Field Report EuroDairy in Slovenia – July 2016

Dairy farming in Slovenia

Marija Klopčič from University of Ljubljana (Biotechnical Faculty – Dept. of Animal Science) gave a short introduction of farming in general and dairy farming is particular in Slovenia. Slovenia has 2.1 million inhabitants. Slovenian agriculture is characterised by small family farms. Average farm size is 7.5 ha. This is influenced by historical reasons. Till 1991, private family farms were allowed to have a maximum of 10 ha's of agricultural land. Largely due to mountainous and hilly terrain, almost 75% of the utilised agricultural area is characterised as less favourable area. Forestry is also of considerable importance in Slovenia; 63% of Slovenia is covered with forest, 37% is agricultural land used, with more than half grassland. The composition of the agricultural area is dominated by meadows and pastures, which represent 58% of all agricultural land. Maintenance of grassland and development of cattle production for both milk and meat is of strategic importance. Keeping of grassland is a suitable use of land, in particular in less favoured areas where alternative usage is quite limited. Indeed, the maintenance of livestock production and grasslands are important factors in preservation of the cultural landscape and of settlement in the rural areas, preventing the risk of abandonment and overgrowing. Milk production is the predominating agricultural activity in the country, accounting for 16.2% of the Gross Agricultural Output (GAO), which places Slovenia close to the EU average. The fluctuations in contribution of the sector to the GAO can be partly explained by the changes in milk prices and by fluctuations in GAO of crop products. Suckler cow farming on the grasslands with beef as production goal is also a major activity in Slovenia. This big group of farms, often combined with off farm employment, is characterised by very small herds.

Since the mid-1990s, the dairy sector in Slovenia went through rapid structural changes including a continuous decrease in the number of producers and an increasing herd size per holding. In 1985, 161,875 dairy cows were reared on 58,194 agricultural holdings. Total raw

milk production amounted to 379,800 tons of which 80% was delivered to the milk collection stations and the rest was used or sold on farm. In 2015, 99,664 dairy cows were reared on 6,073 dairy farms with a total milk production of about 595,000 tons and with on average 16 dairy cows per farm. More than 60% of dairy cows are housed on farms within less favoured areas: in mountain, hilly, karst, Natura 2000 and water protected areas. Apparently, there is higher competition to obtain land between the agricultural sectors and the human settlements and industry in the valleys. Indeed, very high prices for land are paid in the lowlands (from €30,000 – €60,000/ha) and lower prices in less favoured areas (€20,000 – €30,000/ha).

Slovenia has a well-developed operating system of milk collection. It is largely organised through cooperatives but in some cases dairies themselves collect milk. In 2015, there were 92 registered and approved purchasers of milk of which 82 were cooperatives. There are seven domestic dairies that are member of the Chamber of Commerce and Industry of Slovenia and the Slovene Dairy Association. The self-sufficiency rate of milk production is over 120%, which makes Slovenia a net exporter of milk. Before accession to the EU, milk was purchased only by domestic dairies, but afterwards some cooperatives reoriented their sales of raw milk to foreign processors. In 2015, 539,000 tonnes of milk were delivered for processing, of which around 40% was sold and transported to Italian companies. Slovenia exports approximately 20% of its dairy products, so the export market is important for our dairies. The main export markets are, besides Italy, the countries of the former Yugoslavia, in particular Bosnia and Herzegovina, Croatia, and Kosovo.

The milk price is at present 21 ct/kg, it is one of the lowest in Europe. Diversification and especially agro tourism is an important issue in Slovenia. The dairy sector in Slovenia could profit from better networking with other European countries which are in the front of dairy production.

During EuroDairy Meeting in Bled, Slovenia, we visited three family dairy farms in Gorenjska region (northwest part of Slovenia).

Farm visit: family farm 'Nejc Dolenc'

A family farm with 72 ha farm land (22 ha own land + 50 ha rented land - from this 50 ha meadows, 10 ha pasture for grazing and 12 ha maize) and 85 Holstein Friesian cows with a milk production of more than 10.000 kg/cow/year and 65 young stock. 70% of the milk is sold via Agricultural cooperative to Italy, 5% of the raw milk is sold to schools etc., 5% is sold via milkomat and 20% of the milk is processed to dairy products on the farm and sold via farm shop and on the local market.

The farm is one of the best in the best milk producing region of Slovenia. Land price in this region is high, between 50,000 and 70,000 euro/ha, compared to a land rent price of 100 to 500 euro/ha/year. Farm was taken over by grandson to profit from subsidies (€ 45,000) for young starting farmers. Two families are making their living from this farm. The production costs on this farm vary between 25 and 35 ct/l milk. The average life production of dairy cows on this farm is very high: close to 70,000 kg/cow and 4-5 lactations are common. The owners

are proud on their high number of cows producing more than 100,000 kg milk or 10,000 kg protein and fat in a life time. Calving interval is quite long (450 days); milk production level is tempered a bit (to max. 10,000 kg) to reduce veterinary costs. The cows go out for grazing, number of grazing hours depend on temperature. Next to grazing the cows are fed with a mixed ration of grass silage, maize silage and concentrates. Next to that they are fed with hay as much as possible. The hay is barn dried with air heated by electricity from solar panels. Future innovations for this farm:

- Genetic selection to improve breeding value and produce functional cows with 'correct conformation traits'
- Continue with grazing and milking on ration with hay
- Improving animal welfare and reducing veterinary costs
- May be starting with agro tourism (apartments and restaurant)
- More milk processing on own farm, to profit from added values.



Farm visit: modern farm 'Janez Sajovic'

The new farm buildings are in use since last year. The old farm was in the village, the barn was too small for all the cows and young stock. Getting all the permissions and making the plans costed 15 years and about € 300,000. The regulations for building on this spot were extremely hard to handle and resulted in a very expensive barn, made of steel, with wooden and aluminium walls. The building with surrounding infrastructure costed 3 million euros and was partly compensated by 1.3 million investment subsidies.

The profitability of the farm is doubtful as planning was based at an average milk price of 35 ct/l, while present milk price is at the moment 21 ct/l. The only solution is to reduce production costs at maximum and to increase milk production per cow. The size of the farm is 42 ha (25 ha own land + 17 ha rented land - from this 11 ha meadows, 6 ha permanent grassland, 6 ha lucerne, 15 ha maize and 4 ha barley), with 101 Holstein Friesian cows and 94 young stock. Average milk production was last years about 7,500 kg/cow/year. This year in the new barn the production is going up to 9,000 kg/cow. Milk is sold via a agriculture cooperative to Italy. The cows are milked in a rotary milking parlour with 20 stands. The choice for a rotary was made instead of robot milking because of the high maintenance costs of robots, mental working load (with robot 24 hours stand by is needed when there are troubles; with the rotary milking is finished after 1 hour and 20 minutes. The main reason was however that was expected that the cows would have much problems to get used to the robot and too many cows should be been replaced.

The old barn was too crowed. In this new barn animal welfare and management improved tremendous.

Future innovations for this farm:

- Increase milk production per cow
- Separate feeding of the concentrates
- Separation of manure and using of dry manure in liege box to improve animal welfare

Farm visit: multifunctional farm 'Jože Soklič'

This family farms already for the 9th generation on this place. The farm has 45 ha agricultural land (13 ha Alpine land, 3 ha maize for silage, 2 ha barley, 22 ha meadows and 5 ha pasture) and 50 ha forest and a herd of 50 Simmentaler cattle; 16 dairy cows are milked on farm, 6 suckler cows and heifers graze on the Alps; the remainder are young stock. When they are not needed for replacement of the dairy cows, they stay on the farm, including the males, for beef production. Next to this there are some pigs and laying hens on this farm for provision of meat and eggs. The farm buildings are traditional and milk production is about 6,000 kg/cow/year. The cows have a life time of 5 – 6 lactations. 80% of the milk is sold via a cooperative to Italy and 20% of the milk is used for tourists on farm.

Agro tourism is an important activity on this farm, with 35 rooms and 3 apartments for guests and a restaurant. They offer B&B as well as dinners. 70% of the guests are coming from outside Slovenia, representing most European countries. The combination of farming and tourism fits well on this farm. The farm itself is too small to generate sufficient income

from farming. On the Alpine pasture are also farm buildings in summer relatives of the family go there often for holidays.
Future innovations for this farm:

- Continuation of combination of traditional farming and agro tourism
- Farming activities are stable and to a main part focussed on production of food for the guests.