

# Dairy farming systems and development paths in Slovenia

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## Abstract

The aim of this article is to describe the status of the dairy sector and future development paths of the various cattle farming segments in Slovenia. Agriculture is carried out under very diverse circumstances. About 73% of agricultural land is defined as 'less favoured areas'. The agricultural area (472,918 ha) consists of 58% of permanent grassland and 36% of arable land, mostly used for production of feed. Cattle husbandry on family farms, of which there are 7,000 dairy farms, is the most important agricultural activity. Three farming systems can be observed: summer grazing with the dual-purpose breeds in the mountains; grazing with suckler cows in the hills; and intensive dairy farming in the valleys. These farming systems were characterised on the basis of 1,346 questionnaires collected in 2007. Farmers of the local Cika breed were interested in protecting nature elements and in organic farming. Dairy farmers expressed a more economical attitude towards the farm business. Of the developing dairy farmers, more than half looked for specialisation and less than half for diversification. Management of grassland was ranked as of relatively high importance. Regular contact with some Western European institutes resulted in lowland areas receiving high N applications around the turn of the century. Land fragmentation is a huge problem. In a recent 'life long learning' project with Poland, Lithuania and the Netherlands, dairy farmer strategies were analysed. Of the participating 365 Slovenian dairy farmers, 40% applied grazing and the average farm had 30 separate parcels of land. Farmers in the Eastern European countries (n=1,028) were more concerned about the market and abolition of milk quota than were the farmers in the Netherlands. Farmers in Slovenia were more consumer-oriented. A challenge for Slovenia is to utilize the existing consumer orientation of farmers for direct selling or agro-business purposes, as well as a strengthening of the dairy-chain structure to gain better access to the international milk market.

**Keywords:** dairy farms, production systems, grassland, Slovenia

## Dairy farming in Slovenia

Slovenian agriculture is characterised by small family farms. This has been influenced by historical reasons. Until 1991, private farmers were allowed to have only a maximum of 10 ha of agricultural land. Largely due to the mountainous and hilly terrain, almost 75% of the utilised agricultural area is characterised as having 'less favourable area' status. Forestry is also of considerable importance in Slovenia. These days, family farms account for 93% of the land and agricultural enterprises. The composition of the agricultural area is dominated by meadows and pastures, which represent 58% of all land, while arable land and horticulture, vineyards, and extensive orchards utilize respectively 36.0, 3.2 and 1.5% of the land (SURS, 2012). Maintenance of grassland and development of cattle production for both milk and meat is of strategic importance. Grassland is a suitable use of the land, in particular in the 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 rural areas, reducing the likelihood of abandonment and the land becoming overgrown. Milk production is the predominant agricultural activity in the country, accounting for 16.2% of the Gross Agricultural Output (GAO) in 2013 (Table 1), which places Slovenia close to the EU average (KIS, 2011). 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. In some years, crop production has been strongly affected by

Table 1. Share of milk production in Gross Agricultural Output (GAO): 2007-2013.

	2007	2008	2009	2010	2011	2012	2013
Total GAO (€ mill.)	1,509	1,551	1,410	1,439	1,610	1,585	1,588
Share of animal production in GAO (%)	45.2	47.3	46.6	44.5	45.1	46.3	48.0
Share of milk production in GAO (%)	14.6	16.1	13.9	13.6	14.5	14.6	16.2
Share of beef/veal production in GAO (%)	12.1	11.6	13.1	12.4	12.8	14.0	12.8

Source: EUROSTAT, Economic Accounts for Agriculture; KIS, 2011.

bad weather conditions (droughts, storms, floods). Suckler cow farming on the grasslands with beef as a production goal is also a major activity in Slovenia. This large group of farms, whose work is often combined with off-farm employment, is characterised by very small herds.

### *Structure of dairy farming*

Since the mid-1990s, the milk sector in Slovenia has gone through a period of rapid structural changes including a continuous decrease in the number of producers and an increasing herd size per holding (Figure 1). In 1985, there were 161,875 dairy cows reared on 58,194 agricultural holdings. Total raw milk production amounted to 379,800 Mg, of which 80% was delivered to the milk collection stations and the rest was used or sold on farm. In 2013, 99,664 dairy cows were reared on 6,573 dairy farms with a total milk production of about 595,000 Mg. However, the structural changes slowed down after 2004, when quotas were introduced, although the national quota of Slovenia has not been fully used (MAFF, 2014). According to the recent farm structure survey (SURS, 2012), the average number of dairy cows per holding is 15.2 and the average farm size is 11 ha. In Slovenia, more than 43% of the dairy holdings have fewer than 10 cows, 34% of dairy farms have between 10 and 20 cows and 23% of farms have more than 20 dairy cows; this last group accounts for more than half of the national herd. The abolition of milk quota will likely speed up the restructuring process, although the milk price may be a better indicator for this.

More than 60% of dairy cows are housed on farms situated within less favoured areas: in mountain, hilly, karst, Natura 2000 and water-protected areas (Figure 2). The structural development of the sector did not

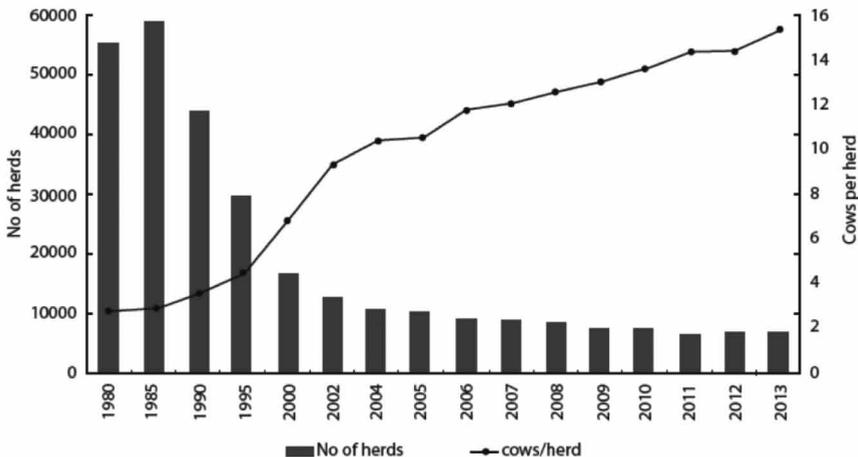


Figure 1. Changes in numbers of milk suppliers (number of dairy herds) and average number of dairy cows per herd.

differ very much in relation to the different farming conditions, and this may be regarded as unexpected. For instance, the percentage of cows and farms in the mountainous and hilly areas stayed about the same during the last 10 years (Figure 2). Apparently, there is greater competition to obtain land between the agricultural sectors and other sectors – human settlements and industry in the valleys. Indeed, very high prices for land are paid in the lowlands (from €30,000-60,000 ha<sup>-1</sup>) and lower prices in less favoured areas (€20,000-30,000 ha<sup>-1</sup>).

### Milk market

Slovenia has a well-developed operating system for milk collection. It is largely organised through cooperatives but in some cases the dairies themselves collect the milk. In 2014, there were 94 registered and approved purchasers of milk of which 82 were cooperatives. There are seven domestic dairies that are members of the Chamber of Commerce and Industry of Slovenia and the Slovene Dairy Association. The self-sufficiency rate of milk production is over 115%, 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 2014, there were 517,000 Mg of milk delivered for processing, of which around 37% was sold and transported to Italian companies (SURS, 2015). 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 (Bogovič, 2012). Slovenia has a series of EU-certified milk and meat PDO products, like Nanos and Tolminc cheese and Kranjska sausage (EC, 2015). In general, Slovenian milk prices follow the trend in the EU, but at a lower level, and are significantly lower than in Italy (Figure 3).

### Performance at farm level

In recent years, dairy husbandry has seen a change in the breed structure, with dairy cow breeds increasing and the combined-purpose breeds (for milk and meat) decreasing (Figure 4).

This, together with technological advances in breeding and nutrition, has led to higher average milk yields and improved quality of milk. During the last twenty years, milk yield per cow has doubled. However, when comparing the milk yields with the EU-average, a relatively low technical efficiency of Slovenian dairy farming is indicated. The Slovenian average of 5,514 kg per cow in 2012 was at a level of 82% of the EU-27 average of 6,692 kg. Part of the explanation of the moderate average yields in Slovenia will be the low share of Holstein-Friesian cows in the national dairy herd (35% in 2013) and the large share of dairy

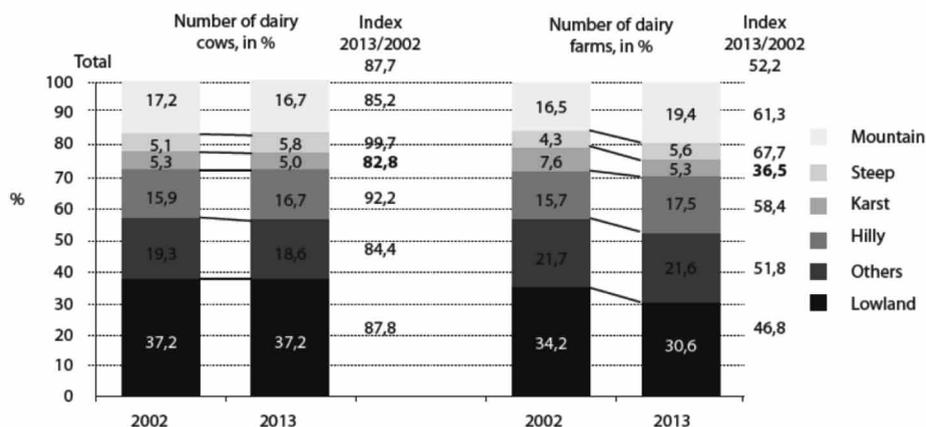


Figure 2. Number of dairy cows and farms in six different farming conditions in years 2013 and 2002 (in percentages of total).

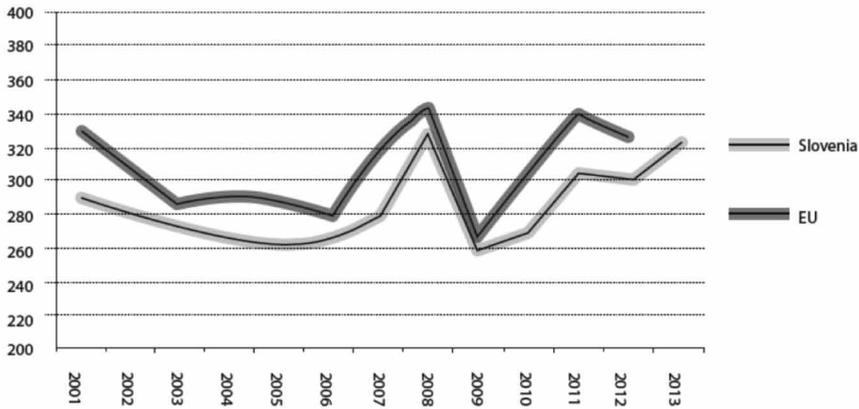


Figure 3. Trends in milk prices on farm gate (in € Mg<sup>-1</sup>): comparison Slovenia vs EU (Volk, 2014).

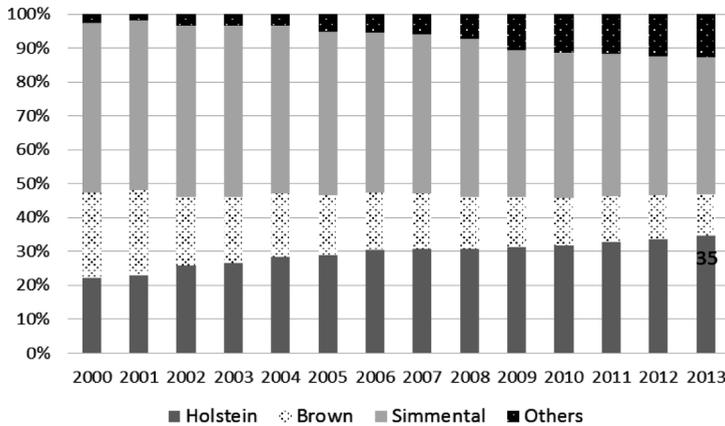


Figure 4. Breed structure of dairy cows over time (Volk, 2014).

farms functioning in the less favoured areas, where forage production is limited mostly to grasslands. About 40% of the Slovenian dairy herd is Simmental type and another 12% is Brown Swiss (Figure 4). These breeds of cows are more suitable for combined milk and beef production, which is the farming system that dominates on the smaller farms in the less-favoured hilly areas. The milk yield on farms with official milk recording, which covers about 80% of all dairy cows in Slovenia, increased to 6,328 kg in 2014. This ranges from 5,490 kg milk for Simmental cows to 7,414 kg milk for Holstein-Friesian cows. The quality of raw milk in recent years is for 92% classified in the extra-quality class, and additionally, 6% in the first-quality grade.

#### *Application of manure and mineral fertilizer*

Cattle and pig production are strongly developing in particular areas, like in the North East and in the North West, and less in the traditional livestock areas of the country. The ratio between number of livestock and manure production and available agricultural land in these regions is no longer in balance.

Use of organic fertilizers, especially livestock manure, sewage sludge and compost, is extensively regulated. About 80% of all agricultural holdings use manure or slurry to fertilize their agricultural areas including permanent grasslands. The other farmers have no animals and no manure. About 20% of arable

land, which varies from year to year, has crop cover during the winter. These crops are subsequently incorporated as green manure (MAFF, 2012). The maximum yearly-allowed application rate per hectare is based on the major nutrients – not more than 170 kg N ha<sup>-1</sup> and 120 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> and 300 kg K<sub>2</sub>O ha<sup>-1</sup>. These amounts correspond to 2.5 LU (livestock unit) of cattle (ruminants) or 2.0 LU of pigs or poultry per ha. Nitrogen is commonly the limiting nutrient in manure, except in the case of poultry manure where the high phosphate content often limits the amount that can be applied. If a farm produces manure surpluses relative to its agricultural land available for manure application, the surpluses must be transported elsewhere upon receipt (to neighbouring farmers, through the market or, as a last solution, to the approved waste disposal service). The application of slurry is prohibited during wintertime, between 15 November and 15 February, if the arable soils are bare (i.e. without vegetative cover) during this period. It is prohibited to use organic fertilizers on soils that are flooded, deeply covered by snow (>10 cm), frozen, on slopes where surface runoff is possible, in swamps, marshes or in natural forests. Mineral fertilizers are typically used as additional fertilizer. When added to the organic fertilizer, this results in an average use of 140-150 kg N, 65-75 kg P<sub>2</sub>O<sub>5</sub>, and 130-150 kg K<sub>2</sub>O per ha and year (Mihelič *et al.*, 2006).

The consumption of mineral fertilisers/nutrients (N, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O) in the period 1992 to 2010 was reduced by 24% from 135 to 103 kg ha<sup>-1</sup> utilised agricultural area (Figure 5). In this period, on average, 63 kg N, 30 kg P<sub>2</sub>O<sub>5</sub>, and 37 kg K<sub>2</sub>O per hectare were used (ARSO, 2011). In 2012, 64% of the total agricultural area was fertilised. The estimated average consumption of nutrients by the total fertilised land area was 146 kg ha<sup>-1</sup> – 78 kg N, 32 kg P<sub>2</sub>O<sub>5</sub> and 36 kg K<sub>2</sub>O (STAT, 2013). The plant nutrients from fertilisers were mostly used for cereals (39%), permanent grassland (32%) and green fodder (16%).

The Agricultural Advisory Service plays an important role in performing soil analysis and in the preparation of rotation plans and soil fertilisation plans. An innovation in this area has been the implementation of the agri-environmental programme. Farmers can ask for financial support from this programme only on the basis of measured nutrients in the soil and a well prepared fertiliser plan (MAFF, 2012).

## Studies of development paths of cattle farmers in Slovenia

The development of the cattle sectors, as seen from the viewpoints of the farmers, was studied in the periods 2005-2007 and 2011-2012 as part of European projects. In the first study the entire focus was on Slovenia, and in addition to the dairy sector, farmers with the autochthonous Cika breed and a group of suckler cow farmers were also included. The second more recent study also concerned dairy farmers in Poland, Lithuania, Slovenia and the Netherlands.

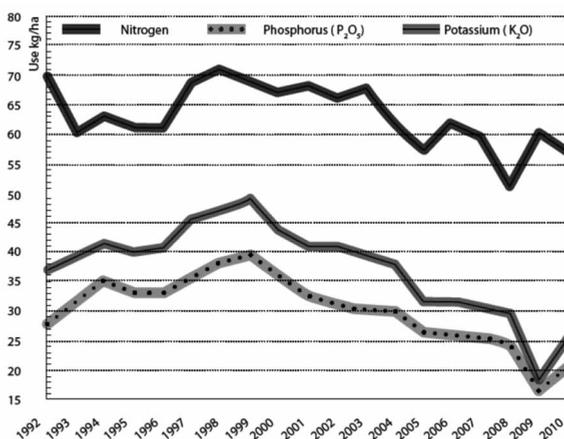


Figure 5. Consumption of plant nutrients (N, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O) in kg per hectare of utilised agricultural area (UAA) in period 1992 to 2010 in Slovenia (ARSO, 2012).

## Study of future plans and info exchange in years 2005-2007

The study was part of the EU-Twinning project 'Farming with quota' – SI SI04-AG-06. Two research questions of this particular activity of the project are addressed here (Klopčič *et al.*, 2010):

- How do farmers think about future plans to react to the EU policies?
- What interest do farmers have in information exchange and different tasks of farming?

### *Material and methods*

A questionnaire was developed for Cika farmers, suckler-cow farmers and dairy farmers. The anonymously distributed questionnaire was identical for Cika and suckler-cow farmers, while the questionnaire for dairy farmers had some questions that were differently formulated. The Cika is an endangered breed and is part of the National programme for conservation of the Slovenian indigenous breeds. It is a dual-purpose breed, used for milk production or as a suckler cow. The milk is often processed into local dairy products. We find these cattle often in mountainous regions.

The number of returned questionnaires from the dairy, suckler-cow and Cika farmers were, respectively, 1,114, 121 and 111. The response rates were 22, 24 and 41%, respectively. About 40% of Cika farmers participated in the questionnaire, while only a small proportion of suckler-cow farmers took part in the questionnaire. More than 10% of the 10,000 Slovenian dairy farmers in that period participated in the study.

### *Results and discussion*

Dairy farms participating in the survey had a larger land area than the other groups of farmers. The Cika farms appeared to be much smaller than suckler-cow and dairy farms (Table 2). The majority of Cika and suckler-cow farms were located in hilly and mountain regions. Less than half of the Cika farms' herds had purebred cattle. Cika and suckler-cow farmers in this study were more often employed outside agriculture (61-64%) than dairy farmers (32%), while the average age did not differ between the three groups. Suckler-cow farmers seemed to have a somewhat higher education than the other two groups of farmers. The proportion of farmers said to have a successor varied from 55% of the Cika farmers to 69% of the dairy farmers.

The thoughts about future planning of the farm business are rather similar between Cika and suckler-cow farmers (Table 3). On average, they more often choose consolidation rather than expansion, while dairy farmers act the opposite way. The relatively small number of Cika and suckler-cow farms studied that indicated they do wish to develop further, choose mostly to develop by diversification; in other words a combination of cattle and another activity. Of these second activities, agro-tourism is most popular choice (26-32%), while there is a significant interest in organic farming (43-44%), which is completely opposite to the preference of the questioned dairy farmers: only 6% of them show interest in the organic farming system.

The three farmer groups were asked to express their interest in different activities that are part of the farming job. They could choose between 'high', 'average' and 'low' interest. Dairy and Cika farmers scored high on interest in animal health and fertility and feeding, but also higher on a sound environment

Table 2. Characteristics of the farms participating in the survey.

Variable (answer)	Cika farmers	Suckler-cow farmers	Dairy farmers
Number of farms	111	121	1,114
Average no. of cows farm <sup>-1</sup>	3.8	11.1	19.1
Agricultural land in use (ha)	8.8	12.1	17.1

Table 3. Future plans of Cika, suckler cow and dairy farmers (%) (Klopčič *et al.*, 2010, 2014).

Future plans	Dairy farmer, % n=1,114	Suckler cow, % n=121	Cika, % n=111
No future plans/stop farming or hobby farm	10	14	20
Keep the farm as it is now	41	55	46
Develop the farm further	49	31	34
<b>Further development</b>	<b>n=541</b>	<b>n=37</b>	<b>n=38</b>
by increasing number of cows	64 <sup>1</sup>	38 <sup>1</sup>	76 <sup>1</sup>
by starting/increasing with a new activity	54 <sup>1</sup>	70 <sup>1</sup>	82 <sup>1</sup>
horses	6	23	16
agro-tourism	5	26	32
local products	2	14	15
changing to organic farming	6	43	44

<sup>1</sup> A combination of an increase of number of cows and starting new branch was possible.

(Table 4). Nature protection, especially, was much more highly rated by the local-breed farmers, thereby expressing a close tie to the environment they live in. Dairy and suckler-cow farmers expressed a more economically oriented attitude towards the farm business and its environment in this study. For these two groups, management of meadows and pastures, and farming in an economical way (to be entrepreneurial) were key factors for success. For dairy farmers, the organisation of work was also considered to be important for running the business in an efficient way.

In addition, the dairy farmers were asked from which organisations they received information about farm management practices. In those years, 69% of the farmers said they received information from the extension service, 31% from the veterinarian, 28% from the farmers' cooperative, 15% from the feed company, 6% from the university and 2% from private consultants. The national extension service clearly fulfils a major role in providing the farmers with know-how. The task of the extension service is to combine information about government programmes with transfer of more technical farm or herd data. The regulatory tasks ask an increasing part of the labour capacity.

Table 4. Farmers with high interest (in %) in different tasks of farming (choice was high, average or low interest); it was possible to give multiple answers (Klopčič *et al.*, 2010, 2014).

Tasks	Cika farmers	Farmers with suckler cows	Dairy farmers
Care for animal health and fertility	72	48	77
Feeding of cattle	59	49	75
Management of meadows and pasture	47	60	63
Organisation of work/labour input	47	43	63
Farming in economical way/entrepreneurship	37	52	61
Animal breeding work	51	38	60
Working on sound environment (use of fertilisers, manure, etc.)	54	32	51
Protecting nature elements on farm	44	17	26

## Study of development paths in 2011-2012

This study was part of the CEE project of Wageningen UR in combination with a Life Long Learning-Leonardo da Vinci project, involving four countries: Slovenia, Poland and Lithuania. The research questions reported here are (Klopčič *et al.*, 2014):

1. Which farm development paths do dairy farmers in Slovenia choose?
2. Which economic and social factors influence this? Factors studied were perceived internal strengths and weaknesses, and external opportunities and threats.

### *Material and methods*

A questionnaire was used. The questionnaire had 49 main questions and, in total, 225 sub-questions which dealt with the following topics: farm and farmers' features; development direction; farming goals; availability of resources; opportunities and threats. The study was based on 1,038 questionnaires. 1,028 farmers completed the questions about strategic goals: 339 from Lithuania, 334 from Poland and 365 from Slovenia. The questionnaires were collected in 2011/2012, either (in Lithuania and Poland) by extension workers visiting the farmers or (in Slovenia) by instructing the farmers in group meetings during extension activities; these farmers returned the questionnaires by official post.

Farmers were asked to indicate in a list of 10 strategies what their first, second and third most important strategies were for the development of their farm in the next five years. Then a Principal Component Analysis (PCA) was conducted to see whether these answers could be summarized. Five components explained 67% of the variance in the answers (wait-and-see, move, diversify, cooperate or independent, and chain integration). Next a cluster analyses was performed to find segments of farmers with a similar combination of strategies. Also, farmers were asked to indicate the availability of resources and their opinion towards a series of opportunities and threats. They indicated the availability of resources on a 7-point Likert scale anchored by 1 'very difficult to obtain' to 7 'very easy to obtain'. The same procedure was followed for opportunities and threats, anchored by -3 'big threat' to +3 'a big opportunity'. Then a PCA was conducted to see whether these answers could be summarized.

### *Results and discussion*

The different sizes of the seven segments of surveyed Slovenian dairy farmers are presented in Table 5. Each segment illustrates a certain development direction (path) of the farm. Farmers in Slovenia seemed to be more cooperation-oriented and have a larger interest in diversification than their colleagues in Lithuania and Poland. The group of cooperating diversifiers is quite unique for Slovenia. The cooperation

Table 5. Seven farmer segments in Slovenia in % of total number of farms (n=365) and characteristics of those farms per segment.

Farmer segments	Farmers who 'wait and see'	New starters	Cooperating specialists	Independent specialists	Chain integration	Cooperating diversifiers	Independent diversifiers
% of total farmers	10	7	16	31	14	12	10
Quota in kg	125,326	231,273	225,562	227,328	245,168	165,962	171,273
Total agr. area in ha	22	34	31	34	39	30	29
Milk yield/cow in kg	6,118	7,218	7,172	6,853	6,695	6,643	6,301
% of farms applying pasturing in summer	41	37	37	39	22	44	47
% of farms with unfavourable land	86	65	68	68	79	73	75
Pieces of land	25	44	32	33	28	25	28

in Slovenia is based on a large number of agricultural cooperatives (more than 100) of which 82 also act as intermediaries for milk: the cooperative buys and markets the milk to a processor or elsewhere.

Some characteristics of the farmer segments are also presented in Table 5. Farmers who expressed preference to chain integration have, on average, the largest milk quota (245,000 kg of milk) and they cultivated on average 39 ha of agricultural land (owned plus rented land). Also, the group of farmers who want to reallocate their farm to another location (mostly they want to move outside the village), and the independent and cooperating specializers have above 200,000 kg of milk. Farmers who prefer to diversify also have a somewhat lower milk quota. The lowest quota (125,000 kg of milk) has the group of farmers who do not know in which direction they will develop – the so-called ‘wait-and-see’ group of farmers. This group also cultivates the lowest area of agricultural land (22 ha). Average production of milk per cow varies from 6,118 kg for the ‘wait-and-see’ segment to around 7,000 kg for the reallocators and specialisers. These differences in milk production also depend on the breed. The diversifying farmers, especially, more often have dual-purpose breeds like Brown and Simmental cows. The rate of applying pasturing in summer differs between 22% for the ‘chain-integration’ group of farmers, to 44-47% for the diversifying farmers. The low percentage of grazing during the summer results mainly from the fragmented land situation on the farms. The various segments of farmers work, on average, with between 25 and 44 individual parcels of land. Some farmers are farming on more than 100 parcels of land, which are sometimes located far from the farm. This implies that Slovenian farmers spend a lot of time travelling from one plot of land to another, and this also explains the high tractor density in the country.

The link between development paths and availability of resources for the four countries is described in Table 6. In 2013, results of a similar questionnaire to that used in the other countries, but with fewer questions, was received from 102 Dutch farmers. These farmers were randomly selected to receive a postal questionnaire. The results are included here. The following resources are considered: land (rent, buy), labour, money (subsidies, credit), milk quota and knowledge (extension, private). It appears that land and labour availability are the biggest problems in all four countries. The availability of resources ranks almost the same among all four countries. Farmers in Poland, however, are clearly more optimistic about the availability of resources than the farmers in Slovenia and Lithuania. It appeared that quota and information (know-how) scored lower by the group of farmers classed as ‘cooperating diversifiers’ in Slovenia. This group seems to need additional attention, perhaps because resources and know-how do not fit easily into the expectations of this farmers’ segment.

The perceptions of Slovenian, Lithuanian, Polish and Netherlands farmers regarding a series of opportunities and threats are presented in Table 7. Slovenian and Polish farmers consider the abolition of the milk quota and, to a lesser degree, the international milk market, as a threat; whereas, in contrast, Netherlands farmers see these changes as an opportunity. The orientation on the consumer is strongest in Slovenia, as well as appreciation for the certifying organisations. Farmers in the Netherlands show more fear regarding the regulations concerning environment and animal welfare.

Table 6. Available resources for each country according to respondents; factor scores are listed (1=very difficult available to 7=very easy available).

Resources	Slovenia	Lithuania	Poland	the Netherlands
Land	2.5	2.5	2.9	2.6
Labour	2.9	2.6	2.6	4.2
Money	3.8	4.6	5.2	3.7
Quota	3.9	4.7	5.2	5.5
Knowledge	4.6	5.6	5.7	5.6

Table 7. Opportunities and threats as experienced by Slovenian, Polish, Lithuanian and Dutch farmers expressed by scores between -3 and +3 (-3=big threat to +3 =big opportunity).

Opportunities/threats	Slovenia	Poland	Lithuania	the Netherlands
Abolition of milk quota	-1.4	-0.9	+0.1	+0.8
EU subsidies	+1.1	+1.4	+2.2	+0.2
International milk market	-0.3	-0.2	+0.3	+1.2
Certifying organisations	+0.6	+0.3	+0.4	+0.1
Regulations on manure and fertilizer	0	0	+0.4	-0.8
Regulations concerning animal welfare	+0.4	0	+0.6	-0.4
Consumer concerns	+0.5	+0.9	+0.7	-0.1
Consumer orientation	+1.9	+0.6	+1.0	+0.5

## Conclusions

The conclusions below refer to Slovenia:

- In Slovenia the spatial distribution of production is relatively stable: the process of structural change is rather similar in both the flat areas and the hilly/mountaneous areas; during the milk-quota era, restructuring of the sector is occurring relatively slowly.
- The milk price is low when compared to the old EU member states; this stimulates the sale and transport of raw milk to Italy.
- Dual-purpose breeds fulfill an important role in Slovenia, although the percentage of dairy breeds is increasing.
- The national extension service still fulfils a major role in know-how transfer.
- Dairy farmers and beef farmers are more economically oriented than Cika cow farmers; Dairy farmers also give a high priority to the management of grassland; Cika farmers are more nature-minded.
- For Slovenian dairy farmers, cooperation among the farmers, and in the chain and diversification, are also important development paths besides specialisation in dairying.
- Interest in organic farming is lower than expected.
- Land and labour availability and land fragmentation are the biggest problems for all segments of farmers.
- Utilization of the existing consumer-orientation of farmers for direct selling or agro-business purposes is a possible route for the future, as well as a strengthening of the dairy chain structure to gain a better access to the international milk market.

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