

# Modernisation of the Karwowski dairy farm

Modernising a farm to promote innovative technologies and sustainable farm management in Poland.

### **EAFRD-funded projects**

Location: Piatnica municipality, Poland

Programming period: 2014-2020
Priority: P2 - Competitiveness

Focus Area: Farm performance, restructuring &

modernisation

Measures: M04 - Investments in physical assets

Funding: Total budget 1750 000 (PLN)

RDP support 800 000 (PLN)
Private/own 950 000 (PLN)

Timeframe: 04/2018 - 08/2020

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Karwowski

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# Summary

The Karwowski farm is located in the municipality of Piatnica in the Podlaskie Voivodeship in Poland. It is a dairy farm, breeding and raising 195 dairy cows. The feed base is grown on 233 hectares of agricultural land, including 75 hectares that are owned by the farmers themselves. Over the years, the Karwowski family has invested in new technologies to increase their farm's productivity and efficiency while also working towards the introduction of lowemission and carbon-neutral practices. However, more investment was needed to modernise the farm further to achieve the highest possible yields. To this effect, European Agricultural Fund for Rural Development (EAFRD) funds supported the improvement of storage facilities and the purchase of suitable digital equipment.

# **Project results**

The farm's production efficiency has increased. Specific results include collecting warm water recovered from milk cooling to clean the barn infrastructure. The number of trips to refill the water tank in the sprayer has reduced when performing chemical treatments.



The farm's efforts to consistently improve its performance through the introduction of new machines and production technologies have won it a number of awards and distinctions.

# **Key lessons and recommendations**

The owners' extensive experience and interest in deepening their knowledge regarding modern crop cultivation and dairy cattle breeding, combined with the achieved production results, has made the dairy farm one of the best farms in the Podlaskie Voivodeship. The introduction of new technologies to facilitate work and increase the productivity and efficiency of the farm also aligned well with the implementation of low-emission and carbon-neutral practices.

#### Context

The Karwowski farm is located in the municipality of Piatnica in the Podlaskie Voivodeship in Poland. It is a dairy farm, breeding and raising dairy cattle. It has 195 dairy cows with an average yield of 10 559 litres of milk per cow. The cows are kept in a free-stall barn without bedding and their feed is delivered on a feeding corridor. A total of 233 hectares of agricultural land provides the feed base, including 75 hectares owned by the farmers. Manure is stored in tanks under the barns and in a closed standalone tank. The farm applies organic fertilisers. Originally, milking took place in a 2x4 milking parlour, but due to the continuous expansion of the herd, it became necessary to install a 36-stall rotary milking parlour.





Herd replacement is based on the farm's own heifers, which are raised from calves born on the farm. Calves and heifers are raised on bedding with access to a paddock, which contributes to their health and productivity.

Over the years, the farmers have continuously invested in new technologies to increase productivity and efficiency, while also working towards the introduction of low-emission and carbonneutral practices. However, more investment was needed to modernise the farm further to achieve the highest possible yields. To this end, they applied for EAFRD funds from the 2014-2020 Rural Development Programme.

# **Objectives**

The main objective of the project was to modernise the farm. The aim was to build a new feed storage facility and slurry storage tank and acquire new digital equipment, such as a feed-pushing robot for the feeding table, a forage trailer and a computer-controlled sprayer to improve the overall productivity and efficiency of the farm.

## **Activities**

Over a two-year timeframe, the project activities involved the procurement and building of the feed storage facility in 2018. This was followed by the purchase of the feed-pushing robot for the feeding table, the forage trailer, and the computer-controlled sprayer with a capacity of 4 000 litres and a working width of 21 meters in 2019. A 1 270m³ slurry storage tank was also bought and constructed in 2020.

## **Main results**

- Due to the EAFRD-supported investments, the farm's production efficiency increased. Specific results included collecting warm water recovered from milk cooling to clean the barn infrastructure. The number of trips to refill the water tank in the sprayer has also been reduced when performing chemical treatments.
- The farm's efforts to consistently improve its performance through the introduction of new machines and production technologies have won it a number of awards and distinctions.

# **Key lessons and recommendations**

The owners' extensive experience and interest in deepening their knowledge regarding modern crop cultivation and dairy cattle breeding, combined with the achieved production results, has made the dairy farm one of the best farms in the Podlaskie Voivodeship. The introduction of new technologies to facilitate work and increase the productivity and efficiency of the farm also aligned well with the implementation of low-emission and carbon-neutral practices.



