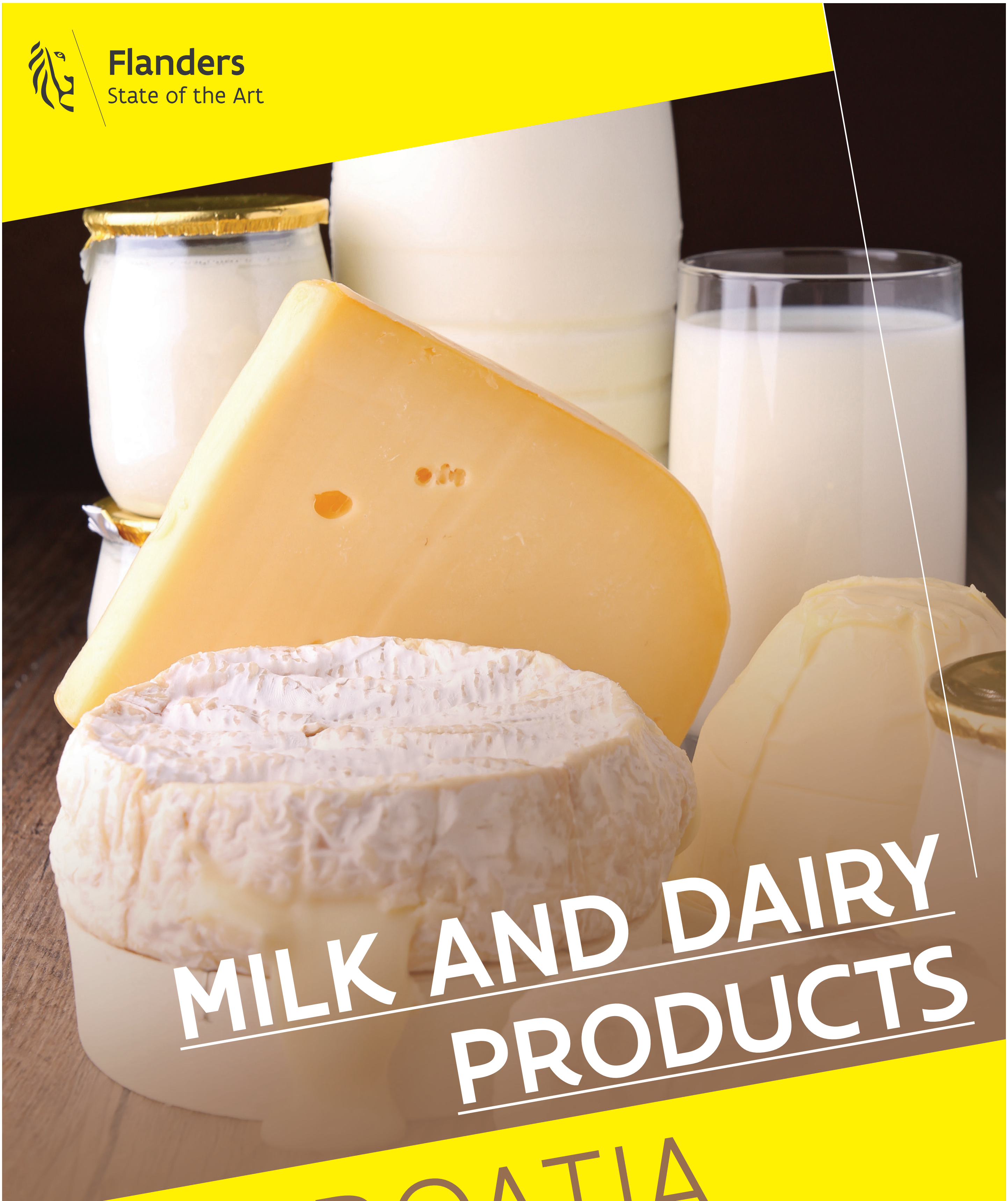
Flanders
State of the Art



# MILK AND DAIRY PRODUCTS IN CROATIA

**FLANDERS** INVESTMENT & TRADE MARKET SURVEY

# Milk and dairy products in Croatia

December 2016


Written and compiled by Selma Čeljo and Marin Čatlak

c/o Embassy of Belgium
Pantovcak 125d
HR - 1000 ZAGREB
Croatia
office@beltrade-croatia.com

# Table of Contents

# 1 Economic overview

Croatia borders Bosnia and Herzegovina, Hungary, Montenegro, Serbia, Slovenia and Italy (sea border), and has been an independent country since 1991. The country has a long and dramatic coastline with the Adriatic Sea, in which the country has over 1 000 islands and islets, of which just 48 are permanently inhabited.

The most important sectors of Croatia's economy in 2015 were wholesale and retail trade, transport, tourism and food services (21.2%), industry (21.1%) and public administration, defense, education, human health and social work activities (15.4%).

Croatia's main export partners are Italy, Bosnia and Herzegovina and Slovenia while its main import partners are Germany, Italy and Slovenia.

In 2015, Croatia finally came out of its six-year long recession. Between 2008 and 2014, GDP shrunk by more than 12% in real terms and unemployment surged from below 9% to more than 17%. The situation started to improve at the end of 2014, and in the course of 2015 real GDP growth surpassed expectations. Economic activity was expected to have expanded by 1.8% in 2015. The external sector performed strongly, and Croatia recovered some of the lost market shares. Growth was however mainly driven by the rebound in consumption and – to some extent – investment.

The recovery is set to strengthen over the next couple of years, but risks remain. By 2017, GDP growth is forecast to attain 2.1% and unemployment to contract to below 14%, while the current account surplus should stabilize at around 3% of GDP. The external sector is expected to continue to contribute to this positive performance, but the main driver of growth will be internal demand. Investments, in particular, are set to start growing more robustly, on the back of an increased absorption of EU structural and investment funds.

Nevertheless, growth is projected to remain subdued for a catching up economy and it will take several years before output returns to pre-crisis levels. In a low inflation environment, high government and private debt, jointly representing more than 200% of GDP in 2014, public and private investment as well as household consumption will continue being constrained. Given the depth and length of the recession, Croatia is currently expected to grow above its potential over the next two years. Eventually, however, the economy is set to return to its long-term potential growth, currently estimated at below 1%. This low rate weighs on the convergence process and slows down the unwinding of macroeconomic imbalances. Lifting potential growth requires sustained investments and deep structural reforms in labor and especially product markets in view of fostering full utilization of the labor force, while ensuring robust productivity growth.

Source: http://ec.europa.eu/europe2020/pdf/csr2016/cr2016_croatia_en.pdf

**GDP growth rates (in real terms)**


## Croatia Economy Data

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| Population (million) | 4.3 | 4.3 | 4.3 | 4.2 | 4.2 |
| GDP per capita (EUR) | 10,512 | 10,309 | 10,338 | 10,151 | 10,151 |
| GDP (EUR bn) | 45.0 | 44.0 | 44.0 | 43.0 | 43.0 |
| Economic Growth (GDP, annual variation in %) | -0.3 | -2.2 | -1.1 | -0.4 | 1.6 |
| Consumption (annual variation in %) | 0.3 | -3.0 | -1.9 | -0.7 | 1.2 |
| Investment (annual variation in %) | -2.7 | -3.3 | 1.4 | -3.6 | 1.6 |
| Industrial Production (annual variation in %) | -1.3 | -5.4 | -1.6 | 1.2 | 2.4 |
| Retail Sales (annual variation in %) | 3.5 | -0.9 | 1.7 | -0.3 | - |
| Unemployment Rate | 18.6 | 20.9 | 21.6 | 19.6 | 17.9 |

# 2 Milk and dairy industry in Croatia

## 2.1 Milk and dairy industry in figures

In 2009, which was a record year for Croatia's milk industry, 675 thousand tons of milk were collected, which covered around 84% of local market demand. In 2015, this number has significantly decreased, only 513 thousand tons of milk were collected, and only 58.8% of local market demand was covered. On the other hand, self-sufficiency in milk production of other EU countries (average value) was 108.9% in 2009, but grew to 113,1% in 2015.

Croatia's imports have drastically increased since 2012, especially imports of butter (by 93%) and cheese (by 88%).

In 2015, as compared to 2014, the collected cows' milk decreased by 1.8% and the ewes' milk by 6.7%, while the collected goats' milk increased by 6.2%.

Expressed in quantities, it means that in 2015 there were about 9 300 t less cows' milk and about 200 t less ewes' milk collected, while the quantity of collected goats' milk increased by about 220 t compared to 2014.

The quantity of milk imported by dairies increased in 2015, as compared to 2014, by 16 800 t, that is, 17.4%. Other data on import and export of raw materials collected by dairies are protected in line with the Official Statistics Act (NN, Nos 103/03, 75/09, 59/12 and 12/13).

Regarding fresh dairy products, as compared to 2014, an increase was recorded in the production of drinking milk of about 20 400 t (7.4%), in the production of cream of about 1 000 t (3.8%) and in the production of fermented products of about 13 500 t (18.8%), while the production of milk-based products decreased by about 600 t (3.0%).

There was an decrease in the production of butter of about 230 t (5.8%) compared to 2014. In 2015, the total cows' cheese production increased by 1 600 t (5.1%), of which the production of soft cheese increased by 2.7% (80 t), of medium-hard cheese by 9.7% (1 370 t), of fresh cheese by 4.7% (630 t) and of processed cheese by 0.6% (12 t).

The milk fat content in collected cows' milk decreased by 2.6% and in ewes' milk by 7.0%, while in goats' milk it increased by 7.0%, as compared to the previous year.

Regarding individual dairy products, the milk fat content in drinking milk increased by 5.5%, in cream by 1.1% and in fermented products by 7.5%, while in butter it decreased by 6.6% and in cheese from cows' milk (pure) by 2.0%.

The milk protein content increased in drinking milk by 7.3%, in cream by 3.2% and in cows' cheese by 3.1%.

MILK AND DAIRY PRODUCTS, 2015

| | Quantities, t | | Indices 2015. / 2014. |
|---|---|---|---|
| | 2014 | 2015 | |
| | | *Availability* | |
| *Cows' milk collected* | 522 694 | 513 406 | 98,2 |
| *Ewes' milk collected* | 3 025 | 2 821 | 93,3 |
| *Goats' milk collected* | 3 473 | 3 690 | 106,2 |
| *Cream* | z | z | z |
| *Whole milk import – only dairies* | 96 703 | 113 502 | 117,4 |
| *Skimmed milk import – only dairies* | z | z | z |
| *Cream import – only dairies* | z | z | z |
| *Other products (e.g. cheese, butter, yoghurt) – only dairies* | z | z | z |
| | *Production of fresh products* | | |
| *Drinking milk* | 276 380 | 296 793 | 107,4 |
| *Raw milk* | z | z | z |
| *Whole milk* | 135 026 | 137 668 | 102 |
| *Pasteurized* | z | z | z |
| *Sterilized and uperized* | z | z | z |
| *Semi-skimmed milk* | 135 506 | 142 003 | 104,8 |
| *Pasteurized* | z | z | z |
| *Sterilized and uperized* | z | z | z |
| *Skimmed milk* | 5 351 | 4 638 | 86,7 |
| *Pasteurized* | - | - | - |
| *Sterilized and uperized* | 5 351 | 4 638 | 86,7 |
| *Buttermilk* | z | z | z |
| *Cream* | 26 350 | 27 342 | 103,8 |
| *With fat content of < 29%* | 20 158 | 19 118 | 94,8 |
| *With fat content of >29%* | 6 192 | 8 226 | 132,8 |
| *Fermented products (yoghurts, drinking yoghurts and other)* | 71 515 | 84 972 | 118,8 |
| *With additives* | 14 335 | 17 882 | 124,7 |

| | *Quantities, t* | | *Indices* |
|---|---|---|---|
| | 2014 | 2015 | 2015. 2014. |
| *Without additives* | 57 180 | 67 090 | 117,3 |
| *Drinks with a milk base* | 20 102 | 19 506 | 97 |
| *Other fresh products (milk jelly and other)* | z | z | z |
| | *Production of other products* | | |
| *Powdered dairy products* | z | z | z |
| *Butter and other yellow fat dairy products* | z | z | z |
| *Butter* | 3 882 | 3 656 | 94,2 |
| *Other yellow fat dairy products* | z | z | z |
| *Cheese from cows' milk (pure)* | 31 948 | 33 586 | 105,1 |
| *Cheese from ewes' milk (pure)* | z | z | z |
| *Cheese from goats' milk (pure)* | z | z | z |
| *Other cheese (mixed)* | 149 | 269 | 180,5 |
| *Soft cheese (> 68% of moisture)* | 2 975 | 3 055 | 102,7 |
| *Medium-soft cheese (62% – 68% of moisture)* | 274 | 231 | 84,3 |
| *Medium-hard cheese (55% – 62% of moisture)* | 14 078 | 15 449 | 109,7 |
| *Hard cheese (47% – 55% of moisture)* | 1 135 | 882 | 77,7 |
| *Extra hard cheese (< 47% of moisture)* | 488 | 470 | 96,3 |
| *Fresh cheese* | 13 252 | 13 881 | 104,7 |
| *Processed cheese* | 2 029 | 2 041 | 100,6 |
| *Whey – total* | 72 881 | 63 700 | 87,4 |
| *Exports of milk and cream in bulk – only dairies* | z | z | z |

1) *See Notes on Methodology.*

MILK FAT CONTENT IN MAIN DAIRY PRODUCTS, 2015

| | Milk fat content, t | | Indices |
|---|---|---|---|
| | 2014 | 2015 | 2015. / 2014. |
| *Availability* | | | |
| *Cows' milk collected* | 20 709 | 20 161 | 97,4 |
| *Ewes' milk collected* | 213 | 198 | 93,0 |
| *Goats' milk collected* | 115 | 123 | 107,0 |
| *Cream* | z | z | z |
| *Whole milk import – only dairies* | 3 615 | 4 507 | 124,7 |
| *Skimmed milk import – only dairies* | z | z | z |
| *Cream import – only dairies* | z | z | z |
| *Products* | | | |
| *Drinking milk* | 8 005 | 8 443 | 105,5 |
| *Buttermilk* | z | z | z |
| *Cream* | 5 208 | 5 265 | 101,1 |
| *Fermented products (yoghurts, drinking yoghurts and other)* | 1 634 | 1 756 | 107,5 |
| *Drinks with a milk base* | 652 | 608 | 93,3 |
| *Other fresh products (milk jelly and other)* | z | z | z |
| *Concentrated milk* | - | - | - |
| *Powdered dairy products* | z | z | z |
| *Butter and other yellow fat dairy products* | z | z | z |
| *Butter* | 3 211 | 2 998 | 93,4 |
| *Other yellow fat dairy products* | z | z | z |
| *Cheese from cows' milk (pure)* | 6 259 | 6 133 | 98,0 |
| *Whey – total* | 261 | 195 | 74,7 |
| *Exports of milk and cream in bulk – only dairies* | z | z | z |

*COWS' MILK PROTEIN CONTENT IN MAIN DAIRY PRODUCTS, 2015*

| *Products* | *Protein content, t* | | *Indices* |
|---|---|---|---|
| | 2014 | 2015 | 2015 / 2014 |
| *Drinking milk* | 9 062 | 9 720 | 107,3 |
| *Whole milk* | 4 424 | 4 510 | 101,9 |
| *Semi-skimmed milk* | 4 446 | 4 653 | 104,7 |
| *Skimmed milk* | 175 | 151 | 86,3 |
| *Buttermilk* | z | z | z |
| *Cream* | 780 | 805 | 103,2 |
| *Powdered dairy products* | z | z | z |
| *Butter and other yellow fat dairy products* | z | z | z |
| *Cheese from cows' milk* | 6 370 | 6 566 | 103,1 |
| *Processed cheese* | 276 | 276 | 100,0 |
| *Whey* | 517 | 432 | 83,6 |

In March 2016, the total quantity of cows' milk collected decreased by 1.7% compared to March 2015 and increased by 3.7% compared to the 2015 average.

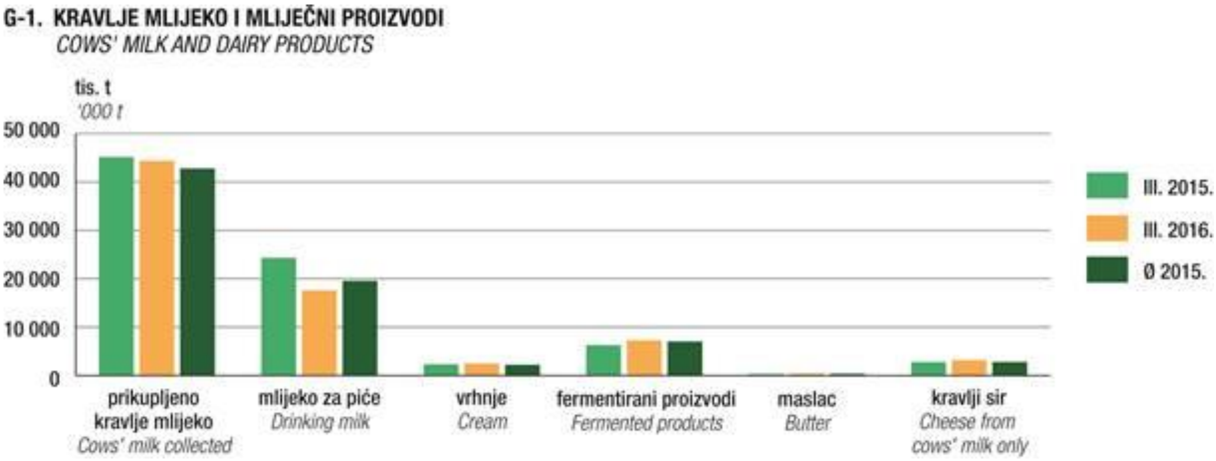
In March 2016, the content of milk fats increased by 0.5% compared to March 2015 and by 1.9% compared to the 2015 average. The content of proteins was higher by 0.3% compared to March 2015 and by 0.1% compared to the 2015 average.

In March 2016, as compared to March 2015, an increase was recorded in the production of cream (6.7%), fermented products (15.9%), butter (24.9%) and cheese (13.7%), while a decrease was recorded in the production of drinking milk (27.6%).

As compared to the 2015 average, an increase was recorded in the production of cream (11.2%), fermented products (3.5%), butter (19.0%) and cheese (12.6%), while a decrease was recorded in the production of drinking milk (9.9%).

In 2015, the abolishment of milk quotas for European farmers (started April 2015) and the Russian embargo have caused an excess of 3 billion liters of milk on the European market. This milk has started to flood the Croatian market, which already imports around 45% of its consumed milk, at dump prices. Domestic purchasers have again announced lower purchase prices, which will harm domestic farmers even more. The main problem for domestic farmers is the supermarket chains' excess import of foreign milk and dairy products.

According to Eurostat data from 2015, Croatia performed very poorly in milk industry, producing only 167 kilos per capita. Only Greece, Bulgaria and Malta performed worse. Another indicator of how critical the situation in Croatia's milk industry is, is the fact that in 2016, 3500 breeding cows have been slaughtered, and 70 milk farms in Slavonia have been shut down in the course of one month. If this trend continues, 30% of Croatian milk production could be ruined in less than a year.




http://www.dzs.hr/Hrv_Eng/publication/2016/01-01-27_01_2016.htm

http://www.dzs.hr/Hrv_Eng/publication/2016/01-01-26_03_2016.htm

## 2.2 Imports and exports of milk and dairy products

The quantity of milk imported by dairies increased in 2015, as compared to 2014, by 16 800 t, that is, 17.4%. Other data from Croatian Bureau of Statistics on import and export of raw materials collected by dairies are protected in line with the Official Statistics Act (NN, Nos 103/03, 75/09, 59/12 and 12/13).

Other, unofficial data which can be useful to get an insight into the Croatian dairy market and its most important importers can be found in the following tables:

**IMPORT CROATIA: Main 10 suppliers of Packed milk in 2015 (Tons)**

| Country | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | ± % on 2014 * | ± % on 2013 * |
|---|---|---|---|---|---|---|---|---|
| Czech Republic | 392 | 427 | 61 | 75 | 2.163 | 9.572 | +342% | - |
| Slovenia | 931 | 920 | 1.550 | 2.438 | 3.136 | 6.458 | +106% | +165% |
| Austria | 407 | 458 | 16 | 972 | 474 | 2.715 | +473% | +179% |
| Hungary | 80 | - | 194 | - | 1.373 | 1.514 | +10,20% | - |
| Germany | 2.725 | 6.491 | 4.468 | 6.003 | 2.683 | 1.371 | -48,91% | -77,17% |
| Serbia | - | - | - | 2.707 | 7.830 | 533 | -93,20% | -80,32% |
| Cyprus | - | - | - | - | - | 108 | - | - |
| Slovakia | - | - | 165 | 120 | 110 | 94 | -14,04% | -21,35% |
| France | 24 | 24 | 25 | 23 | 28 | 32 | +11,27% | +39,82% |
| Bosnia & Herzegovina | 24.897 | 28.239 | 27.884 | 17.547 | - | 9 | - | -99,95% |

Source: **Processed by Clal based on GTIS data**
* Change from the same period of previous year.

| IMPORT CROATIA: Main 10 suppliers of Bulk milk in 2015 (Tons) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Country | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | ± % on 2014 * | ± % on 2013 * |
| Hungary | 8.945 | 13.635 | 23.716 | 72.309 | 75.738 | 89.564 | +18,26% | +23,86% |
| Slovenia | - | 5.564 | 5.556 | 11.575 | 10.908 | 28.070 | +157% | +143% |
| Slovakia | - | - | 1.726 | 12.598 | 10.757 | 13.587 | +26,30% | +7,85% |
| Czech Republic | 3.489 | 9.531 | 10.741 | 20.300 | 4.183 | 6.798 | +62,51% | -66,51% |
| Netherlands | - | - | - | - | 1.969 | 1.191 | -39,51% | - |
| Poland | - | - | - | 1.408 | 3.692 | 1.175 | -68,19% | -16,56% |
| Germany | - | - | 202 | 811 | 645 | 733 | +13,66% | -9,58% |
| Austria | 0 | - | - | - | 356 | 329 | -7,51% | - |
| Romania | - | - | - | - | 1.251 | 48 | -96,18% | - |

Source: **Processed by Clal based on GTIS data**
* Change from the same period of previous year.

| IMPORT CROATIA: Main 10 suppliers of Butter in 2015 (Tons) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Country | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | ± % on 2014 * | ± % on 2013 * |
| Germany | 702 | 668 | 730 | 1.171 | 1.404 | 1.624 | +15,67% | +38,72% |
| Poland | 184 | 324 | 555 | 314 | 397 | 523 | +31,54% | +66,43% |
| Netherlands | - | 1 | 7 | 342 | 155 | 324 | +109% | -5,04% |
| Serbia | 2 | 3 | 2 | 0 | 170 | 203 | +19,52% | - |
| France | 13 | 18 | 22 | 56 | 265 | 138 | -48,00% | +147% |
| Belgium | 140 | 179 | 130 | 94 | 118 | 130 | +10,51% | +39,32% |
| Czech Republic | - | - | 9 | 24 | 134 | 118 | -11,94% | +390% |
| Austria | 0 | 11 | 3 | 42 | 40 | 38 | -5,03% | -10,85% |
| Slovenia | 2 | 8 | 38 | 42 | 29 | 29 | -2,73% | -31,98% |
| Italy | 1 | 4 | 3 | 6 | 16 | 18 | +8,59% | +190% |

Source: **Processed by Clal based on GTIS data**
* Change from the same period of previous year.

| IMPORT CROATIA: Main 10 suppliers of Cheese in 2015 (Tons) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Country | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | ± % on 2014 * | ± % on 2013 * |
| Germany | 6.427 | 6.543 | 7.674 | 8.762 | 9.708 | 11.638 | +19,89% | +32,82% |
| Netherlands | 682 | 1.112 | 523 | 1.198 | 2.966 | 4.897 | +65,10% | +309% |
| Slovenia | 796 | 698 | 542 | 892 | 993 | 1.819 | +83,19% | +104% |
| Italy | 610 | 617 | 605 | 758 | 916 | 1.266 | +38,28% | +67,09% |
| Poland | 186 | 167 | 111 | 255 | 797 | 1.232 | +54,67% | +383% |
| Austria | 370 | 315 | 315 | 438 | 372 | 582 | +56,54% | +32,81% |
| Lithuania | 410 | 234 | 260 | 173 | 601 | 575 | -4,38% | +232% |
| France | 354 | 369 | 350 | 323 | 372 | 410 | +10,33% | +26,86% |
| Serbia | 217 | 235 | 244 | 250 | 319 | 368 | +15,51% | +47,20% |
| Hungary | 33 | 22 | 72 | 90 | 160 | 289 | +81,20% | +222% |

Source: **Processed by Clal based on GTIS data**
* Change from the same period of previous year.

http://www.clal.it/en/?section=stat_croazia

# 3 Main milk farms in Croatia

- Vindija d.d.

The "Vindija Quality" sign unites more than 1,000 different products into seventeen brand names, out of which Z bregov, Cekin and Vindon are the most familiar with consumers.

Vindija owns commercial centres in all of Croatia's largest towns, and it distributes its products in Bosnia and Herzegovina, Serbia and the Republic of Macedonia through a company member – Vindija Trade. Along with a strong domestic and regional presence, Vindija also exports its products to EU countries.

- Belje d.d.

Belje d.d. food processing industry and agricultural production is based in Darda, and has a tradition in food production which is more than three centuries long. Belje is Croatia's leading manufacturer of pork, beef, cow milk and sugar beet. Since the beginning of 2005, it is a part of Concern Agrokor which is the biggest food producer in this part of Europe.

Own farms and arable land are the basis of Belje's agricultural production. Natural raw materials of controlled origin from own cultivation are made to become the well-known products of Belje food industry.

Company premises are located throughout Baranja. More than 20,000 ha of arable land, numerous farms and plants, as well as 2,000 employees are the best indicator of the size and power of Belje.

- Topolik farm

The Topolik farm is the biggest robotized dairy cow farm in Europe with the total capacity of 500 head of cattle. It is the first and only farm of the kind in Croatia, and there are no farms in Europe with as many as 6 robots as it is the case on this Belje farm in Topolik. Sixty million kuna was invested in the construction and equipment of the farm.

The farm Topolik covers an area of 4.23 ha and consists of two buildings: the production stable and the dry cows stable. The production stable is a unique building in Croatia, 160 m long and 16 m high, without any partition walls or pillars. The total area of the stable is 6,560 $m^2$ and the stable has 414 beds. The cow movement is regulated by the system of one-way and so called "smart doors" and feeding is computerized with the automatic food concentrate dosing according to individual needs of each cow. Apart from that, the stable is equipped with the automatic control of microclimate conditions.

Robotized milking (VMS) is carried out with 6 fully automatized robots which milk each cow three times within 24 hours. A specific characteristic of robotized milking is the fact that the position of the cows udder is detected by a laser which is followed by the robot placing the milking cup. The robot recognizes the milk quality and milk of altered parameters is separated into special tanks.

The cattle herd in Topolik is of a superior genetics and high health status of the Holstein breed, imported from Sweden. The cows weigh on average 580-600 kg and are 26 months old. The milk production rates are excellent. The average milk production is 10,600 l of milk a year. For further cattle reproduction on the Topolik farm, Belje is going to use the 10 best bulls in the world.

Apart from the production stable there is also a dry cow stable which covers the area of $600m^2$. This stable is intended for cows in preparation for calving. The beds in the stable are made according to the leaning board system which enables the sliding of manure into a dirt corridor which is cleaned by the automatic cleaner.

The Topolik farm is equipped with the closed rainfall collection system with a settling tank and a pre-pump station. The water recycling plant with a freestanding water tower of $100m^3$ capacity supplies the farm with water. The manure removal system is mechanized and pre-programmed and the size of the manure storage container facilitates depositing manure for the period of 9 months.

- Mitrovac farm

The Mitrovac farm is also one of Croatia's biggest dairy cow farm with a capacity of 2,000 cows. The annual production of milk on the farm exceeds 15 million litres, with a production per cow of almost 9,500 litres of milk annually. The farm consists of 7 new, state-of-the-art facilities boasting airy, ventilated premises, high ceilings, free movement of the animals and maximum care of their welfare. The milking is taking place at a top-notch rotolactor milking machine with 60 milking places. Mitrovac is one of Belje's six dairy farms, where a total of 32 million litres of milk will be produced this year. The farm also features a solar power station.

- Šolčić farm

Šolčić farm operates in Bjelovar city and the surrounding area since 2003. Their farm's worth has been estimated on 20 million HRK. The main activities are milk production and calf breeding.

- Orlovnjak d.o.o.

This dairy cow farm was fully reconstructed in 2011. Farm capacity is 650 to 700 dairy cows with daily production of 16000- 18000 litres of high quality milk.

- Dairy and livestock cooperation "Proizvodi sela"

It was founded in 2014 by 10 milk producers. Together, their daily production of first class fresh milk, which uses the mark "Milk from Croatian farms", amounts to 12 000 l (yearly 3.5 million litres).

Details about their farms and production can be found in the following table:

| Farm | Location | Number of animals | Dairy cows | Daily milk production (liters) | Milk fat | Milk proteins | Cultivated area |
|---|---|---|---|---|---|---|---|
| Farma Vrhovec | Luka, Zagrebačka županija | 150 | 70 | 1200 l | | | 120 ha |
| Farma Pogačić | Luka, Zagrebačka županija | 50 | 25 | 400 l | 4,4 % | 3,7% | 50 ha |
| Farma Podhraški | Zagorska sela, Krapinsko zagorska | 39 | 16 | 300 l | 4.2% | 3.5% | 35 ha |
| Farma Pandek | Sesvete, Zagrebačka županija | 250 | 130 | 2000 l | 4.3% | 3.65% | 200 ha |
| Farma Mužinić | Donja Zelina, Zagrebačka županija | 400 | 120 | 3000 l | 4.3% | 3.6% | 140 ha |
| Farma Ljubić | Desinić, Krapinsko Zagorska | 48 | 20 | 350 l | 4.2% | 3.6% | 40 ha |
| Farma Kiseljak | Straža, Krapinsko zagorska | 40 | 24 | 400 l | 4.0% | 3.4% | 35 ha |
| Farma Jurkas | Šenkovec, Zagrebačka županija | 130 | 60 | 1200 l | 4,1 % | 3,6 % | 140 ha |
| Farma Hrust | Marija Gorica, Zagrebačka županija | 60 | 30 | 600 l | 4.6% | 3.7% | 50 ha |
| Farma Hajdina | Tederovec, Zagrebačka županija | 45 | 18 | 350 l | 4.35% | 3.85% | 60 ha |
| Farma Baršić | Dubravica, Zagrebačka županija | 60 | 35 | 500 l | 4.6% | 3.7% | 60 ha |
| TOTAL | | 1272 | 548 | 10 300 | 4.31% | 3.63% | 930 ha |

# 4 Milk and yoghurt

## 4.1 Drinking Milk Products

### TRENDS

The elimination of EU milk quotas from April 1st 2015 has given milk producers in Croatia some cause for concern. On the one hand, Croatian producers are concerned that this will result in more intense price competition in the domestic drinking milk products category, which will in turn impact negatively on their profit margins. At the same time, when it comes to exports (of both raw milk and finished products), Croatian producers fear that they may not be able to compete effectively with European counterparts that have decades of experience in the wider EU market.

### COMPETITIVE LANDSCAPE

Dukat remained the clear leader in drinking milk products in 2015 with an overall value share of 31%. The company, which is part of Groupe Lactalis, enjoys a strong early mover advantage in this category, having been the first dairy producer to achieve nationwide distribution in Croatia. Vindija was the second leading player overall with a value share of 16%, followed by Meggle Hrvatska doo with a 7% share. Other prominent competitors included Agrokor, Kaufland kd and Billa doo.

### PROSPECTS

While the dairy industry has attempted to reassure local dairy farmers that they will not be negatively affected by the end of EU milk quotas, it is nonetheless expected that raw milk production in Croatia will continue to decline over the forecast period as imports increase. This will inevitably cause more dairy farms to close, and compel others to adjust their business models. Some smaller farmers have already attempted to adapt to the new environment by selling milk directly to consumers via vending machines. As of mid-2015, there were around 55 such vending machines in Croatia. This was equivalent to roughly one per 100,000 inhabitants, meaning there is plenty of room for the further development of this type of venture in the country.

## 4.2 Yoghurt and Sour Milk Drinks

### TRENDS

Greek-style yoghurt has become increasingly popular in Croatia in recent years, so much so that the portfolios of most major yoghurt manufacturers in the country now include at least one product of this type. Some companies have taken the trend a step further and introduced other "ethnic type" yoghurt products, including Italian and Turkish varieties.

### COMPETITIVE LANDSCAPE

Dukat maintained its strong lead in yoghurt and sour milk products in 2015, claiming an overall value share of 29% with its Dukat and b.Aktiv brands. Vindija placed second with a value share of 15%, followed by Danone doo with a 12% share. Other prominent competitors included Zott, Meggle Hrvatska, Agrokor and Kaufland.

PROSPECTS

Due to increasing maturity of the market, growth in yoghurt and sour milk products retail volume sales and value sales at constant 2015 prices over the forecast period is expected to be relatively modest overall. Nonetheless, this would still be a welcome improvement on the negative volume and constant value CAGRs recorded during the review period, when demand was inhibited by the economic downturn. Gradual improvements in domestic economic conditions will be the main factor driving the category's recovery over 2015-2020, though new launches and marketing activities should also bolster growth in retail volume and constant value sales.

# 5 Main producers/distributors

### Dukat d.d.

Dukat's business operations are based on the top-quality milk processing, manufactured at domestic dairy farms. Therefore, Dukat's milk bears the label "Milk from Croatian Dairy Farms" given by the Croatian Agricultural Agency.

Furthermore, Dukat is the first and only dairy in Croatia that supports and promotes production of domestic organic milk and has offered its consumers the first Croatian organic milk - Dukat BIO Milk, the only milk that bears both labels, "Milk from Croatian Dairy Farms" and "Organic Product of Croatia".

Dukat's products have received numerous national and international awards in recognition of their quality, while the Dukat umbrella brand was named the most trusted dairy brand in Croatia by consumers.

In 2010 Dukat was named the Best Buy milk, dairy and cheese brand offering consumers the greatest value for their money.

Dukat has a rich assortment of milk, dairy and cheese retail products of prestigious Dukat, Sirela, KIM, Président and Galbani brands.

Their main products in milk and yoghurt area are:

- Dukat milk http://www.dukat.hr/en/products/dukat/milk
- Dukat yoghurts http://www.dukat.hr/en/products/dukat/fermented-products

### Vindija d.d.

Today, Vindija group encompasses 14 companies, out of which 8 are based in Croatia and 6 in neighbouring countries. It employs a workforce of more than 4,000 and makes an annual turnover of 400 million euros. On a yearly basis, 200 million litres of milk are bought up and processed, which puts Vindija in the high second place for the quantity of the milk produced in the Republic of Croatia. Healthy, nutritional products of supreme quality are produced in the most modern technological facilities, where all international systems of quality: ISO 9001, HACCP, HALAL, KOSHER, IFS and BRC have been implemented into the production lines. Vindija's programme boasts more than one thousand well-known and appreciated umbrella brands: 'z bregov milk and dairy products, Vindi non-alcoholic drinks and natural juices, Cekin chicken meat and processed chicken meat, Vindon turkey meat and processed turkey meat, Rozeto processed cattle meat and Latica bread, rolls and cakes.

Vindija is the only dairy in Croatia with organized buying of cow's, goat's and sheep's milk. Moreover, they insist on the supreme quality of the raw material, which is also confirmed by the fact that they have the highest ratio of the EU compliance standard for milk on the Croatian market.

Because of the extreme importance of this segment, Vindija has formed a special department, Milk buy-out centre, which deals with the organisation of buying fresh milk and the daily control of milk, as well as the expert monitoring of farming in all the phases of the production process.

Their main products in milk and yoghurt area are:

- z'bregov fresh milk
- z'bregov yoghurts

### Meggle Croatia d.o.o.

In 1996, Meggle entered the Croatian market through its distribution center and office in Matulji situated at the foot of the Učka mountain. Three years later, production of its products commenced, thanks to cooperation with the Osijek dairy farm IPK Mia from which Meggle Mia d.o.o. was created. At that point, Meggle became part of the Croatian production industry.

Meggle Croatia today is the third dairy in Croatia with a long tradition of manufacturing high quality products from the best Slavonian milk, employing 208 workers and processing around 130,000 liters of milk per day.

Their main products in milk and yoghurt area are:

- Meggle fresh and long life milk http://www.meggle.hr/en/milk/
- Natural, thick and fruity yoghurts http://www.meggle.hr/en/yoghurts/

Other competitors worth mentioning are

- Kaufland with its K-classic brand (https://www.kaufland.hr/Home/index.jsp)
- Billa with its Billa brand
- and Zott products which are distributed by Zvijezda d.d.

# 6 Cheese

## TRENDS

Cheese remained the largest of the four main dairy categories in Croatia in value terms in 2015, claiming an overall share of 36%. Unprocessed cheese remained the dominant product type with an overall value share of 95%. This dominance was due to the enduring popularity of hard cheese products, which accounted for 80% of unprocessed cheese value sales.

## COMPETITIVE LANDSCAPE

Dukat remained the clear leader in cheese in 2015, claiming an overall value share of 30% thanks to the combined strength of its Sirela, Dukatela, Dukat and Galbani brands. Dukat is part of Groupe Lactalis, which has ambitious expansion plans for Southeast Europe and has chosen Croatia as its operational hub in the region. Vindija dd was the second leading company in cheese in 2015 with a value share of 10%, followed by Belje dd with an 8% share. Other prominent competitors included Mondelez Zagreb, Zdenka Mlijecni Proizvodi doo and Meggle Hrvatska doo.

## PROSPECTS

After Croatia's EU accession was completed in July 2013, it was widely expected that cheese unit prices in the country would come down as entry barriers were lowered and competition intensified. This turned out not to be the case, however. Rather, most producers saw access to cheaper raw milk imports as an opportunity to broaden their portfolios and increase profit margins, instead of passing savings on to consumers in the form of price reductions. However, following the scrapping of EU milk quotas in April 2015, it is likely that price will become a more important platform for competition over the forecast period.

Dukat, as already mentioned, has a wide range of cheese brands:

- Sirela
    - Dukat, President, Galbani, Podravec, Gouda, Edamer, Dimsi, Bjelovarski salty cheese, Ribanac, Trapist, Pekorelo, Picok cheese spread triangles, Toast soft cheese slices, Sirela pizza cheese, Domaći sir. http://www.dukat.hr/en/products/sirela
- President
    - Fresh cheeses, Brie, Camembert, Domaći mladi sir, Emmental, Le Blue, Madrigal, Salakis, Soft goat cheese with white mould, Cheese spread triangle, Butter (http://www.dukat.hr/en/products/president)
- Galbani
    - Mozzarella, Gorgonzola, Mascarpone, Bel Paese soft cheese, Ricotta (http://www.dukat.hr/en/products/galbani)
- Dukat
    - Dukatela, Zagrebački sir, Cottage fresh cheese, Posni sir etc. (http://www.dukat.hr/en/products/dukat/fresh-cheeses)

Vindija also offers a variety of cheeses: fresh cheeses, fresh cream cheeses, soft cheeses, semi-hard cheeses, hard cheeses, blue cheeses, breaded cheeses and melted cheese spreads (http://www.vindija.hr/en-GB/Products/Fresh-cheeses.html?Y3RnXDMyLHBcMTQ0)

Belje is most famous for its ABC fresh cream cheese, but they offer other cheeses as well. (http://www.belje.hr/eng//proizvodi/abc.asp

Zdenka milk products d.o.o. assortment includes processed (melted) cheeses such as:

- semi-hard cheeses
- hard rind cheeses
- soft cheeses
- fresh cheeses
- butter

http://www.granolio.hr/en/production/cheese-production/

# 7 Other Dairy

TRENDS

Demand for fromage frais and quark grew strongly in Croatia throughout the review period. The share of total other dairy current value sales held by this category increased from 28% in 2010 to 39% in 2015.

COMPETITIVE LANDSCAPE

Dukat maintained its commanding lead in the other dairy category in 2015 with an overall value share of 39%. Vindija ranked second with a value share of 14%, followed by Meggle Hrvatska with a 9% share. Other prominent competitors included Ferrero, Agrokor, Zott, Kaufland and Danone.

PROSPECTS

It is expected that fromage frais and quark will surpass cream early in the forecast period to become the largest of the main other dairy categories in Croatia in value sales terms. This will be largely due to the growing use of fromage frais and quark in the preparation of Sir i Vrhnje (cheese and cream), one of the country's most popular traditional national dishes. Given rising health awareness among Croatians, the perception of fromage frais and quark as being relatively low in fat will also help to boost demand.

http://www.euromonitor.com/dairy-in-croatia/report

The Croatian Food Agency (HAH)
I. Gundulića 36b,
31 000 Osijek
Hrvatska
Tel: +385 31 214-900 / +385 31 227 600 | Fax: +385 31 214-901
E-mail: info@hah.hr
Web: http://www.hah.hr/

The Croatian Food Agency (HAH) is legal entity which role, organization and modus operandi are arranged/regulated by the Food Act (OG 81/13), the statutes of the Agency and other legal acts. HAH was established by the Food Act from 2003, and officially has started its work in January 2005. It is seated in Osijek. Director is the legal representative of HAH who is responsible for all operational and legal matters. HAH is funded by the state budget of the Republic Croatia.

HAH performs scientific and technical tasks in the field of food and feed safety and is the national referent point for risk assessment in food and feed safety area. In performing its duties HAH is guided by principles of independence, transparency and confidentiality.

Tasks of the HAH/Tasks required to enable HAH to carry out its role:

- scientific risk assessment in the field of food and feed safety,
- to provide scientific studies in the field of food and feed safety,
- to provide scientific opinions at the request of the competent authorities, ex officio or at the request of third parties,
- to provide technical opinions and scientific and technical support to the competent authorities in the areas of food and feed safety, food and feed quality, human nutrition, animal health and welfare, plant health, novel food, nutrient enriched food, food and feed for particular nutritional uses and GM food and feed,
- to provide initial risk assessment (as RASFF contact point in Croatia),
- to collect and analyse data from official controls and other relevant data for characterisation and monitoring of risks which have a direct or indirect impact on food and feed safety,
- to identify and characterize risks and emerging risks,
- to establish and coordinate the national institution network in the field of food and feed safety in the Republic Croatia,
- to develop and apply uniform risk assessment methodologies in the field of food and feed safety
- to educate interested parties and to publish educative materials about food and feed related risks,
- to inform the public about matters within its field of work,
- to independently express conclusions and orientations on matters within its field of work and to provide rapid, reliable, objective and comprehensible information to the public and interested parties,
- to promote the effective coherence between risk management, risk assessment and risk communication.

HAH cooperates closely with competent institutes, academic societies, laboratories and other legal entities in food and feed safety system in the Republic Croatia. HAH also cooperates with other EU member states and competent international institutions and organizations.

HAH is Focal Point for European Food Safety Authority. HAH delivers information and data received from EFSA to the competent authorities in the Republic Croatia.

### The Reference laboratory for milk and dairy products

University of Zagreb
Faculty of Agriculture
Department of Dairy Science
The Reference laboratory for milk and dairy products
Svetošimunska 25
10000 Zagreb, HR
Tel. +385 1 239 3942 | Fax +385 1 239 3988
E-mail: rlm@agr.hr
Web: http://rlm.agr.hr/index2.php?page=1

The Reference laboratory for milk and dairy products (RL) was established in 2001 as the result of work on the mutual project of the Dairy Department of the Faculty of Agronomy at the University in Zagreb and the Ministry of Agriculture and Forestry. The Project defined sources of financing and purchase of the equipment necessary for the work of the Reference laboratory. With the adoption of the "Ordinance on the quality of fresh raw milk" (Official Gazette, 102/2000) the need for establishing and work of the Reference Laboratory was emphasized, similar to the EU countries. Its role started together with the establishment of the Central Laboratory for Milk Control (CLMC) in Križevci, as the essential part of the integral system.

From 2003-2007, RL was certified for "Quality management system", according to the international standard HRN EN ISO 9001. The evaluation of the whole system was performed by the independent certifying house Det Norske Veritas (DNV).

The aims and tasks of the Reference laboratory for milk and dairy products, pursuant to provisions of the Ordinance (Official Gazette 102/2000) and the Decision of the Ministry of Agriculture, Fishery and Rural Development (2007 and 2011) are:

- performing analysis of milk and dairy products by reference methods according to which the CLMC and other milk laboratories in the Republic of Croatia calibrate laboratory instruments, but also checking the precision of its work in the same way as it is done by laboratories in other European countries,
- delivery of calibration samples of cow, goat and sheep milk for the calibration of analytical instruments in the CLMC and other laboratories, so the control system of the raw milk quality in the Republic of Croatia is completely independent and integral,
- continuous supplementation of the conversion line for the instrument (Bactoscan FC), which determines the total number of micro organisms in the raw cow, goat and sheep milk, which represents one of the most complete conversion lines in the EU countries,
- organizing interlaboratory comparison testings for the CLMC and other milkman laboratories in the Republic of Croatia which ensures the following of calibration results to reference method results.
- introducing new analytical methods (testing procedures), so today the Reference laboratory for milk and dairy products is accredited for 42 analytical chemical, physical and microbiological methods according to the standard HRN EN ISO/IEC 17025,

- organising courses for employees of the CLMC and other dairy laboratories.

The Ministry of Agriculture, Forestry and Water Management authorised the RL for issuing international certificates for performing physical, chemical and microbiological analyses of milk and dairy products (Decision of 19 December 2007).

Also, pursuant to the "Law on food" (Official Gazette number 46/07, 55/11) and the "Ordinance on authorising official and reference laboratories for food and animal food" (Official Gazette number 86/10, 7/11), the Ministry of Agriculture, Fishery and Rural Development authorised the Reference laboratory for milk and dairy products as an official and reference laboratory for food. (Decision of 28 February 2011. www.mps.hr/default.aspx?id=7604).

http://rlm.agr.hr/index2.php?page=1

# 8 Import of milk and milk products into Croatia

The Croatian milk and dairy market is subject to EU policies and regulations since 2013. The EU milk sector is integrated into the Common Organisation of the Markets in agricultural products (Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products). These regulations apply to Croatia too. They can be found on the following link:

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1308&from=en

Moreover, other relevant information regarding EU milk and dairy sector can be found on the following link: http://ec.europa.eu/agriculture/milk/policy-instruments/index_en.htm