



A coherent system for reducing costs and increasing income



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1 Description of the innovation

Innovations are numerous and holistic. A no-till system has been adopted on arable land twenty years ago, cover crops are now sown between each main crop and FYM compost used for increasing soil organic matter content. A rotational grazing system (one-day per plot) has been recently implemented on permanent grassland after over-sowing of white clover. Inorganic N fertilization has been abandoned on grasslands. Temporary grasslands replaced green maize cropping and soybean feed purchase. They are based on grass/legume mixtures for making hay. Hay drying is finished in barn; its quality is very high. Grass silage is not used anymore. Grazed grass and hay are only complemented by feed produced on the farm: cereals and cereal/pea mixture.



Holstein Friesian cows are progressively bred with Normande bulls for creating a pure Normande herd by in-breeding for a higher green forage intake and better cheese aptitude. The free-stall cow barn is bedded by a suspended straw shredder. Cows are milked by a milking robot. Milk is processed into hard cheese and sold locally in the new farm shop.



Working conditions,
Economic results, Contacts
with consumers

Low product prices and high input prices induced a willingness to change. Forage self-sufficiency has been implemented for economic reasons but also for improving dairy cow health. Milk quality was improved for producing a quality different from industrial products. The strategy consists in coming back to the essence of the ancient system: use of local resources and insertion of farmers into local communities. The industrial system worked for a while but because of economic crises, the return to the ancient model combined with new techniques and knowledge (milking robot, machinery, no-till system,...) is considered as necessary.

ENVIRONMENT

Soil type: Loam

Climate: Temperate oceanic

Altitude: 50 m asl

Slope: 3%

GRASSLAND MANAGEMENT

Grazing: Yes

Grazing management type: Rotational grazing (one day per plot)

Barn hay drying

Hay produced on temporary grasslands in a 4-cut per year cutting regime

**STRUCTURE**

Annual Work Unit: 3

Agricultural Area: 100 ha UAA

Permanent grassland area: 18 ha

Temporary grassland area: 27 ha

Annual crop area: 55 ha

Breed: Holstein Friesian progressively crossed with 'Normande' breed.

Stocking rate: 2.2 LU per ha of grassland area

ANIMAL PERFORMANCE

Dairy production: 6,500 l/cow*year but milk quality is at least as important as yield for making cheese

WHY IT IS WORKING?

The system is working because it is coherent and innovations make sense. It is a natural approach based on the respect of nature (plant, animals, people).