consumption by 75% compared with conventional solutions.

Lessons & Recommendations

- The investment support measure (M04) proved to be ideal for the applicant to improve the competitiveness of the farm. The experiences from the project have been very good, both from an economic and an animal welfare point of view. As a result, the beneficiary has applied for and has been granted investment support to install the new ventilation systems, including heat exchangers, in the three old broiler houses.

Context

The beneficiary is a conventional farmer managing 96 ha of land. His main activity is to breed broilers for slaughtering. Before this investment he bred the animals in three broiler houses of 3 500 m² that could accommodate 369 LU. The expansion of the boiler production capacity was necessary to reduce the production costs per unit.

Objectives

The objective of this investment project was to secure the farm's competitiveness in an increasingly challenging market, in which there is an increasing demand for resource effectiveness and animal welfare.

Activities

The investment carried out involved carrying out the following activities:

- Earthworks, setting up the infrastructure for electricity and water.
- Building the new broiler house covering 2 500 m².
- Installing the new heat exchanger and ventilation system.
- Installing LED lights and a gender separated feeding system.

The original project application was submitted in 2015, however, it was later handed over to another farmer. This transfer of the application and the grant led to a relatively long project implementation period of almost 4 years. The actual implementation period was not that long.

Main results

After the investment, production takes place in broiler Following the investment, the production now takes place in broiler chambers totalling an area of 6 000 m², which shelters 519 LU (150 more than before the investment).

The new additional unit has significantly reduced odour nuisances, emissions of greenhouse gases and ammonia from the poultry production. This is due to:

- The installation of a heat exchanger (air to air) which reduced the energy consumption used for heating. The energy efficiency is 80% higher compared with the existing facilities. The annual heating costs in the new facility were EUR 11 410 lower, compared to the old units. The depreciation time for this component of the

investment is 15 years.

- The 33 LED light units installed improved the energy efficiency by 33% compared with conventional solutions. The depreciation time is 9 years.
- The low energy consumption of the ventilation system makes it very efficient, reducing energy consumption by 75% compared with conventional solutions. The ventilation system is integrated with the air to air heat exchanger. The depreciation time is 15 years.
- Animal welfare has improved due to the installation of the ventilation system. The indoor environment is now drier than in a conventional broiler house. This means that the bedding is drier, ensuring better and drier pads for the chickens.
- The gender divided feeding system ensures that male and female chickens are separated and fed with the most appropriate feeding composition to ensure optimal growth. This leads to a 10% reduction of ammonia emissions compared with conventional non-gender divided feeding systems. The depreciation time for this component is 15 years.

Key lessons

The investment support measure (M04) proved to be ideal for the applicant to improve the competitiveness of his farm. The experiences from the project were very good, both from an economic and an animal welfare point of view. As a result, the beneficiary applied for and has been granted investment support to install new ventilation systems including heat exchangers in the three old broiler houses. These three projects will make the farm much more competitive and energy efficient. Expanding the farm and improving its performance would not have been possible without the support received from the RDP.

