



Pivot irrigation system on grasslands



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1 Description of the innovation



Pivot irrigation system was introduced on grasslands belonging to the farm. A drilled well (200 meters deep) was dug as a source of water for irrigation. Three machines are used to irrigate three separate grasslands that have different location, size and shape. The parameters of every rampe pivot irrigation are adopted to specific agricultural plots.



Added value:

Increasing grassland productivity
(5-6 cuts in the growing season)



The farmer's strategy

The farmer processes milk (20% of yearly production) into dairy products at the farm level and sells them under his own brand. He is the owner of one the Internet domain and he is going to promote his products through a farm website in the future. The idea of the farmer is to increase the amount of grass in feed up to 80% as well as to increase the scale of production of processed products on the farm. As Poland is the second country, after Albania that has the smallest water resources in Europe, irrigation systems are used almost exclusively on vegetable farms and nursery. The use of rampe pivot irrigation on grasslands is new in the country.

2 Farm description

ENVIRONMENT

Soil types:

Sandy, Sandy-loam

Climate:

Warm-summer humid continental

Altitude :

70 m a.s.l.

Slope :

0%

GRASSLAND MANAGEMENT

All of the grasslands are exclusively mowed.

The sward is conserved by making haylage.

STRUCTURE

Annual Work Unit: 6

Agricultural Area: 63 ha UAA

Main forage area: 63 ha

Temporary grassland area: 33 ha

Other green forage area: 30 ha

Average stocking rates:

- agriculture area 2.4 LU/ha
- main forage area 2.4 LU/ha
- grassland area 4.5 LU/ha

ANIMAL PERFORMANCE

Dairy cows: 100

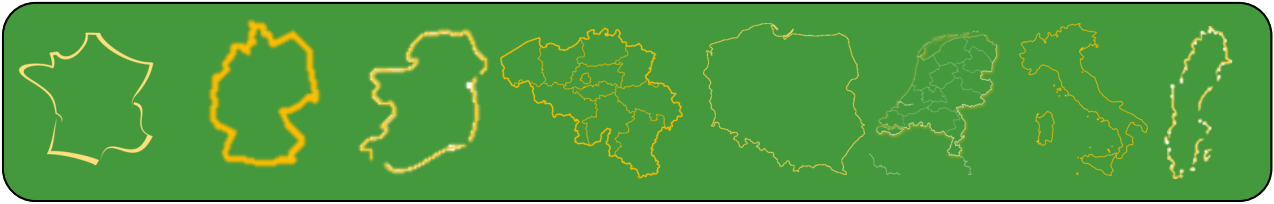
Total livestock units: 150 LU

Milk production per head: 8200 (l/year)

WHY IT IS WORKING

The irrigation system is working on the farm, because it allows to get expected grass yield regardless of seasonal droughts. The farmer increased the number of heads in a herd. Despite of having the same area of land the farmer had adequate amount of roughage for all cows kept on the farm. Furthermore, buying the irrigation machines was more economic than buying more agricultural land in the surrounding area.

Country shapes



Domains of innovation



Machinery, tools



Forage mixture



Forage conservation technique



Grazing management system



Legume management



Animal feeding management



Animal type (breed)



Product processing



Marketing



Farm system



Landscape

Main types of animal

