



SESAM statistical data for Slovenia and farm description of CAFS partner in project

Slovenia is a country located in Europe at the crossroads of main European cultural and trade routes. It is bordered by Italy to the west, Austria to the north, Hungary to the northeast, Croatia to the southeast, and the Adriatic Sea to the southwest. Slovenia covers 20,271 square kilometers (7,827 sq mi) and has a population of 2.084 million. Slovenia is a parliamentary republic^[21] and member nation of the European Union, United Nations, and NATO. The capital and largest city is Ljubljana.

Slovenia has a mostly mountainous terrain with a mainly continental climate, with the exception of the Slovene Littoral, which has a sub-Mediterranean climate, and of the Julian Alps in the northwest, which have an Alpine climate. Additionally, the Dinaric Alps and the Pannonian Plain meet on the territory of Slovenia. The country, marked by a significant biological diversity, is one of the most water-rich in Europe, with a dense river network, a rich aquifer system, and significant karst underground watercourses. Over half of the territory is covered by forest the human settlement of Slovenia is dispersed and uneven.

In Slovenia, the utilized agricultural area (UAA) is mainly comprised of 60% permanent grassland and meadow and 25% arable land for cereals and fodder crops. Arable land for industrial crops only accounted for 2.8%. The rest of Slovenia's UAA is taken up by permanent crops (trees or shrubs). In Slovenia there were 69,902 agricultural holdings in 2016; on average they were using 6.9 hectares of agricultural area and were breeding 6.0 livestock units. An average agricultural holding had 2.8 persons in employment; the average annual work input of each of them was 0.4 AWU. 55,782 agricultural holdings in Slovenia were breeding animals in 2016.

In 2018 almost 629,000 tons of cow's milk was produced, i.e. almost 2.9% less than in 2017. Cows were milked on around 13,300 agricultural holdings. In 2018 fewer than 5,900 agricultural holdings were producing milk for either sale by contract or direct sale. On the remaining 7,400 agricultural holdings milk was mostly used as feed or for food (self-supply).

The quantity of collected cow's milk represented almost 91% of all cow's milk produced in Slovenia. The total quantity of collected cow's milk (almost 571,000 tons) decreased by more than 8,000 tons compared to 2017 (a 1.4% decrease). In 2018 cow's milk was collected from around 5,300 agricultural holdings



Selection of farms:

CAFS as partner in project SESAM selected four farms to participate in big pilot test. First criteria was willingness for farmers to participate in project and their interest in SESAM findings. We selected farms that are mainly in alpine or hilly areas that are still easily accessible. All the farmers are interested in SESAM project and will provide their knowledge and findings to develop sensor assisted alpine milk production.

1st farm:

Farm position: central Slovenia near Ljubljana (capital).

Land: 50ha from which 5,0ha are permanent grassland, 10ha of corn for silage, 5,0 ha cereals, 5,0 ha maize, 10ha alfalfa, 20ha of cultivated grassland (grass clover mixture)

Herd structure:

52 brown cattle cows, 29 heifers, 14 calves

In 2016 they installed new barn for 50 cows and 30 heifers.



2nd farm:

Farm position: central Slovenia, south of Ljubljana (capital)

Land: 36ha

Herd structure:

57 brown cattle cows, __ heifers, __ calves

In 2019 they installed new barn for 50 cows and 30 heifers.

3rd farm:

Farm position: west part of Slovenia near Jesenice.

Land: 65ha from which 31ha are permanent grassland, 18ha of corn for silage, 16ha of cultivated grassland

Herd structure:

57 holstein cows, 46 heifers, 10 calves

In 2001 they installed new barn for 110 cows.

**4th farm:**

Farm position: west part of Slovenia near Kranj.

Land: 26ha of grassland

Herd structure:

59 holstein cows, 17 heifers, 16 calves

In the last 15 years the farm has contributed 5 tested bulls (MILKO, JALOG, TILO, JEFER, FIK), participation in the European holstein show in Cremona in 2010, etc.