Bulletin
of the International Dairy Federation
446/
2010

The World Dairy Situation
2010

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Bulletin of the International Dairy Federation 446/2010

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ISSN 0250-5118

Bulletin of the International Dairy Federation

PRICE : 125 Euro

446/2010

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Subscription Price for the electronic version of the 2010 Bulletin : 335 Euro for all issues.
Adress orders to :
INTERNATIONAL DAIRY FEDERATION / FEDERATION INTERNATIONALE DE LAITERIE
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The World Dairy Situation 2010

Foreword

The world dairy market is constantly growing and evolving. Every year, global production consistently increases on average and fulfils new needs and requirements in various regions and continents. As an industry, we are all well aware that consumer needs are changing and we must be quick to adjust to such demands. Therefore, it gives me great pleasure to introduce our new-look flagship publication – the IDF World Dairy Situation report for 2010. This updated edition is the result of close collaboration between top experts and key organisations throughout the globe and the IDF. Its contents, including statistics on production, consumption and trade in all regions of the world, as well as specific observations from IDF member countries, will help the reader to better understand and deal with the many challenges and opportunities facing the global dairy market, many of them driven by population and income growth, consumer health concerns and changing dietary patterns worldwide.

I am convinced that the greater strategic insight and in-depth analysis that it provides makes it invaluable for decision-makers and all dairy sector actors concerned by the continuously changing global dairy market conditions. And, thanks to the innovative layout, it is also easy to use and reference.

I would like to thank IDF experts from the Standing Committee on Dairy Policies and Economics, the IDF National Committees, the Centre National Interprofessionnel de l'Economie Laitière and Productschap Zuivel teams for their hard work and invaluable contributions in producing this unique document. I am sure we all wish to support and encourage them in their unremitting efforts to improve this world-class publication.

I would also like to thank our partners: Credit Agricole, Saputo and Tetra Pak for their support in the publication and wider dissemination of this significantly improved Bulletin; the contents of which I am sure will benefit and aid all decision-makers within the global dairy sector.

Christian Robert
Director General

November 2010

Introduction

Fostering a greater understanding of the economic forces affecting the world dairy industry requires a rich source of data and analyses. It has long been the primary objective of the IDF Standing Committee on Dairy Policies and Economics to provide such information, and the annual World Dairy Situation is a key outcome of that effort.

The World Dairy Situation 2010 edition contains several changes, all designed to make it more usable and relevant to today's dairy industry economic and policy issues. In addition, the World Dairy Market Forum section has been expanded to include more invited articles from leading experts.

Dairy markets in recent years have proved that our industry is truly global in nature. For decades, trade in dairy products was a small part of most country's economy and world dairy prices were heavily influenced by domestic support policies as well as trade subsidies and barriers. However, domestic policy reforms, bi-lateral and regional trade agreements, and economic growth around the world have resulted in increasing world dairy product trade.

Record high farm milk and dairy product prices in 2007 and 2008 were actually dampened in importing countries due to this dairy product trade flow, clearly a benefit to consumers in those countries. On the other hand, the global economic crisis of late 2008 and 2009 slowed demand growth at the same time farm milk production increased in response to those record prices of 2007 and dairy producers in the exporting countries suffered.

Despite these ups and downs, world trade in dairy products continues to increase, rising 7 percent in 2009 above year-earlier levels. That trend appears to be continuing in the first half of 2010. New market exchange activity, reported in the World Dairy Market Forum section of this report, is a reflection of this trend and an expectation that it will continue. The IDF World Dairy Situation 2010 brings strategic insights about this dynamic and growing world dairy market for use by producers of farm milk, dairy product manufacturers, and ultimately the end users of those products around the globe.

Bob Yonkers
Chair of IDF Standing Committee on Dairy Policies and Economics

Message from the WDS team

The IDF World Dairy Situation Report 2010 provides trends in global dairy production, processing, trade and consumption, producer (farm) milk prices and wholesale prices, as well as recent key economic and policy developments. This year new chapters are on leading dairy companies presented by world region and an overview of the market outlooks prepared by recognized international organisations. Finally, experts have again been offered a platform to contribute to current topical discussions. This year the subjects selected are: informal dairy economies and their dynamics; global view of milk production costs; volatility on both sides of the Atlantic Ocean; and four initiatives undertaken in the field of futures.

The report includes short statistical country overviews including comments based on questionnaires completed by National Committees of IDF. Additional countries for which no questionnaire was returned are included as the editors took the liberty to fill in the quantitative part of the questionnaire, but refrained from commenting on the dairy situation in those particular countries. The presentation format of the country reports has completely been revamped to facilitate comparison of the country reports to each other. Finally, detailed statistics by world, region and individual countries are included in the report.

The report has been produced under contract with IDF by Productschap Zuivel (PZ) and Centre National Interprofessionnel de l'Economie Laitière (CNIEL). The two organizations successfully shared their data sources to make this report as complete as possible. The WDS team from CNIEL consists of: Véronique Pilet, Susan Owens, Benoît Rouyer and Philippe Jachnik and from PZ of: Martin Valstar, Jurriën Scheepstra, Jurgen Jansen and Adriaan Krijger (responsible editor). The WDS team is looking forward to your comments on this new format and invites you to communicate any suggestions for improvement to info@fil-idf.org.

The WDS Team

A word from our partners

At Saputo, we value consumers' ever-changing expectations and their growing appetite for innovative products. That is why we support the IDF World Dairy Situation Report which brings to light dairy information from all regions of the world. This useful resource enables us to remain in the forefront of the dairy industry.

Tetra Pak is pleased to have been invited to partner with IDF for this important publication – a source of invaluable data for the whole dairy industry. In times when society is looking for healthy food, all of us active in the value chain of milk production and distribution, have a responsibility to educate all stakeholders about the tremendous value that the dairy industry brings to people. We trust this publication will form an integral and important part of increasing the knowledge about the importance of the dairy industry.

The leader of proximity banking, the "Crédit Agricole" occupies for more than a century a predominant place with farmers. It is also the primary partner bank for the French Agribusiness. The "Crédit Agricole" accompanies all the French Agribusiness networks in France and all over the world, where French companies are among the world leaders, especially for dairy products. In this context, the IDF World Dairy Situation is an important tool providing useful data for the dairy sector and the international network of "Crédit Agricole".

Summary

For many dairy farmers and companies 2009 was a remarkable year. The financial crisis in the global economy caused international demand for dairy produce to decline in late 2008 and had a dramatic impact on product prices during the first half year of 2009. For the first time since the mid-nineties global consumption per capita declined. The financial crisis impacted on every aspect of the dairy business: production, trade, consumption and prices. The general trend was stagnation but it turned out different per region. Chinese non-skimmed milk powder (WMP) demand in the second half year was a key driver of rising dairy commodity prices and recovery of the world dairy market. Asia acted as an engine for the global dairy industry.

As a consequence of the general recession, most companies experienced a decrease in their turnover in 2009 primarily due to the sharp decrease in product prices. But this situation certainly does not hold for every company and every country. China is an exception. A number of Chinese companies showed remarkable growth and the Chinese dairy processing industry started to invest abroad.

Growth of world milk production slowed down in 2009. Low milk prices and high input costs discouraged many farmers around the globe. Meanwhile buffalo milk production is still growing at a higher pace than cow milk production.

During the first half-year of 2010 prices recovered. This recovery will stimulate milk production for the rest of the year.

World output for dairy produce increased last year for all products except for WMP. This is remarkable since production of WMP increased steadily between 2000 and 2008. The decline resulted from a huge drop in milk production in many parts of the world, including China. World butter production kept growing in 2009, mainly due to India. World cheese production developed slowly. For the second consecutive year production of skim milk powder (SMP) showed strong growth, whereas production had been stable at the beginning of the decade.

World dairy trade increased rather slowly during the first part of 2009 but showed a remarkable recovery during the second part, led by Chinese imports. China's solid demand for foreign produce, following the melamine crisis, coincided with the generally low price levels that were typical for international markets during most of 2009.

World trade is still not more than 7% of world production but it is increasing. Chinese buying accounted for most of the increase in international dairy trade growth in 2009. The driving force was trade in WMP.

Beyond 2010 milk production is expected to grow on average by more than 2% annually during the next decade; Asia will account for most of it.

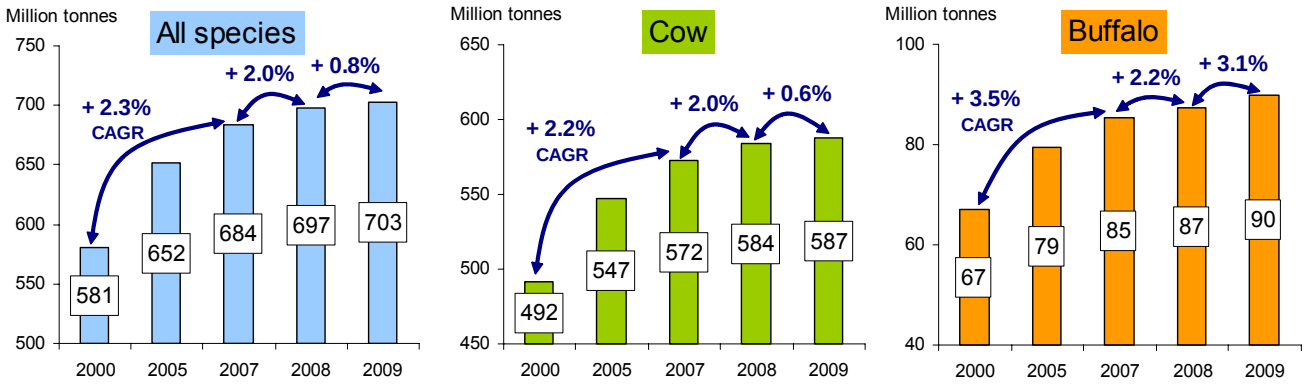
In conclusion: 2009 showed a mixed picture: a stagnating first half year and a strong recovery during the second part. 2010 looks much more balanced: demand is steady and production development is moderate.

1. Milk Production

1.1. Overview

The growth of world milk production slowed down in 2009. Compared to last year it increased by only 0.8% to 703 million tonnes. This rate is rather small in comparison to 2008 versus 2007 (+2.0%) and much lower than the compound annual growth rate (+2.3%) observed during the period from 2000 to 2007. Milk production increase was also smaller than the growth of world population (+1.4%) in 2009. This setback occurred even though weather conditions were rather normal in the main milk production areas. Poor return from milk production and high input costs seemed to have discouraged farmers in many parts of the world. Furthermore, last year the world dairy sector temporarily lost one of its driving forces, as Chinese production suffered from the impact of the melamine crisis: mistrust by local consumers hindered production from the last months of 2008.

Milk production growth between 2000 and 2009



Source: CNIEL, PZ, FAO, IDF National Committees

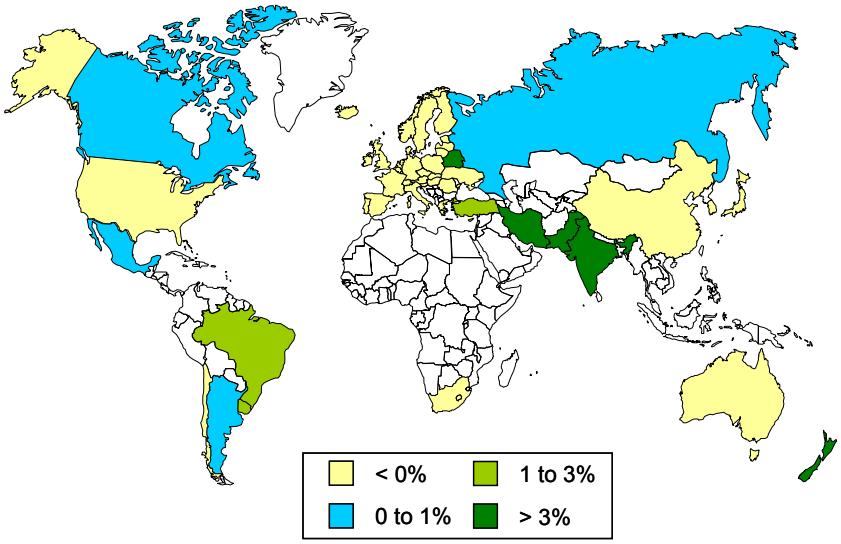
1.2. Cow milk

Cow milk production, still represents 84% of the total world milk production. Its growth rate was estimated at +0.6% in 2009, the lowest observed since 1997.

Cow milk production decreased in many parts of the world: European Union, United States, Ukraine, Australia, Japan, South Africa and even China, where the tremendous growth observed since 2000 was brought to a total standstill by the melamine crisis. In the United States an important culling program reduced dairy cow numbers by 250 000 heads (or -2.7%) between December 2008 and December 2009. This led to a slight decrease in cow milk production (-0.3%), whereas it had substantially increased by 6 million tonnes between 2005 and 2008. Within the European Union, cow milk production decreased sharply in France (-3.8%), Ireland (-2.9%) and in many parts of Eastern Europe. On the other hand, a few countries like Denmark (+3.3%), Belgium (+3.3%), the Netherlands (+1.4%) and Germany (+1.2%) presented development opposite to the general European trend.

Outside Europe, some countries boosted their cow milk production in 2009. In New Zealand, after a slight decrease in 2008 due to a severe drought during the first few months, production increased sharply (+8.7%) in 2009. While no specific information about cow milk production is available for the moment, total milk production in India – mainly buffaloes and cow milk – increased by 3.3% during the last dairy year, ending in March 2010. This substantial growth was unexpected because India faced a severe drought in 2009. Substantial growth also occurred in Pakistan (estimates of +3.8%), in Belarus (+5.7%), in Turkey (+2.9%) and in Iran (+3.6%).

Cow milk production annual growth in 2009



Ranking of the main producers

mln tonnes	2009	Annual growth 08/'09 (%)
EU 27	147.9	**-0.7**
United States	85.9	**-0.3**
India (e)	48.1	**3.3**
China	35.2	**-1.0**
Russia	32.6	**0,7**
Brazil (e)	28.0	**1.5**
New Zealand	17.0	**8.7**
Pakistan (e)	12.4	**3.8**
Ukraine	11.6	**-1.3**
Turkey	11.6	**2,9**
Mexico	10.9	**0.0**
Argentina	10.3	**0,3**

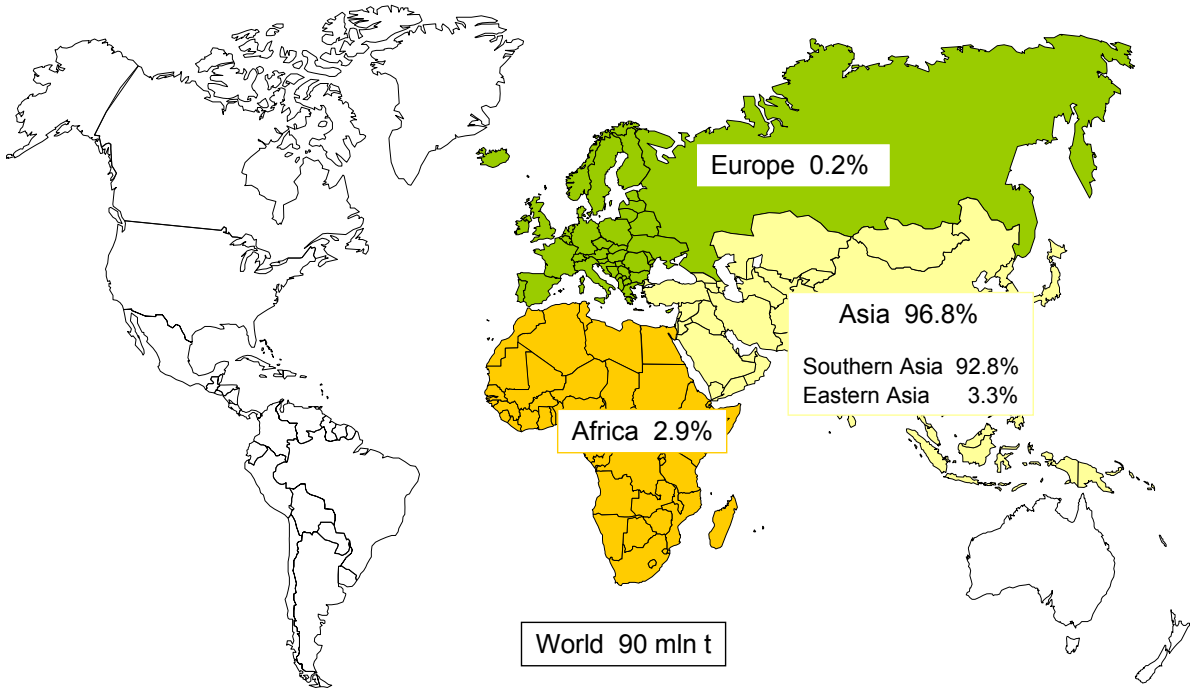
(e): estimates

Source: CNIEL, PZ, FAO, IDF National Committees

1.3. Buffalo milk

In 2009, buffalo milk production kept increasing much faster than cow milk production. The world production of buffalo milk was estimated at 90 million tonnes in 2009. It constituted 13% of the total world milk production, compared to 8% in 1990. Buffalo milk is produced in few countries. More than 90% of the total volume is produced in India and Pakistan. Outside Southern Asia, smaller volumes are also available in Egypt, China, Iran and Italy.

Buffalo milk production - Geographical breakdown in 2009



Source: CNIEL, PZ, FAO, IDF National Committees

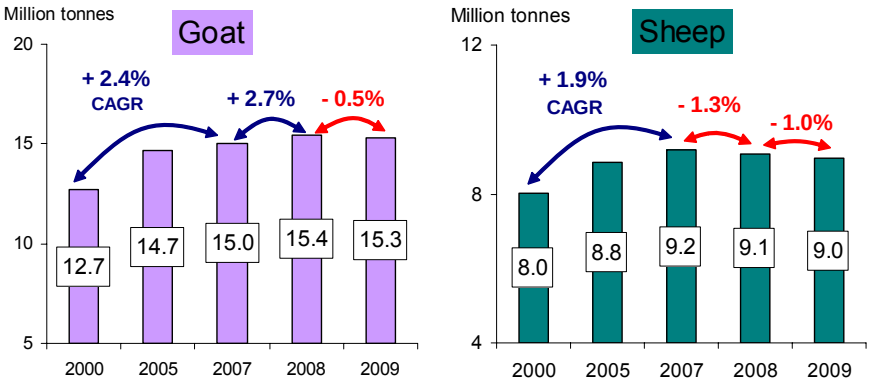
1.4. Milk from sheep, goat and other animals

Goat milk constitutes around 2.2% of total milk production, sheep milk 1.3% and camel milk 0.2%. According to FAO data for 2009, goat milk was mainly produced in Asia (59% of world production), in Africa (21%) and in Europe (16%), whereas sheep milk production is located in Asia (46%) and Europe (34%), and camel milk mostly in Africa (89%).

Goat milk production has been increasing regularly over the last few years, but this growth was halted in 2009. Goat milk production decreased globally last year by 0.5%, subsequent to a downturn in most European countries: Spain, Portugal, Italy, Norway, Croatia and Russia. This situation as a whole includes however some exceptions. Goat milk production was indeed rather dynamic in the Netherlands (+7.3%) and in France (+6.5%).

As for sheep milk, world production has been decreasing for the last two years. In 2009, this decline occurred mainly in Europe.

Goat and sheep milk production development



Source: CNIEL, PZ, FAO, IDF National Committees

1.5. Trends for 2010

The development of milk production highlights wide geographical variations during the first few months of 2010. Milk output decreased slightly in the EU, Australia, Japan, and more significantly in Argentina and Ukraine. On the other hand, a small increase was observed in Canada and in the United States, while Brazil and Chile experienced a sustained growth of their milk production.

The decrease observed in the EU, Australia and Argentina is due to a slow start, but milk production has been growing since April thanks to better weather conditions. Therefore, milk production is expected to increase in those areas in 2010.

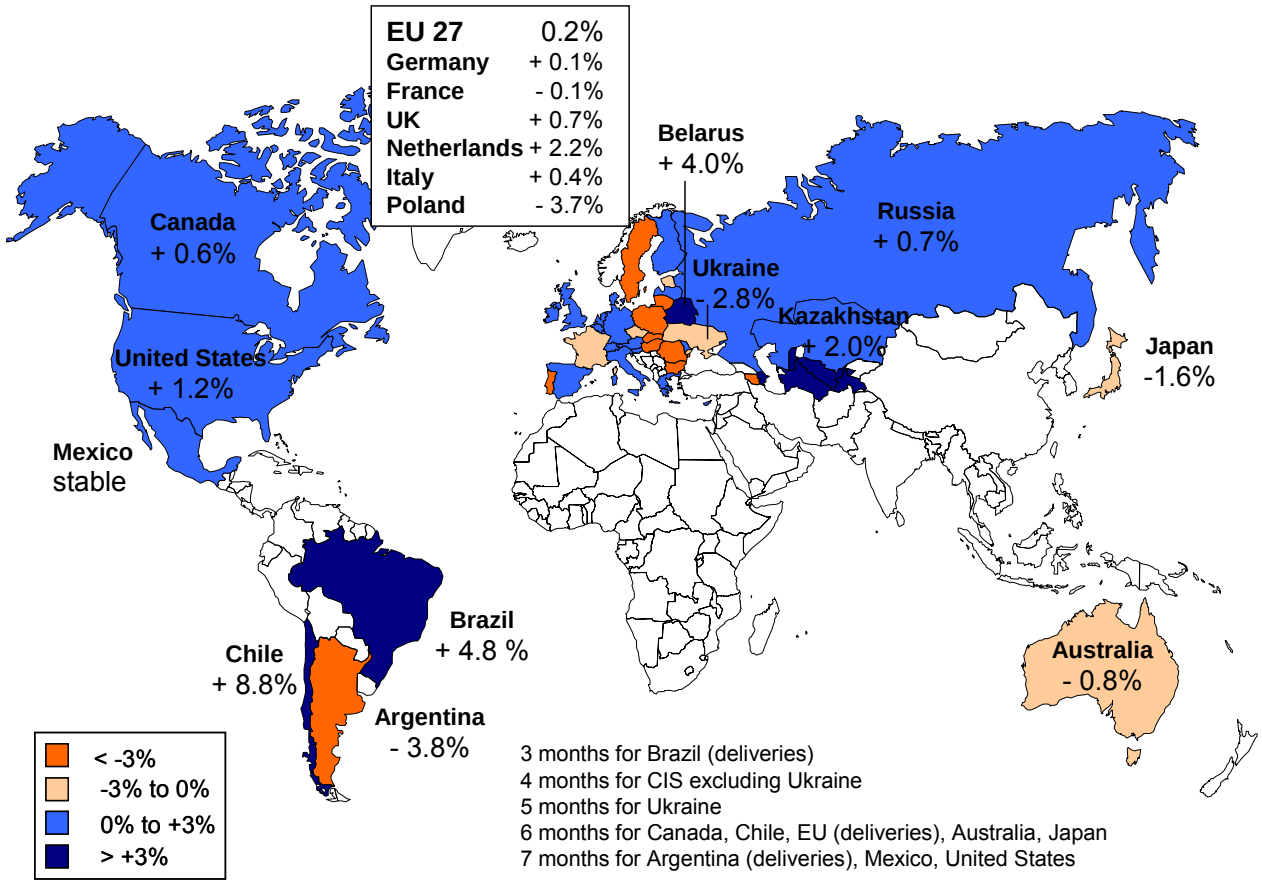
Also, since early spring 2010, better returns from milk prices globally tend to stimulate milk production in most parts of the world. Consequently, forecasts for the whole year tend to point to a more positive development than the trend observed during the first few months of 2010 (cf. Dairy outlook chapter).

Even if no precise figures are available, local authorities expect a sharp increase in milk production in India during the 2010-11 dairy year, because monsoon rainfall in early summer 2010 was rather abundant in comparison to the previous year. A similar enthusiasm exists within dairy organizations in Uruguay. Rain in mid-June 2010 and good weather conditions increased the availability of pasture, which is expected to consolidate milk production volumes, already between 2 and 3% above last year's levels during the first months of 2010.

In China, milk production is also likely to increase this year. Indeed, a clue is provided by figures published by the Chinese National Bureau of Statistics, which are showing sustained growth of processing activity in the dairy sector. During the first seven months of 2010, the output of fluid milk increased by 9% to 10.1 million tonnes, while the production of solid dairy products (mainly milk powders) rose by 5% to 1.7 million tonnes.

On the other hand, milk production might slow down in Pakistan because of the terrific floods that occurred during the summer. Likewise, the fires and severe drought faced by Russia in July and August could hinder the slight growth of milk output observed during the first few months of 2010.

Milk production trends during part of 2010



Source: CNIEL, PZ, national statistics, international press

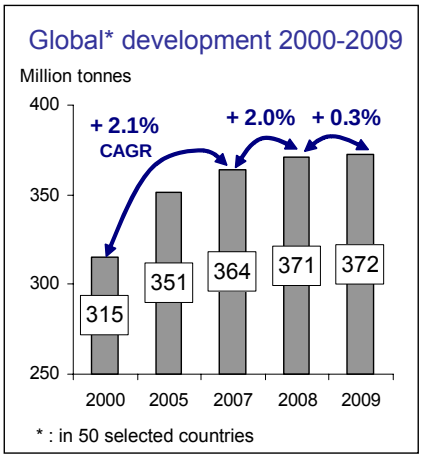
2. Milk Processing

2.1. Cow milk deliveries

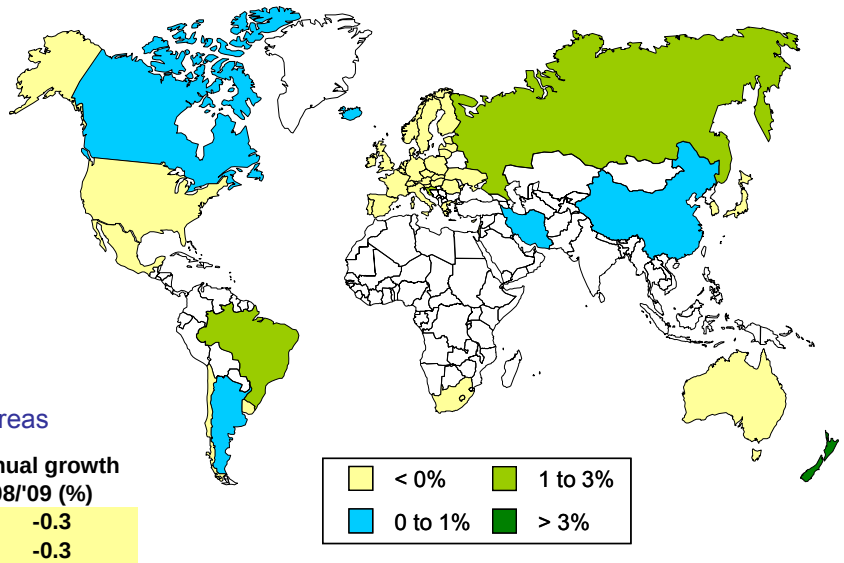
According to the data collected from IDF National Committees and other bodies, cow milk deliveries globally increased by 0.3% in 2009. This rate is rather small in comparison with 2008 (+2.0%) and with the compound annual growth rate (+2.1%) observed during the period from 2000 to 2007.

Like milk production, milk deliveries decreased last year in many parts of the world: EU, United States, Japan, Australia, South Africa, Korea, Norway and Ukraine. In a few countries like China deliveries increased slightly (+0.5%) in spite of a decrease in cow milk production (-1.0%). The share of processed milk has been increasing regularly for the last few years in China, reaching 71% of produced milk in 2009, versus 60% in 2000. In Russia too, last year, milk deliveries increased faster (+2.8%) than cow milk production (+0.7%). Here again, the share of delivered milk rose broadly during the last decade, from 39% in 2000 to 50% in 2009.

Cow milk deliveries development



Development in 2009



Main countries and areas

mln tonnes	2009	Annual growth 08/'09 (%)
EU 27	134.2	**-0.3**
United States	85.4	**-0.3**
China	25.0	**0.5**
Brazil	19.6	**1.5**
New Zealand	16.9	**8.7**
Russia	16.3	**2.8**

NB: India not ranked (no reliable data available)

Source: CNIEL, PZ, FAO, IDF National Committees

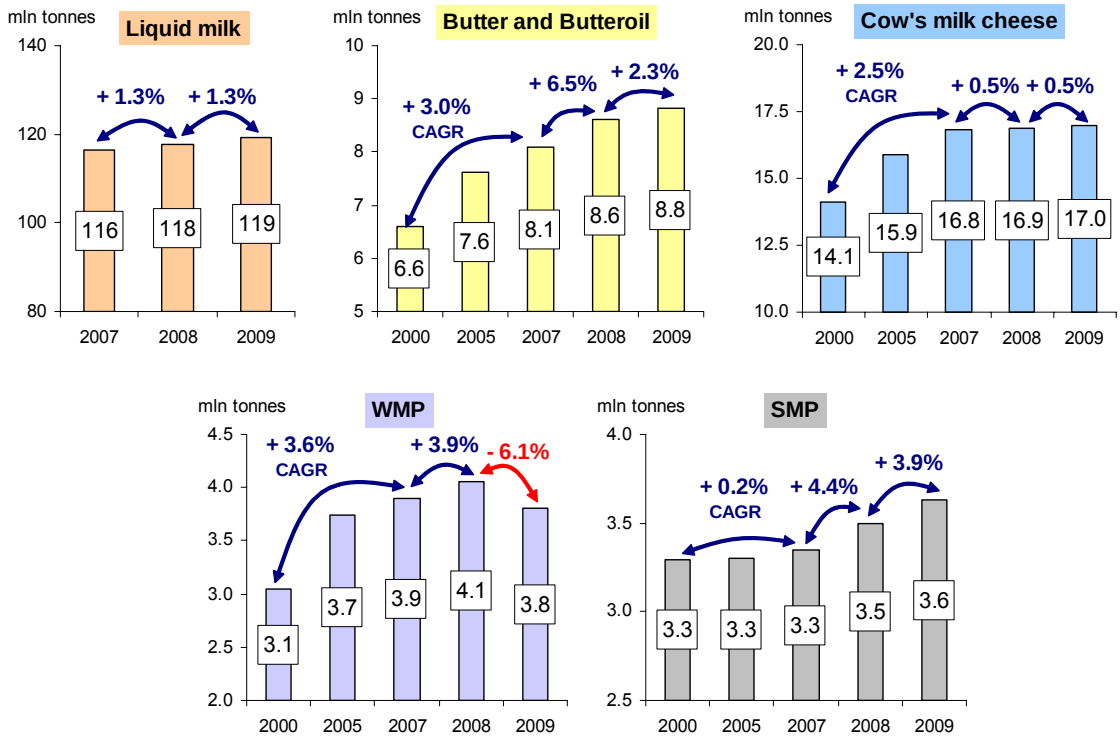
2.2. General overview of dairy products output

World output increased last year for every dairy product, except for whole milk powder. This setback is a spectacular turnaround since production of whole milk powder increased widely between 2000 and 2008. This decline results from a huge drop in the milk production in many parts of the world, including China.

World butter production kept growing last year, even if growth was not as sustained as in 2008. As for cow's milk cheese, industrial output has been weak for the last two years, although it had been rather strong since 2000. SMP experienced an opposite development, with a sustained growth in 2008 and 2009, whereas production was almost stable between 2000 and 2007.

Consolidated and exhaustive figures are not available for fresh dairy products. Only global trends are built up from national statistics. However, according to the data collected for this report, liquid milk output increased slightly last year, while fermented products experienced a rather sustained production growth.

Dairy products output development in selected countries



NB: total for each product determined by the compilation of data issued by 50 selected countries, which represent at least 90% of the world production for butter, cow's milk cheese and milk powders, and 70% for liquid milk.

Source: CNIEL, PZ, FAO, IDF National Committees, USDA

2.2.1. Liquid milk and fresh dairy products

In 2009 as well as in the last few years, liquid milk output has been rather stable in most western countries. On the other hand, it showed a sustained growth in other parts of the world.
The production of fermented products and milk drinks presented last year a more sustained growth than production of liquid milk in most countries of the world. This growth was especially impressive in the United States (+ 4.7 percent) and in China (+ 22.5 percent).

Liquid milk and fermented products - Output development in selected countries

Liquid milk

Million tonnes	2009	Annual growth 08/'09 (%)
EU 27	32.8	0.2
United States	25.2	0.6
China	13.2	4.6
Brazil	10.9	2.0
India*	7.9	4.8
Mexico	4.5	3.3
Russia	4.3	1.0
Japan	3.9	-3.7

*: figures only for cooperatives

Fermented products and milk drinks

Million tonnes	2009	Annual growth 08/'09 (%)
EU 27	10.4	0.4
China	3.2	22.5
United States	2.5	4.7
Japan	2.3	-1.6
Russia	2.2	0.0
Turkey*	2.1	0.7
Iran	0.9	4.0
Argentina	0.6	1.5

* : 2008 figures
NB: no data available for India

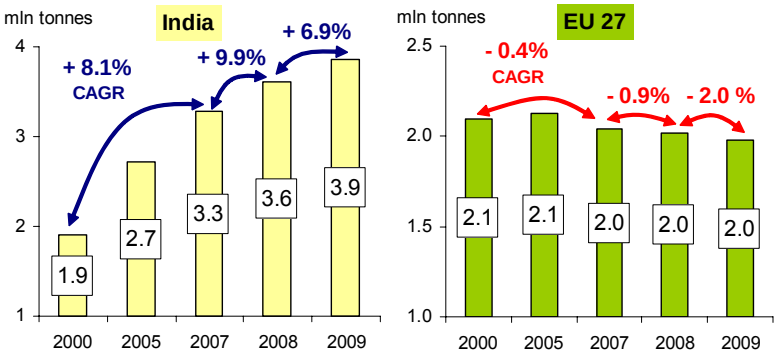
Source: CNIEL, PZ, Eurostat, IDF National Committees, ZMB

2.2.2. Butter and other milk fats

World output of butter and other milk fats (butteroil, ghee) is estimated at approximately 9.5 to 10 million tonnes. According to the data collected, this output increased by 2.3% between 2008 and 2009. This growth mainly concerned ghee produced in India. The production of butter and butteroil declined in many parts of the world, especially in the European Union, the United States, Russia and Australia. Among the main producers, New Zealand is an exception. Its butter production increased last year by 8.8%.

Butter output development

Global development 2000-2009 for the two main players



Development in 2009 for the main countries and areas

1 000 tonnes	2009	Annual growth 08/'09 (%)
India*	3 855	6.9
EU 27	1 979	-2.0
United States	712	-4.6
Pakistan	630	3.0
New Zealand	470	8.8
Russia	232	-9.1

NB: butteroil included
* : estimate

Source: CNIEL, PZ, FAO, IDF National Committees, ZMB

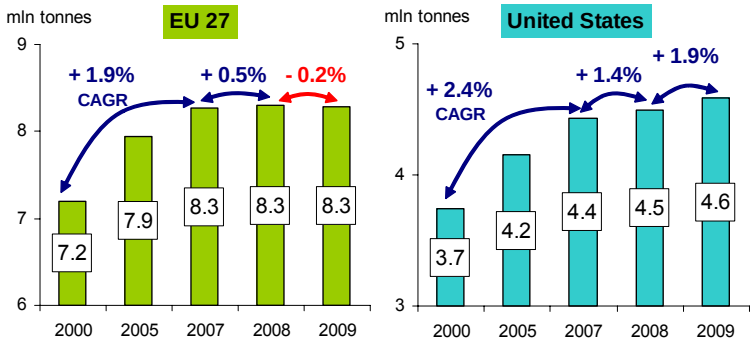
2.2.3. Industrial cheese

World production of natural cheeses (i.e. all cheeses excluding processed cheeses) is estimated at around 20 million tonnes. Cow's milk cheeses produced from milk delivered to dairies (i.e. industrial cheeses) represent more than 80% of the global natural cheese production. The rest is made up of farm and home-made products, but also cheeses made from other milk (sheep, goat, and buffalo). Europe and Northern America represent 80% of the world natural cheese production.

As in 2008, cheese production increased moderately in 2009. European production was the main cause for this slowing down. The output of industrial cow's milk cheeses, which represents 90% of the whole European cheese production (9 million tonnes), decreased slightly because the domestic demand stopped growing. On the other hand, cheese production was sustained in the United States, thanks to strong domestic demand, which compensated a significant decline in exports following their 2008 record.

Cow's milk cheese output development

Global development 2000-2009 for the two main players



Development in 2009
for the main countries and areas

1 000 tonnes	2009	Annual growth 08/'09 (%)
EU 27	8 287	-0.2
United States	4 585	1.9
Brazil	614	1.2
Argentina	509	6.5
Russia	436	1.5
Canada	331	0.7
Australia	330	-3.6
New Zealand	270	-8.5

Source: CNIEL, PZ, IDF National Committees, ZMB

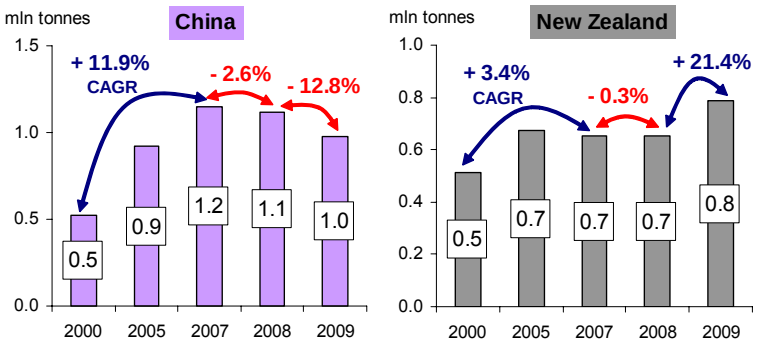
2.2.4. Milk powders

World production of WMP is estimated at around 4 million tonnes. Apart from New Zealand and Argentina, the output of whole milk powder decreased in most parts of the world between 2008 and 2009. In Europe, production has even been decreasing for the last ten years. The decline was amplified last year, because it was more profitable for processors to produce and sell skim milk powder to intervention rather than producing and exporting whole milk powder on the world market. Poor returns on the international market also convinced Brazilian operators to reduce their WMP output by 100 000 tonnes, and to focus their activity on products to be sold mainly on the domestic market (liquid milk, fresh dairy products, cheese). In Australia, WMP output was restrained by a drought, which reduced milk production as well as other dairy products.

Surprisingly considering its recent development, Chinese output of WMP experienced a huge drop last year. According to USDA estimates, whole milk powder output (including infant formula) decreased last year from 1.12 to 0.98 million tonnes. This corresponds to a 13% decline, whereas the CAGR was about +12% during the period 2000-2007, just before the melamine crisis. The melamine crisis caused a general mistrust by local consumers towards the domestic WMP, which eventually led to an important decrease in Chinese production. Now the trend seems to be reversing. According to the Chinese National Bureau of Statistics, milk powder production (mainly WMP and infant formula) has already increased by 10.6% for the first six months of 2010.

Whole and semi-skim milk powder output development

Global development 2000-2009 for the two main players



Development in 2009
for the main countries and areas

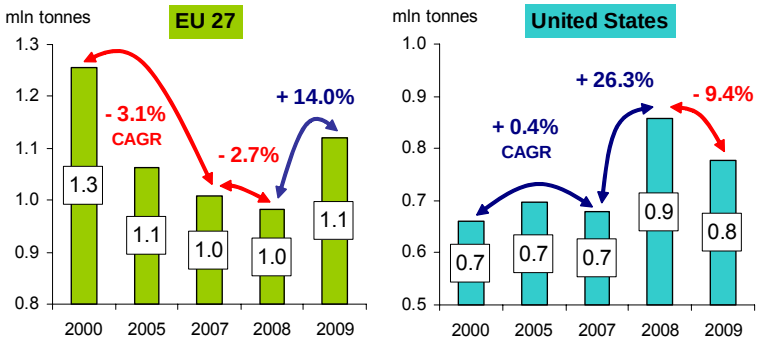
1 000 tonnes	2009	Annual growth 08/'09 (%)
China	977	-12.8
New Zealand	790	21.4
EU 27	739	-11.6
Brazil	473	-17.3
Argentina	235	17.5
Australia	126	-14.6

Source: CNIEL, PZ, IDF National Committees, USDA, ZMB

World production of SMP is estimated at around 4 million tonnes. Apart from the United States and Australia, the output of skim milk powder increased last year in most parts of the world. In Europe, the output was stimulated by the poor economic situation in the dairy sector, which led the European Commission to open intervention and to purchase butter and skim milk powder; 283 000 tonnes of skim milk powder, corresponding to a quarter of annual production, were actually withdrawn from the market between March and October. Production also strongly increased in New Zealand, thanks to tremendous growth in its exports, especially to Eastern and South Eastern Asia.

Skim milk powder output development

Global development 2000-2009 for the two main players



Development in 2009
for the main countries and areas

1 000 tonnes	2009	Annual growth 08/'09 (%)
EU 27	1 120	14.0
United States	778	-9.4
India*	364	7.4
New Zealand	360	35.8
Australia	190	-10.3
Japan	167	5.8

*: estimate

Source: CNIEL, PZ, IDF National Committees, ZMB

2.2.5. Condensed milk

The geographical breakdown of condensed milk production changed considerably during the last three decades. World production, which, in the eighties, was dominated by the EU, the United States and the ex-USSR, is now much more scattered with significant contributions in the Far East (Malaysia, Thailand, Singapore and China) and South America (Brazil, Peru, Chile). FAO estimated world production in 2009 at around 4.7 million tonnes.

According to data collected among IDF National Committees and other respondents, condensed milk production decreased last year in most parts of the world: EU (-3%), China (-8%), Chile (-20%), Ukraine (-10%), Canada (-8%), Peru (-8%), Russia (-4%) and United States (-6%).

2.2.6. Whey products and casein

In 2009 surplus milk protein worldwide led to a reduction in casein production in most countries (where statistics are available). In the EU, output was estimated at around 115 000 tonnes, that is to say 20 000 tonnes less than in 2008. European processors preferred to sell surpluses as skim milk powder to intervention.

Liquid whey production results mainly from the industrial production of cheese, which generates more than 80% of the total whey available, and secondarily from the casein output. For this reason, the major processors of whey are located in Europe, North America and Oceania, which correspond to the major cheese production areas. In 2009, the United States produced 490 000 tonnes of whey powder and condensed whey, as well as 190 000 tonnes of whey protein concentrates. The production of whey powder within the EU is estimated at around 1.6 million tonnes.

3. Dairy Industry

3.1. General recession in 2009

Most dairy companies experienced a decrease in turnover in 2009, primarily due to the sharp decrease in dairy product prices. This situation as a whole includes however some exceptions, especially in Asia and in America. Growth remained steady for the Asian leaders, though it was not as strong as for the last five years. Turnover increased however last year by 8% for Mengniu and by 14% for Yili.

In America, some companies boosted their activities through a very ambitious purchasing strategy. Mexican Lala bought several companies in the United States: National Dairy Holdings (18 plants; annual sales of 1.8 billion USD), Promised Land and one Farmland Dairies plant. Lala's turnover (2.9 billion USD in 2008) might now approach 5 billion USD.

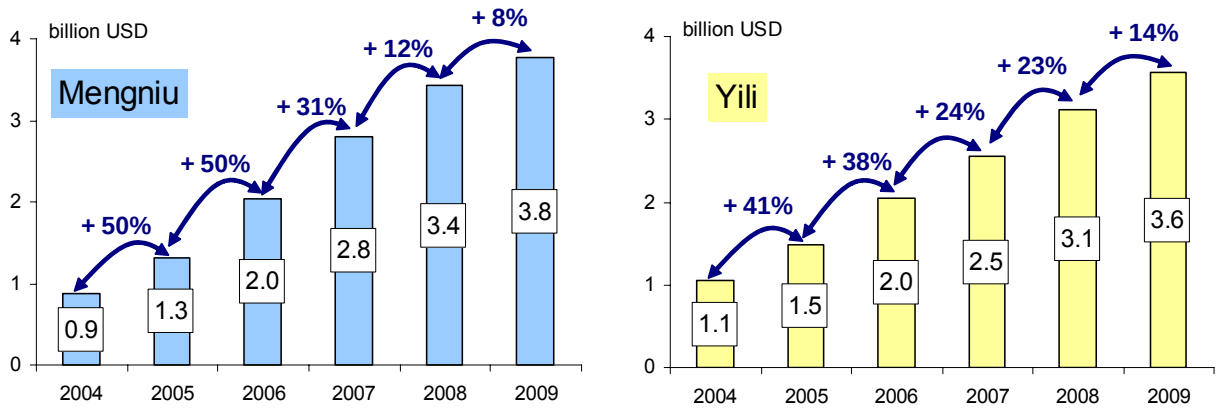
Main dairy leaders in 2009 (dairy turnover in billion USD)

> 20	10 to 20	6 to 10	4 to 6	3 to 4
Nestlé 27.3	Danone 16.0 Lactalis 11.8 FrieslandCampina 11.4	Dean Foods 9.7 Fonterra 9.6 Arla Foods 8.7 DFA 8.1 Kraft Foods 6.8	Saputo 5.2 Meiji Dairies 5.1 Parmalat 5.1 Morinaga 4.8 Bongrain 4.6 Lala 4 to 5	Mengniu 3.8 Yili 3.6 Sodiaal 3.5 Land O' Lakes 3.2 Bel 3.1 Tine 3.0 Schreiber 3 to 4

NB: Unilever not ranked

Source: CNIEL, PZ, company reports, international press

Mengniu and Yili turnover growth



Source: CNIEL, PZ, company reports, international press

Canadian Agropur was also very active. It acquired three production sites in the United States: Schroeder Milk, Green Meadows and one Farmland Dairies plant. Subsequently, Agropur increased its turnover last year by 8% to 2.7 billion USD.

In 2009, Brazilian Bom Gosto bought several dairy assets in Brazil: two processing sites from Parmalat and Nestlé, then the company Laticínios Credense. Consequently, Bom Gosto doubled its turnover to 820 million USD. The fourth largest Brazilian dairy company now plans to expand abroad. Early 2010, Bom Gosto announced a 30 million USD investment in order to set up a new factory in Uruguay.

3.2. Reorganization speeds up again in 2010

If little occurred in Europe last year, things have changed considerably since the beginning of 2010. French Lactalis bought two major companies in Spain: Forlasa, leader in Manchego cheese with a turnover exceeding 200 million USD, then the dairy branch of Ebro Puleva, one of the leaders of the Spanish liquid milk market with annual sales over 600 million USD. French Danone and Russian Unimilk agreed to merge their dairy businesses in the CIS area. Danone holds 57.5% of the merged business, which is expected to generate annual sales of 2 billion USD.

Two other important projects are currently in progress in Europe. The top French dairy co-operative Sodiaal is expected to take over Entremont, the leader of the European market for Emmental with an annual turnover of 2 billion USD. In Germany, Nordmilch and Humana, which, in 2009, already merged their commercial activities into a new structure called Nordcontor, might clear a new step this autumn with a total merger of their operative businesses.

Outside Europe, reorganization is still very active in Brazil. In February 2010, five Brazilian dairy coops (Itambé, Centroleite, Confepar, Cemil and Minas Leite) announced a planned merger. This would lead to the biggest dairy cooperative in Latin America being set up, generating a turnover exceeding 2 billion USD, with deliveries of approximately 7 million litres of milk per day from 40 000 producers.

The Chinese dairy industry is starting to invest abroad. In July 2010, the third dairy processor Bright Dairy bought a 51% interest in New Zealand Synlait Milk for 60 million USD. The New Zealand Industry is experiencing a slow but regular reorganization. Five projects are currently in progress. Thus, in 2011-2012, the New Zealand dairy sector might include as many as ten companies, whereas it had only three operators involved on the world dairy market in 2002.

Reorganization within the New-Zealand dairy sector

In 2002, there were only three firms* left in the New Zealand dairy sector

Fonterra — TATUA — Westland Milk Products NEW ZEALAND

* involved on the world dairy market

Between 2006 and 2008, three new companies were put into operation

OpenCountry — synlait making more from milk — NZDL

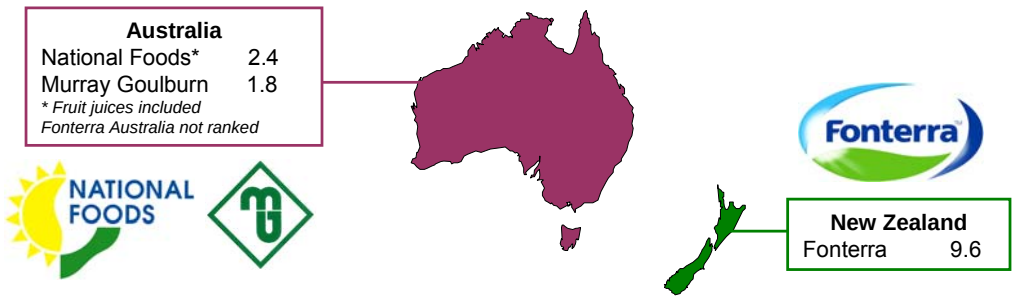
In 2009-10, several projects are in progress

MATAURA VALLEY	Ingredient Solutions	Oceania DAIRY GROUP	Miraka	ARAPUNI MILK
~20 000 t of milk powders annually	Manufacture of micellar caseins	Manufacture of milk powders	~37 000 t of milk powders annually	Manufacture of milk powders

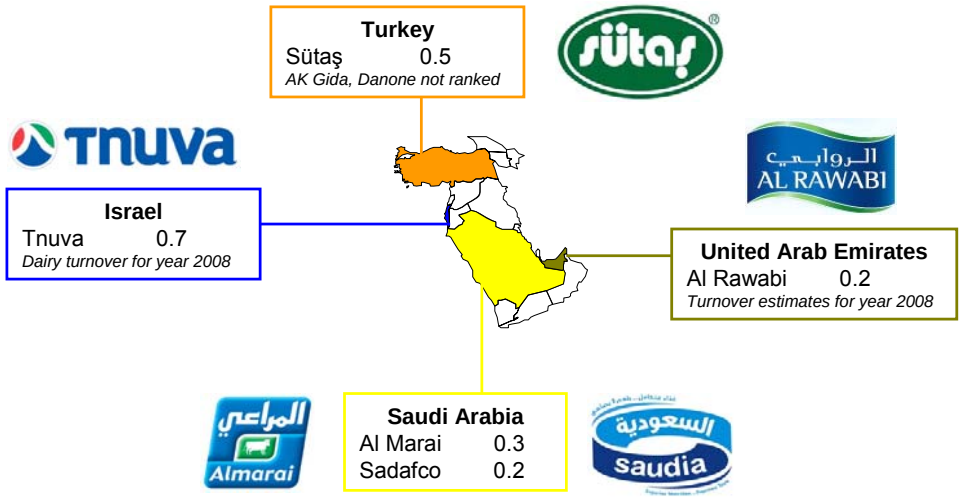
Source: CNIEL, PZ, company reports, international press

3.3. Dairy leaders in different world areas (2009 turnover in billion USD)

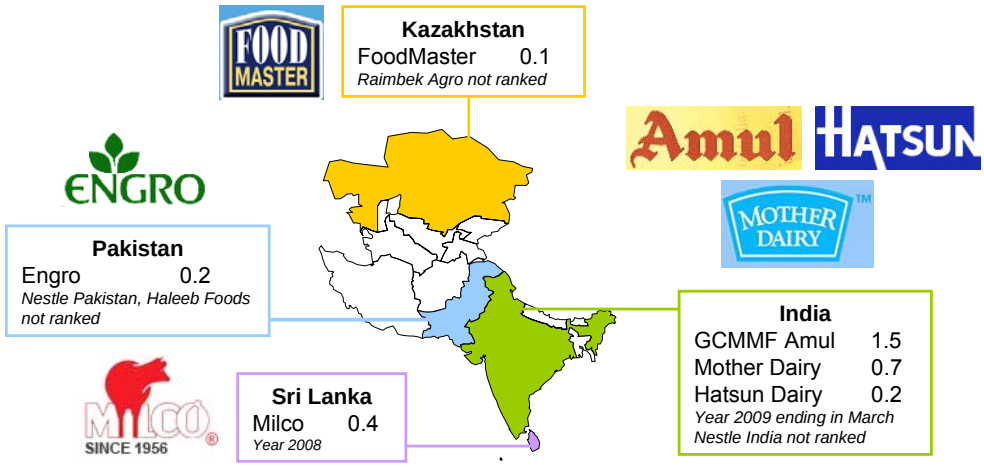
Oceania



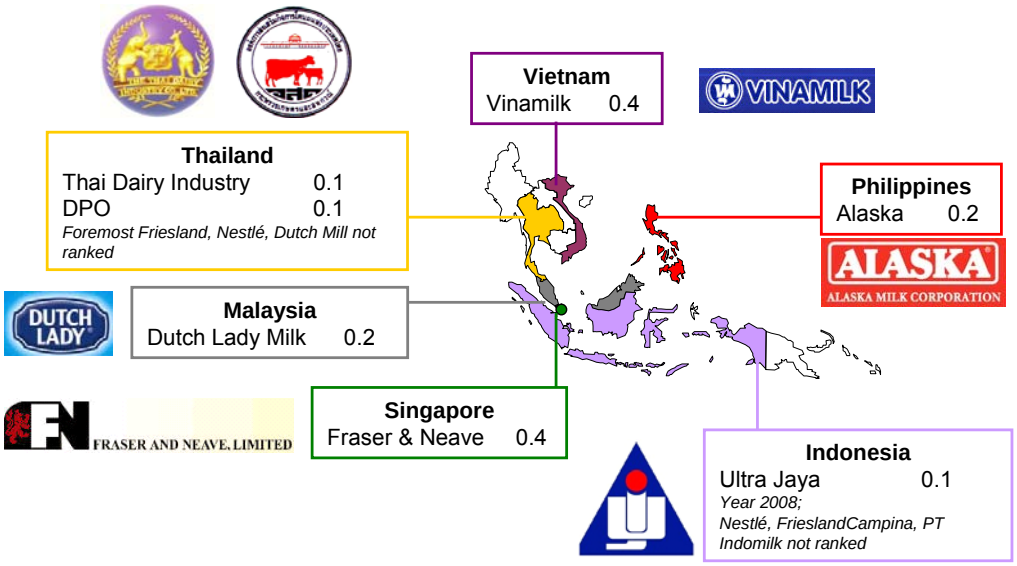
Western Asia



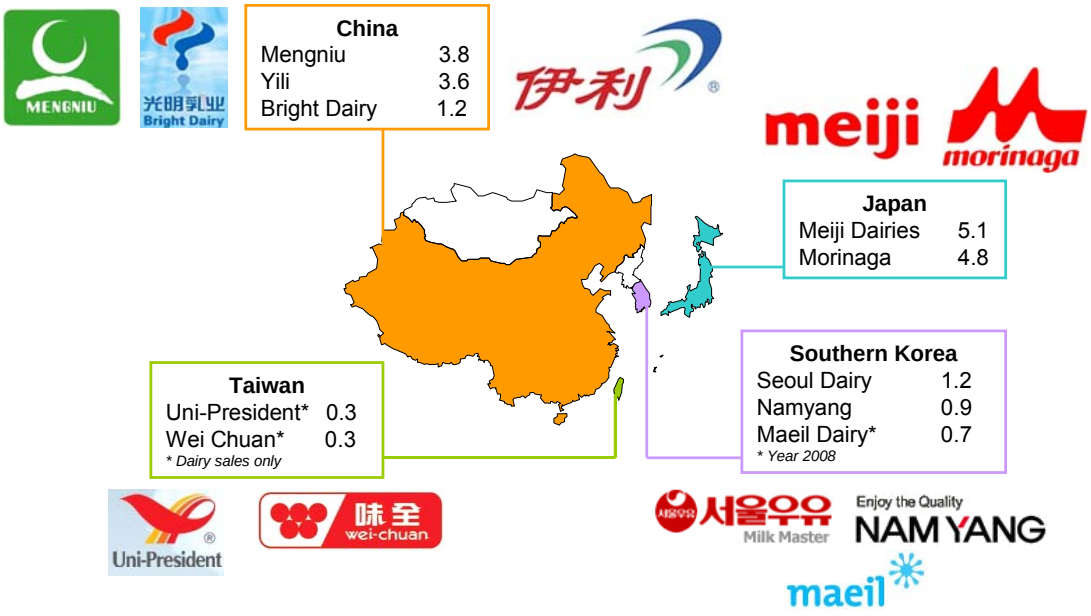
Central and Southern Asia



South-Eastern Asia



Eastern Asia



Northern & Central America

United States

Dean Foods*	9.7
DFA	8.1
Kraft Foods*	6.8
Land O'Lakes*	3.2
Schreiber**	3 to 4

** Dairy sales only*
*** Estimates*

Canada

Saputo*	5.2
Agropur	2.7
Parmalat	1.4

** Dairy sales only ; year ending in March 2010*

Mexico

Lala	4 to 5

Estimates ; 2.9 in 2008

Southern America

Colombia

Alpina	0.7
Colanta	0.6

Nestlé not ranked

Venezuela

Parmalat	0.6

Brazil

Brasil Foods*	1.3
Itambe**	1.0
Bom Gosto	0.8

** Dairy sales only ** Estimates*
DPA (Fonterra-Nestlé) not ranked

Peru

Gloria	0.2

Uruguay

Conaprole	0.4

Chile

Soprole	0.5
Colún*	0.3

** Year 2008*
Nestlé not ranked

Argentina

Mastellone Hermanos	0.9
Sancor*	0.8

** Estimates*

Africa

Morocco

Centrale laitière	0.7

Egypt

Juhayna	0.1

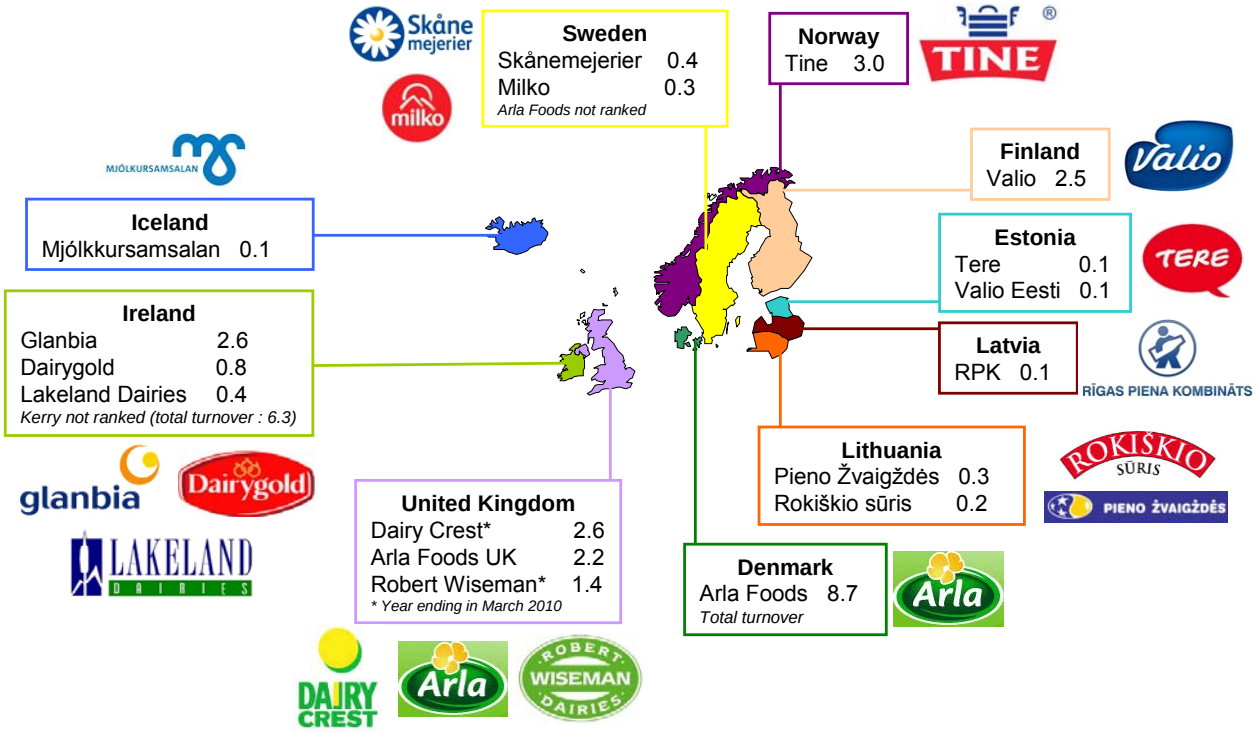
Kenya

NKCC	0.1
Brookside Dairy	0.1

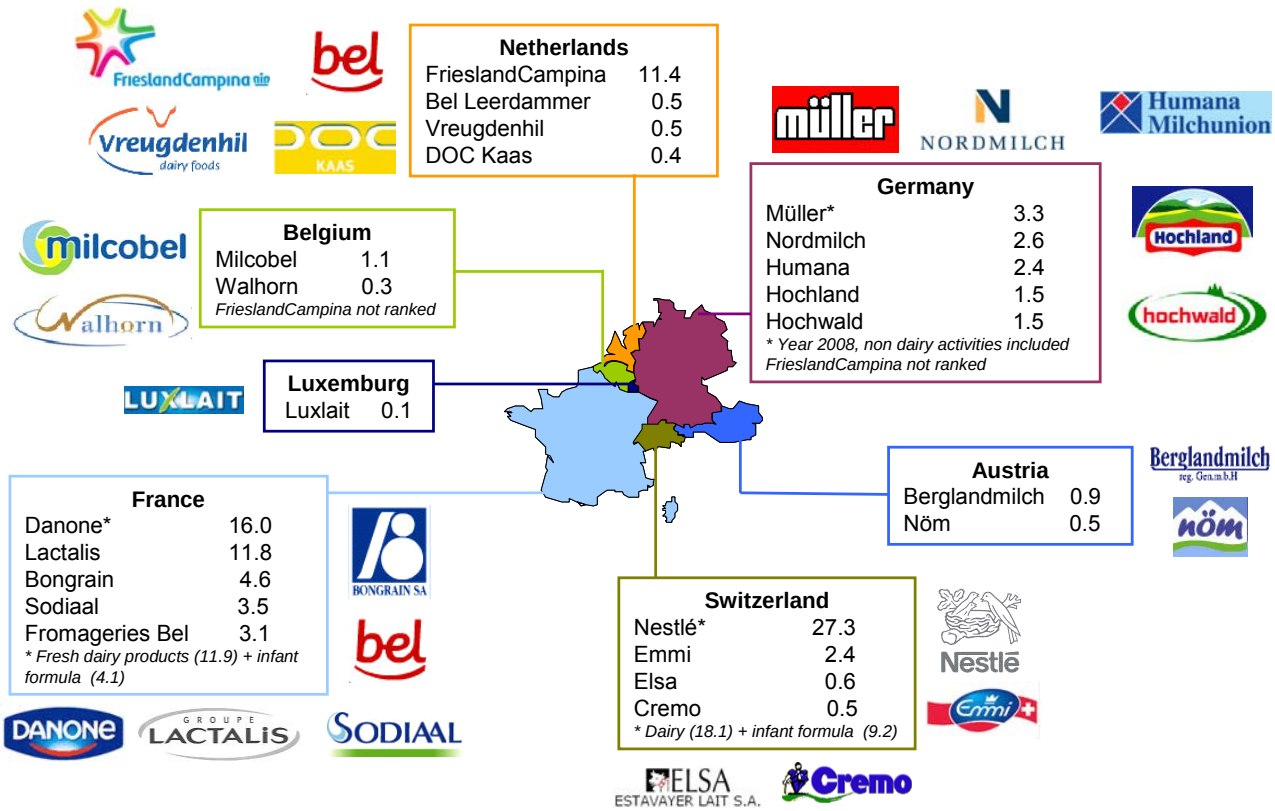
South Africa

Clover	0.7
Parmalat	0.4

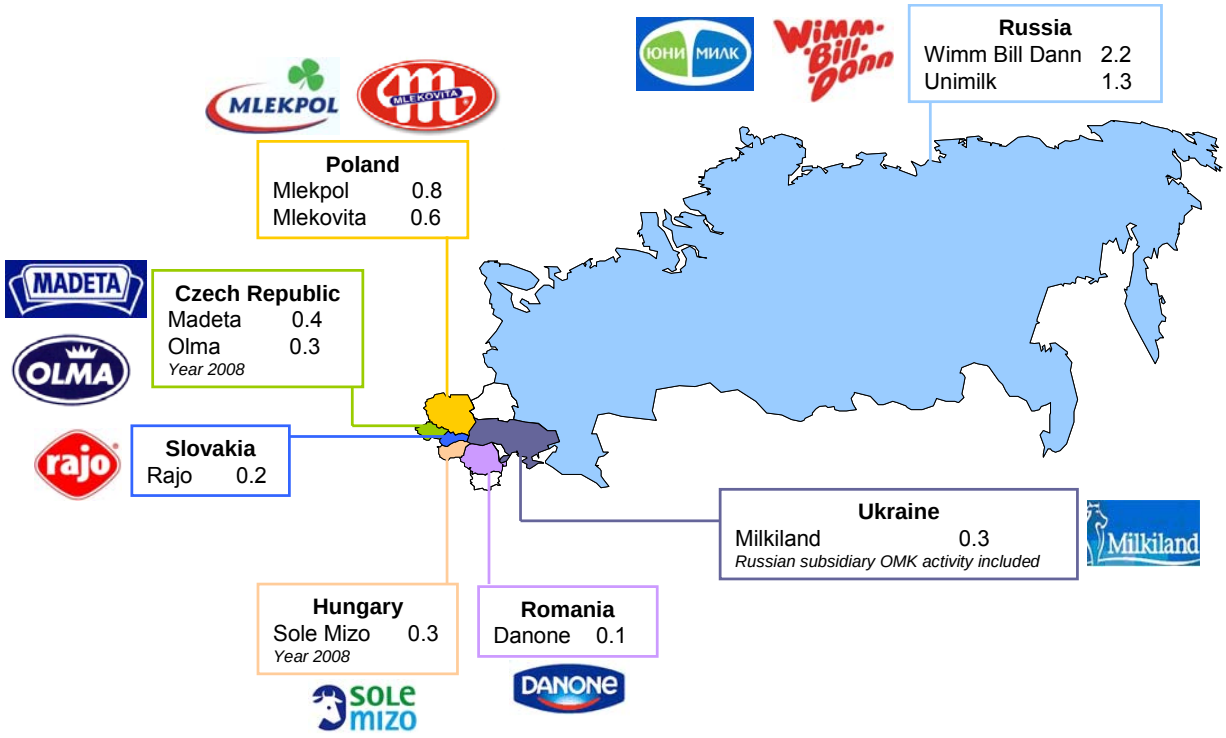
Northern Europe



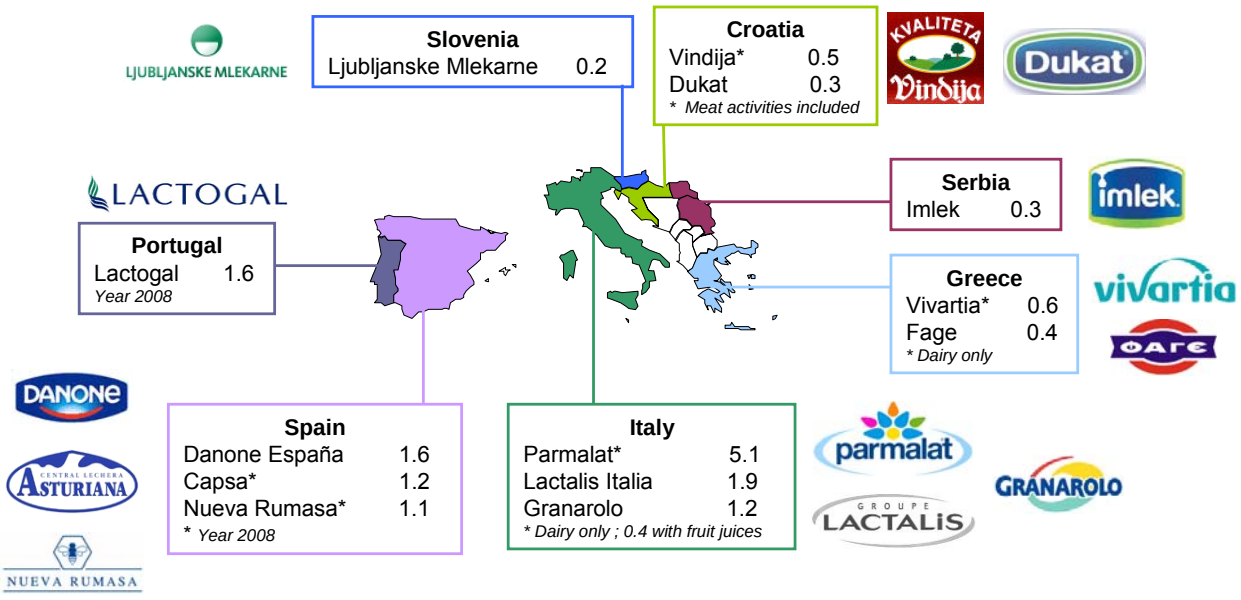
Western Europe



Eastern Europe



Southern Europe



Source: CNIEL, PZ, company reports, international press

4. Consumption

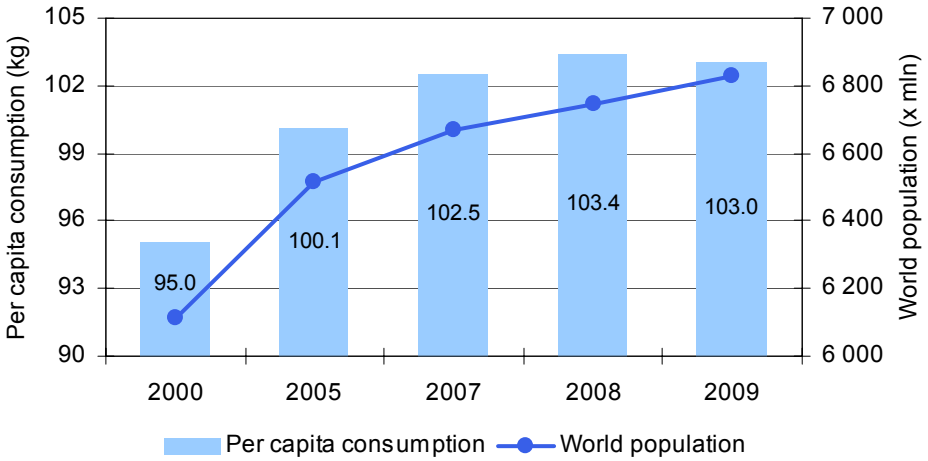
4.1. Global consumption

Basically, when not taking into account public and private stock changes, global consumption is equal to world milk production. This volume includes not only human consumption, but also the use of milk for feed purposes and for some technical applications (both food and non food) of products like casein and caseinates. No reliable data are available about the proportion of milk used for the various destinations. Therefore when talking about consumption, reference is generally to total consumption.

In 2009 world milk production/consumption (all kinds of milk) reached a level of more than 703 million tonnes. Compared to the year 2000, total volume has grown by 21% (+ 122 million tonnes). Based on the UN world population forecasts the global per capita consumption can be calculated. With an estimated population amounting to 6.83 billion people, global per capita consumption of milk in 2009 was 103.0 kg. Because of the continuous growth in world population, the global per capita milk consumption in the period between 2000 and 2009 grew by no more than 8% (+ 8.0 kg). The average conceals huge regional differences between for example countries in Europe, which is a traditional dairy region, and upcoming dairy countries in Asia.

In 2009 however, for the first time in years the global per capita consumption of milk declined by 0.4%. Of course no stock changes have been taken into account. In the knowledge that in 2009 a large amount of EU and US milk was taken off the market through intervention, the fall in per capita consumption of milk would have been even bigger. The main reason for the decline was the crisis in the world economy, which had already been in evidence in the last quarter of 2008. Another reason for the decrease is the slowing down in the growth of Chinese dairy consumption due to the melamine crisis.

Per capita milk consumption versus development in world population



Source: calculation based on world milk production figures and UN population forecasts.

4.2. Regional consumption

While global consumption can be deducted from world milk production, calculating the consumption of individual countries is a much more difficult thing to do. One has to take into account the trade of milk. In 2009 world dairy trade amounted to almost 50 million tonnes[(A)] milk equivalents, nearly 7% higher than in the previous year. Though the global per capita milk consumption suffered a slight setback, a higher proportion of that volume originated from world dairy trade. The global per capita consumption of internationally traded dairy products increased by more than 5% compared to the previous year, reaching a level of 7.3 kg.

[(A)] Conversions of product volumes into milk equivalents are based on the non-fat solid content methodology.

The FAO Food Outlook (June 2010) provides a good overview of regional milk production and dairy trade[(B)]. Based on these figures regional consumption can be calculated, by balancing production with imports and exports. Asia (38%) is the most important consuming region, followed by Europe (30%, including EU and non EU-countries) and North America (13%). When a region has a self-sufficiency rate of less than 100%, imports are needed to meet the demand. Asia, Africa and Central America (including Mexico) are examples of regions with high net dairy imports. South America, North America and non-EU Europe are self-sufficient, being small net exporters. The European Union is, compared to the three regions just mentioned, a relatively large net exporter. Oceania however is the only region in the world, where consumption is lower than net exports volume. About 60% of production (based on FAO figures) is exported outside Oceania, which results in a self-sufficiency rate of close to 250%.

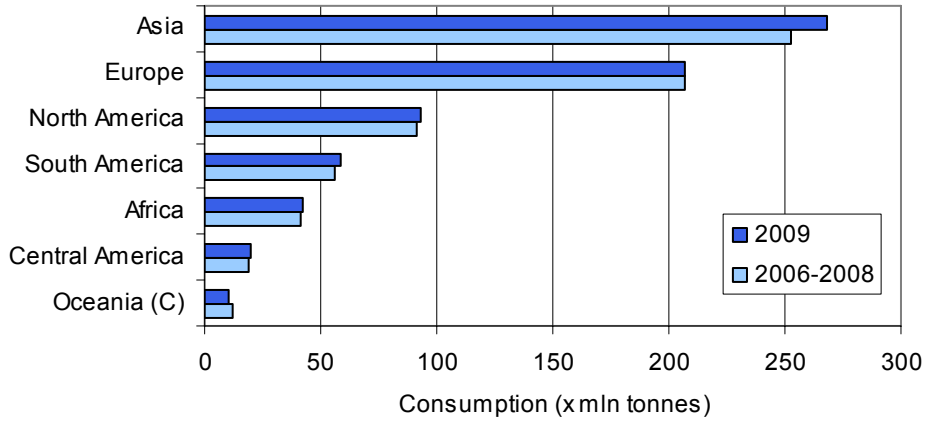
Global consumption by region in 2009

	Consumption '09 (mln tonnes)	Share (%) world consumption	Share (%) world production
Asia	268.3	38.4%	36.0%
Europe	206.8	29.6%	30.8%
EU 27	*145.8*	*20.8%*	*22.0%*
Non-EU	*61.0*	*8.7%*	*8.8%*
North America	93.0	13.3%	13.4%
South America	58.3	8.3%	8.5%
Africa	42.6	6.1%	5.2%
Central America	19.7	2.8%	2.3%
Oceania	10.6	1.5%	3.7%
World	699.5	100.0%	100.0%

Source: calculation of consumption volumes based on FAO Food Outlook June 2010

Comparing the 2009 volumes with the average regional consumption in the period 2006-2008 gives an indication of the development in regional consumption. Strongest growth occurred in Asia. Consumption in this region increased by approximately 6%. India and Pakistan especially contributed to this increase. Consumption growth in these countries was fuelled by increasing local production. The American regions and Africa showed a small rise in consumption. European consumption is stagnating, both in the European Union and non-EU Europe.

Development regional consumption 2009 compared to average 2006-2008



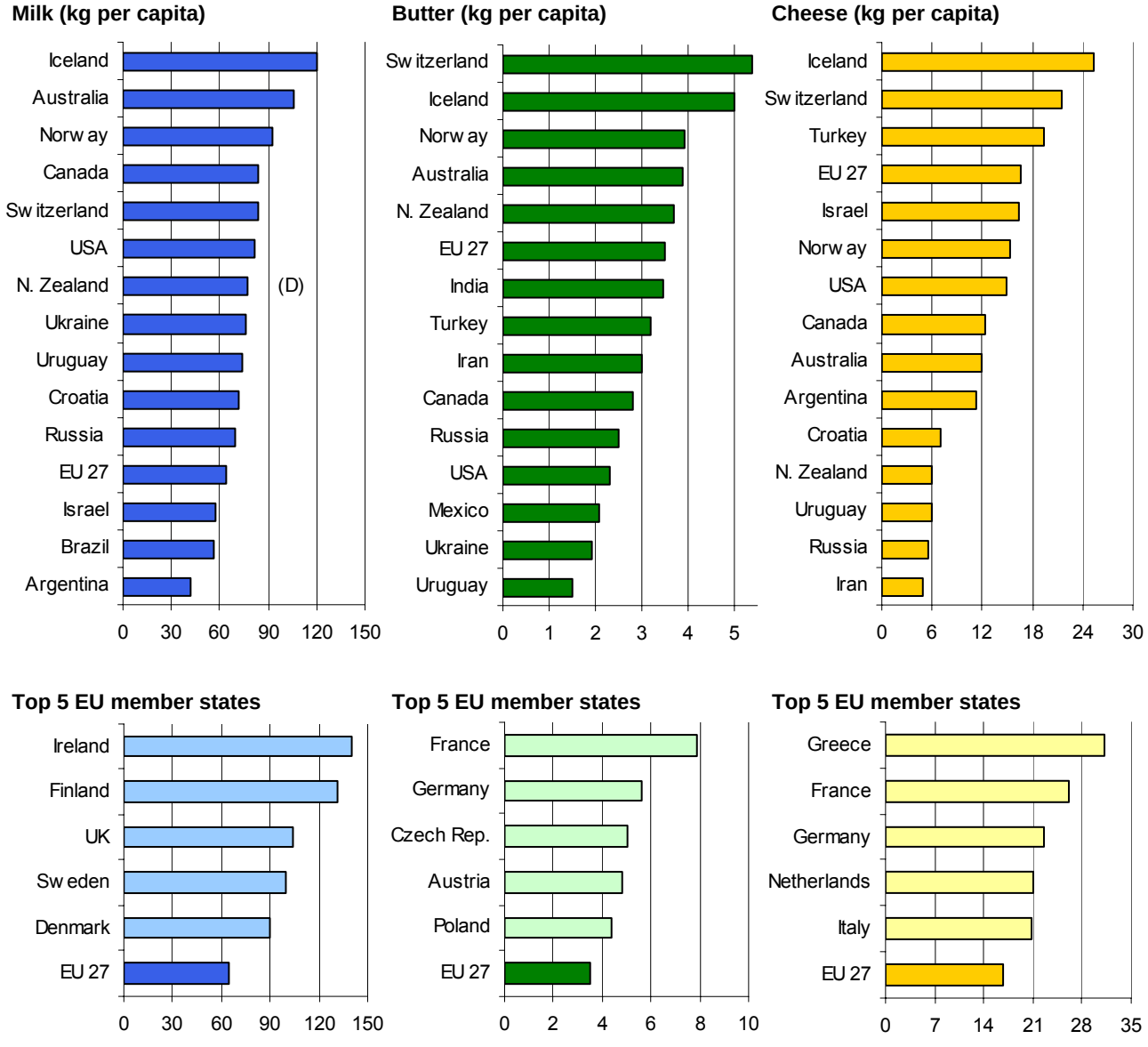
Source: calculations of consumption volumes based on FAO Food Outlook June 2010

[(B)] Conversions of product volumes into milk equivalents are based on the solids content methodology. This gives a different result for the world dairy trade volume in 2009 (41.9 million tonnes) compared to the non-fat solid content method (49.8 million tonnes).
[(C)] As a consequence of the method used the decline in Oceania is not a correct representation of reality. Average production and trade figures don't show the fluctuations in the period 2006-2008. Furthermore production volumes refer to a different period (for example Australian figures refer to the period July-June of the following year) than the trade figures. This results in too high a consumption level for the reference years.

4.3. Consumption of individual products

Reliable figures for consumption of individual dairy products are hard to obtain. The consumption figures are mainly based on balance sheets compiling the apparent consumption by country. One of the problems with this calculation method is that often production statistics are incomplete, out-of-date or not available. Furthermore in many countries the informal sector plays an important role. For that part of the dairy chain no detailed figures about separate products are available. Another problem is that many dairy products are subject to further processing and are incorporated into other foods, which makes it difficult to identify them in their original form. These products can be consumed on the domestic market or on foreign markets, but it is very difficult to identify the volume of their dairy content. A final difficulty is the confidentiality of data about private stocks in the dairy industry. This leads to under- or overestimation of the consumption volumes, because changes in private stocks are not included in calculation of consumption.
Due to this kind of problems comparability of the consumption of individual dairy products between different countries is very difficult. More consumption figures are available in tables 24-26 of Annex 2.

Per capita consumption of dairy products in selected countries (2009)



Source: IDF National Committees, FAPRI, Eurostat.

(D) Including milk drinks, fermented products.

5. World dairy trade

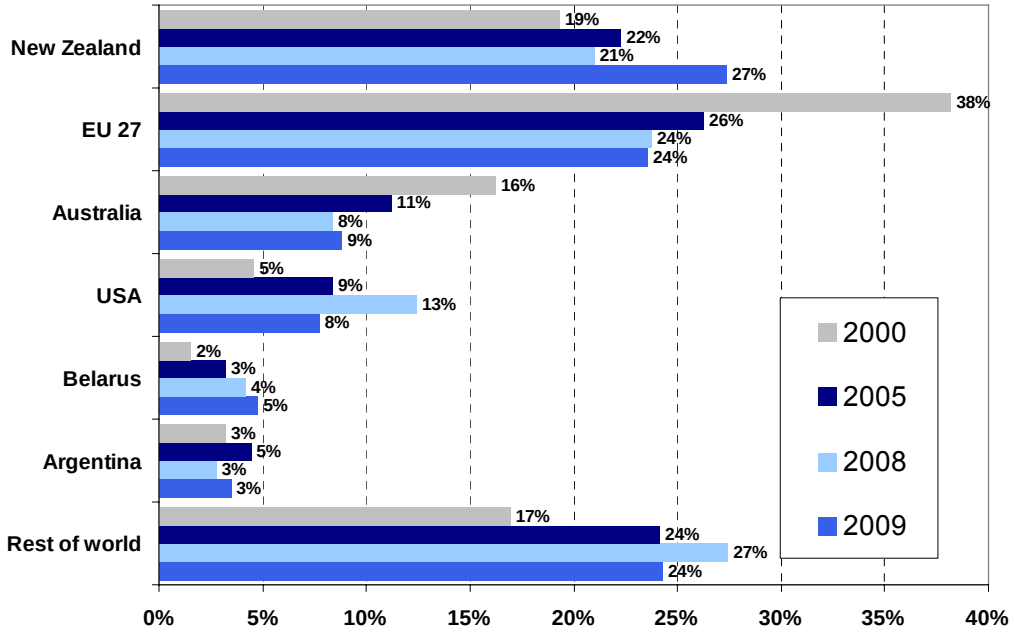
5.1. Introduction

World dairy trade is subject to various dynamics. Milk production, dairy demand and economic development in the various regions of the world all have their impact and are often inter-related. Furthermore, developments in the national and international political environment interact with market opportunities and company strategies, thus shaping the international scene of dairy trade flows.

5.2. Trade volume expands despite economic crisis

In 2009, world dairy trade[A], which excludes the EU-intra trade[B] volume, amounted to about 49.8 million tonnes milk equivalents[C]. This was nearly 7% above the previous year level. Apparently, though a weakening demand following the global economic crisis may have had a negative impact on export activities of specific countries, thus leading to substantial annual volume reductions, the crisis in the end did not affect trade as a whole, at least not on a volume basis. Moreover, though sluggish demand seemed to have affected trade volumes particularly in the first half of 2009, notably for cheese and SMP, the second half of 2009 was generally characterised by a dynamic recovery. Furthermore, substantial increases in the exports to China were a driving force behind the global expansion in WMP trade. In that country, imports soared because solid demand for foreign produce following the 2008 melamine crisis coincided with the generally low price levels, which were typical for international markets during most of 2009.

Export share [D] development of key exporters on the world dairy market (milk equivalent basis, period 2000-2009)



Source: PZ, Comtrade

(A) In this chapter, world dairy trade is defined as the global export volume minus the EU-27 intra-trade volume: volumes are based on total trade flows of the following commodities: butter and butteroil, SMP, WMP, condensed milk and cheese.
(B) EU is defined as the EU-27 territory. In 2009, the volume of EU intra trade of said commodities amounted to 34.8 million tonnes (or 41% of total global trade volume).
(C) In the analysis, conversions of product volumes into milk equivalents are based on the non-fat solid content methodology.
(D) As part of total world trade volume, reference volumes (million tonnes) used: 2000: 38.8 / 2005: 43.9 / 2008: 46.8 / 2009: 49.8.

5.3. New Zealand recovery driving force behind volume growth

A strong recovery of New Zealand, which had experienced a disappointing export year in 2008, formed the main basis for the volume growth. Its dairy exports experienced double digit growth for almost all main commodities. As a result, New Zealand resumed its leading position as prime supplier to the world dairy market, attaining a 27% share of world dairy trade.

Furthermore, EU and Australia also expanded their overall export volumes, though on a more modest level. In the case of EU, trade in SMP and, to a lesser extent, cheese was primarily responsible for this increase.

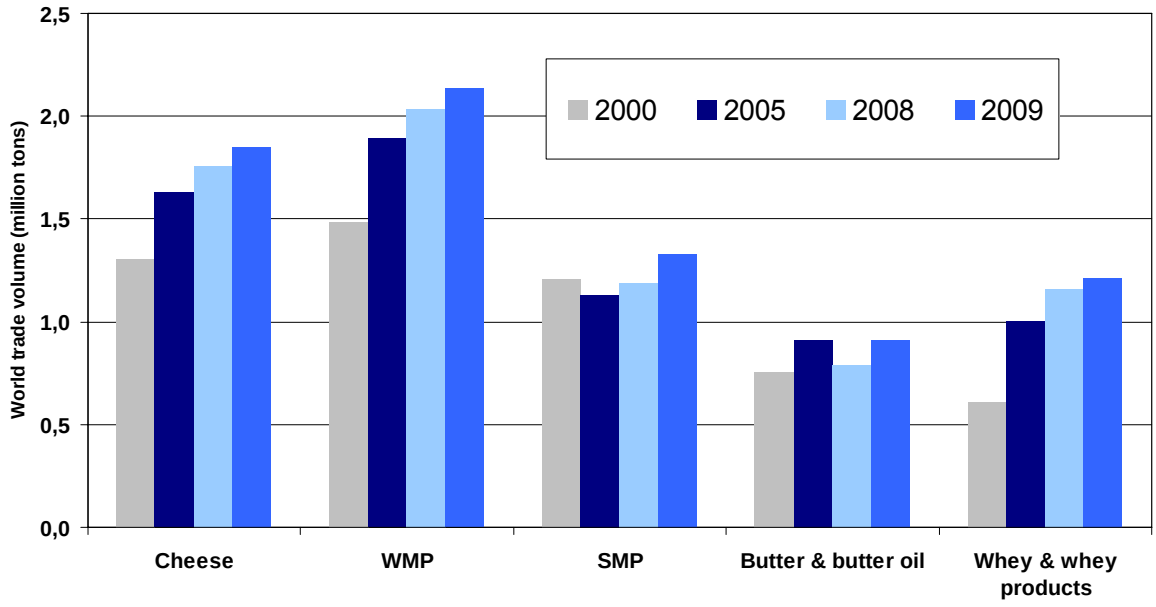
As for Australia, substantial export increases in both the butter and butteroil category and SMP stood at the basis of the growth, which reflected a modest recovery after several years of decline. Meanwhile the position of the USA in international markets was sharply under pressure, as a result of a combination of less milk supply and reduced competitiveness, especially in the Asian markets.

5.4. Trade development outpaces production

Since 2000, world trade volume, with ups and a few downs, has grown by on average 3% per year. Thus, trade has increased more than production, which over the same period stepped up by around 2% per year. This is basically a logical phenomenon, since it always takes time for milk production to react to changing demand patterns in the world. Meanwhile, international trade is used to fill up the gap between demand and supply. In 2009, the overall share of world dairy trade in the global milk pool was just over 7%, which is quite modest. This puts into perspective the role of international trade and underlines the fact that the vast majority of the world's milk never crosses any border, since main focus in dairy remains local, at most regional.

It is not expected this situation will drastically change in the near future. In their latest annual outlook[(E)], FAO and OECD claim that in the next decade, due to the expected developing countries' further growth in production and consumption of fresh dairy products, international dairy trade as a ratio to global milk production may even decline towards 6%.

World dairy trade: volume development by product category



Source: PZ, Comtrade

[(E)] OECD-FAO Agricultural Outlook 2010-2019 (p. 161).

5.5. Trade development by product category

Global trade development varies significantly between the different product categories, though for 2009, all main categories showed volume growth. The categories with the strongest growth were butter and butteroil (+16%), as well as SMP (+12%). This is remarkable, since both categories have been subject to stable to shrinking trade volumes in recent years, which resulted in very modest, average annual growth rates between 2000 and 2009. As for butter and butteroil, the 2009 volume jump was particularly fuelled by export increases from both New Zealand and Australia. After several years of decline, the butter and butteroil category is now back at a level comparable to that of 2005. In 2009, world trade volume for butter and butteroil reached an estimated 912 thousand tonnes. As for SMP, world trade volume amounted more than 1.3 million tonnes, a plus of nearly 140 thousand tonnes compared to the previous year. This substantial volume increase was mainly based on demand in Asia picking up again towards a further expansion in that region. Exporters from New Zealand, EU and Australia appear to have benefited most.

International cheese trade in 2009 increased by 5%, to a volume of 1.8 million tonnes. This reflects a recovery from the contraction, which had taken place in the previous year. Though growth really got momentum in the second half of the year, already in the first half cheese trade started to show signs of recovery from the 2008 setback. The increase for cheese in 2009 was fully in line with the long term growth development already observed for years, though trade volume development seems to be subject to some flattening in the more recent years. Still, annual growth rates between 2000 and 2009 were on average nearly 4%.
World trade volume of WMP stepped up by 5% in 2009, to about 2.1 million tonnes, mainly thanks to a solid demand from China. Meanwhile, several WMP markets suffered from sluggish demand because of the global economic crisis, whose influence was especially felt during the first half of the year. As a result, WMP exports of several countries were under pressure. Major suppliers suffered from a lack of competitiveness (EU) or reduced product availability (Australia). Not so New Zealand, whose exports went through a strong recovery in 2009. The country clearly resumed its dominant role in the market, representing more than a third of world trade volume. Besides, also WMP exports from Argentina showed a substantial recovery.

In line with the global increase in cheese production and the worldwide investments in whey processing made over the years, world trade in whey and whey products in 2009 further increased, up to a volume of about 1.2 million tonnes, less than 5% above the previous year level. This increase was at a slower pace than the long term development though (which was on average 8% per year between 2000 and 2009). Renewed competition from SMP may have played a role in this. Still, the whey category has shown the most impressive increase over the past decades. This was driven both by a strong demand from specific markets for whey powder as a substitute for SMP in feed and also by the growing role of whey products in the worldwide food and ingredients business, where they find their use as a functional and cost-effective input for food and non-food applications.

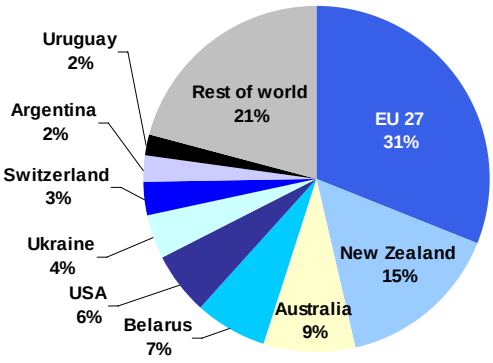
5.5.1. Cheese

In cheese, the EU remains the leading supplier to the world market, holding a 31% export market share. In 2009, EU exports expanded by more than 22 thousand tonnes (+4%). This was triggered by markets in Asia (Japan!), Middle East and Northern Africa. Meanwhile, trade to the US, a major outlet for EU exports, suffered a setback, because there, a sluggish internal market in combination with sufficient supply led to record stock building, thus reducing the incentives for import. Also demand from Russia weakened (-4%), but the world's leading cheese market remained by far EU's prime destination.
Leading member states in the EU cheese export were Germany (18%), the Netherlands (14%), France (13%) and Italy (12%), together represen-ting nearly 60% of total EU third country exports.

New Zealand was the biggest grower in 2009, and managed to expand its cheese exports by more than 42 thousand tonnes (+18%). This strengthened the country's position as the second largest exporter worldwide, with an export share exceeding 15%. New Zealand's exports increased for almost all regions, with the EU as a remarkable high point of growth. Meanwhile, the main focus of New Zealand remains with Asia and Oceania (Australia), regions which in 2009 absorbed about two thirds of the country's total export volume for cheese.
Cheese exports from Australia were up 3%, to reach 162 thousand tonnes, a modest recovery from the sharp decline in 2008, when severe problems in supply following unfavourable weather conditions had hit

Australian exports. Traditionally, most Australian cheese goes to Asia, where Japan remains by far the most important market, absorbing more than half of Australian exports in 2009.
Among the other major cheese supplying countries to the world market, remarkable (further) progress was made by Belarus, Argentina and Uruguay. As for Belarus, exports stepped up by no less than 19%, representing an additional volume of over 19 thousand tonnes, most of which was sent to the Russian Federation. The increase in Argentinean export is to be qualified a partial recovery rather than an expansion. Exports from the leading dairy exporter in South America were nearly 47 thousand tonnes (+34%), mainly as a result of selling more product to countries in the region, i.e. Brazil, Chile and Mexico. Cheese exports by Uruguay soared in 2009, reaching a record level of nearly 35 thousand tonnes (+22%). Most of this cheese remained within Latin America (74%), with Brazil as the most promising market. Uruguayan exports to Asia also developed well, notably those to South Korea.

Leading exporters on the global cheese market (2009, total volume: 1.85 mln tonnes)

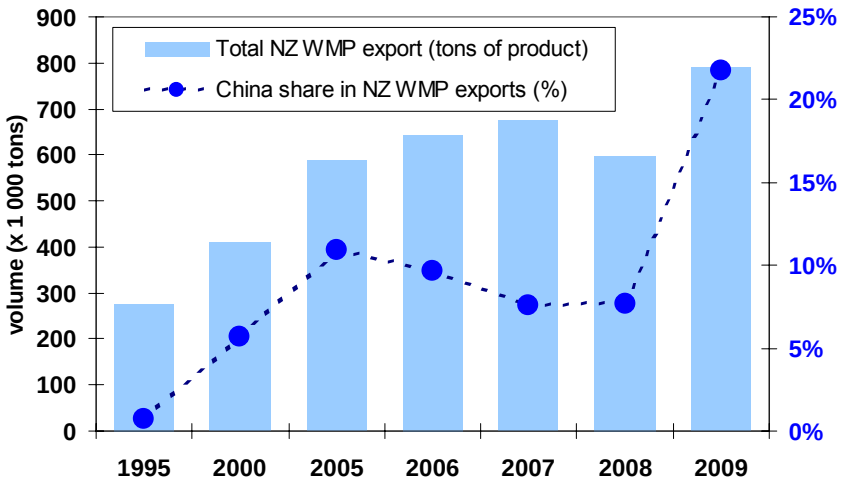


Source: PZ

5.5.2. Non-skimmed milk powder (WMP)

In WMP, New Zealand was by far the leading supplier to the world market. The country stepped up its exports by nearly one third, to reach a record high volume of 788 thousand tonnes. Despite the temporary setback in 2008, New Zealand thus keeps steadily expanding its markets especially in Asia and the Middle East, a strategy which also builds on the gains from FTA's with ASEAN, China and, more recently, Malaysia and the Gulf Co-operation Council (GCC). In 2009, New Zealand sold almost two thirds of its export volume in those regions, where China was the key destination, absorbing more than one fifth of total New Zealand exports. Exports to China were almost four times as high as in 2008.

Evolution of New Zealand's WMP exports and the role of the Chinese market (period 1995-2009)



Source: PZ

Moreover, given the fact that the total increase in WMP trade to the Chinese market exceeded the increase in world trade volume as a whole, one could even argue that demand from China finally saved the global WMP market from contraction in 2009.

Apart from New Zealand, Argentina was the only other major WMP exporter that managed to achieve a positive volume development in 2009. The country stepped up its export volume to 144 thousand tonnes (+43%), thus attaining an export share of about 7%. This recovery followed several years of retreat from the world market, due to both problems in supply and a temporary government policy of limiting WMP exports to protect the internal market from high price levels.

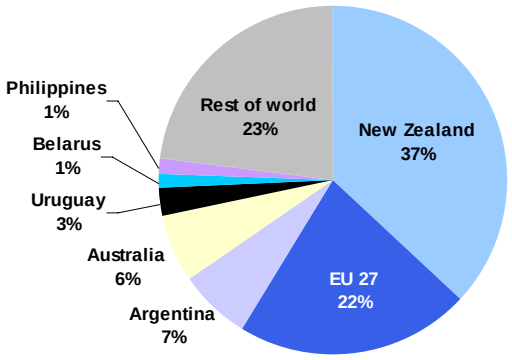
Other (minor) exporting countries that expanded their exports substantially were Uruguay and Belarus. As for Uruguay, most product remained within South America, where a strong increase in exports to Brazil more or less counterbalanced a sharp reduction in shipments to Venezuela. But beyond doubt most growth for Uruguay came from exports to Africa and, to a minor extent, the Middle East. In 2009, these two regions covered 27% of its total export volume, against nearly 7% in the previous year.

Belarus, though operating from a totally different perspective in terms of both geography and history, apparently is going through a similar process of export diversification. The country, despite its traditional focus on the Russian market, materialized its 2009 export growth basically in other countries within the region, like Kazakhstan and Ukraine. Moreover, a substantial volume was shipped to Venezuela. Hence, the share of non-Russia destinations in Belarus' total exports in 2009 more than doubled, to nearly 50%.

Meanwhile, exports from major exporters like the EU and Australia fell back. The EU exported nearly 463 thousand tonnes, which was 4% below the previous year level. This was mainly due to less milk production and shifting priorities in processing following stiff competition. However, export developments varied significantly among the different Member States. While leading Member States like the Netherlands and Denmark both expanded their exports, other Member States exported much less, like Belgium, France and the UK.

Australian WMP exports in 2009 amounted to 133 thousand tonnes, -5% compared to the previous year. Australia's output remains vulnerable to variation in milk production circumstances, i.e. weather conditions. Moreover, the generally low price levels for powder in 2009 made competition tough and triggered a shift towards more profitable categories like cheese. The focus in Australian WMP trade remains on Asia, where exports were down on various key markets. A bright spot in the reduced 2009 sales turned out to be Sri Lanka, a market where Australian exports almost tripled.

Leading exporters on the global WMP market (2009, total volume: 2.13 mln tonnes)



Source: PZ

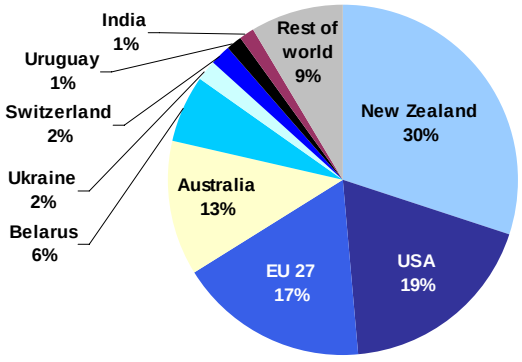
5.5.3. Skim milk powder (SMP)

In 2009, the substantial increase in supply of SMP to the world market was sustained by the export development of all major SMP exporters, except for the USA. The most striking development was observed for New Zealand, with exports up to almost 400 thousand tonnes (+69%), representing an additional volume of 162 thousand tonnes. With that, New Zealand took over again from the USA as the leading supplier to the world market, representing no less than 30% of the (expanding) world trade volume. By far most SMP exports from New Zealand are marketed in the Asian region, with China, Indonesia, Malaysia and the Philippines as the prime destinations. In 2009, these four destinations were also among the biggest growers, and represented 46% of New Zealand's total SMP exports.

In 2009, US' SMP exports suffered a strong setback, coming down to nearly 249 thousand tonnes (-36%). Less product availability in combination with reduced competitiveness on international markets played a role in this.
Meanwhile, EU exports contributed with a massive 54 thousand additional tonnes of SMP to the international market, reaching a volume of 230 thousand tonnes. Leading EU exporting Member States like Belgium, the Netherlands and, to a lesser extent, Germany, all boosted export volumes. By contrast France, suffering from reduced milk supplies, had its exports reduced after several years of strong growth. Almost half of the EU's SMP went to Africa, with Algeria and Egypt as key destinations. Besides, Asia also remained important to EU exporters, representing 40% of total exports.
Australia strengthened its position as the number four SMP supplier. The country stepped up its SMP exports by one third, to a volume of nearly 249 thousand tonnes. Almost 90% of this went to South East Asia, where the Philippines, Singapore and Indonesia were the prime destinations. In all of these markets, growth materialized in 2009, besides interesting growth developments in Bangladesh, Japan and Peru.
In 2009, the four leading exporters (New Zealand, USA, EU and Australia) represented more than 78% of world trade volume. This share was slightly higher than in 2008, illustrating that supply of SMP to the world market remains a rather concentrated business. Of the minor suppliers only Belarus and Uruguay showed a substantial increase.

Belarus reached a volume of 80 thousand tonnes (+30%), thus accelerating its structural growth development, which has made its SMP exports almost triple since 2000. Besides volume development, Belarus is also in a process of diversifying its destinations for SMP. Consequently, growth in 2009 was mainly triggered by several non-Russia destinations in the region and in Asia, while sales to Russia were under pressure. Though that country remained the prime destination, it only absorbed about 54% of total Belarus' exports, against 83% in the previous year.
This development is in line with a dairy agreement that Belarus and the Russian Federation concluded in the summer of 2009 following a row on dairy issues. In the deal, Russian producers were to buy less foreign (Belarussian) milk powder whereas Belarus on the other hand could increase its exports of cheese, curd and butter to meet demand on the Russian market.
Uruguay more than doubled its (modest) SMP exports in 2009, up to a volume of 19 thousand tonnes. Three quarter of this was exported to Latin America, where demand especially from Mexico and Brazil triggered the export growth.

Leading exporters on the global SMP market (2009, total volume: 1.33 mln tonnes)



Source: PZ

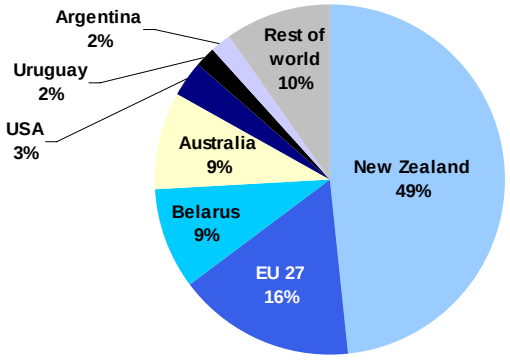
5.5.4. Butter and butteroil

The international butter and butteroil market in 2009 was more than ever dominated by New Zealand. This country's exports expanded substantially, to almost 442 thousand tonnes (+38%). Consequently, New Zealand remains by far the largest exporter in this product category, its exports representing nearly half of the world trade volume. Though most product went to Asia and the Middle East (39%), New Zealand's exports had a wide geographical distribution, with major destinations in almost every region in the world. This is illustrated by the top-8 destinations in 2009, which were Egypt, Belgium, Iran, USA, Russian Federation, Mexico, China and India. Together, these countries represented almost 60% of New Zealand's total export volume. In 2009 almost 60 thousand tonnes went to the EU, where for historic reasons New Zealand still enjoys a position as preferred supplier.

On a distance from New Zealand, the EU remained the second supplier to the world market, with an export volume of 148 thousand tonnes (-1%). Despite this slight reduction, which particularly concerned trade in butteroil, one could argue that exports more or less stabilized after several years of sharp decline. The main target for EU exporters remains Russia, the world's largest butter market, besides major markets in Northern Africa and the Middle East. Except for the Netherlands, all leading butter and butteroil exporters of the EU increased their third country exports. This however clearly could not compensate for other Member States' export reductions.

Thanks to a record high export volume of 85 thousand tonnes (+39%), Belarus for the first time in history became the third largest international supplier of butter and butteroil. Though the country remains a prime supplier to the important Russian market, which still covered 75% of its 2009 export volume, other destinations in the region like the Ukraine and Kazakhstan are becoming increasingly important.
After several years of decline, Australian exports of butter and butteroil soared in 2009, to reach 83 thousand tonnes (+75%), the highest export volume since 2002. Half of Australian exports went to Asia, where Singapore, South Korea and Malaysia were the key destinations. Other important destinations were Northern Africa (Egypt, Morocco), Turkey, Mexico and the USA. These all contributed substantially to the volume growth observed in 2009.

Leading exporters on the global butter and butteroil market (2009, total volume: 0.91 mln tonnes)



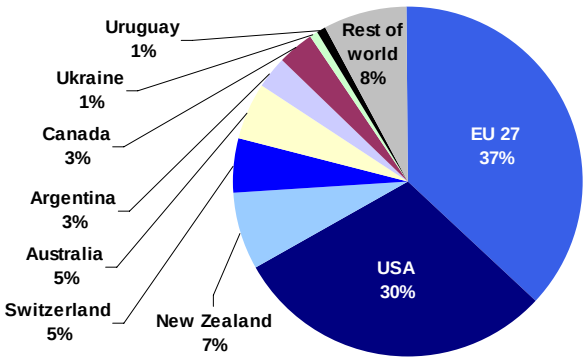
Source: PZ

5.5.5. Whey powder and whey products

World trade in whey powder and whey products is dominated by exports from the EU and the USA, which in 2009 represented two thirds of the total world trade volume.
Exports by the EU amounted to 446 thousand tonnes, up 15% compared to the previous year. More than 90% of this volume consisted of whey powder. The major part (73%) of EU exports was covered by exports from France, the Netherlands, Poland and Germany. Of these four Member States, the increase in Polish exports (+43%) contributed most to the additional EU export volume. By far most EU export in this category targeted the Asian region, where China, Indonesia, Malaysia, Thailand and South Korea were key destinations. Except for the latter, all these showed solid growth in 2009. With a massive 115 thousand tonnes (+48%), China alone absorbed more than a quarter of total EU export volume.

For the USA, whey powder and whey products were among the few export categories which in 2009 showed a volume increase. Total export volume stepped up by 2%, to reach 360 thousand tonnes. The focus of the USA, like for the EU, is Asia, where almost 70% of US' exports were marketed in 2009. China strengthened its position as the number one market, showing a solid 29% growth and representing 26% of total US' export volume. Other expanding key markets for the US in that region were a.o. South Korea, Philippines and Vietnam. By contrast, exports to Japan, Malaysia, Thailand and Taiwan fell back. Besides Asia, also Central and South America is a substantial buyer of US' produce. This particularly applies to Mexico, which after China is the second largest market for the USA. In 2009, Mexico, which besides being a neighbour is also a US trade partner within NAFTA, absorbed a volume of no less than 67 thousand tonnes (+13%).

Leading exporters on the global market for whey powder and whey products (2009, total volume: 1.21 mln tonnes)



Source: PZ

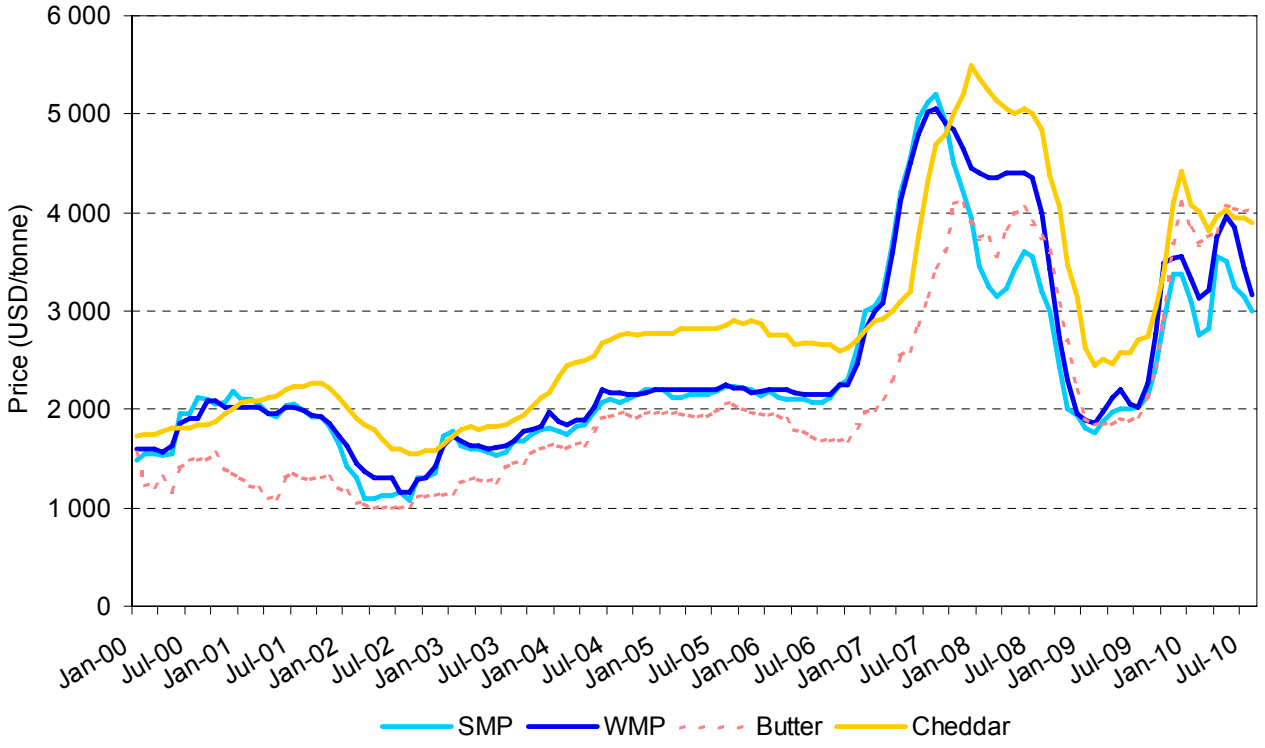
6. Prices

6.1. Wholesale prices

Since the start of 2009 the dairy market was confronted with a period of extraordinary low prices. The financial and credit crisis in the world economy, which caused international demand for dairy products to decline in late 2008, had a dramatic impact on product prices during the first half of the year 2009. Reduced demand in the EU and collapsing world market prices had a direct effect on EU market prices. In the EU, a further decline in prices and a growing uncertainty in the market were encountered by market support measures from the European Commission. The intervention buying schemes were enlarged and in February 2009 the EU reopened its programme to subsidize the export of dairy products. Also in the USA the DEIP (Dairy Export Incentive Program) was reactivated and from May the first export refunds were allocated. In the context of the rapid fall in international prices, private and public stocks of dairy products increased. This was the case in New Zealand, the European Union and the United States.

The support measures, taken by the competent authorities, thus reassured the market and prevented prices from further collapsing. After bottoming out, prices were slowly stabilising during the second and part of the third quarter of 2009.

World market price development (F.O.B. port, USD per tonne)

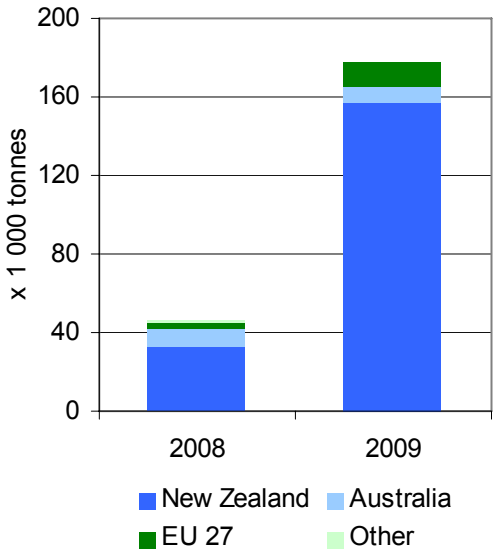


Source: USDA (Oceania export prices).

At the end of the summer international prices started to strengthen, rebounding rapidly at the end of 2009. Illustrative are the auction prices on the *global*DairyTrade electronic platform, where Fonterra, amongst other commodities, is selling a limited volume of its production of whole milk powder.

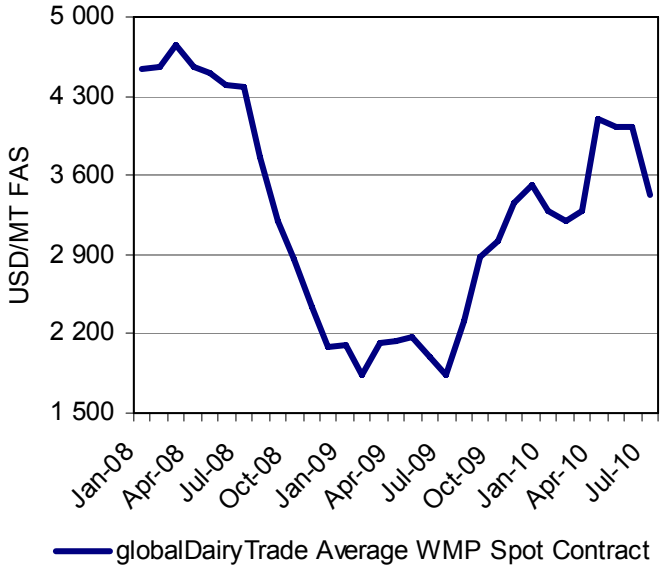
The strong recovery in prices was triggered by increased demand, mainly from oil exporting countries, but also from China (taking advantage of lower prices). Moreover, the price strengthening also took place as a result from reduced supplies available in some regions in response to low profitability in the previous year and because of weather impacts on production in the Southern Hemisphere producing countries. The 2008 dairy year in Oceania ended up with large stocks in New Zealand as a result of 7% growth in milk production. These supplies were largely decreased during 2009 by huge exports to China.

Imports of WMP into China



Source: National Statistics China

WMP Prices



Source: *global*DairyTrade

Chinese imports of dairy products from world markets have soared during the latter half of 2009. This was partly attributed to the melamine scandal in China with consumers turning away from local produce, but also because prices were so much lower than the previous year. Chinese WMP demand has been a key driver of rising dairy commodity prices. Chinese buying accounted for most of the increase in international dairy trade growth this year, which has been rising some 5% above 2008 levels.

The last quarter of 2009 was characterized by a steady rise in prices, which accelerated in the October - November period. Actually this price recovery was mainly supply driven and less demand driven, because the lower milk production outcome during 2009 had diminished export availabilities worldwide to such an extent that just a slight increase in demand could move prices strongly forward as it did.

At the end of 2009 EU market prices for butter and SMP had risen by more than 50% compared to the start of the year. On international markets all dairy product prices were showing signs of strong recovery, to such an extent not seen since August 2008: price levels were up to more than 80% compared to the start of the year. While some of these price rises could be attributed to the lower rate of the US dollar itself, the rest stemmed from a combination of lower supply and increasing demand.

This particular price development is also illustrated by the evolution of the FAO dairy price index. This index (100 in 2002-2004) fell from its peak in 2008 of 220, down to a value of 142 in February 2009. Since then, prices did bottom out in the first quarter of 2009 and then recovered, to have the index reaching a value of 216 in December 2009.

The differences in real market prices over the year 2009 were substantial. In May 2009, product prices in the Oceania region were USD 1 900 per tonne for butter, USD 2 000 per tonne for SMP, USD 2 200 per tonne for WMP and USD 2 585 per tonne for Cheddar cheese. These prices were about half their previous year levels. At the end of 2009 however, prices had recovered to USD 4 110 per tonne for butter, USD 3 375 per tonne for SMP, USD 3 550 per tonne for WMP and USD 4 425 per tonne for Cheddar cheese.

6.1.1. Developments 2010

During the first half of 2010, international dairy markets were surprisingly strong, with butter and cheese prices of Oceania averaging around USD 4 000 per tonne, while SMP prices averaged above the USD 3 000 mark. This development was due to a combination of tight product supplies following lower than anticipated milk production in Oceania, coupled with a modest recovery in global economic activity, which stimulated demand.

Beneath fundamental factors also the general market sentiment was moving prices ahead. Lower supplies at producer level together with a waiting attitude of buyers, covering their needs at the latest moment, has caused markets to become more price sensitive in such a way that a minor decline in output and/or a minor rise in demand could easily result in a strong reaction in price. In the course of the second quarter nervousness in the market was rising and buyers became more active. Especially Chinese appetite for milk powder continued to be a dominant factor during the first half of 2010 and was driving world markets. Up to May 2010, imports of SMP and WMP were both about 65% ahead of the same period in 2009.

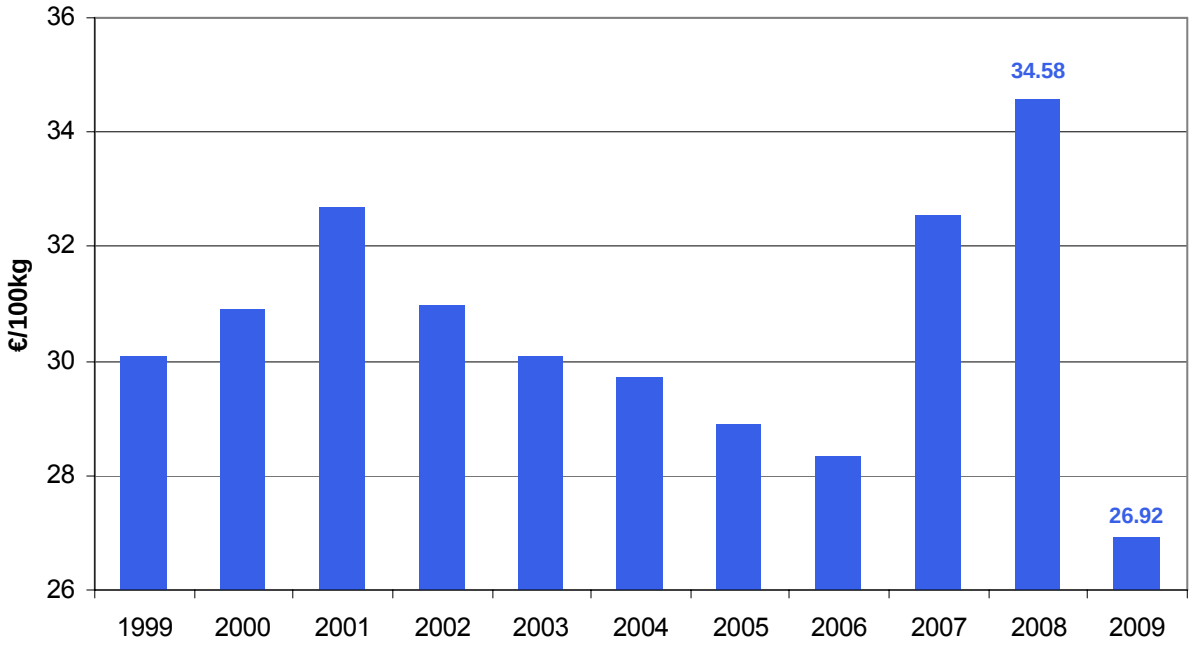
6.2. Milk producer prices

The rises in milk prices in 2007 and 2008 were suddenly reversed at a stroke by the very sharp fall in 2009. In the first half year of 2010 producer prices for milk have to a large extent recovered from this price fall.

6.2.1. Year 2009

In the EU, milk producer prices hit a record low in 2009 after the highest milk prices ever in 2008.

Average EU milk prices from 1999 to 2009(A)



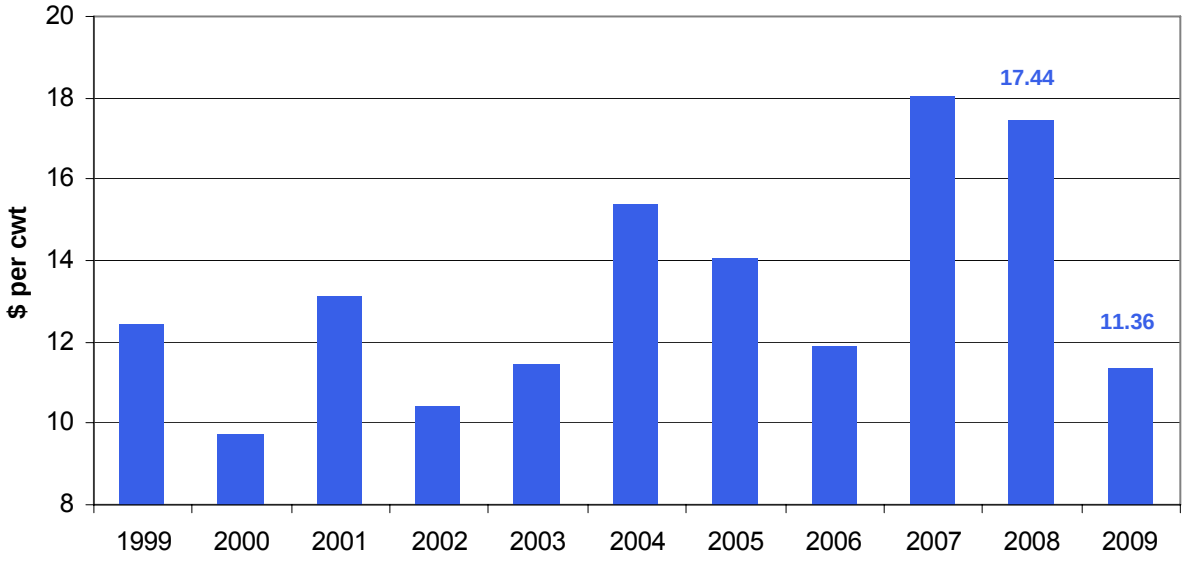
Source: LTO International Milk Price Comparison (www.milkprices.nl).

Besides the dramatically low milk prices in 2009 the figure “Average EU milk prices from 1999 to 2009” also demonstrates the increase in the fluctuation of the milk prices starting in 2007 after the liberalization of the EU dairy policy. But the sharp fall in prices caused the European Commission to take additional market management measures at the end of 2008 and beginning of 2009. These measures created a safety net and prevented a further drop in milk prices.

(A) Average milk prices paid by 17 large EU dairy companies in euro per 100 kg standard milk with 4.2% fat and 3.4% protein.

As appears from the figure below, 2009 was also a very bad year for USA dairy farmers.

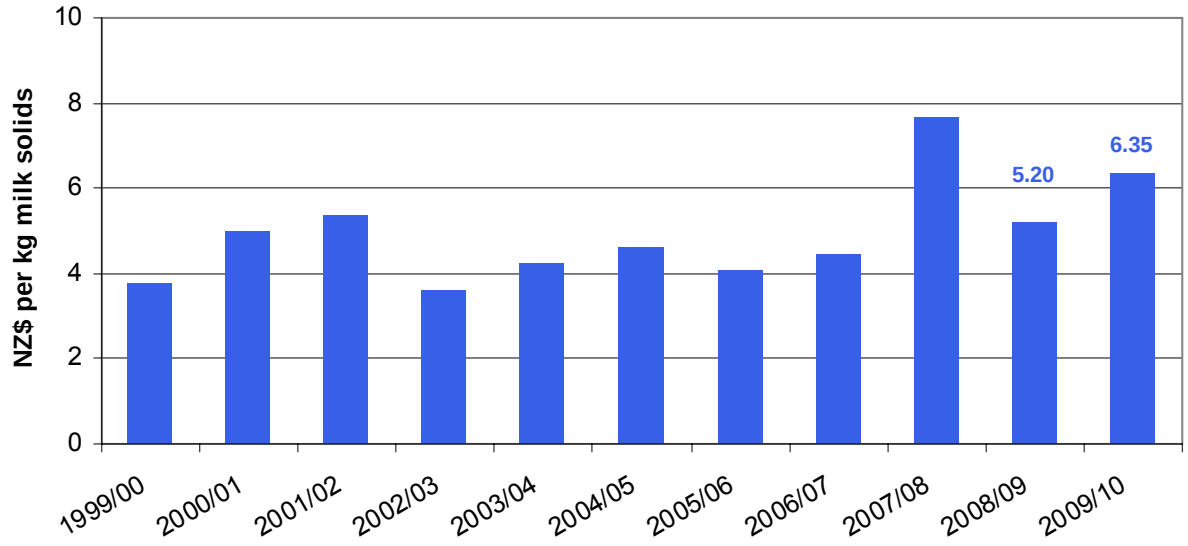
Class III milk price in the United States of America ($ per cwt)[(B)]



Source: USDA.

The milk producer price development in New Zealand deviates from the EU and USA as is shown by the milk prices of Fonterra in the following figure. Though Fonterra milk prices have also fluctuated more, contrary to the EU and USA, milk prices in New Zealand have a steady tendency to increase.

Fonterra milk prices 1998/99 to 2009/10[(C)(D)]



Source: Fonterra (www.fonterra.com)

(B) For milk producer prices in the USA the so called Class III milk price has been taken as an indicator. The Class III price - expressed in US$ per hundredweight (cwt) - relates to milk with a fat content of 3.5% fat intended for processing to cheese and is published monthly by the USDA.

(C) Fonterra's milk price is based on payment in NZ$ per kilogram of milk solids (fat and protein) and the milk price year runs from 1 June to 31 May.

(D) For 2009/10 the Fonterra milk price of NZ$ 6.35 per kg milk solids is based on their forecast of a milk price payment of NZ$ 6.10 plus a distributable profit of 45 cents (range 40-50) minus a retention of 20 cents (range 10-30).

6.2.2. Developments 2010

In both Europe and USA the improved market situation in the first half of 2010 became gradually evident from improvements of the monthly milk prices paid by the European dairies and the development of the USA Class III price. During the second quarter of 2010 the average European milk price started to increase and in June 2010, it was more than 20% higher compared to the same month last year.
The average USA Class III price in the first half of 2010 was more than 30% higher compared to the first six months of 2009. Also the Fonterra opening forecast for the 2010/2011 season indicated better prices for 2010 compared to 2009. At the start of 2010/11 Fonterra forecasted a payout of NZ$ 6.60 per kilogram milk solids and a distributable profit of 30-50 cents.
It is difficult to forecast how milk producer prices will evolve in the rest of 2010 and even impossible for the coming years. But certain as night follows day milk prices will keep fluctuating strongly and farmers all over the world should bear this in mind running their business.

7. Dairy Outlook

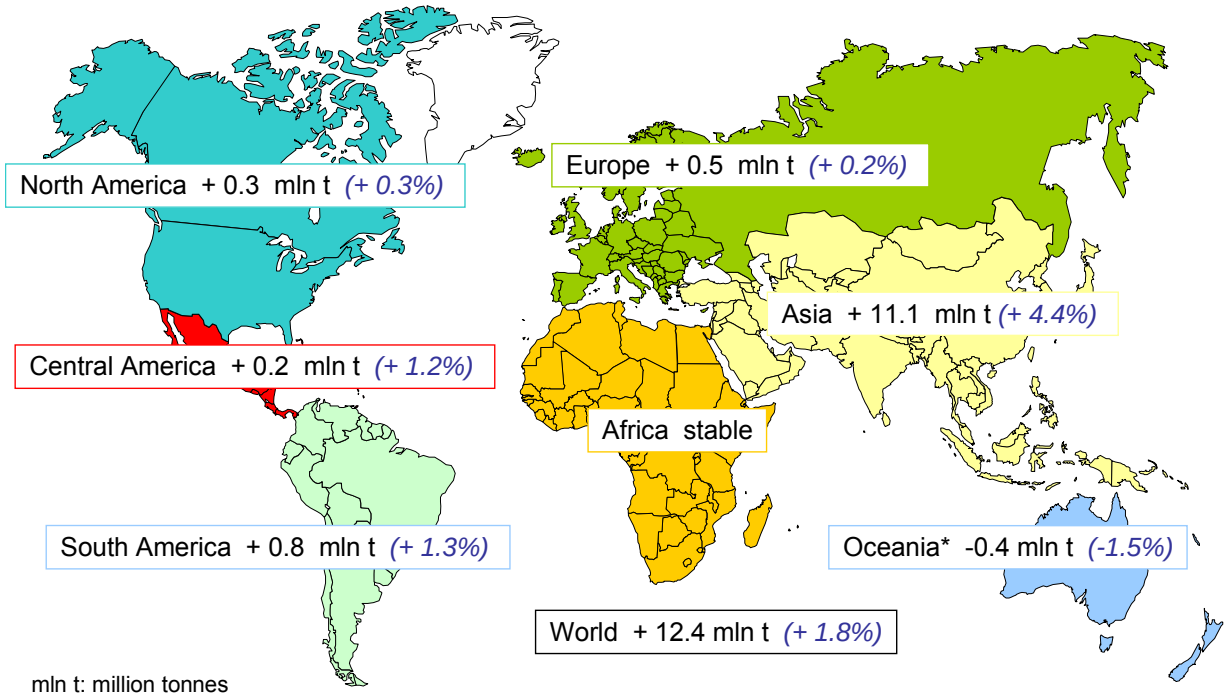
7.1. Short term

Twice a year the USDA and the FAO both publish separately a special report containing short term forecasts for the dairy sector. This chapter presents the main figures concerning milk production from the FAO 'Food Outlook' report published in June 2010 and the USDA 'Dairy: World Markets and Trade' report issued in July 2010.
The FAO survey provides forecasts on global milk production (all species taken together) for thirty five selected countries and for each continent. The USDA study supplies forecasts for cow milk production in thirteen selected countries.
The main trends described in those two reports are rather similar. They are both foreseeing a sustained growth in Asia, with a clear recovery of the Chinese dairy sector after the decline observed in 2009. They also agree on a very small increase in milk output in Europe, North America, Russia, and they both anticipate a decrease in Ukraine. Nonetheless, their analyses are rather different for Latin America: FAO believes in a significant growth in Argentina, which is not the case of USDA. On the other hand, FAO only expects a very small increase of the Brazilian milk output, while USDA forecasts a sustained growth.

7.1.1. FAO Food Outlook report

FAO expects world milk production to increase by 1.8% in 2010. Asia is supposed to generate nearly 90% of world milk production growth.
India's output is forecast to expand substantially, by some 6%. The same relative growth is also anticipated in China, which is quite low in comparison with recent history. But, after the melamine crisis of 2008, this increase gives evidence of the fast recovery of the Chinese dairy sector.

Milk production forecasts for 2010 by FAO



mln t: million tonnes
* Year finishing in May 2010 for New Zealand, in June 2010 for Australia

Source: FAO Food Outlook June 2010

FAO anticipates a stagnation of milk production in Africa, North America and in Europe. Cold weather conditions constrained pasture growth in the Russian Federation and in the Ukraine, resulting in a stabilization of milk production.
Calculations for the 2009-10 dairy year in Oceania show a slight decrease for total continental production, due mainly to a sharp fall in Australian output (-6.4%), whereas a mere 0.6% increase is expected in New Zealand.

In South America, output is expected to expand by 1.3% in 2010. Although weather conditions are quite favourable for milk production in Uruguay and Argentina, growth is anticipated to be rather small, because of the difficult financial situation of the farmers after low product prices, high feed costs and drought faced in 2009. FAO also anticipates a stagnation of the Brazilian output as the weather situation is not favourable for pasture growth.

7.1.2. USDA World Dairy Markets and Trade report

The thirteen countries surveyed by USDA represent around 75% of the world cow milk production. The cumulative output of those selected countries is expected to grow by 1.7% in 2010. USDA forecasts little increase in the United States (+1.0%) and in the EU (+0.2%), but expects sustained growth in India (+3.7%), in China (+10%) and in Brazil (+ 5%).

Comparison of USDA and FAO forecasts for milk production in 2010

	FAO All species milk production (%)	USDA Cow milk production (%)
Canada	+ 1.2	+ 0.6
Mexico	+ 2.7	+ 0.9
United States	+ 0.2	+ 1.0
Argentina	+ 2.9	+ 2.0
Brazil	+ 0.3	+ 5.0
EU 27	+ 0.3	+ 0.2
Russia	+ 0.9	+ 0.9
Ukraine	-2.6	-3.0
India	+ 6.0	+ 3.9
China	+ 6.1	+ 10.0
Japan	+ 0.0	-0.8
Australia*	-6.4	-4.9
New Zealand**	+ 0.6	+ 0.8

*: year ending in June 2010
**: year ending in May 2010

Source: FAO Food Outlook June 2010, USDA World Dairy Markets and Trade July 2010

7.2. Long term

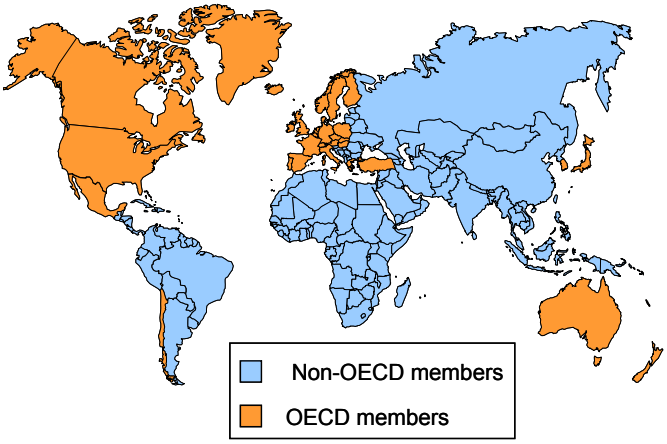
Long term trends within the world dairy sector are provided each year by two special reports, one published by FAPRI, the other one edited jointly by FAO and OECD.

In its annual report, the American FAPRI models dairy figures for fifty countries accounting for 75% of the world milk production. As for FAO and OECD, their annual survey provides global figures for big geographical groups: World, OECD members, Non-OECD members.

7.2.1. OECD-FAO Agricultural Outlook 2010-2019

According to FAO and OECD, milk production will increase during the next decade by 2.2% annually. This rate is expected to be lower among OECD members (+0.8%) than in the rest of the world (+3.1%). For dairy products, the largest increase in global production is of whole milk powder (+2.5% annually), followed by butter (+2.2%), cheese (+1.8%) and skim milk powder (+1.0%). As for milk production, the output of those different milk products will grow faster in non-OECD members.

Production average annual growth rates (%) between 2010 and 2019



	World	OECD	Non-OECD
Milk	2.2	0.8	3.1
Butter	2.2	0.7	3.0
Cheese	1.8	1.3	3.1
SMP	1.0	0.3	3.0
WMP	2.5	0.7	3.8

Source: OECD-FAO Agricultural Outlook 2010-2019

Consequently, the share of non-OECD members in global production will be higher in 2019 than today for every milk product. The output of OECD members will remain dominant in global production only for cheese and skim milk powder.

Production of dairy products: breakdown between OECD and non-OECD members

Average 2007-09			
	World (billion tonnes)	OECD (%)	Non-OECD (%)
Butter	9.7	39	61
Cheese	19.4	77	23
SMP	3.4	77	23
WMP	4.3	47	53

Forecast 2019			
Butter	12.4	32	68
Cheese	23.2	73	27
SMP	3.7	70	30
WMP	5.6	40	60

Source: OECD-FAO Agricultural Outlook 2010-2019

As for consumption, in 2019 non-OECD members will play a dominant part for butter and milk powders, especially whole milk powder. But OECD members will remain the main area for cheese consumption.

Consumption of dairy products: breakdown between OECD and non-OECD members

Average 2007-09			
	World (billion tonnes)	**OECD** (%)	**Non-OECD** (%)
Butter	9.7	33	67
Cheese	19.3	74	26
SMP	3.2	53	47
WMP	4.2	20	80

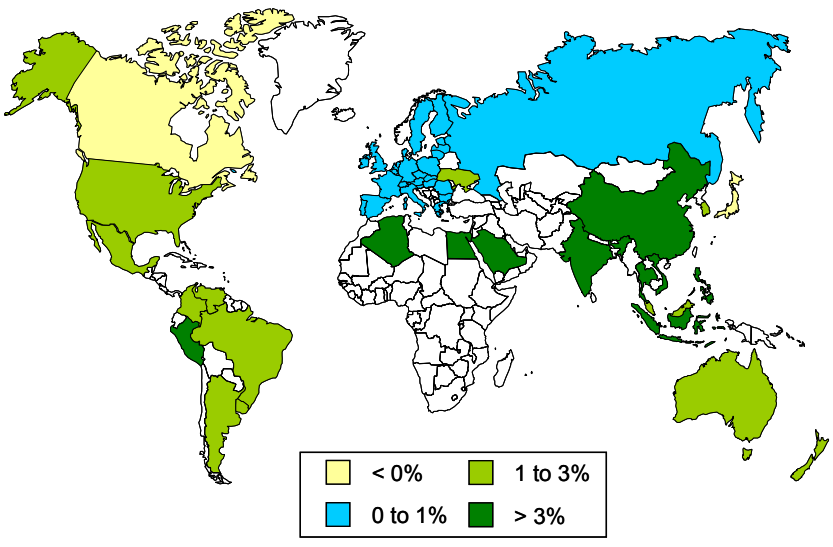
Forecast 2019			
Butter	12.3	27	73
Cheese	23.1	71	29
SMP	3.7	49	51
WMP	5.5	17	83

Source: OECD-FAO Agricultural Outlook 2010-2019

7.2.2. FAPRI 2010 World Agricultural Outlook

According to FAPRI, milk production will globally increase by 2.1% each year during the next decade. But this result as a whole covers up wide variations among the modelled countries. Milk production is expected to increase strongly in India (+3.4%) and China (+7.6%), whereas it will decrease slightly in Canada (-0.2%) and in Japan (-0.5%).

Cow milk production annual growth rates between 2009 and 2019



1 000 t	2019	CAGR 09/'19 (%)
India	150 957	3.4
EU 27	138 707	0.4
United States	94 503	1.0
China	61 578	7.6
Brazil	36 942	2.8
Russia	34 516	0.6
New Zealand	21 202	2.3
Mexico	14 724	2.8
Argentina	12 899	2.5
Ukraine	12 836	1.3
Australia	12 089	2.3
Colombia	8 765	2.0
Canada	8 070	-0.2
Japan	7 504	-0.5
Switzerland	5 908	0.6

NB : buffalo milk included for India

Source: FAPRI 2010 World Agricultural Outlook

As for dairy products, the biggest increase in global production during the next decade is for butter (+2.9% annually), followed by whole milk powder (+2.8%), cheese (+1.7%) and skim milk powder (+1.6%).

Main producers of butter, cheese and milk powder in 2019

Butter	2009	2019	CAGR 09/'19 (%)
India	3 855	6 270	5.0
EU 27	2 090	1 967	-0.6
United States	708	757	0.7
New Zealand	419	483	1.4
Russia	280	298	0.6

Cheese	2009	2019	CAGR 09/'19 (%)
EU 27	6 730	7 544	1.1
United States	4 583	5 279	1.4
Brazil	614	947	4.4
Argentina	534	699	2.7
Egypt	441	615	3.4

SMP	2009	2019	CAGR 09/'19 (%)
EU 27	1 080	916	-1.6
United States	778	870	1.1
India	364	590	4.9
New Zealand	316	395	2.3
Australia	219	265	1.9

WMP	2009	2019	CAGR 09/'19 (%)
China	977	1 700	5.7
New Zealand	781	825	0.5
Brazil	473	816	5.6
EU 27	790	588	-2.9
Argentina	222	315	3.6

Source: FAPRI 2010 World Agricultural Outlook

India is already by far the biggest butter producer. Driven by rapidly growing domestic demand, Indian butter production will increase by 5% annually and will account for 90% of global growth.
Cheese is the only product for which the EU output will not decrease during the next decade. The EU and the United States will remain the two main cheese producers in the world in 2019, accounting for more than half of global production.
Milk powder production is expected to increase in most countries except in the EU.

8. World Dairy Market Forum

8.0. Contents

8.1. The informal dairy sector: a mechanism for pro-poor development

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8.1.1. Introduction

This paper relates recent experience with the informal dairy sector in Developing Countries. Its size and economic contribution are presented, along with its performance in pro-poor development. A project implemented by the International Livestock Research Institute (ILRI) is presented as an example of pro-poor development utilising the informal dairy sector.

8.1.2. The informal food sector

The 2008 World Bank Development Report promotes investment in agriculture as critical to poverty reduction in the developing world, and cites evidence that the poor's involvement in markets offers pathways out of poverty at the household level. The informal sector is particularly attractive in that it can deliver pro-poor growth throughout the business cycle: providing nutrition and employment during hard times (Yasmeen, 2001); but serving demand growth in a boom (Simon, 2000). Participation in the informal sector generates positive results for women (Broutin and Bricas, 2006), as well as other marginalised groups. However, labour and educational impacts on children may well be negative, and the informal sector offers few attractions to aspirant youth (Simon, 2000). Competition between informal and formal food sectors in the developing world has not been much researched (Varcin, 2000). Global figures on the informal sector are few, largely due to definitional problems and informal actors' falling outside institutional structures such as taxation. Charmes' (2000) is apparently the most recent attempt at quantifying informal sector activity, and it is non-agricultural in emphasis.

Livestock's pro-poor development contribution is usually via the informal sector featuring smallholder production, small-scale trader accumulation and distribution, small-scale processing, and retail sales via vendors in street or open-air markets. Recent development efforts target these entry points (e.g. see FAO, 2007). The market share of the informal livestock sector in developing world markets dwarfs that of the formal sector (table 1). The informal livestock sector is also a significant employer in its value chain functions (Staal et al., 2008a, b, c) and supermarket-type retail development remains very limited in Africa and the less advanced Asian countries (Tschirley et al., 2004; Humphrey, 2006), serving huge numbers of poor consumers.

Table 1. Size of the informal livestock sector

Region	% of Production by Small-holder / poor farmers				
(definition of 'small-holder' in brackets)	Beef	Chicken (meat)	Milk (cow)	Small Rum. (meat)	Eggs
Eastern Africa (≤ 6 milking animals)	60	90	60-90	56	87
Bangladesh (< 3 ha of land)	65	77	65	78	77
India (< 2 ha of land)	75	92	69	92	71

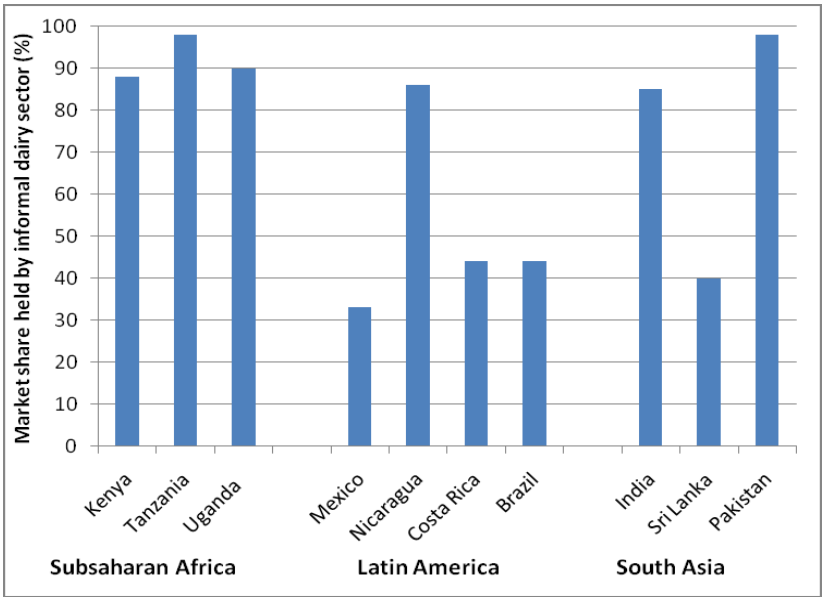
Source: East African region: Peeler and Omore (1997); Bangladesh: Bangladesh Bureau of Statistics (1999); India: NSSO (2007).

8.1.3. The informal dairy sector

Often known as the "traditional" or "non-organised" sector, the so-called informal dairy sector is contrasted with the "commercial" or "formal" sector by Staal et al. (2008a) in terms of size, business and household structure, and selected commercial factors. Omore et al. (2004) observe that the informal sector's produce is rarely pasteurised and packaged, providing a convenient data collection guide.

As emphasized by many authors (see Staal et al., 2008a; CALPI, 2006), substantial and growing demand by developing country consumers underpins the resilience of the informal sector. This demand has been shown to be analogous in many ways to that in developed countries: with pronounced quality and safety preferences. In addition, developing country consumer demand features pursuit of traditional products, and purchase of raw materials for home processing (Jabbar et al., forthcoming; CALPI, 2006). In numerous settings the informal dairy sector has been shown to provide higher prices to farmers, and lower prices to consumers, than has the formal sector. Moreover, milk quality has been commonly found to be higher in the informal sector[(A)]. Despite a general lack of support from policymakers, and in some cases active discrimination, the informal sector dominates milk delivery and marketing systems in the developing world (figure 1).

Figure 1. Size of informal livestock sector



Source: ILRI Collaborative Research, reported in FAO (2001).

8.1.4. Experience in the Kenyan informal dairy sector – the Smallholder Dairy Development Project

At over 100 kg/year, Kenyans are amongst the developing world's largest milk consumers, much of it in liquid form (Sevo, 2008). An estimated 86% of all Kenyan milk sales are via the informal sector, while just 14% is pasteurized and packaged. Imports and exports are negligible, and milk reaches retail points via several routes: direct milk sales from producers to consumers (42% by volume), via dairy farmer groups (24%) and the remainder is sold via some 40,000 small-scale milk traders (Omore et al., 2004).
Such informal sector dominance has pre-occupied Kenya's public officials and other dairy stakeholders for the past decade: industry development and the public interest (particularly in terms of public health) have been one set of concerns; another has been the vested interests of large firms in the formal sector. The opposing entailed the few large and highly capitalized, highly organized, and well-connected producer-processors selling higher-priced milk on one hand, and on the other the large number of poor, often part-time, haphazardly organized, small-scale producer-traders selling lower-priced milk. Competition for market

[(A)] For Kenya see Kaitibie et al., (2008); Staal (2006). For India see CALPI (2006).

share, and an accompanying public debate, became centered on perceptions of quality and safety (Leksmono et al., 2006; Muriuku et al., 2003).
The Smallholder Dairy Project in Kenya began in 1997 as a collaborative project between ILRI and research and development partners in Kenya (the Kenya Agricultural Research Institute and the Ministry in charge of livestock development), with funding from the UK Department for International Development (DFID). It started as an integrated research and development project, largely technical in nature, and developed through marketing (a second phase) towards enhancing the policy and institutional environment. "Changing mindsets" was an important goal toward influencing policy. To that end, delivery of research-based evidence was vital, including testing of milk quality and measurement of dairy-based employment. One far-reaching piece of evidence was that consumers boil milk before consuming it, eliminating many health risks. The project also developed, along with partners (The Kenyan Dairy Board), training and certification programmes for small-scale milk traders. These two activities were highly influential in policy changes in favour of the informal sector. Such change extended beyond regulation, to include significant reduction in harassment of (now licensed) traders by various officials (Kaitibie et al., 2008).

8.1.5. Applications arising from the Kenyan Smallholder Development Project

The changes seen in Kenya have had important regional effects. A regional programme on rationalization and harmonization of dairy policies has been carried out by the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), as part of its Policy Analysis and Advocacy Programme. Dairy regulators from Kenya, Uganda and Tanzania agreed in 2006 to pilot Kenyan-style approaches to the informal dairy sector: this includes cross-border recognition of training and certification (see ASARECA, 2007).

Further integrated research and development has proceeded in East Africa (via the East Africa Dairy Development Project), and in Assam, India where the Kenyan training programme has been adapted to local conditions and accepted as the basis for ongoing improvement of the smallholder dairy sector. There has also been transfer of lessons into other informal commodity sectors in Africa and Asia, specifically in risk-based approaches to pork in Southeast Asia.

8.1.6. Likely future paths for the informal dairy sector

No clear developing-country model is available for a path leading from informal to formal dairy systems, as has been seen in the developed world. Such a trend is likely to be associated with increasing scale and adoption of specific technologies, and these trends are in turn associated with substitutions between crop and livestock sectors (Staal et al., 2008a; Chen and Rozelle, 2001). Experience from both East Africa and South Asia is that co-operative-based development is not catalytic of the process (Staal et al., 2008b, c), although the organized supply of key inputs (genetics, animal health) may be so.

Competition between formal and informal dairy sectors has been little studied for developing countries outside Kenya, as demand assures outlets for both sectors. Kenya's case was one of friction[(B)] surrounding both access to supply of milk on one hand and consumers on the other, but this was centred largely on influence exerted by large dairy processing interests rather than competition on price and transaction arrangements.

Against a backdrop of buoyant demand, and consistency in many demand drivers (e.g. urbanization), the sheer size of the informal dairy sector seems to assure its future in Africa and South Asia. Different retail development paths may play a part in the resilience of the informal sector. Attractive producers' prices, even in the presence of trader margins, continue to provide the production and transaction incentives for continued informal dairy sector participation. Recent acceptance of, and development support to, the informal dairy sector in policy circles (see above) has been productive from the livelihood and public health points of view (e.g. Kaitibie et al., 2008; CALPI, 2006), and is likely to contribute to medium-term resilience. Institutional strengthening is apparent in formation of traders' associations, and the role of statutory bodies in training and service provision to informal sector actors.

A Bibliography is available from the IDF Secretariat on request.

[(B)] Known locally as "the Milk War" (Leksmono et al., 2006)

8.2. Milk production costs 2008 – a global overview

Torsten Hemme and dairy researchers from 80 countries participating in IFCN

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8.2.1. Introduction

Milk production is a very important element of the whole dairy chain. The price for a dairy commodity like butter skim milk power or cheese is driven 80 – 90% by the milk price the processor pays to the farmers. In simple terms, this means that the on farm cost of producing milk is the most important driver for a competitive dairy region. Based on the IFCN Dairy Report 2009 (published in October 2009), this article is describing the concept of the IFCN network, illustrating the global milk production and presents cost of milk production.

8.2.2. IFCN Dairy Network 2009

The IFCN - International Farm Comparison Network - founded in 1997 is a global research network attracting and connecting dairy researchers from over 80 countries and also more than 70 dairy related companies. The IFCN core competence is in the field of milk production, milk prices and especially dairy farm economics. The IFCN is independent from third parties and committed to truth, science and reality of results. In 2009, the IFCN has analysed dairy trends in 80 countries which represent 96% of world milk production.

The IFCN Dairy Research Center coordinates the scientific work and provides a professional management for the network. The network co-ordination is mainly funded by membership fees from countries and also partnership fees with dairy related companies and institutions.

Chart 1: Distribution and density of milk production world wide

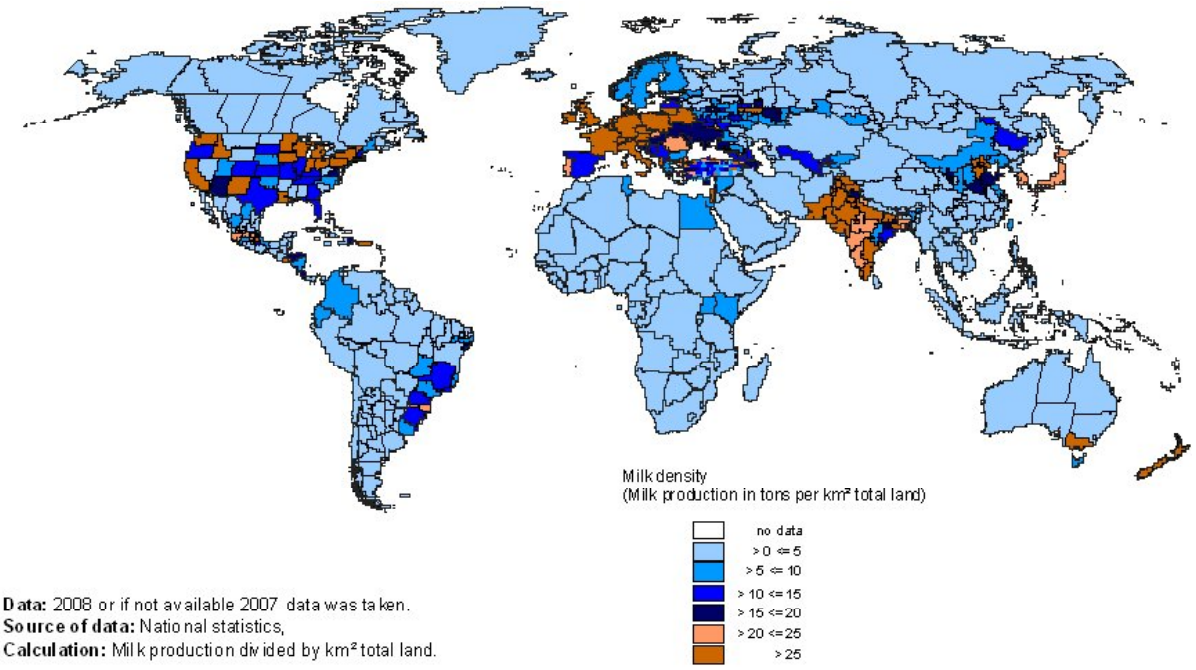


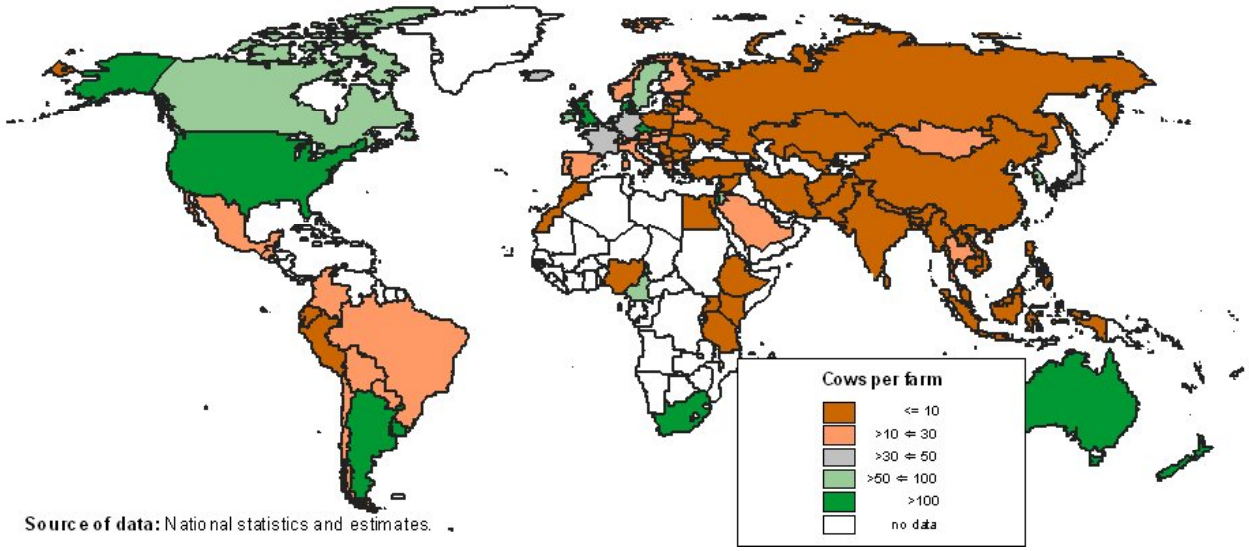
Chart 1 illustrates the centers of milk production in the world. The indicator used was the milk density defined as milk production per square km land area. For this analysis the countries like Canada, USA, Mexico, Brazil, Russia, India, China, Australia and New Zealand have been segmented into its regions.

Based on this, the most important centers of milk production are Europe and South Asia. These two regions provide more than 50% of the global milk production. Besides these the countries, New Zealand, Israel,

Japan, South Korea, parts of the countries of USA, Mexico, Turkey and Russia and the regions Australia-Victoria, Brazil-Santa Catharina as centres of milk production with a milk density of more than 20 tonnes milk per km^2. Moreover the milk density is quite high around Beijing and also Moscow.

The high milk density regions have the advantage of low milk collection costs and the agglomerations advantages. The lower milk density regions like the Eastern part of Europe, South America and the Mid-West of the USA have the advantage to have space. This means space to increase milk production and less challenges to meet the environmental regulations like limited livestock units per ha.

Chart 2: Average size of dairy farms by country



Based on the IFCN estimate of dairy farms, the world average farm size is 2.44 cows/farm. Looking to the world farm size map (chart 2) in most countries of the world the average farm size is below 10 cows. This is especially the case for most countries in Asia, Eastern Europe, Africa and parts of Latin America. Only 15 countries have an average farm size of more than 50 cows. The 9 countries with a farm size of more than 100 cows per farm are: New Zealand, Australia, Czech Republic, South Africa, Argentina, UK, USA, Israel, Uruguay and Denmark. The average farm size in the EU-15 countries is 40 cows per farm. The average farm size in the 12 new EU member countries is 3.8 cows per farm.

8.2.3. The IFCN methodology

The IFCN methodology is based on three elements: a) the TIPI-CAL model, b) the method of typical farm types selection and c) the method of collecting and validating farm data. The combination of these three elements ensures the comparability of farm economic results between countries.

The model TIPI-CAL (Technology Impact Policy Impact Calculations model) was developed by Hemme (2000) and since has been continuously further refined. So far this was the basis for over 20 PhD thesis and the referring journal articles. The model allows to compare the farm data worldwide and also in different regions and countries, with farms of different sizes and legal forms, under different policy, market and technical scenarios. This study applies version 5.0 of the TIPI-CAL model.

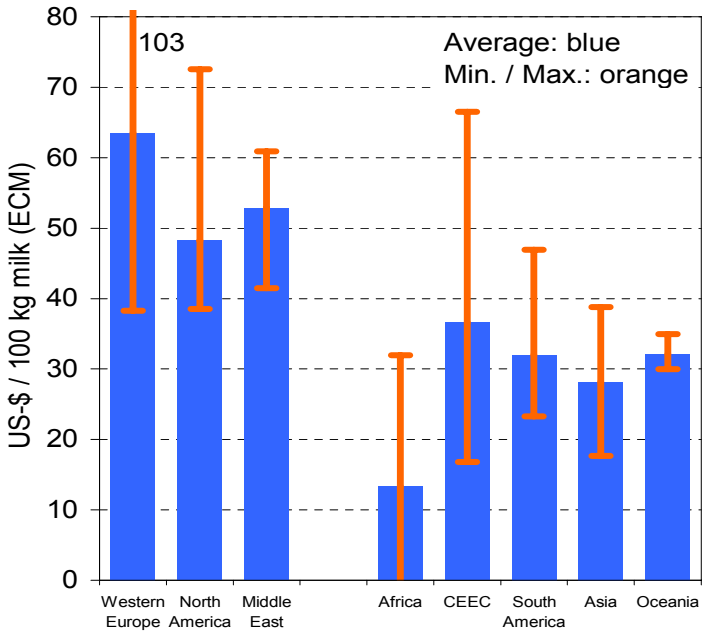
A typical farm represents a very common farm type within a region which has an average management and performance and produces the largest proportion of milk. Usually for every region two or more dairy farm types are defined. The first farm type usually represents the average farm size segment in the region or country. The second farm type represents larger farms. Following this concept in Sweden the first farm type has 60 cows where as the second farm type has 220 cows/ farm.

The IFCN has developed different concepts of collecting data for the typical farms defined. The participating researcher chooses the concept, which fits best in his country. At the end of this process the validation of

farm economic results with the observed reality is a major part of the IFCN process. These processes ensure that the farm economic results represent the farm economic situation in the region or country defined.

8.2.4. Cost of milk production 2008

Chart 3: Cost of milk production by world region



The annual IFCN work of comparing typical farm around the world is an ongoing process since the year 2000. Since then the number of countries has increased from 8 – 45. Moreover, the number of dairy farm types analysed has increased from 21 to 147. In 2009 the IFCN has started to analyse, besides dairy farm economic, other indicators like carbon and water footprints to get a better understanding on the overall sustainability of dairy farming systems.

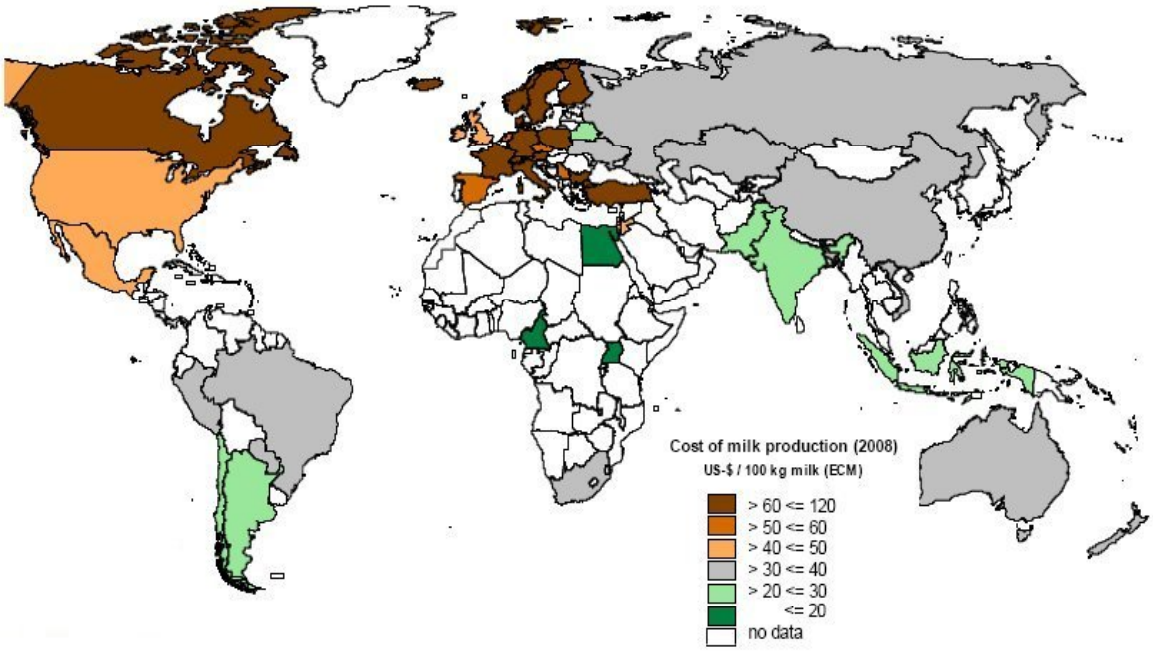
The costs indicator used in this article is representing the concept of full economic costs. Technically it is defined as follows: Costs from the profit loss account of the dairy farm + opportunity costs for own production factors (family labour, own land, own capital) – the non milk returns (returns from cull cows, calves or heifers, returns from manure and returns coupled direct payments).

The chart 3 'Cost of milk production by world region' shows the simplified global overview milk production costs:

- On average Africa had the lowest milk production costs;
- Western Europe, North America and the middle east had the highest cost;
- Cost in Eastern Europe, South America, Asia and Oceania were on a similar level of 28 to 37 US-$ per 100 kg milk.

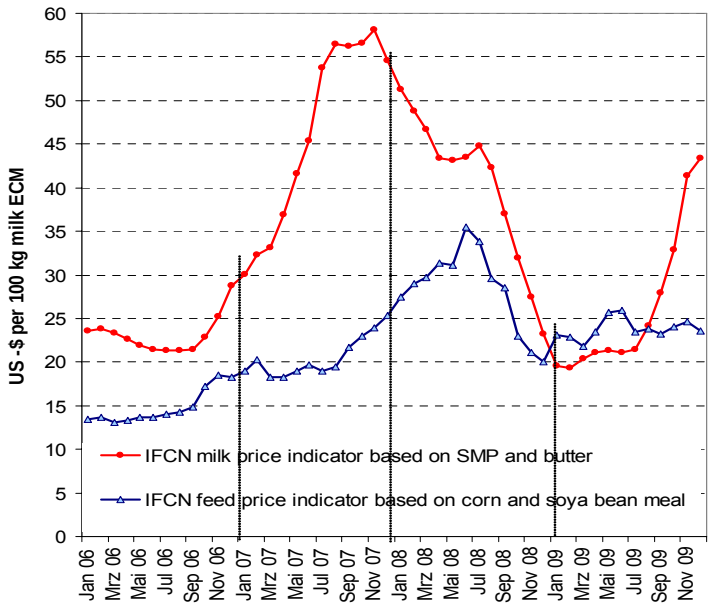
This analysis confirms that on the milk price level at the beginning of 2009 (20 US-$/100kg) only 2 % of the world's milk can be produced.

Chart 4: IFCN results of cost of milk production in 2008 for average farms by country



8.2.5. Dynamics in prices and milk production costs 2006 – 2009

Chart 5: World milk and feed prices



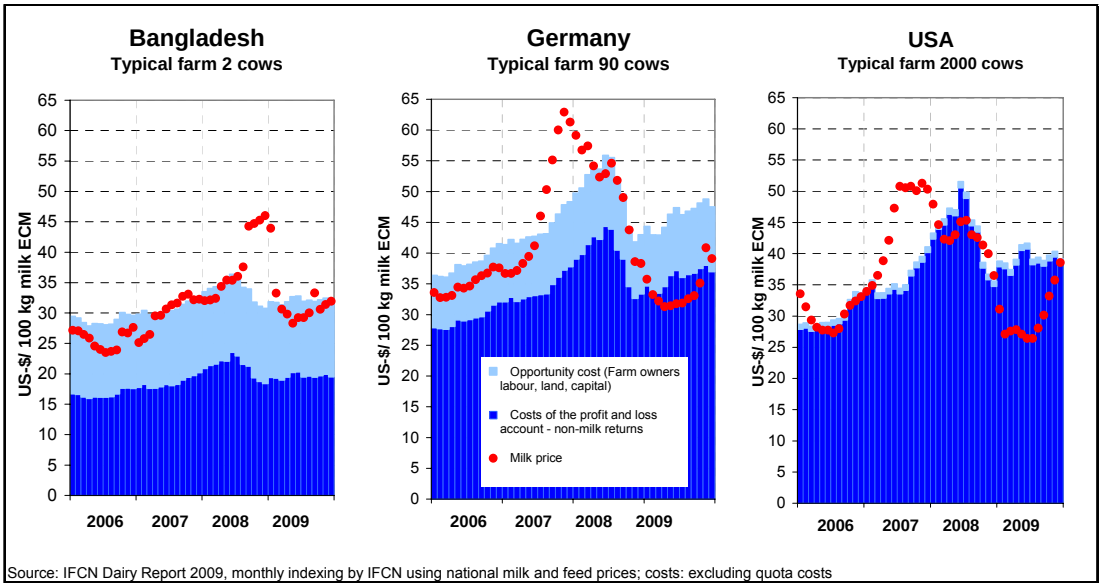
As milk and feed prices have been very volatile in the last 4 years this section shall illustrated how the price and exchange rate fluctuations have affected dairy farm economics in three countries.

Between the Jan 2006 and Dec 2009 the world milk price was ranging between 20 to 58 US-$ per 100 kg milk where the feed prices on the world market was ranging between 13 to 35 US-$ per 100 kg (chart 5).

To analyse the farm level impacts the following three typical farms from the IFCN sample have been chosen: Bangladesh 2, Germany 90 and USA 2000 cows/farm. The monthly farm economic results are based on the annual farm economic results for the year 2008 and the monthly changes in milk and feed prices.

Based on this the following conclusion can be drawn for the typical farms analysed (chart 6):

Chart 6: Monthly milk prices & production costs of typical dairy farms 2006 - 2009



Source: IFCN Dairy Report 2009, monthly indexing by IFCN using national milk and feed prices; costs: excluding quota costs

Bangladesh 2 cows farm: The cost of this farm is not changing significantly as the farm operates on low milk yields (721 kg/cow/year) with small amounts of purchased feed. The high volatility in milk prices lead to a doubling incomes especially in the end of 2008.

German 90 cows farm: The cost of this farm is changing much more compared to the Bangladeshi farm as the farm has a substantially higher milk yield (8725 kg/cow/year). The increasing feed prices and the US-$/Euro fluctuations have increased the milk production costs to 55 US-$ in June 2008. Compared to the costs level on January 2006 this was an increase of 60%. In the period March –October 2009 the farm was not able to generate any income for the farming family.

USA 2000 cows farm: The farm with a milk yield of 10.000 kg/cow and a small share of feed production on the farm shows the strongest increase of milk production costs. From January 2006 to mid 2008 the costs have increased from 28 to 51 US-$ per 100 kg milk. This was an increase of 85% within 2,5 years and shows how sensitive are the high yielding dairy farming system in changing feed prices. In the times of very low milk prices this farm was loosing about more than 10 US-$ per 100 kg milk. The estimated cash flow deficit in 2009 was more than 1,5 million US-$.

8.2.6. Summing up

This article has shown that significant cost difference between world regions and volatile milk and feed prices have a very strong impact on dairy farm economics. Farming systems in developing countries having usually low yield systems are able to produce milk cheapest. Moreover they are less affected by changing feed prices. Further details on this issue can be found in the FAO book which has been just released with the topic - Status and Prospects for Smallholder Milk Production - A Global Perspective.

Farming systems with very high yields and a large share of purchase feed in their ration are the most risky dairy farming systems. Moreover these farming system are loosing their competitiveness once feed prices reach the level from June 2008. On the other side they are in a scenario of low feed price among the most competitive once.

These results indicate that in the current times of volatile prices and exchange rates a continuous monitoring of the milk production costs is essential for the future of a dairy region. Here all stakeholders of the dairy chain – farmers, milk processors, farm input suppliers and local policy makers should realise that they have a joint and continuous task.

8.3. Price volatility in US dairy markets

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8.3.1. Introduction

For most of the 20th century, the US government had in place programs that regulated the price of milk and thereby impacted dairy product prices down the supply chain. Following the disastrous government-induced surpluses of the 1980s, the Support Price for milk was pegged at a level so low as to typically have no effect on market prices. Since 1989, monthly farm level milk prices have been extremely volatile relative to the previous 50 years and comparable to prices for many US agricultural commodities that are associated with considerably greater production risk. The increased volatility in farm milk prices have inspired various private, collective, and public solutions in the last 20 years, but the perilous prices of 2009 have inspired entirely new levels of interest in solutions, including more aggressive forms of government intervention.

In discussing the topic of price volatility it is well to keep in mind several concepts or cautions.

First, what does “volatility” mean? The general definition connotes frequent, large, and unpredictable variation. In assessing concerns about volatility it is necessary to understand whether instability, by itself, is the issue of concern, or rather that prices provide inadequate returns when they are at their lowest. It seems fairly obvious that the issue of interest to dairy farmers is that prices are occasionally too low. Yet it is surely also the case that the frequency and unpredictability of change is also of concern.

Second, how is volatility or adequacy with respect to milk prices measured or quantified? If volatility is a problem now, what degree of volatility is acceptable – what does a solution to this problem require? Similarly, if prices are occasionally inadequate, what is the approximate boundary between adequate or inadequate, or how might that boundary be defined conceptually.

Third, in considering solutions to these problems, does one want to correct the underlying causes or to seek tools to help producers manage or survive the inevitable swings?

8.3.2. Measures of price volatility in US dairy markets

Various statistics are used to quantify volatility. Many of the commonly seen measures are actually inappropriate if one is interested in measuring the frequency of change as well as the magnitude of change. Statistical measures like standard deviation or coefficient of variation are designed to measure dispersion, a more sophisticated version of the range from low to high. Such measures do nothing to differentiate between prices that fluctuate monthly vs. prices that are gently trending in one direction over the same period and with the same range; yet clearly those two patterns are very importantly different from an economic perspective. Several alternatives exist, each with their own advantages and liabilities. A relatively simple common measure is the standard deviation of relative price changes, or log relative returns. A slightly more complex measure used in financial market analysis is generally known as historical volatility, which can be nicely adapted to compare volatility across different sets of prices that are determined with different frequency – daily, weekly, monthly, and so on.

Using these sorts of measures of volatility, volatility has been estimated in various milk and dairy product prices and other market variables over various time periods. Several interesting results emerge.

8.3.3. Milk price volatility is not new

The US Department of Agriculture began collecting average monthly prices paid to farmers for milk in 1910. People who have been operating in the dairy sector over the last 20 years have been acutely aware of the present volatility in farm milk prices. If their memories extend back to the 1970s or earlier, they also remember a time when milk prices were quite stable, having a predictable seasonal pattern but nothing like the great swings that occur now. Few people remain who remember before World War II, but farm milk prices prior to 1942 or so were even more volatile than what is seen today. Using the statistical measure

called “historical volatility” the annualized measures of volatility in US average monthly farm milk prices are as follows:

Historical Volatility	1910 to 1942	1942 – 1976	1988 to 2010
Annualized Volatility (%)	22.0%	9.3%	16.1%

8.3.4. Volatility is not the same for all milk prices

Under the US system, there are several variables that might be called farm-level milk prices. Under Federal Milk Marketing Orders, buyers of milk are required to pay at least the Class minimum price for milk according to the product classification in which the farm milk was used. Thus, milk that is used for beverage products is charged the high Class I price. Milk used to make cheese is charged the lower Class III price. These are prices that processors are required to pay and are the appropriate prices to use when determining the cost of farm milk in a gallon of milk or a pound of cheese. (Actually, processors often pay premiums above the regulated minimum, which can range in magnitude from 5-15% of the base price.) Farmers are paid a weighted average of these Class prices. The Federal Order minimum producer price is often called the Blend Price, but is formally called the Statistical Uniform Price. As with Class prices, processors or cooperatives often pay premiums to farmers that increase their net price but that also introduce another element of variation between the regulated price and the actual price paid. Inasmuch as most of the milk sold by farmers in the US is marketed through a cooperative, this introduces yet another step in the supply chain at which there can be some slippage between the price that a processor pays and the actual price farmers receive. The latter is typically referred to as the Mailbox price.

Analysis of Class, Blend, Plant, and Mailbox prices indicates that the most volatile of these are the regulated minimum Class III and (to a lesser extent) Class IV prices charged for milk used in commodity manufacturing. The least volatile is the Processor Pay Price and the Mailbox price, although they too certainly qualify as volatile. What this indicates is that the current Federal Order price regulation adds to milk price volatility, but buyers who have the opportunity to adjust premiums over time have a tendency to moderate that price volatility by the time it trickles down to the farmer’s mailbox.

Log Relative Volatility	Class III Price	Class IV Price	All Milk Price	Mailbox Price
2000 to 2009	.088	.058	.052	.055

In the preceding and following tables, data from 2000 to 2009 have been used to bracket the first year that Federal Milk Marketing Orders began using product price formulae to calculate Class prices for milk, up to the most recent data for all variables.

8.3.5. Volatility exists in dairy product prices downstream of the farm

Volatility is not unique to the farm level and exists in good measure at the wholesale and retail levels as well. Indeed, the use of product price formulas in Federal Orders, combined with the high degree of wholesale price volatility for bulk cheddar cheese and other commodities, is precisely the reason why Class III and (to a lesser extent) Class IV prices are so volatile since 2000.

Log Relative Volatility	Wholesale Butter Price	Wholesale Nonfat Dry Milk Price	Wholesale Cheddar Cheese Price	Retail Butter Price	Retail Natural Cheese Price
2000-2009	.089	.056	.086	.051	.022

Thus, the volatility in the Class III minimum price is equal to that for the wholesale price of cheese. The lesser volatility of the Class IV price is more nearly comparable to that of its wholesale price component for NDM, despite the fact that the wholesale price of butter is more comparable to the volatility in the wholesale cheese price. The retail prices for butter and natural cheeses (which are dominated by cheddar but include other varieties) are less volatile than the corresponding wholesale prices. This is not an indication that retail

prices do not move up and down with changes in wholesale or farm prices so much as it corresponds to the fact that retailers change their prices with less frequency. Other studies by the Cornell University indicate that retail prices do indeed move both up and down with farm prices, but the adjustment is both delayed and asymmetric. Up side adjustments tend to be a bit quicker and more complete than down side adjustments.

8.3.6. Current and proposed approaches to managing price volatility

From the mid-1940s until about the mid-1980s, the US Dairy Price Support Program, which established an effective minimum to the farm price of milk, went a long way towards reducing the volatility that was characteristic of milk prices prior to the 1940s. Because of excesses in the operation of the DPSP in the late 1970s and early 1980s, the Support Price was reduced in the second half of the 1980s until it reached a level so low as to be almost meaningless. It has held around the level of $10 per hundred pounds ever since. At this low level, the underlying volatility in farm milk prices was once again revealed. The added macroeconomic shocks of 2009 came on top of a period when US milk prices were expected to be at a cyclical low point, creating a double cause for low milk prices. What was particularly devastating for US dairy farmers is that prices of most inputs were unusually high. Thus, what makes 2009 stand out is margins on milk that were quite likely the worst and most prolonged since the Great Depression. The price of milk, by itself, was low, but no lower than it had been in 2003-04 and 2006.

Under these circumstances, farmers are understandably appealing, loudly and vigorously, for new options to either prevent a similar occurrence in the future or to help them better manage through periods of low prices or margins. Two key tools have previously been developed.

In the private sector, futures markets have been developed to mirror Class III and Class IV prices. The Class III contract has been quite successful, achieving sufficient volume to justify its use as a hedging tool. Although useful, this contract is somewhat limited by the fact that the basis risk in some parts of the country is quite high relative to the price of milk farmers actually received. In locations such as Idaho or Wisconsin, the percentage of farm milk that is used in cheese manufacturing is very high, making the basis risk between the actual farm price and a Class III price contract small. In parts of the country, like the West Coast, where butter and non fat dry milk are more important relative to cheese, or like the East Coast, where beverage and fresh products are more important, the basis risk is higher and Class III contracts are less attractive. Although the use of futures markets as a milk price-hedging tool has been increasing, it is still a tool used by a small minority of US farmers. For many farmers, futures are seen as a complicated gamble, and the possibility that they might lock in a price that is less than where the market final settles is sufficiently high and distressing that farmers fear “leaving money on the table”. Specialists would argue that this is not the proper way to evaluate hedging as a risk management tool, but it is the choice that most US farmers have made.

In the public sector, dairy farmers have had the benefit of a Counter Cyclical Payment program known as the Milk Income Loss Contract (MILC). Created in the 2002 farm bill, the MILC provides lump sum monthly payments to dairy farmers in months when the price of milk falls below a certain trigger. The payments are limited by an annual maximum production cap that generally ensures that farms having 100-150 cows or fewer will receive a payment on all the milk they sell, whereas very large farms of 2,000 cows or more will receive a payment on only a small share of their total milk sales. Not surprisingly, smaller scale farms found the MILC payments in 2009 to be extremely helpful but large-scale farmers, who faced the same milk price vs. cost squeeze, found little help in the MILC program.

Public debate about the next, 2012, farm bill has begun a year earlier than normal as agriculture committee leaders in the Congress have recognized that farmers want additional help from the government at the same time that the government is worried about the trajectory of the economic recovery and the large deficits in the federal budget.

The policy debate has split in two basic directions. Farmers and farm advocates who typically favor market solutions and are wary of government programs have emphasized new programs that would provide counter cyclical insurances based on milk price returns in excess of the costs of dairy feeds. This is sometimes referred to as margin insurance. Like other federal crop insurance programs, a base program would be available at no or little cost, but would not provide benefits in any but the direst years. Opportunities would exist to buy higher levels of margin insurance at rates that would be subsidized but put a more serious price burden on farmers. This approach does not attempt to moderate price or margin volatility. Rather it aims to give farmers an offsetting government benefit in periods of low prices or margins.

A very different alternative is gaining considerable support among dairy farmers. The so-called Growth Management approach seeks to moderate price volatility by creating penalties for milk production growth on individual farms that exceeds a national allowable target. Farmers who choose to produce in excess of the target growth rate would be required to pay a fee or tax. Farmers whose production did not exceed the allowable growth rate would receive a pro rata share of any penalties collected. Several variations of this sort of plan have been proposed. The most important difference between these plans involves how aggressively they seek to manage growth, either by the growth allowed or the penalty charged. In some versions, it is not clear that the plan would have much effect on moderating growth. In other plans, the effect could be so large as to significantly enhance the average price of milk. Some versions of the plans discussed in summer 2010 have been estimated to actually increase volatility because of delays in the triggers relative to actual market dynamics.

At the time of this writing, there is considerable debate about the merits of the various plans relative to existing programs, and many plans are being revised on a weekly basis. Perhaps what is most telling is that even though 2010 should be much improved over 2009 in generating more reasonable returns to dairy farmers, the situation is no where near sufficiently improved as to ensure positive cash flows for all farms, much less restore the very deep losses to farm balance sheets in 2009.

8.4. Price Volatility in the EU Dairy Market

Michael Keane (University College Cork, Ireland), Declan O Connor (Cork Institute of Technology, Ireland).

For further information please go to www.ucc.ie/en/foodbus

8.4.1. Introduction

Price variation to some degree is both desirable and inevitable in all free markets as it reflects the changing needs and preferences of customers along with the changing cost and competitive positions of participants at all stages in the supply chain. Price movements reflecting these changes occur through the price discovery process among market participants and these price movements act as price signals to reallocate resources efficiently. While this element of changing prices may be regarded as normal and desirable in free markets, the emergence of extreme price volatility in dairy and food markets in recent years is creating many problems for processors, farmers and other supply chain participants.

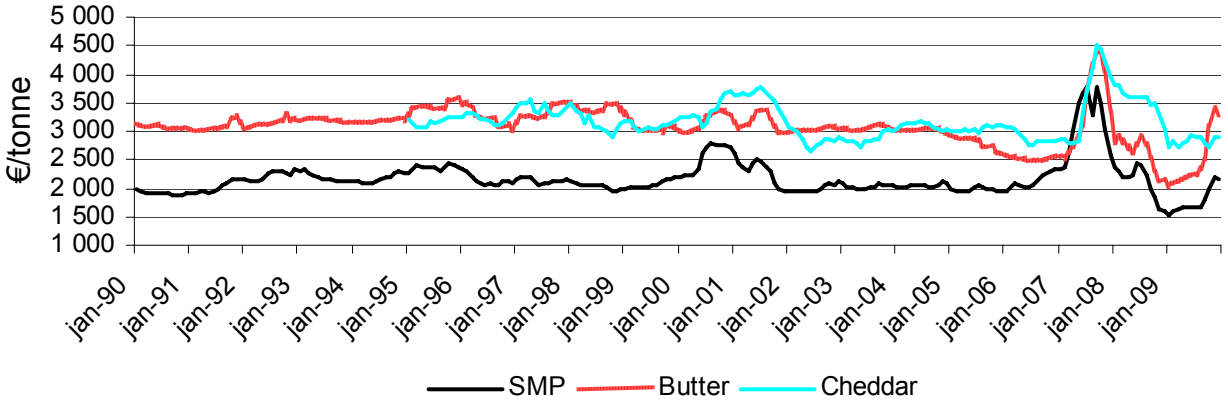
The following areas are briefly discussed in this paper:

- Price volatility in the EU dairy commodities market;
- Price volatility comparison, EU and world markets;
- Causes of price volatility;
- Effect of policy;
- Volatility coping mechanisms.

8.4.2. Price volatility in the EU dairy commodities market

The dairy commodities chosen for analysis are butter, skim milk powder (SMP) and cheddar cheese. Butter and SMP prices represent basic commodity prices for all milk solids (fat, protein, lactose and other) and the volatility present in these prices should be indicative of the price volatility present in dairy commodities in general. In addition cheddar cheese represents a very widely traded international cheese. A review of representative EU monthly prices[(A)] for these products shows that while there have been extended periods of comparative stability in the EU in the past twenty years, there were also some occasional periods of extreme volatility, especially 2007/08, 2001/02 and 1995/96 (Figure 1). It may also be noted that these periods of major volatility have become more extreme over time.

Figure 1: EU Dairy Commodity Prices 1990-2010



(A) The EU butter and SMP prices are the monthly Dutch quotations as published by Agra Europe while the Cheddar prices are the UK mild cheddar series sourced from MDC Datum.

While a variety of methods may be used to precisely quantify price volatility (O' Connor et al 2009), the annualized standard deviation[(B)] is the most widely used (FAO, EComm). Using this method it is seen that, in the case of butter, price volatility in the EU market was very limited in the 1990's, being consistently around 5% while the pattern dramatically changed in the most recent decade moving to about 30 % at the peak (Fig 2). Similarly for SMP, an almost identical pattern to that for butter emerges (Fig 3). Finally for cheddar cheese, volatility in the period 1998 to 2003 was consistently about 10%, while it increased substantially to about 20% at the peak in the period 2004 to 2009 (Fig 4).

8.4.3. Price volatility comparison, EU and world markets

A similar method was used to compare EU and world markets[(C)]. In the case of butter it is seen that price volatility in the 1990's at about 15% for the world market was about three times that of the EU (figures 2 and 5). However in the most recent decade the dramatic increase in volatility in the EU especially has meant that price volatility in the EU has only been slightly less than on the world market (figures 2 and 5). Again an almost identical situation emerges for SMP, with world market price volatility being almost three times greater than the EU on average in the 1990's, unlike the most recent decade when the dramatic increase in volatility in the EU in particular has meant that EU and world market volatility were close to identical (figures 3 and 6). Finally in the case of cheddar cheese, unlike the other two products price volatility on the world market was fairly similar to that for the EU in the 1998 to 2003 period. Price volatility for both markets rose markedly in the 2004-2009 period, while remaining close to identical as between EU and world cheddar cheese markets (figures 4 and 7).

The overall picture that emerges is that in the case of butter and SMP in particular, price volatility was far lower in the EU than on the world market in the 1990's, but that while price volatility rose substantially for all products in the most recent decade, the rise was most dramatic in the EU, such that EU and world market price volatility became almost identical for all three products.

8.4.4. Causes of price volatility

In the absence of Government intervention, markets for basic dairy (and food) commodities tend to be extremely volatile due to fundamental underlying economic forces. With a given income level, food consumers in developed countries are not very interested in buying additional food in general beyond the point of "being satisfied" or satiety, even if prices were to fall substantially. (This would of course vary for individual foods depending on substitutability). By extension from food consumer behaviour, buyers of basic food commodities back along the supply chain tend to be weak buyers of any additional volume above the "normal" or expected quantity, thus precipitating substantial price falls if any extra volume materialises from producers. In contrast, if quantities were to be a little scarce relative to "normal" or expected levels, final food consumers and by extension basic food commodity buyers will be prepared to compete and bid quite high prices, as consumers will forego other "non-essential" purchases but will seek to retain virtually unchanged purchasing patterns for food in general. (Again this may vary for individual foods depending on substitutability). With regard to supply of food commodities, weather (drought versus good growing conditions), disease, changes in policy etc. can cause unanticipated changes in the quantity of farm produce produced. Given the somewhat unique characteristics of food buyers as described above, even small changes in production creating modest surplus amounts coming available will have few interested buyers and, in the absence of Government intervention, prices will have to drop substantially to clear the market. By the same token, if unfavourable weather, disease etc, cause even modest scarcity, food commodity buyers will be prepared to bid quite high prices knowing that the ultimate food consumers will, if required, be prepared to pay substantially more to ensure normal food consumption levels. Thus substantial price volatility can be expected to be a major characteristic of food commodity markets due to some fundamental aspects of buyer behaviour combined with production uncertainty.

[(B)] The annualized standard deviation is the standard deviation multiplied by the square root of the number of measurement periods per annum which in this instance is the square root of 12. It may be represented as follows,
AnnStdDev (r1, ..., rn) = StdDev(r1, ..., rn) * $\sqrt{NumPeriodsPerYear}$, where r1, ..., rn is a return series, i.e., a sequence of returns for n time periods.

[(C)] USDA North European FOB (Free On Board) wholesale skim milk powder and butter prices are taken as representative world prices along with the USDA Oceania cheddar series.

All of the above food market characteristics apply with given income levels. As incomes vary in accordance with the business cycle, buyers purchasing power is affected either positively or negatively for all goods including food, however changes in income have much less consequences for food markets than for many other more discretionary goods such as for example automobiles.

Furthermore in a specific world dairy market context, the extreme price volatility observed in the world dairy commodity prices may in part be explained by the fact that these global markets are considered thin, with only 7% of output traded and four major exporters (New Zealand, EU, Australia and USA) accounting for more than 80% of supply. Hence relatively small changes to supply or demand often lead to relatively large price fluctuations.

8.4.5. Effect of policy

As illustrated in the earlier discussion, the policy instruments employed by the EU up to the Luxembourg Agreement (2003) were very successful in isolating internal EU dairy commodity prices from the greater volatility associated with world prices. Price stability was explicitly expressed as a policy through the target price for milk. In practice intervention purchasing placed a floor on prices while other measures such as production quotas, export refunds, import tariffs and subsidized consumption measures helped to ensure higher and much less volatile prices than those pertaining in world markets. However the substantial reductions in support prices and the confining of support to safety net measures has meant that much greater price volatility has now become the norm in EU dairy markets.

8.4.6. Volatility coping mechanisms

There are a broad range of instruments, both public and private market, which may be utilized to manage price/income volatility. The private market suite of instruments includes over the counter (OTC) contracts, forward contracting, futures contracts and insurance (see Keane and O'Connor 2009). All have potential benefits but also some limitations. For example futures contracts, while not necessarily reducing price volatility in general, offer considerable risk management benefits to market participants but, in an EU context where they currently do not exist (May 2010), considerable support will be required from both the private and public sectors in the initial launch stages to ensure success.

Likewise trade policy and supply management can continue to have an ongoing role in reducing extreme price volatility. One further policy tool that the EU can now employ to promote price stability at levels above the safety net base is that of enlightened management of public stocks in the form of "buffer" stocks with the explicit objective of lessening extreme price volatility.

Figure 2: EU Butter Volatility

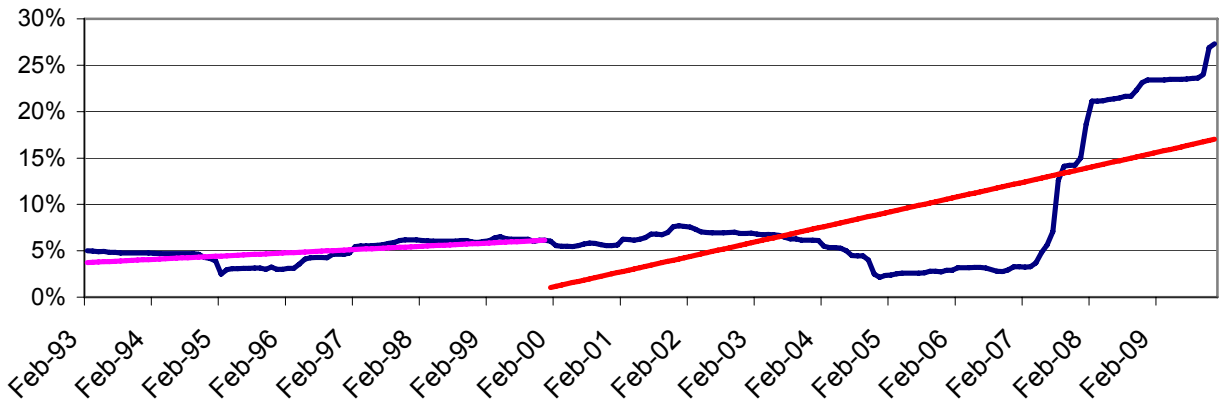


Figure 3: EU SMP Volatility

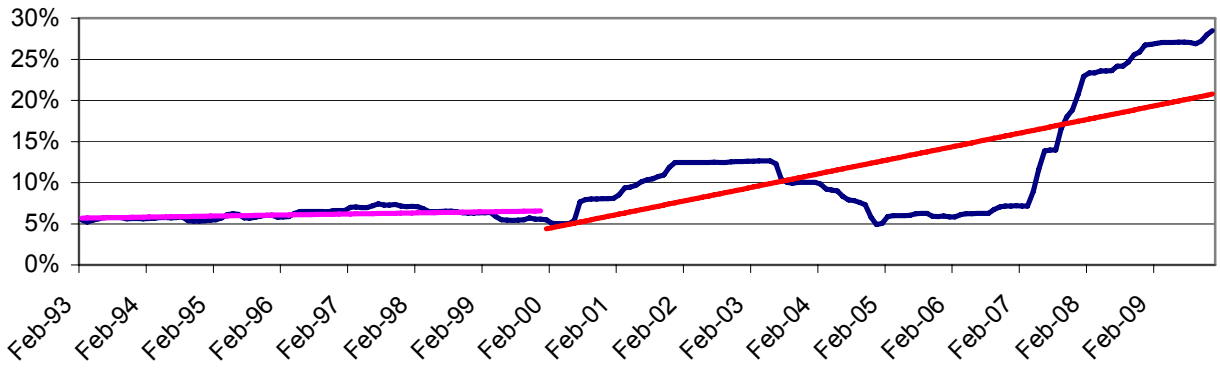


Figure 4: EU Cheddar Volatility

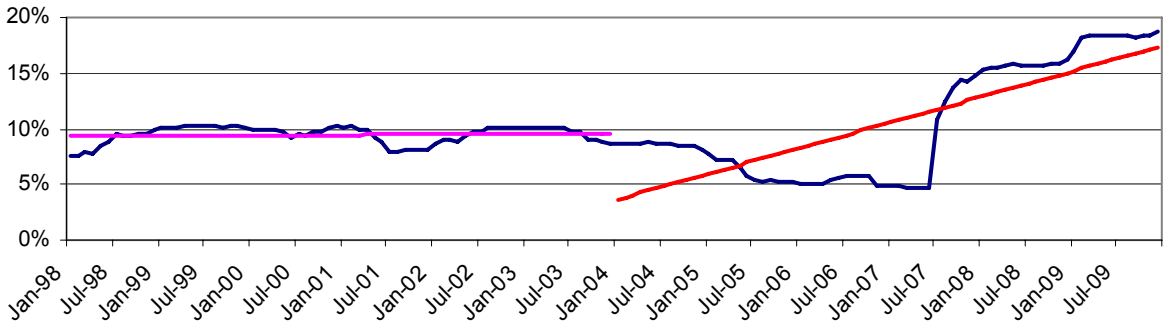


Figure 5: World Butter Volatility

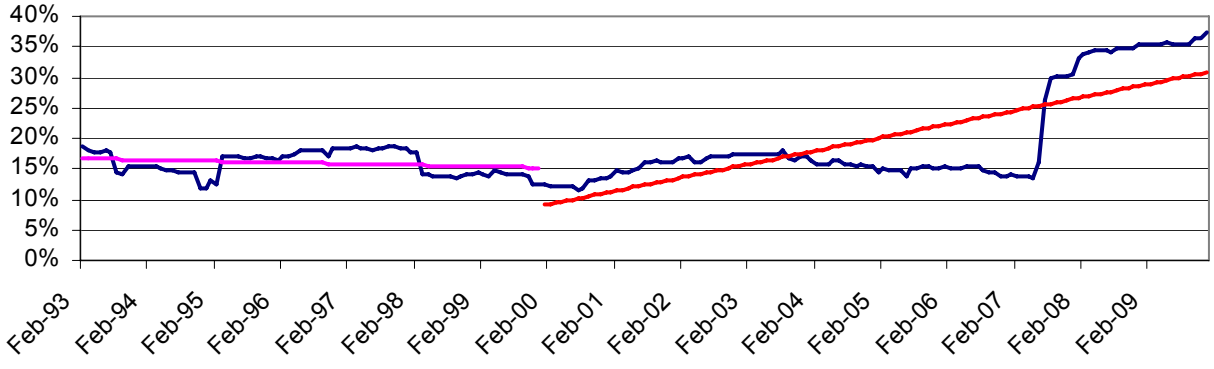


Figure 6: World SMP Volatility

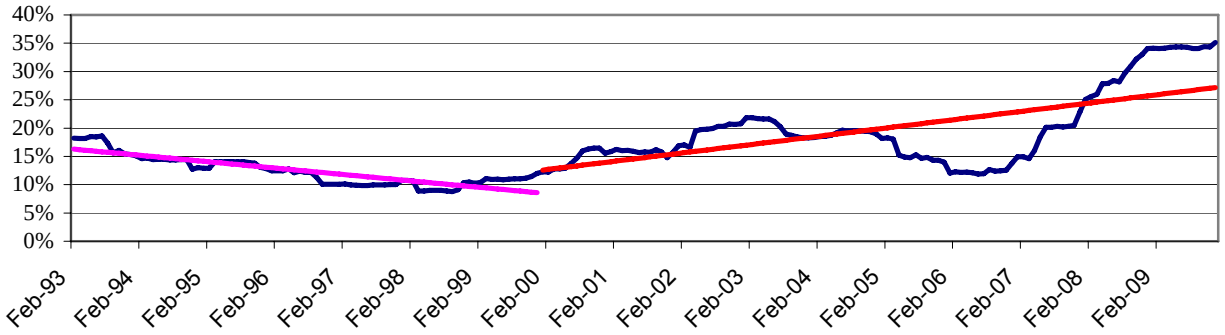
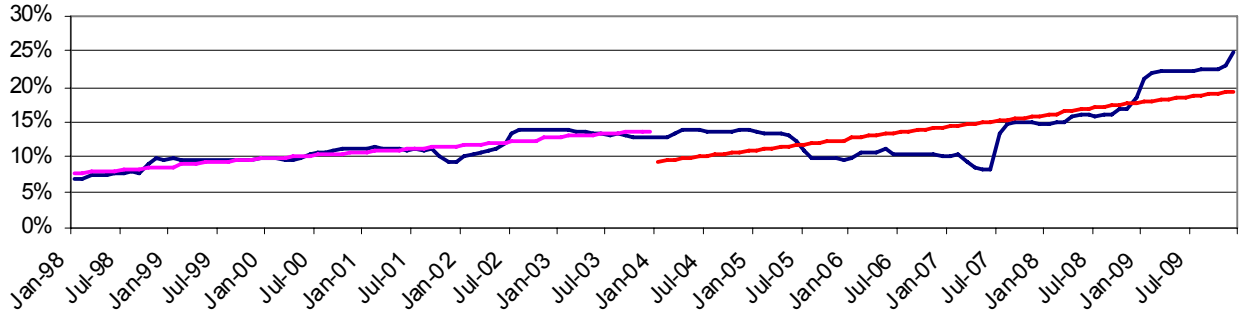


Figure 7: World Cheddar Volatility



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8.5. Dairy futures markets

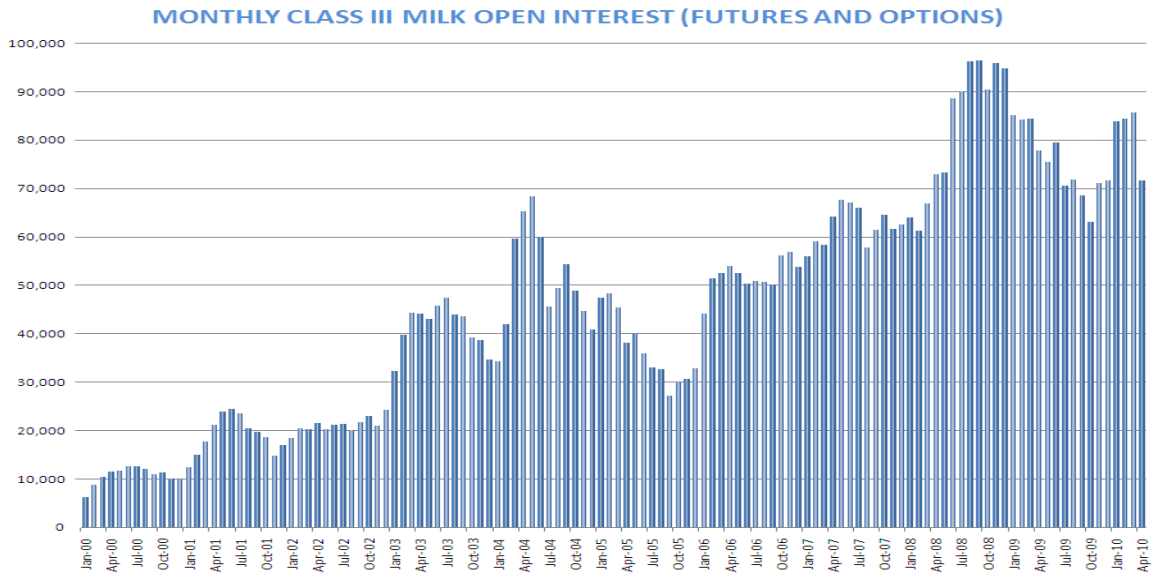
8.5.1. CME Dairy Markets: A history of innovation

Charles Piszczor, CME Group, USA

For further information please go to www.cmegroup.com/trading/agricultural

Before discussing the present and future of dairy trading, it is necessary to look at the past to get a perspective of CME Group's involvement in the dairy markets. The Chicago Mercantile Exchange (CME) was founded in 1898 as the Chicago Butter and Egg Board with trading in "spot" or "cash" (physical) butter. In 1919, it became the CME. Over the years, through mergers and acquisitions, it has further enhanced its offerings. Recent events include the merger with the Chicago Board of Trade in 2007, which resulted in the formation of CME Group, and the acquisition of the New York Mercantile Exchange in 2008.

Important early innovations in CME Dairy Markets include the introduction of trading in butter futures (1919), and "spot" or "cash" (physical) cheese market (1929). The year 1996 was a watershed year, when the exchange spent considerable research and development work on expanding into the US dairy markets. One of the first dairy contracts launched in 1996 was a deliverable fluid milk futures and options contract. Later that same year, the deliverable butter futures contract was re-launched. The fluid milk contract was revised in 1997 to the cash settled BFP (basic formula price) milk contract, which was then changed again in 2002 and renamed the Class III milk contract. To this day the Class III contract remains the core contract of the CME dairy complex (see chart below). The late 1990's saw additional futures contracts added to the dairy complex - non fat dry milk and dry whey - plus "spot" or "cash" cheese (blocks and barrels) in 1997 and non fat dry milk in 1998.



As hedging became the accepted method for managing dairy price risk, the dairy industry foresaw the need to develop additional dairy contracts. At the beginning of 2000, the Class IV Milk futures contract was launched, followed by cash-settled butter and deliverable non fat dry milk. It should be noted that since 1996, the US dairy industry has undergone a structural change, with a consolidation of the number of Federal Milk Marketing Orders and certain regions of the country opting out of the Federal Order program altogether. These developments provided greater flexibility for many processors, cooperatives and producers, but also increased exposure to greater price risk and therefore a larger need for price risk management. For these reasons, the US dairy industry asked the exchange to develop a cash-settled cheese futures contract, which was launched in June 2010.

It has taken years for these dairy contracts to gain broad industry acceptance as well as outside participation. Yet CME Group sees these many years of building and educating the dairy markets as a necessity to fulfill a greater need for global dairy risk management.

In May 2010, CME Group offered international dairy traders the same strategic tools it has offered US dairy participants for sixteen years, and provided them the ability to hedge their price risk for skimmed milk powder. This is a deliverable contract with locations in Australia, New Zealand and Rotterdam, along with locations on both the East and West coasts in the United States.

Dairy trading on a global level is currently comprised of multinational corporations and sophisticated traders. Trading participation from the individual producer or processor is seen as limited at best. There will always be the first adopters that truly understand the importance of managing price risk, but it will also take a concerted effort over a period of years to expand and educate the producer and processor base on the advantages of price risk management.

International dairy futures are seen by CME Group as a long-term growth market. Increasing global demand for dairy products is the driving force behind this optimism. As emerging markets continue to grow and as personal income increases, the citizenry of those markets will begin to demand better and more nutritious foodstuffs. Dairy products offer consumers many foods that are nutrient-dense and can be made into products that are easy to handle and store. For companies to supply these emerging markets profitably and efficiently, they will need to better manage supply and demand as well as price risk. Dairy futures will play a vital role in this process, but it will take time for the global dairy market to learn about and understand how to use these tools.

Successful product innovation is the driving force at CME Group. With the launch of the international skimmed milk powder contract, CME Group expands its 112 year relationship with the dairy industry to the global marketplace. The exchange continually monitors government policies, industry practices and commodity products, both domestically and internationally, looking for new opportunities to assist the dairy industry in managing its risks.

CME offers the largest global network for electronic trading through the CME Globex platform, with hubs in Amsterdam, Dublin, London, Milan, Paris, Singapore, Sao Paulo and Seoul. These platforms allow for virtually around the clock trading. CME Globex execution times have fallen from 80 milliseconds in 2005 to the 5-7 millisecond response times today, with over six billion transactions are processed each month. This provides a level playing field for all market participants, no matter where they are located.

8.5.2. NYSE Liffe skimmed milk powder futures contracts

Nicholas Kennedy

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On October 18th 2010, NYSE Liffe launched skimmed milk powder (SMP) futures contracts. NYSE Liffe has worked in close co-operation with physical market participants to develop this first contract and is in the process of developing a portfolio of products that initially will also comprise Butter and Whey Powder Futures.

The SMP futures contract has been designed as a financial instrument to enable efficient price risk management but is underpinned by the option for physical delivery which will ultimately ensure convergence between spot physical and futures market values.

Unit of trading	24 tonnes, net weight
Origins tenderable	European Union
Quality (to be assessed using COKZ methodology as current at time of delivery)	**Physical and Chemical Analysis:** Fat 1.25% maximum Protein 34.0% (non-fat dry matter) minimum Ash 8.2% maximum Moisture 4.0%, maximum Scorched Particles Disc B maximum Titratable Acidity 0.15%, maximum Solubility Index 1.0 ml maximum WPN index 1.51– 5.99 mg/g - medium heat **Microbiological Analysis:** Standard Plate Count 10.000/g, maximum E-Coli Negative in 1g Salmonella Negative in 25g Yeast & Mould 100/g, maximum Inhibitors Negative
Packaging	25kg net weight in a minimum of 2 ply kraft paper bag with a polythene liner with a minimum tare of 240g
Delivery months	January, March, May, July, September, November such that 6 delivery months are listed
Price basis	Euros per metric tonne. Delivered free onto Buyer's transport in accordance with Incoterm FCA at a delivery point that is within a 150 km radius of Antwerp, Hamburg or Rotterdam
Age profile	Goods must be tendered no later than 6 months after the date of production
Minimum price movement (tick value)	50 Euro cents per tonne (12€)
Last trading day	The last business day prior to the tender day
Tender day	The sixth business day preceding the first business day of the delivery period for that delivery month
Delivery period	The period commencing on and including the first business day of the delivery month, up to and including the last business day of the delivery month

8.5.3. Eurex Commodity Derivatives

Sascha Siegel, Eurex Frankfurt AG; Dr. Carsten Becker, agorumX, Bergen, Germany

For further information please go to www.eurexchange.com

A primer on Eurex futures on butter and skimmed milk powder

At the end of May 2010, Eurex extended its product range in the agricultural commodities segment by adding futures on European butter and skimmed milk powder. The two futures are based on established reference prices from the respective spot markets and provide all participants - from farmers, producers and traders down to members of the processing industry - with an opportunity to hedge and manage the increasing price risks in these dairy products

In order to prepare for the launch of the futures contracts, Eurex worked closely with key players and important market participants in the European and U.S. dairy industry. As a result, the contract specifications explicitly take into account the needs of the market participants of the two respective spot markets (table 1).

Table 1: Contract specifications for futures on butter & skimmed milk powder

Futures on	Butter	Skimmed Milk Powder
Product ID / ISIN	FBUT / DE000A1DKGY6	FSMP / DE000A1DKGX8
Underlying	Eurex Butter Index	Eurex Skimmed Milk Powder Index
Contract Size	5 metric tons	
Currency	EUR	
Notation	EUR per ton	
Price quotation and Minimum Price Change	In points; the minimum price change is one point; equivalent to a value of EUR 5.	
Contract Month	Up to 18 month; the six nearest maturity month of the January, April, July and October cycle.	
Last Trading Day	Last trading day is the Final Settlement Day.	
Settlement	Cash settlement, based on the difference between the Final Settlement Price and the settlement price of the previous exchange day.	
Final Settlement Price	Value of the respective index on the Final Settlement Day at 19:00 CET.	

Both futures are settled in cash. The final settlement prices are determined by the underlying indices whose weekly calculations are derived from market prices in France, Germany and the Netherlands. (see figure 1 and 2). The index values are published once a week on the Eurex website (www.eurexchange.com), enabling clients to calculate the price correlation between their individual buying and/or selling prices and the futures market.

Figure 1: Composition of the Eurex Butter Index

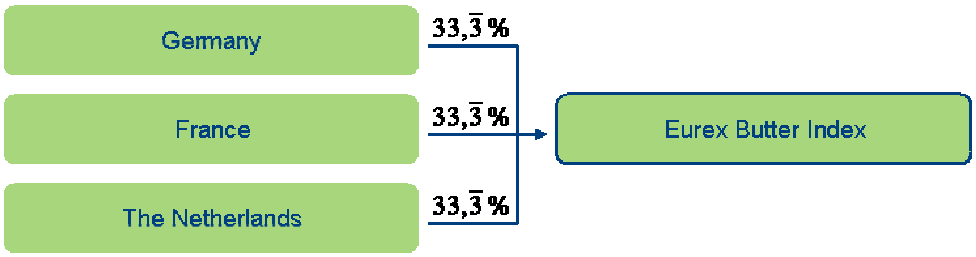
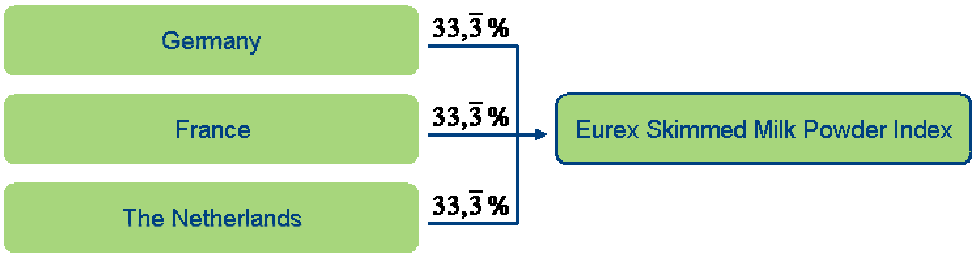


Figure 2: Composition of the Eurex Skimmed Milk Powder Index



There also are several benefits to the cash settlement of the dairy contracts. Our consultation partners prefer this approach as opposed to a physical delivery method for three main reasons:

Hedging the price risk is more important than physical delivery.

Sellers and buyers are usually trading specific qualities. At the same time processors often only can use predefined suppliers who they have to put through an accreditation procedure. As a result, buyers as well as sellers are very often not able to make or to take the delivery at given delivery points.

The contract size for a physically delivered contract is typically based on a truck / container load (20.000 kgs - 25.000 kgs). This huge contract value (e.g. butter between approximately 40.000 - 90.000 EUR) would potentially exclude smaller companies, farmers and private investors from accessing the futures market. Cash settled contracts can be offered in lower contract units (e.g. 5.000 kgs)

From an institutional investor's perspective, the low correlation between the commodity markets and traditional asset classes, such as equities and bonds, offers the benefits of portfolio diversification. Investors can profit from rising or falling agricultural market prices, to enhance or boost income independently from capital market developments.

Eurex is one of the world's leading derivatives exchanges and is jointly operated by Deutsche Börse AG and SIX Swiss Exchange. With around 410 members from 25 countries worldwide, trading volume at Eurex exceeds 8.5 million contracts per day. Eurex aims to offer multiple asset classes in a secure, cutting-edge trading environment, guaranteeing fair and cost-efficient trading opportunities for all market participants. They already list some of the most liquid futures and options on major European equities, equity indexes and fixed income products as well as innovative futures on agricultural products like European processing potatoes and hogs.

8.5.4. New Zealand and NZX - A global dairy market hub

Kathryn Jaggard

For further information please go to www.dairyfutures.com or www.nzxgroup.com

New Zealand is a dominant force in the global dairy industry and with the help of new NZX dairy derivative products, it is on track to become a global dairy market hub.

Global examples show that financial derivative markets grow around physical industries - for example futures markets developed in Chicago to support the risk management needs of the mid-western agricultural producers of the United States. New Zealand is a substantial producer and exporter of dairy commodities and therefore a natural place to establish and trade global dairy risk management products.

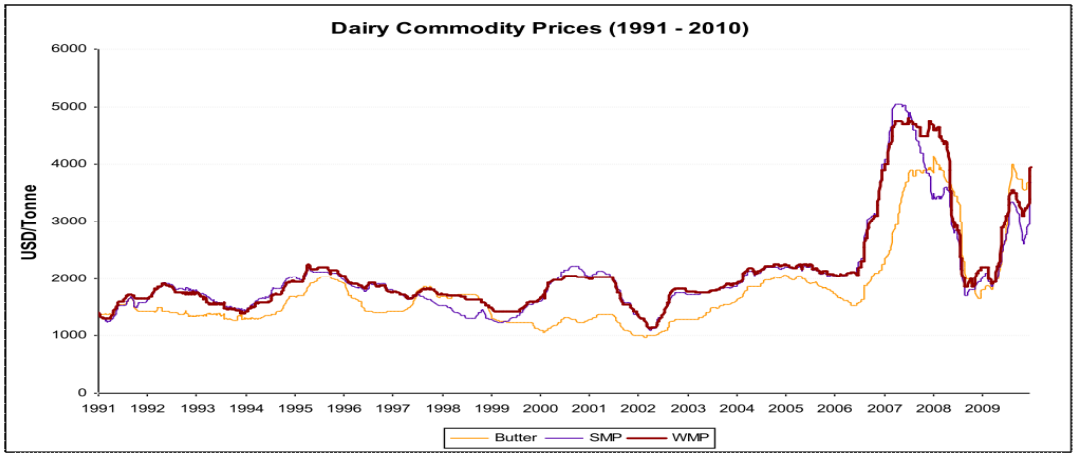
8.5.4.1. NZX Global Dairy Futures and Options

NZX, the home of the main financial markets in New Zealand, believes that New Zealand is perfectly positioned to support the development of a global dairy derivatives market. NZX will launch a suite of cash settled dairy derivatives, the first of which will be Global Whole Milk Powder ("WMP") Futures in 2010. This will be followed closely by Global Skim Milk Powder Futures, Global Anhydrous Milk Fat Futures, with options on these futures contracts to follow. Where there is demand, other dairy risk management tools will meet that demand.

NZX Global WMP Futures will be traded electronically and centrally cleared through the clearing house, New Zealand Clearing Corporation, a wholly owned subsidiary of NZX.

8.5.4.2. Extreme price volatility

Over the past five years, the global dairy industry has experienced the greatest level of price volatility in its modern history, exposing a significant weakness in the dairy industry's ability to manage business with certainty. Compared to other significant agricultural sectors, dairy has been suffering from a distinct lack of effective risk management tools which can help to take volatility out of market and create price certainty. It's this volatility that has driven demand for the listing of efficient risk management tools relevant to the global dairy industry



Source: NZX Agrifax

8.5.4.3. Settled in cash, no physical delivery

Cash settlement of the NZX dairy futures eliminates delivery problems. Feedback from the global dairy industry indicated that physically delivering Global Whole Milk Powder Futures would be cumbersome at best and impossible at worst. Physically delivered futures require actual delivery, freight and procedures for dealing with a commodity that is strictly regulated and not always of a uniform standard, therefore making it difficult to create standardised global futures.
All dairy derivatives listed on the NZX Markets will be cash settled.

NZX Global WMP Futures		
Unit of trading	1 tonne (MT)	
Price basis	USD/tonne	
Minimum Price Movement (Tick Size and Value)	$5 per tonne ($5)	
Daily Price Limits	10% above or below the previous Trading Day's Daily Settlement Price	
Contract Months	Every calendar month such that 18 months are available for trading	
Trading Day	08:00 hrs - 16:00 hrs NZST/NZDST	
Last Trading Day	Trading shall terminate on the last business day preceding the first gDT Auction of the month i.e. trading in the March WMP Futures Contract will expire on the last Business Day immediately preceding the first gDT Auction in April (See Expiry Calendar contained in the Contract Terms and Administrative Procedures - NZX Derivatives Market Contract No 1 ("Contract T&Ps"))	
Final Settlement	Cash settled to the Final Settlement Price calculated by NZX according to an average of winning prices for Whole Milk Powder, Regular - NZ, Contract 1 in gDT Auctions as stipulated in the Contract T&Ps	
Clearing House	New Zealand Clearing Limited	
Common Trading Facilities	Block Trading Facility	√
	Exchange for Physicals Facility	√
	Exchange for Swaps Facility	√
Common Trading Facilities Minimum Volume Thresholds	Minimum Volume Thresholds for each Contract or Class of Contracts are specified in Part B Appendix One of the Procedures	
Exchange Code	WMPF View vendor codes	
Cross Transactions Minimum Time Period	15 seconds	
Position Limits	20,000 Open Positions in any Contract Month	
Exchange Rules	The Contracts are Traded on the NZX Derivatives Market and subject to the NZX Derivatives Market Rules and Procedures	

Annex 1: Country reports

General remarks

- The following country reports are based on information sent by IDF National Committees and by other national organisations.
- Other sources used: CNIEL, Comtrade, European Dairy Association, Eurostat, FAO, FAPRI, PZ, USDA, ZMB, ZMP, FED, ECB, DNB, National Statistics.
- 2009 data are preliminary.
- The IDF National Committees (and other national organisations) are responsible for the text in the key development sections of the corresponding Country Reports.
- The '-' sign is used when figures are not available, confidential or senseless (as a numeric result from calculations).

  The value '0' (zero) is used when volume is < 500 tonnes or null.
- The ranking in this annex is based on the quantity of cow's milk production per country group:

  1. Asia;
  2. EU 27;
  3. Northern America;
  4. Other Europe;
  5. South America;
  6. Africa;
  7. Oceania;
  8. Central America.

Contents:

CHINA

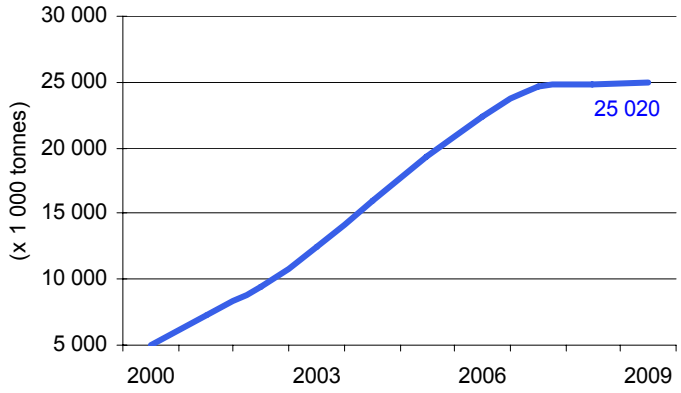
Dairy farming

Cow milk production (x 1 000 tonnes)	35 188
% of worldwide milk production	6.0%
% cow milk deliveries	71%
Number of dairy cows (x 1 000 head)	12 607

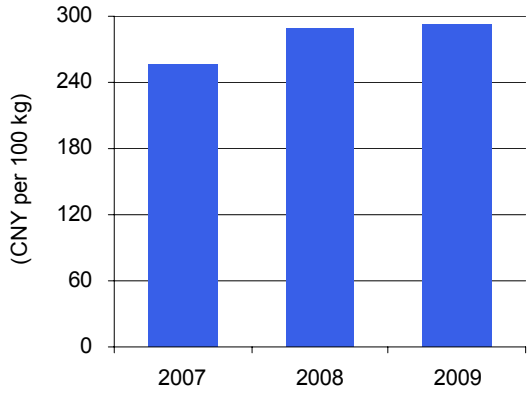
Main processors

Mengniu Dairy Group	www.mengniu.com.cn
Yili Dairy Group	www.yili.com
Wahaha Group	www.wahaha.com.cn
Vivi Group	www.vvgroup.com
Bright Dairy Group	www.brightdairy.com

Cow milk deliveries



Cow milk prices (A)



(A) Real fat and protein contents.

Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	13 240	105	7	171	20	52
Fermented products	3 176	122	2	194	1	76
Cream	-	-	5	175	0	78
Butter and butteroil	35	95	28	209	2	42
Cheese (B)	15	100	17	122	0	-
WMP (C)	977	87	176	382	10	16
SMP	54	102	70	128	0	0

(B) Processed cheese included, made from imported natural cheese. (C) Production of infant formulas included.

Consumption (kg per capita)

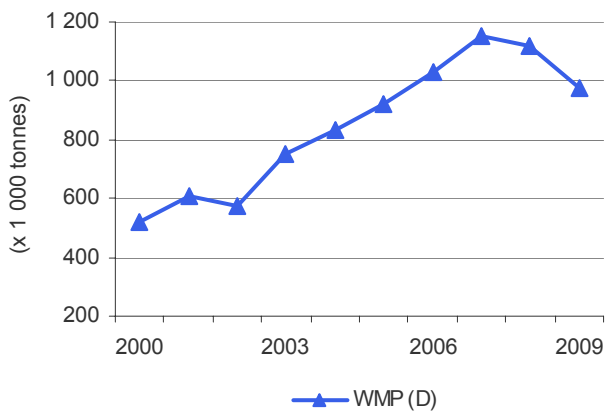
Milk: 11.2 kg

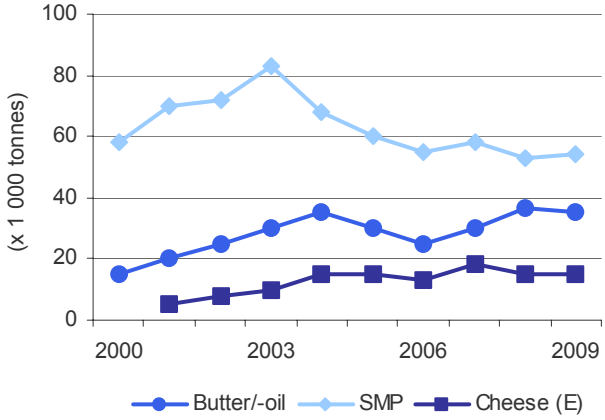
Butter: 0.1 kg

Cheese: -

Population: 1 335 mln.

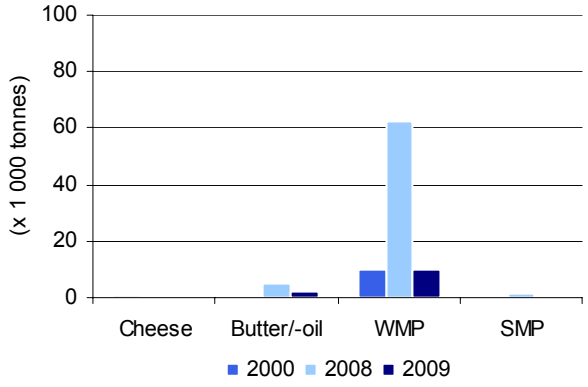
Production





(D) Infant formulas included. (E) Processed cheese included, made from imported natural cheese.

Export



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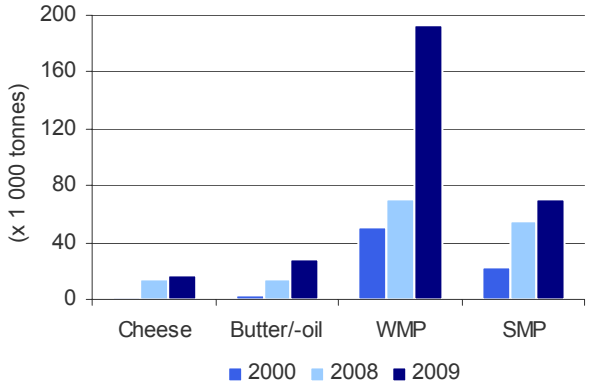


Key developments

Since the milk scandal in 2008, the Chinese government has paid great attention to food safety and treated sick children actively while, at the same time, carrying out rectification on dairy products at national level. In order to secure the raw milk supply, the Ministry of Agriculture rectified and standardized dairy farms and implemented a licence for intake of raw milk from receiving stations. By doing so, large and standardized farms have been promoted for milk producers. Hence, the dairy cow rearing manner started to change from small scale to suitable large scale development.

Meanwhile, the State government has released a series of standards and regulations for dairy and foods to secure safety and quality of the products. In October 2008 the “Quality and Safety of Dairy Products Regulatory Ordinance” was released and in February 2009, the Food Safety Law was issued and put into effect officially from June 1st 2009. In June 2009, “Dairy Products Industrial Policies” and “Dairy Products Processor Access Conditions” have been revised together as one policy entitled “Dairy Products Industrial Policies, 2009 version” for implementation. In July 2009, enforcement regulations of the “Food Safety Laws” have been brought into force. From December 2008, the Ministry of Health launched a clearing-up of dairy standards resulting in 66 national dairy standards that were released officially in March 2010 for gradual implementation: there are 15 standards for products, 2 standards for production, 49 standards for testing methods.

Through our year of efforts, China has emerged from the milk scandal and is recovering gradually for a healthy development.

Source: China Dairy Industry Association (www.cdia.org.cn), Comtrade, FAO, USDA.

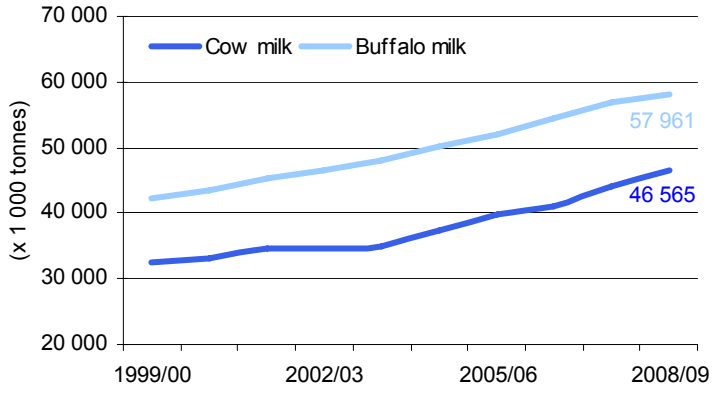
INDIA (A)

Dairy farming (B)

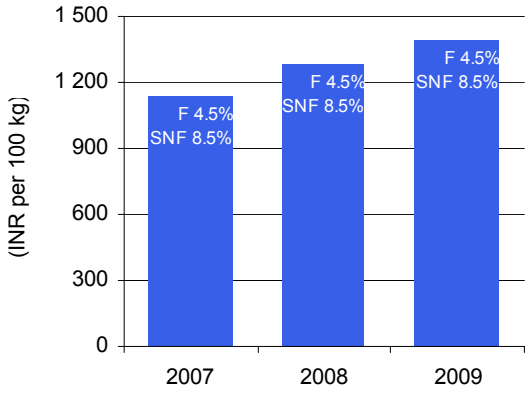
Cow milk production (x 1 000 tonnes)	46 565
% of worldwide milk production	8.0%
Buffalo milk production (x 1 000 tonnes)	57 961
Number of dairy cows (x 1 000 head)	38 500
Number of buffaloes (x 1 000 head)	38 100

(B) Year 2008/09.

Milk production



Milk prices (F = fat%, SNF = Solid Non Fat %) (C)



(C) Mixed (cow and buffalo) milk.

Processing and trade

Volume (x 1 000 tonnes)	Production (D) 2008/09	Production (D) Index (07/08=100)	Import 2008/09	Import Index (07/08=100)	Export 2008/09	Export Index (07/08=100)
Liquid milk	7 534	106	1	-	8	113
Cream	38	102	0	40	0	90
Butter and butteroil (ghee)	109	96	5	521	16	167
Cheese	5	84	1	94	3	154
WMP	74	100	0	298	4	233
SMP	88	95	0	91	24	75

(D) Refers to cooperative dairies only.

Consumption (kg per capita)

Milk: 38.6 kg

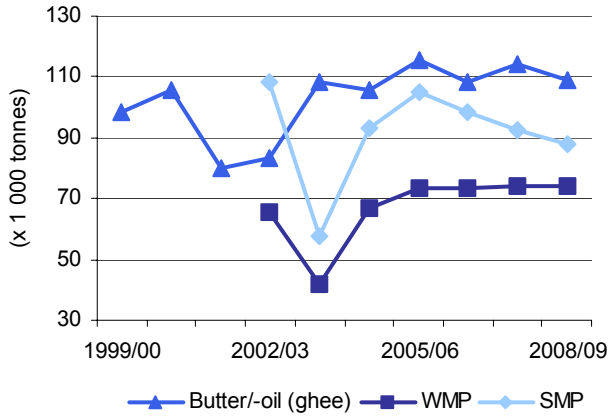
Butter: 3.3 kg

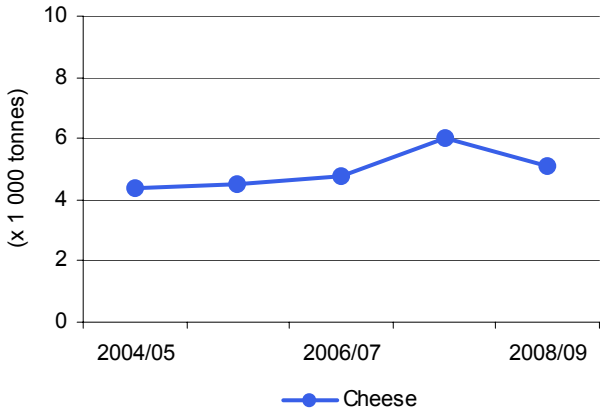
Cheese: -

Population: 1 170 mln.

(A) Dairy years ending March of the following year.

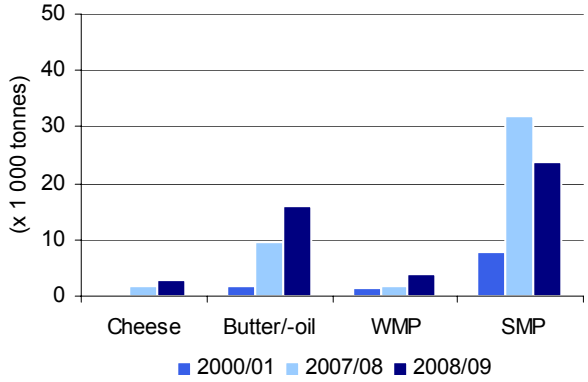
Production (E)





(E) Refers to cooperative dairies only.

Export



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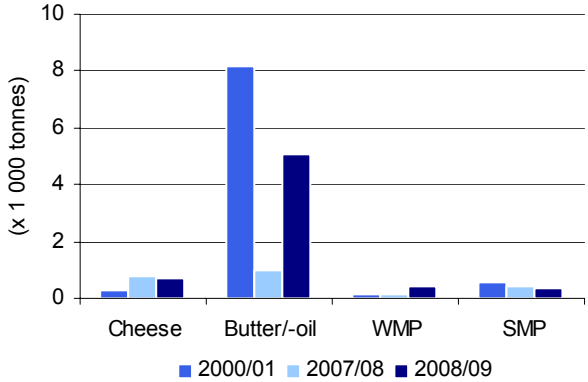


Key developments

Economic Situation
The growth in Gross Domestic Product during 2009/10 is estimated to have been 7.4% as against 6.7% in 2008/09. Agriculture, forestry and fishing sector, contributing around 14.6% to overall GDP, has shown a growth rate of 0.2% in its GDP during 2009/10 as against the previous year's growth rate of 1.6%.

Structural Changes in Farming and Industry
The milk production in India during 2009/10 is estimated to be 111.11 million tonnes in spite of the deficit monsoon (rainfall). Indian dairy farming continues to be characterized by small holder system and largely rural-based activity. Post-production dairy industry broadly features the organized sector (co-operative, government and private dairies) handling about 30%, and the unorganized sector (small private operators) handling about 70%, of the marketable surplus. The proposed National Dairy Plan (NDP) envisages that the share of the organized sector should rise to 65% over the next 15 years.

Consumption
About half of the total milk produced is retained for consumption by rural households. The remaining milk (marketable surplus) is consumed in urban markets as liquid milk, butter, ghee, traditional indigenous products including milk based sweets etc. During 2008/09, the per capita availability of milk increased to 258 grams per day.

Price Trends
The yearly average increase in farm level milk prices (paid by dairy cooperatives to farmers) was around 9% in 2009 over 2008. The wholesale price index of milk and skimmed milk powder rose by 9.01% and 5.58%, respectively, in 2009 over 2008.

Dairy Policy - National Dairy Plan
The NDP aims at meeting the projected national demand of 200 million tonnes of milk by 2021/22 through enhanced domestic production with appropriate technological interventions in animal breeding and feeding. The Government does not provide for product specific farm or export subsidies for the dairy sector.

Source: National Dairy Development Board (www.nddb.org), FAPRI.

IRAN

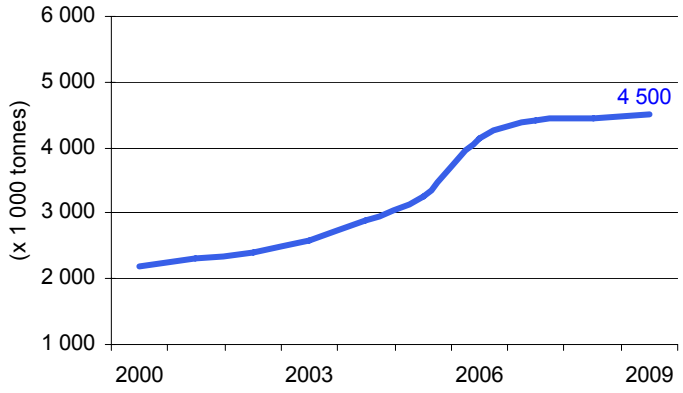
Dairy farming

Cow milk production (x 1 000 tonnes)	8 405
% of worldwide milk production	1.4%
% cow milk deliveries	54%
Number of dairy cows (x 1 000 head)	3 900

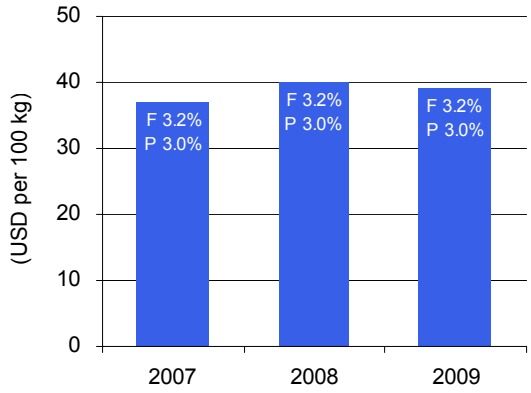
Main processors

IDIC	www.irandairy.ir
Sahar Dairy	www.sahardairy.com
Kalleh	www.kalleh.com
Mihan	www.mihandairy.com
Pak Dairy	www.pakdairy.com

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	1 875	104	-	-	-	-
Fermented products	905	104	-	-	-	-
Cream	140	-	-	-	-	-
Butter and butteroil (A)	68	100	40	80	-	-
Cheese	245	105	-	-	2	-
WMP	-	-	-	-	-	-
SMP	16	107	12	104	1	50

(A) Production of butter only.

Consumption (kg per capita)

Milk: 35.1 kg

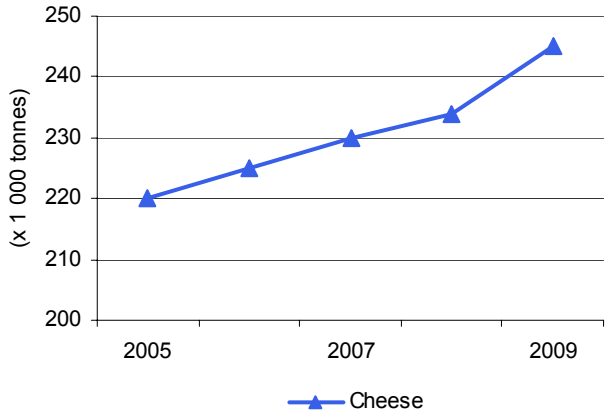
(B) Cream included.

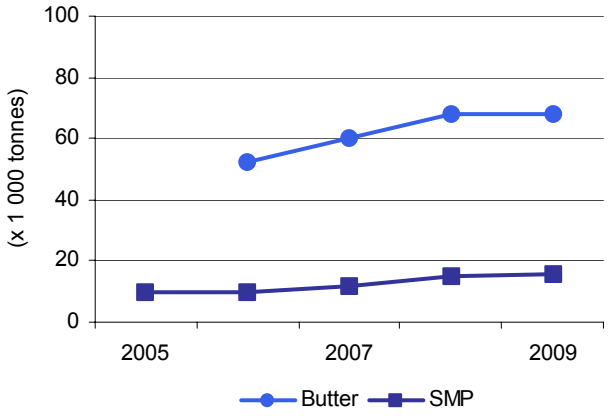
Butter: 3.0 kg (B)

Cheese: 4.8 kg

Population: 74.7 mln.

Production





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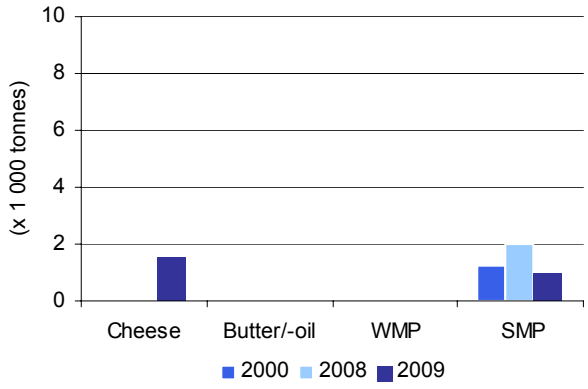

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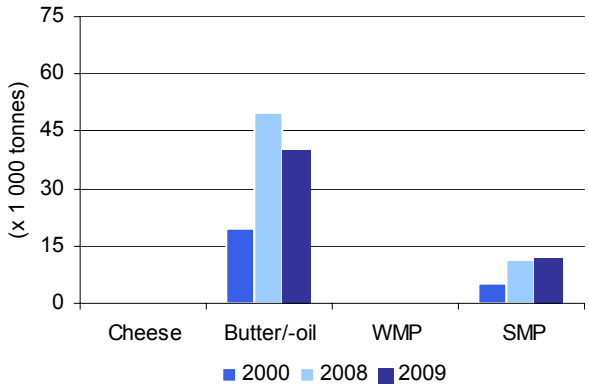


Source: Iran dairy industries Co (www.irandairy.ir).

ISRAEL

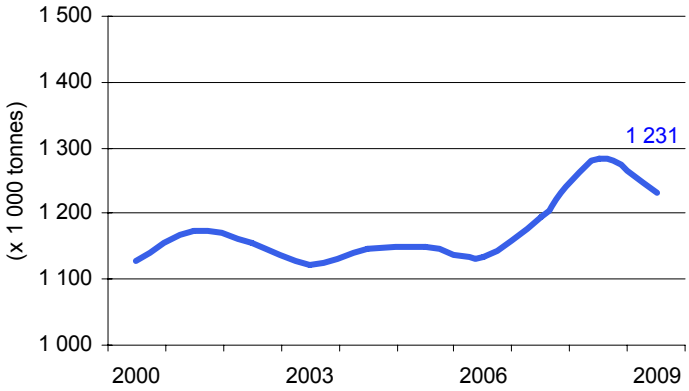
Dairy farming

Cow milk production (x 1 000 tonnes)	1 256
% of worldwide milk production	0.2%
% cow milk deliveries	98%
Number of dairy cows (x 1 000 head)	114

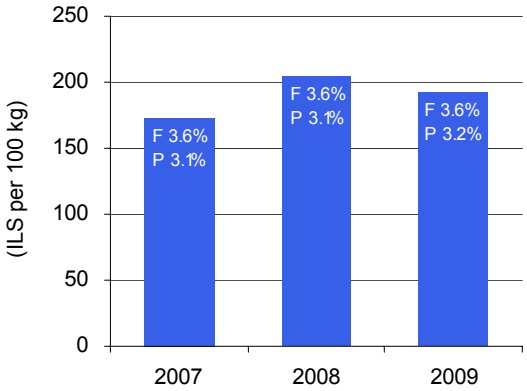
Main processors

Tnuva	www.tnuva.co.il
Strauss	www.strauss-group.com
Tara	www.tara.co.il
Gad	www.gad-dairy.co.il

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

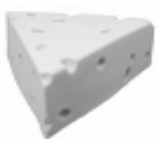
Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk (A)	423	101	0	-	0	-
Fermented products (B)	172	101	0	35	1	210
Cream	-	-	0	-	0	-
Butter and butteroil (C)	6	102	1	100	2	208
Cheese	121	101	2	106	1	88
WMP	-	-	3	114	3	550
SMP	6	58	3	45	4	>1 000

(A) Including production of milk drinks. (B) Including production of dairy dessert and cream. (C) Not including production of industry butter.

Consumption (kg per capita)

Milk: 56.8 kg

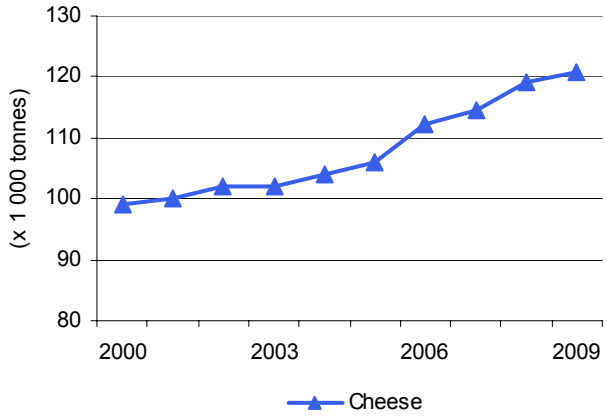
Butter: 0.8 kg

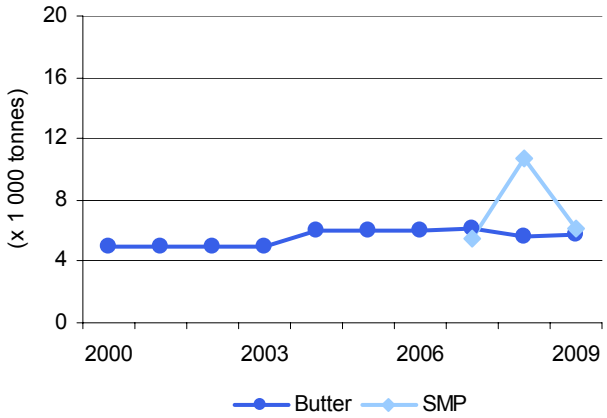


Cheese: 16.4 kg

Population: 7.4 mln.

Production





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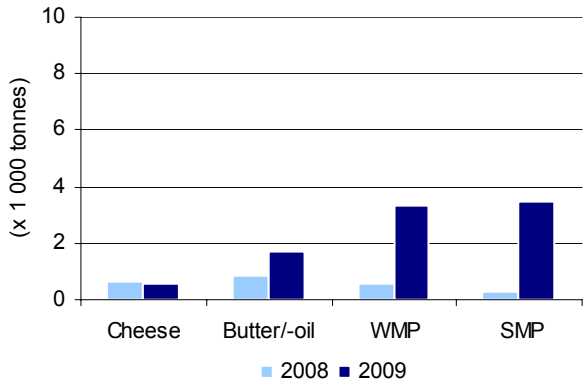

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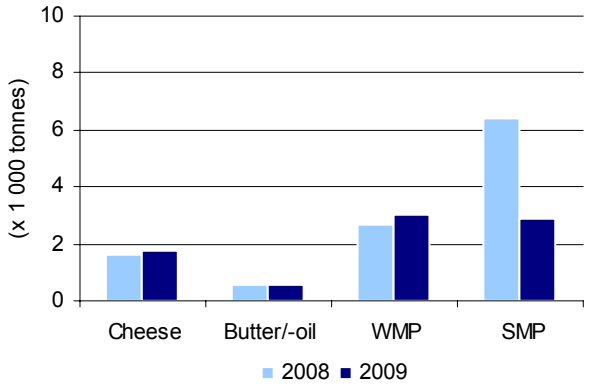


Key developments

Milk is produced on 969 farms. 167 cooperative farms produce 58% of the milk, 787 family farms produce 41% of the milk and 15 agricultural schools produce 1% of the milk. The average milk production on a cooperative farm is 4 190 thousand litres per farm and 641 thousand litres in a family farm. The average milk yield in a cooperative farm is 12 038 kg/cow/year, and in a family farm it is 11 006 kg/cow/year.

Dairy farm trends are the following: the number of farms has decreased from 1 250 in 2001 to 969 in 2009. There has been an increase in average yield per cow from 10 581 kg in 2001 to 11 653 in 2009, and an increase in average farm size from 939 thousand litres per farm in 2001 to 1 256 thousand litres in 2009. (Average production per farm decreased slightly in 2009 due to the general decrease in national quota from 1 273 million litres in 2001 to 1 217 million litres in 2009). There has been continuous improvement in milk quality and solids contents (fat and protein).

In Israel there are three major dairies that cover 90% of the dairy market, and more than 80 small dairies that cover the rest. The biggest dairy in Israel became a privately owned company in 2008.

The basic milk price to farmers is agreed upon between the government, the farmers and the dairies. The price reflects the average production cost plus an agreed compensation for farmers' labor and invested capital. The average price in 2009 was 1.98 shekels/l, and 2.1 shekels/l in 2008, the decrease was due to the decrease in feed prices. Due to the decrease in raw milk prices, the consumer prices for government controlled products decreased by an average of 4.6%.

In 2009, most product categories showed an increase of 1-2%. This is also the average annual increase in population. The average consumption per capita decreased by 1%.

Milk in Israel is produced under a quota system. Milk, together with other agricultural products, enjoys a high custom protection. But because of trade treaties, the custom rate is in decline.

Source: Israel Dairy Board (www.israeldairy.com), Comtrade.

JAPAN

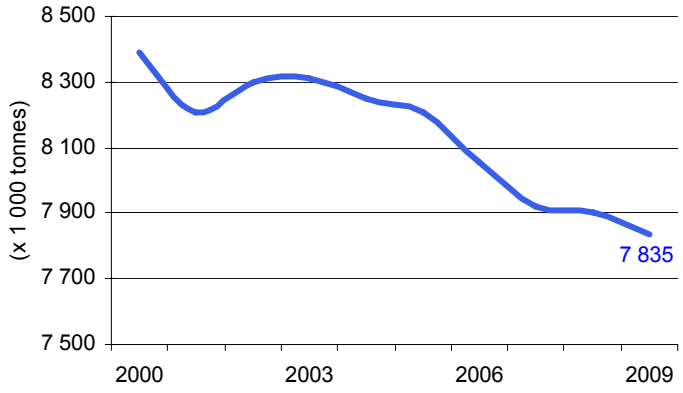
Dairy farming

Cow milk production (x 1 000 tonnes)	7 910
% of worldwide milk production	1.3%
% cow milk deliveries	99%
Number of dairy cows (x 1 000 head)	985

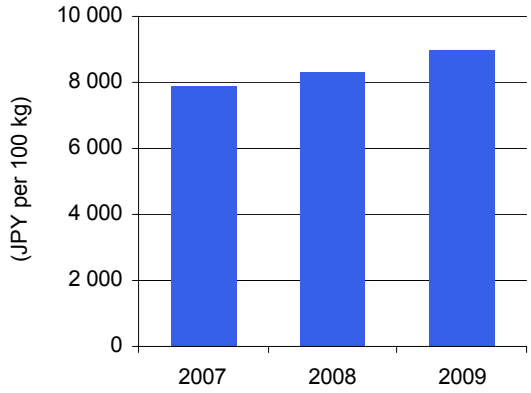
Main processors

Meiji Dairies Corporation	www.meinyu.co.jp
Morinaga Milk Industry	www.morinagamilk.co.jp
Nippon Milk Community	www.megmilk.com
Snow Brand Milk Products	www.snowbrand.co.jp
Yotsuba Milk Products	www.yotsuba.co.jp

Cow milk deliveries



Cow milk prices (A)



(A) Real fat and protein contents.

Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	3 919	96	0	0	2	247
Fermented products	846	101	0	228	0	44
Cream	105	98	0	116	0	95
Butter and butteroil (B)	81	113	0	2	0	141
Cheese (C)	45	104	184	99	0	104
WMP	13	93	0	-	1	239
SMP	167	106	34	107	1	152

(B) Production of butter only. (C) Production of natural cheese in the fiscal year 2009 (period April 2009-March 2010).

Consumption (kg per capita)

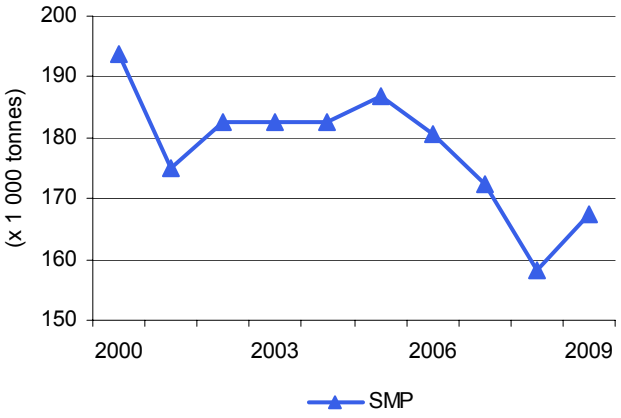
Milk: 34.2 kg

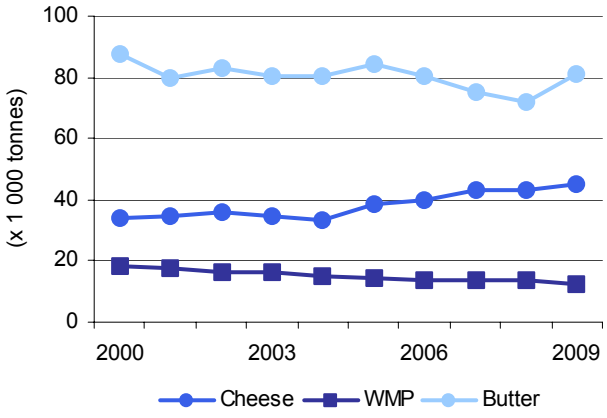
Butter: 0.6 kg

Cheese: 1.7 kg

Population: 127.5 mln.

Production





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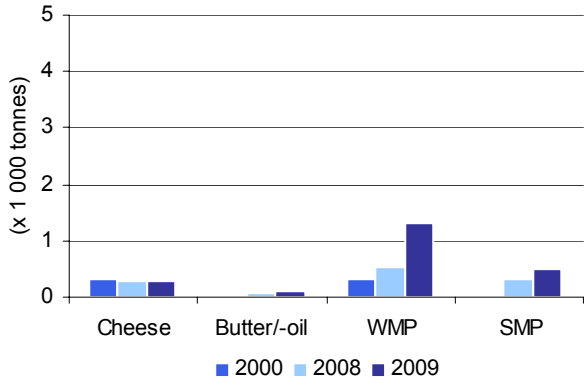

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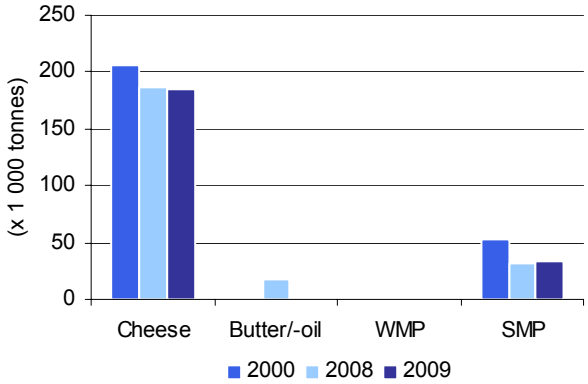


Key developments

In 2009 milk production decreased by 0.9% over the previous year. While the production increased in Hokkaido, the main milk producing district in Japan, it decreased in other regions primarily due to the decrease of the number of dairy cattle. Milk production of Hokkaido accounted for about 40% of Japan's total production 15 years ago. Hokkaido then increased its share and produced in 2009 about the same amount of milk as the other regions of the country in total.

Liquid milk production decreased in 2009 by 3.7% over the previous year due to the continued decline of consumption. While the production of whole milk decreased by 9.4%, the production of reconstituted milk and reduced fat milk (produced from whole milk) soared by 41.4%.
Owing to decreased usage of raw milk for liquid milk that represents a major part of raw milk usage and for cheese, the production of skimmed milk powder (SMP) and butter increased by 5.7% and 13.0% respectively. Cheese production increased by 3.2%. On the other hand cream production decreased by 2.5% after continued increase in recent years.

The wholesale price of SMP and butter developed weakly in 2009 as a result of increased production and stock. The prices of SMP and butter were, in December 2009 0.2% higher and 6.6% lower respectively than in the same month of the previous year.

Japan has been steadily fulfilling its commitments made in the 1995 GATT Uruguay Round Agreement. The commitment of current access import opportunities of dairy products is implemented under the tariff rate quota to private enterprises and the state trading by Agriculture & Livestock Industries Corporation (ALIC). In fiscal year 2009 ALIC took up a new kind of product (butteroil) in fulfilling its commitment.

Source: IDF National Committee of Japan (idfjapan@rapid.ocn.ne.jp).

KOREA, REPUBLIC OF

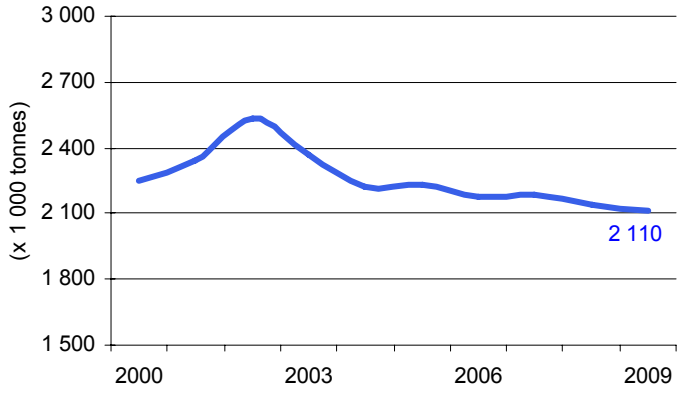
Dairy farming

Cow milk production (x 1 000 tonnes)	2 110
% of worldwide milk production	0.4%
% cow milk deliveries	100%
Number of dairy cows (x 1 000 head)	248

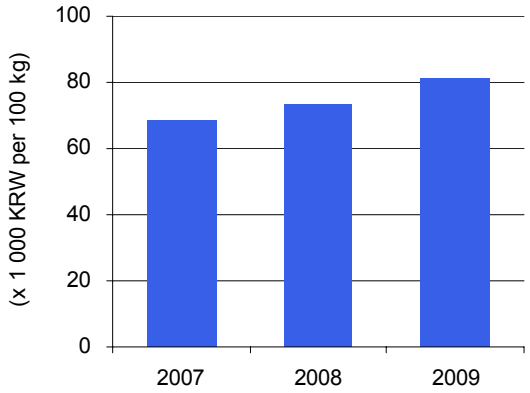
Main processors

Seoul Dairy Cooperative	www.seoulmilk.co.kr
Namyang Dairy Products Co.,LTD	company.namyangi.com
Maeil Dairies Co.,LTD	www2.maeil.com
Binggrae Co.LTD	www.bing.co.kr
Busan Milk Corporation	www.busanmilk.com

Cow milk deliveries



Cow milk prices (A)



(A) Real fat and protein contents.

Processing and trade

volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	1 702	100	0	-	2	572
Fermented products	446	98	0	55	6	123
Cream	20	100	8	479	0	-
Butter and butteroil (B)	3	75	5	167	0	-
Cheese	8	80	49	104	0	118
WMP	3	100	1	100	0	-
SMP	15	75	10	200	0	174

(B) Production of butter only.

Consumption (kg per capita)

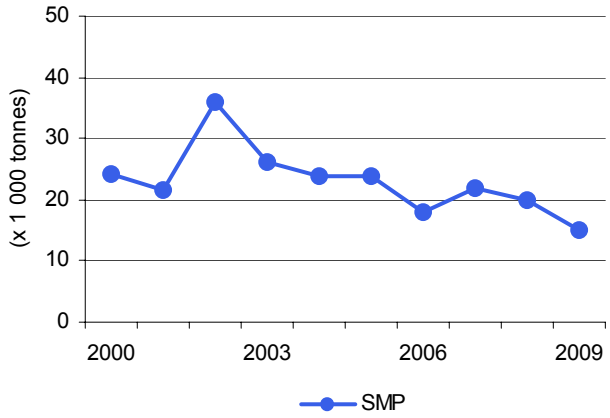

Milk: 34.9 kg

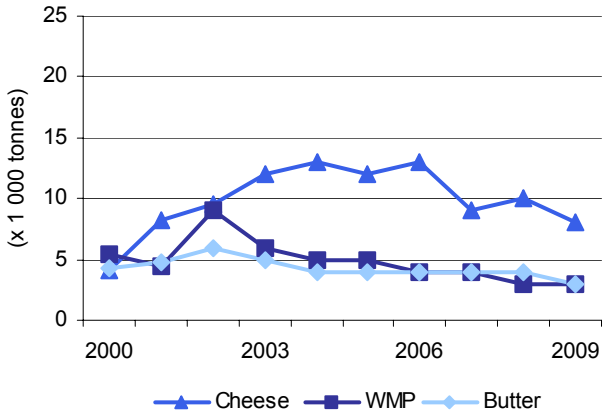

Butter: 0.2 kg


Cheese: 1.5 kg


Population: 48.7 mln.

Production





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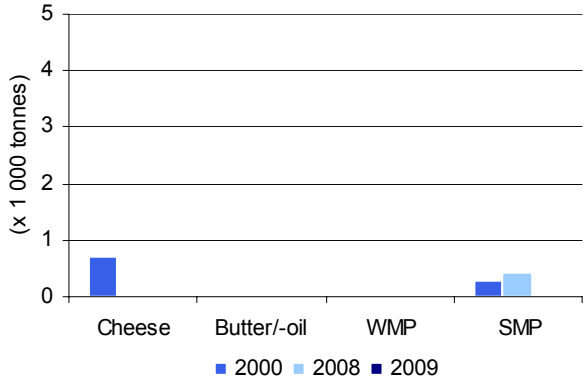

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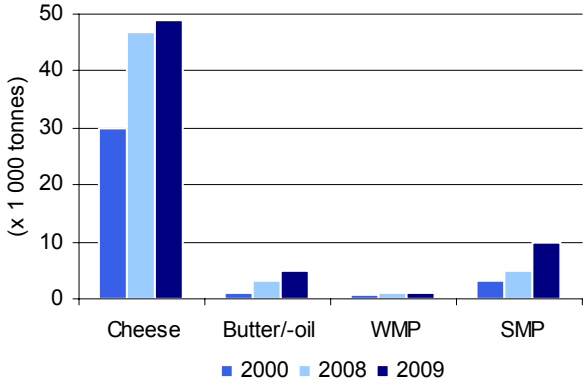


Key developments

The number of dairy farmers continues to fall, due to declining of profitability and to restructuring in South Korea in 2010. As of March 2010, there were 6 742 dairy farmers, down 3.8% from the same period in the previous year. Milk production was 0.52 million tonnes in the first quarter of 2010, a drop of 1.2% in comparison with the same period in 2009. Production volumes of all dairy products for the first quarter of 2010 also went down, except fermented products. Production of fluid milk and milk powder were 396 000 tonnes, down 3.5%, and 5 951 tonnes, down 15.4% respectively compared to the same period in the last year. Although consumption of fluid milk decreased by 1.3%, consumption of butter and cheese recovered and were up 8.5% compared to the same period of 2009.

On the other hand, farm-gate milk prices did not change significantly. For reference, the pricing system in Korea is not affected by the consumer market, but is controlled by the stakeholders who take production costs into account once every few years. Prices for milk ingredients dropped by 0.74% compared to the previous season. Retail sales prices for all milk products in the first half of 2010 were flat compared to the end of the 2009.

EU-Korea FTA negotiations were finished in July 2009. FTA negotiations with 13 countries such as Canada, Mexico, GCC, Australia, New Zealand, Peru, Colombia, and Turkey are currently underway. The government is now considering implementing a package of measures to develop the dairy sector and to address concerns that the FTA may adversely impact agriculture. The measures cover revising the 'Dairy Promotion Act' which includes organizing a ‘Central Dairy Council’ operating nationwide quota system, etc. To sum up South Korea's Economic Situation, GDP will grow by 5.2% in 2010 as exports continue to increase; as will consumption and facility investment, with strong recovery in domestic consumption. Domestic sales are projected to increase under the positive circumstances of economic recovery. Also, investment will be expanded as the global economic situation improves. However, there are still concerns about economic uncertainty like the EU Financial Crisis and China's inflationary pressures.

Source: Korea Dairy Committee (www.dairy.or.kr), Korea Dairy Industries Association, Comtrade.

PAKISTAN (A)

Dairy farming (B)

Cow milk production (x 1 000 tonnes)	12 437
% of worldwide milk production	2.1%
Buffalo milk production (x 1 000 tonnes)	22 279

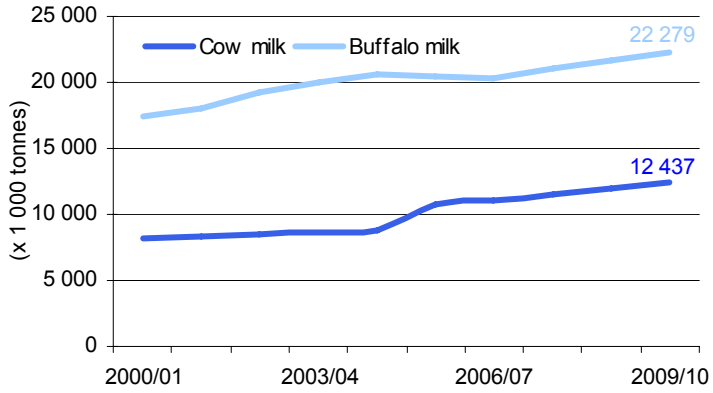
Number of dairy cows (x 1 000 head)	9 740
Number of buffaloes (x 1 000 head)	11 200

(B) Year 2009/10.

Main processors

Nestle Pakistan Ltd.	www.nestle.pk
Haleeb Food Ltd.	www.haleebfoods.com
Engro Foods Ltd.	www.scribd.com
Shakarjang Food Pr. Ltd.	www.shakarganj.com.pk
Idara –e-Kissan	www.himsr.com

Milk production (C)



(C) Milk production for human consumption.

Processing and trade

Volume (x 1 000 tonnes)	Production 2008/09	Production Index (07/08=100)	Import 2008/09	Import Index (07/08=100)	Export 2008/09	Export Index (07/08=100)
Liquid milk	-	-	0	252	29	137
Cream	-	-	0	635	0	48
Butter and butteroil	630	103	0	251	0	64
Cheese	-	-	1	74	0	1
WMP	-	-	7	987	3	157
SMP	1	100	8	119	1	77

Consumption (kg per capita)

Milk: -

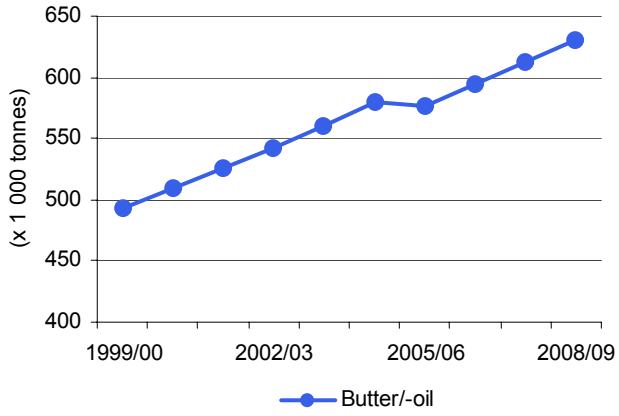
Butter: -

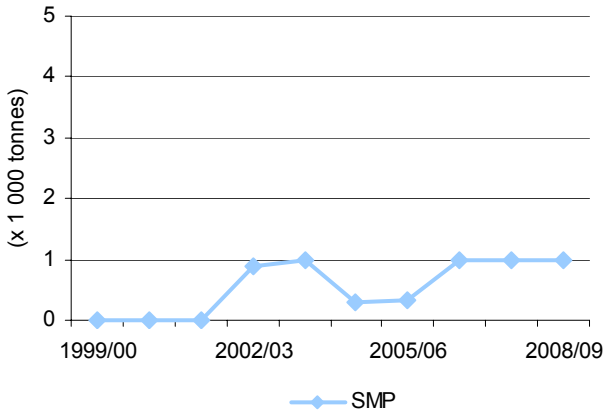
Cheese: -

Population: 176.2 mln.

(A) Dairy years ending June of the following year.

Production





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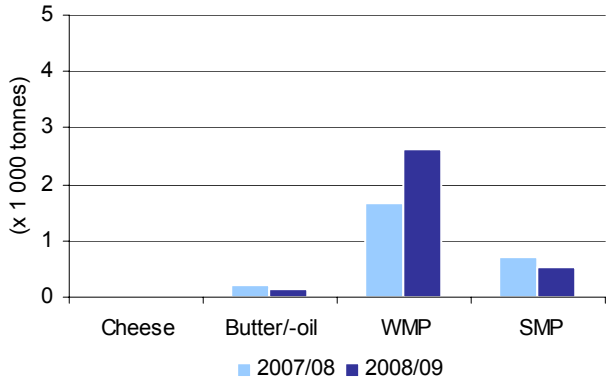

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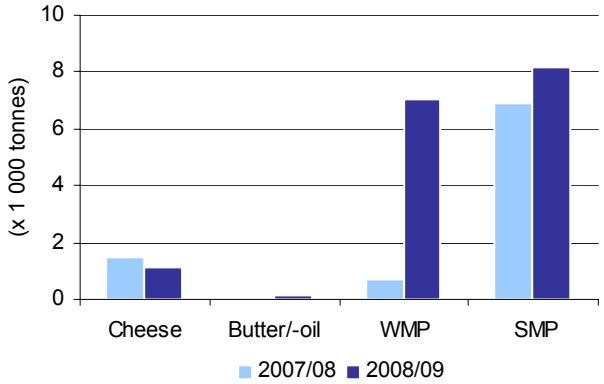


Key developments

Economic Situation, Trade Policy

The overall milk production in Pakistan has increased by 3.2% during 2007/08 as compared to the year 2006/07. Similarly, the production of butter, processed liquid milk and cheese has also increased by varying proportions.

A general increase of trade (import and export) in dairy products like milk, butter and cheese has been observed. The exports of milk and cream have increased by 40% while that of butter by 3.6 times, and cheese and curd by 9.6 times in 2007/08 as compared to 2006/07. Accordingly, the imports of major products like milk and cream, and butter have decreased by 26% and 61%, respectively. However, the import of cheese has increased by 45% in 2007/08 as compared to the year before. It is believed that this increase in import of cheese is largely due to its increased internal consumption by the pizza industry.

Price Trends

Despite the increase in production the wholesale and retail prices of dairy products have increased across the board in 2007/2008 over 2006/07. For example, the wholesale prices of fresh unpacked milk have increased by 16%, while its retail prices by 18% in Lahore during 2007/08 as compared to the previous year.

Source: Agricultural Census Organization (e-mail: agcensus@yahoo.com), Comtrade, FAO.

TURKEY

Dairy farming

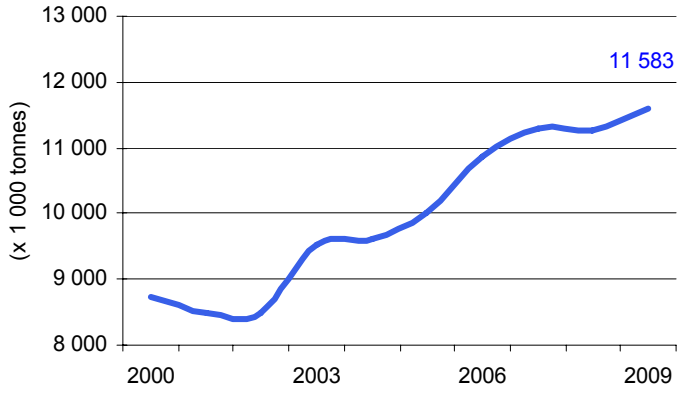
Cow milk production (x 1 000 tonnes)	11 583
% of worldwide milk production	2.0%
% cow milk deliveries (A)	40%
Number of dairy cows (x 1 000 head)	4 133

(A) Estimate.

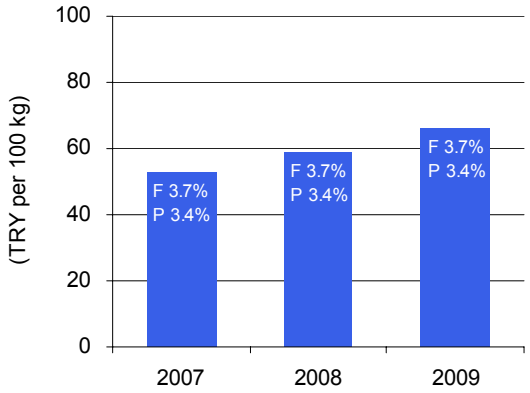
Main processors

Ak Gida	www.ulker.com.tr
Pinar	www.pinar.com.tr
Danone	www.danone.com.tr
Sütaş	www.sutas.com.tr
Aynes	www.aynes.com.tr

Cow milk production



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk (B)	1 539	100	0	-	2	129
Fermented products (B)	2 081	100	0	-	9	124
Cream	-	-	0	199	5	91
Butter and butteroil (C)	147	103	14	193	0	119
Cheese (C)	153	101	6	187	23	118
WMP (B)	11	100	5	80	1	84
SMP	-	-	12	115	0	79

(B) Production data: year 2008. (C) FAO estimates based on dairies production; total production (including farm products) for cheese: ~1.6 million tonnes.

Consumption (kg per capita)

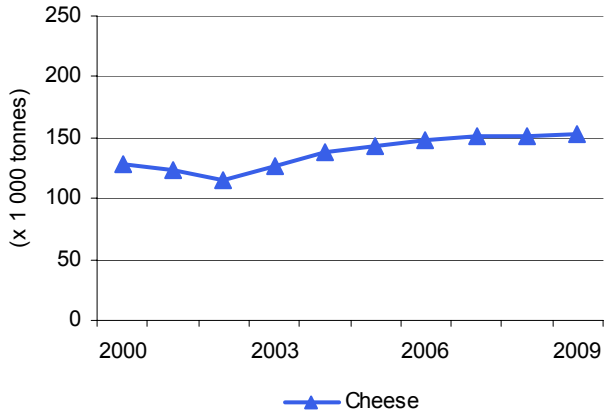
Milk: 26.0 kg

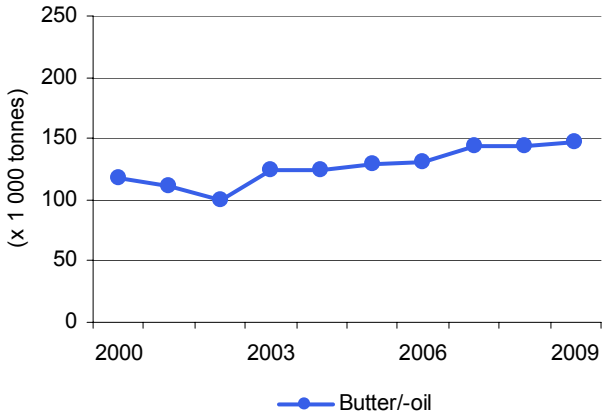
Butter: 3.2 kg

Cheese: 19.4 kg

Population: 71.5 mln.

Production





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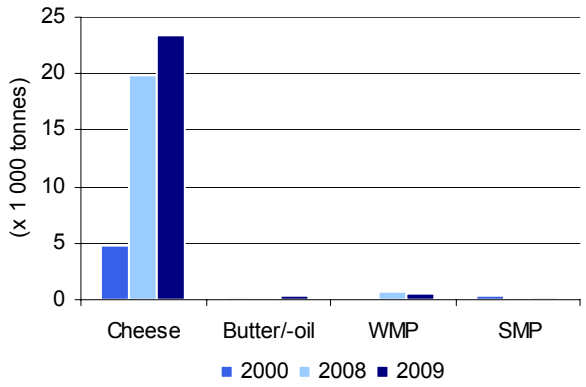
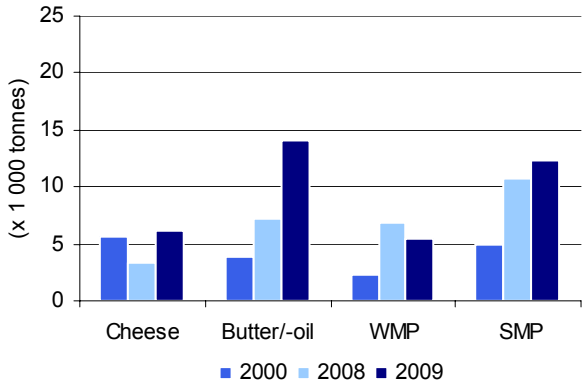


Import



Key developments

At the beginning of 2009 the major problem that Turkey experienced in the dairy industry, like the rest of the world, was the volatility of milk prices. Production in our country reaches its highest level in the spring months due to the high delivery rates and then gradually decreases. However, consumption is lower in contrast to higher production in these months and demand reaches the highest level in the months when the production decreases. This production-demand imbalance causes serious price instability. The Turkish Ministry of Agriculture and Rural Affairs issued the “Support Communiqué for Appraising Raw Milk” on 30 April 2009 to support milk production and to bring a solution to price instability. With this communiqué the Ministry implemented a measure to ensure domestic production and supply of milk powder which the manufacturing and exporting firms need in order to utilize the over supply of raw milk, to develop milk production and to create stability in raw milk prices. The measure also continues in 2010. Although Turkey is the 15th largest milk producer in the world with 12.5 million tonnes of milk production, export figures are below the required levels. Turkey is carrying out various studies to be able to export to the EU countries and to increase the export figures. Studies to improve animal health and the quality of raw milk are the most important ones. Thrace Region was given the “Certificate of Free from Foot-and-Mouth Disease” by OIE on 27.05.2010 in the framework of the struggle with foot-and-mouth disease program carried out by the Ministry of Agriculture and Rural Affairs. There is another study on prevention of PPR (Peste des petits ruminants) disease in sheep and goats, putting earrings on sheep and goats and their identification. Studies cover all of Turkey. “Nutrition-Friendly School Certificate” program prepared by the Ministry of Health in the framework of Obesity Control Program in Turkey contributes to increasing milk consumption in schools and to building the generations eating healthily. Turkey continues to work on the basis of protecting consumers and the environment in environment and food legislation, increasing trade and the competitiveness of the industry in the framework of the EU harmonization process. Voluntary GDA labeling studies to help consumers to be able make informed choices continues in the framework of labeling regulations.

Source: Association of Packaged Dairy Industry of Turkey, Turkish statistical institute, IGEME, Comtrade, Eurostat.

EUROPEAN UNION

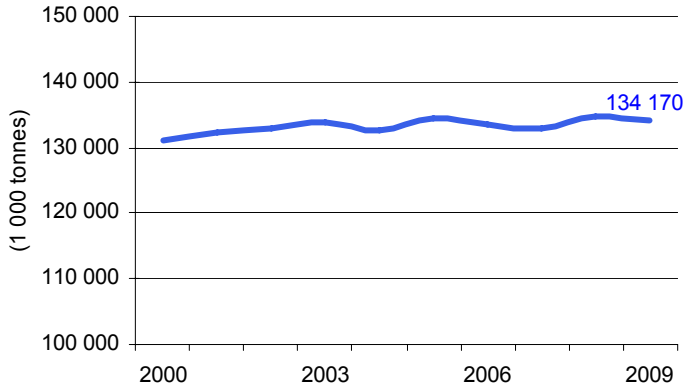
Dairy farming

Cow milk production (x 1 000 tonnes)	147 870
% of worldwide milk production	25.2%
% cow milk deliveries	91%
Number of dairy cows (x 1 000 head)	23 798

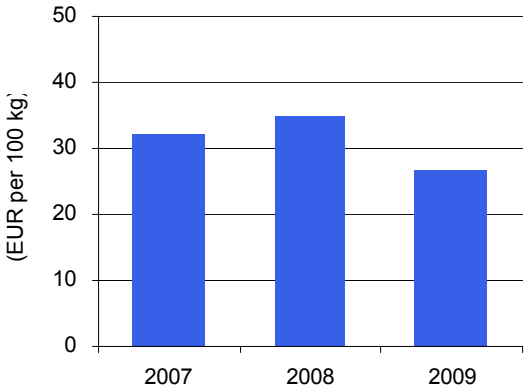
Main processors

Danone	www.danone.com
Lactalis	www.lactalis.fr
Friesland Campina	www.frieslandcampina.com
Arla Foods	www.arla.com
Parmalat	www.parmalat.com
Bongrain	www.bongrain.com

Cow milk deliveries



Cow milk prices (A)



(A) Weighted average, real fat and protein contents.

Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	32 781	100	16	220	174	102
Fermented products	8 516	101	9	85	103	97
Cream	2 510	101	5	187	60	101
Butter and butteroil	1 979	98	62	97	148	99
Cheese	8 287	100	83	99	573	104
WMP	739	88	1	113	463	95
SMP	1 120	114	6	79	231	129

Consumption (kg per capita)

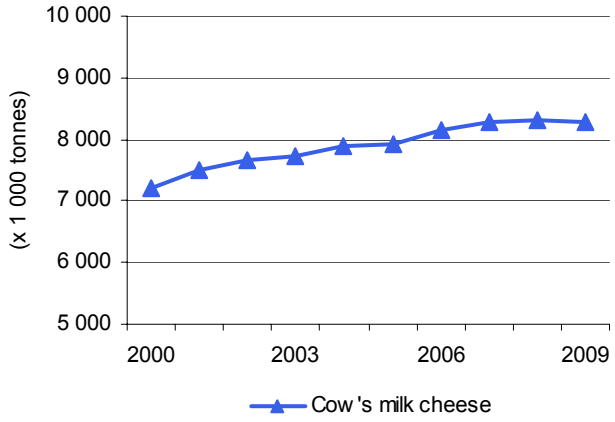
Milk: 64.5 kg

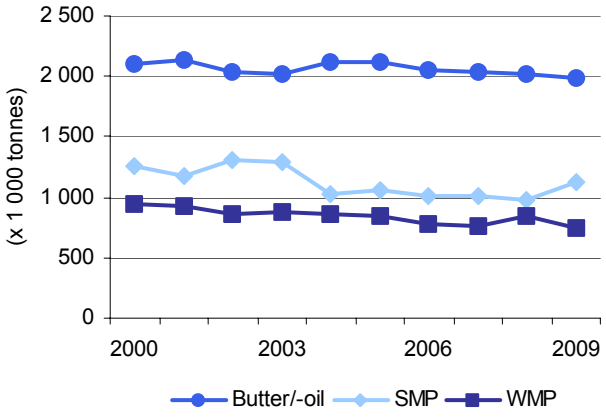
Butter: 3.5 kg

Cheese: 16.6 kg

Population: 499.7 mln.

Production





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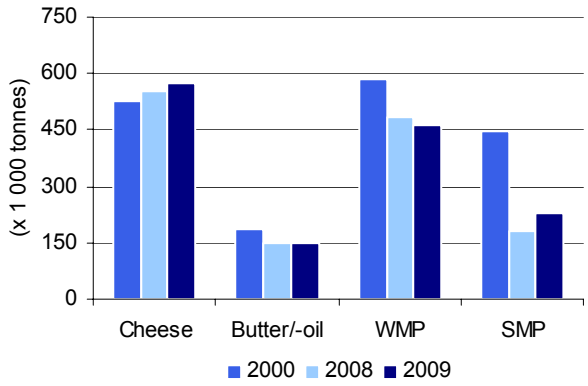
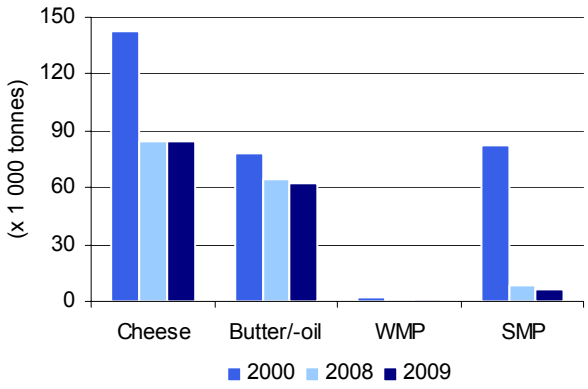


Import



Key developments

In 2009, European milk deliveries fell -0.6%, in spite of the possibility of a 1% quota increase. Quota under-use reached a record of -4.2% in the dairy year 2009-2010. Paradoxically, this drop in milk production was not equally divided over processed products, SMP grew by + 5.8%, and so did production of consumption milk (+0.2%) and of fermented products (+1.2%). On the contrary, whole and semi-skimmed powder production fell by -2.9%, butter production decreased by 2%, and cheese production remained stable.

After the record year 2008, the beginning of 2009 showed a drastic decline in milk and dairy product prices, owing to a drop in demand and emphasized by the economic crisis. It caused the European Commission to take a number of additional market management measures. Thus the regulation for private stocks of butter into intervention was opened earlier (on 1 January 2009) and the limits on the quantities of butter and skim milk powder to be taken into intervention were raised exceptionally. Furthermore, at the end of January 2009 export restitutions were reactivated, after eighteen months' absence, to provide relief for the internal market. The overall situation of the European dairy market improved in the second half of 2009. Even milk prices developed positively at the end of the year, following the evolution of world market prices.

European exports to third countries accounted for one quarter of the global trade in dairy products. EU increased its exports, particularly of SMP (+29%), whey powder (+17%) and cheese (+5%).

The European Commission launched a series of meetings of a "High Level Expert Group" for milk in order to study ways and means that contribute to stabilising the market and producers' incomes, reducing price volatility and enhancing market transparency. A final report was released in June 2010 and included recommendations related to: contractual relations between producers and processors, collective bargaining power of producers, the role of interbranch organisations, transparency in the dairy supply chain, futures, marketing standards and origin labelling, and innovation and research.

Source: IDF, European Dairy Association, Eurostat, European Commission.

AUSTRIA

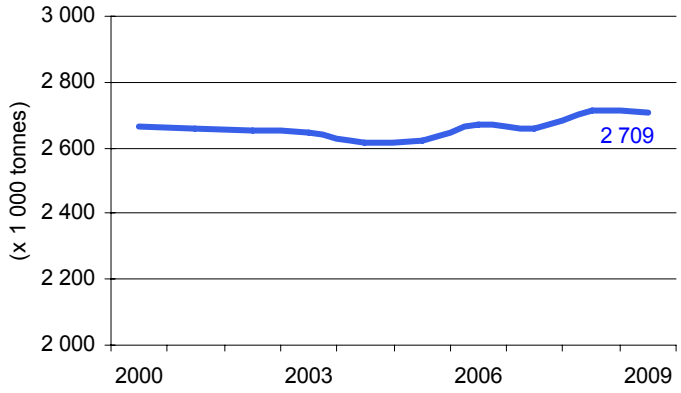
Dairy farming

Cow milk production (x 1 000 tonnes)	3 229
% of worldwide milk production	0.5%
% cow milk deliveries	84%
Number of dairy cows (x 1 000 head)	532

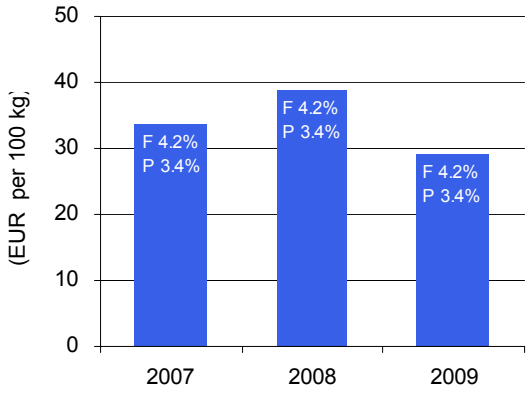
Main processors

Berglandmilch	www.berglandmilch.at
NÖM	www.noem.at
Gmundner Molkerei	www.gmundner-milch.at
Tirol Milch	www.tirolmilch.at
Käserei Rupp	www.rupp.at

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	715	101	62	124	701	102
Fermented products	287	99	48	111	159	97
Cream	61	98	10	88	18	75
Butter and butteroil	32	98	15	114	3	92
Cheese	146	99	85	101	96	109
WMP	1	100	6	82	8	119
SMP	4	103	19	94	6	79

Consumption (kg per capita)

Milk: 79.2 kg (A)

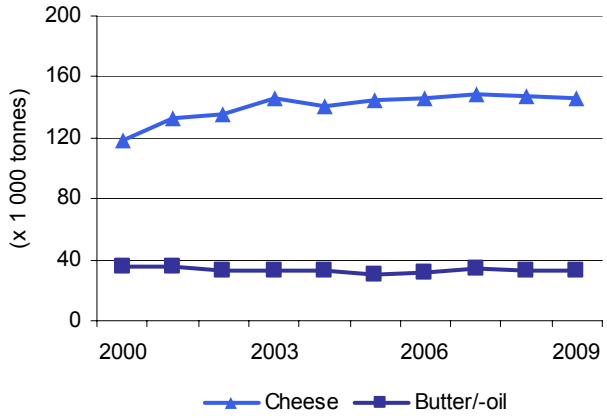
Butter: 4.8 kg

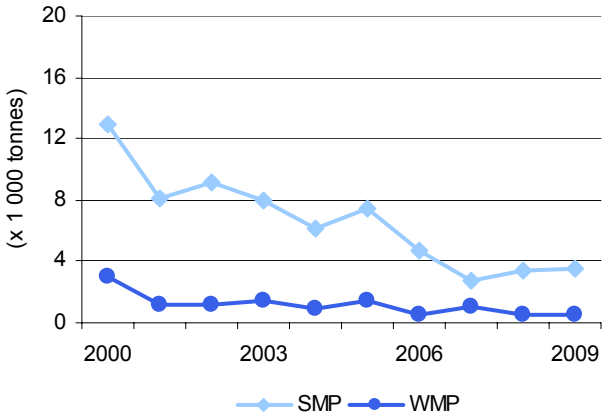
Cheese: 17.4 kg

Population: 8.3 mln.

(A) Including milk drinks, fermented products.

Production





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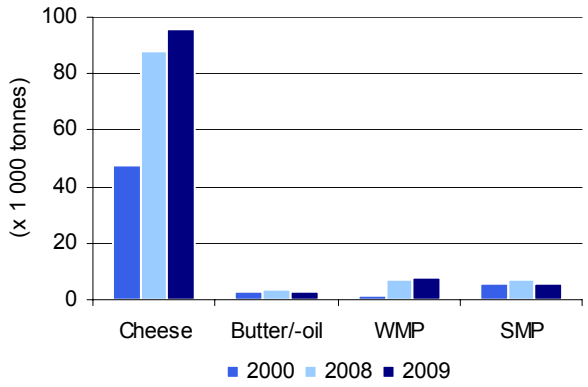
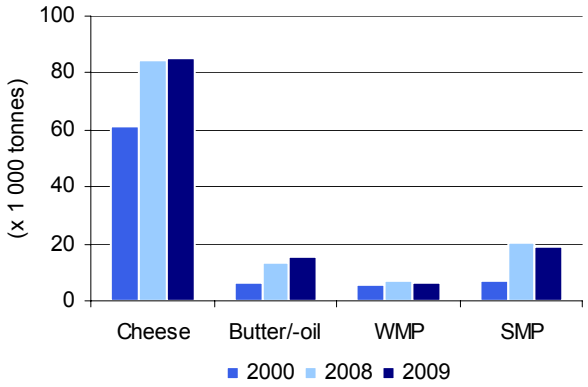


Import



Source: Agrarmarkt Austria (www.ama.at), Comtrade, Eurostat.

BELGIUM

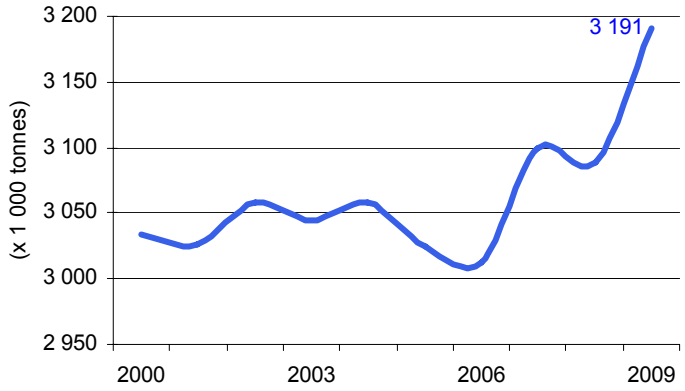
Dairy farming

Cow milk production (x 1 000 tonnes)	3 245
% of worldwide milk production	0.6%
% cow milk deliveries	98%
Number of dairy cows (x 1 000 head)	504

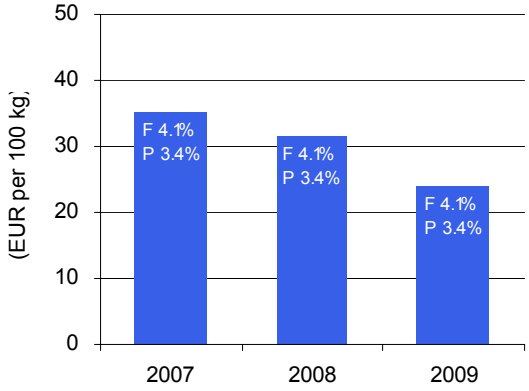
Main processors

FrieslandCampina	www.frieslandcampina.com
Danone	www.danone.com
Milcobel	www.milcobel.be
Corman	www.corman.be

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	640	99	687	106	730	107
Fermented products	321	100	144	100	316	102
Cream	133	102	120	99	71	114
Butter and butteroil (A)	128	112	102	92	139	115
Cheese	68	104	264	83	145	106
WMP	63	75	60	112	132	98
SMP	81	115	51	111	83	100

(A) Production of butter and butteroil, including reprocessed butter (years 2008 and 2009: calculated).

Consumption (kg per capita)

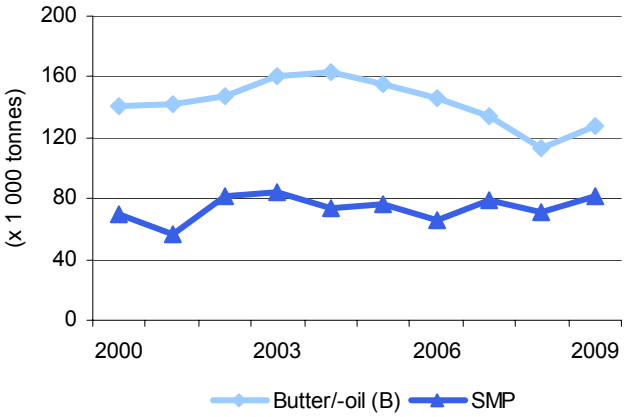
Milk: 53.5 kg

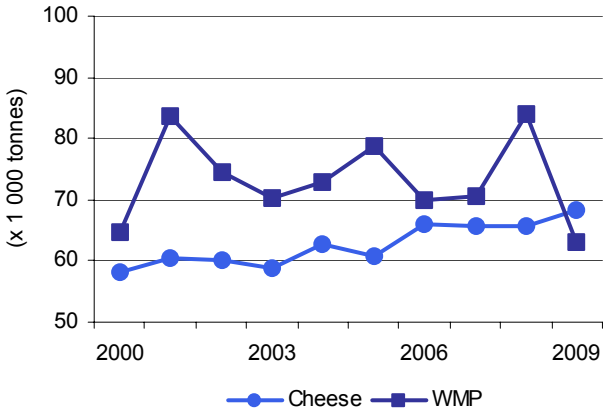
Butter: 2.4 kg

Cheese: 15.6 kg

Population: 10.7 mln.

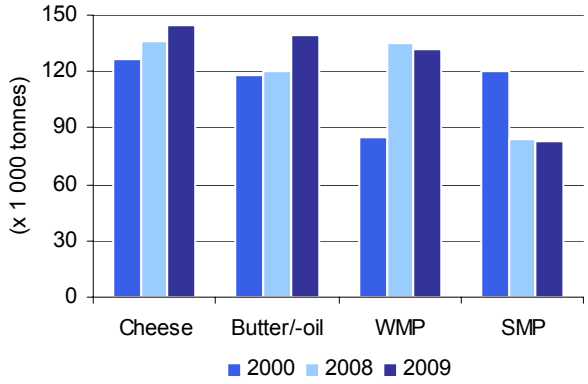
Production





(B) Incl. reprocessed. Years 2007, 2008 and 2009: calculated.

Export



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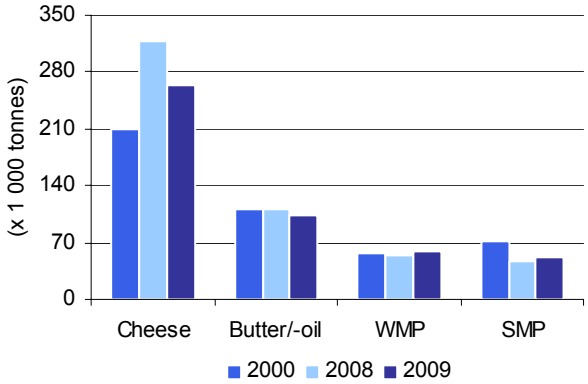


Key developments

Between December 2008 and December 2009, 6.4% of the milk producers stopped their activity. At the same time, the volume of the milk deliveries increased about 3.3% (+/- 100 million litres). As a result, the average volume of milk produced per farmer reached 311 000 litre/year in 2009. It represents a growth of 10.4% versus 2008. On the last 3 years, the average deliveries per producer increased about 25%.

In 2009, the real milk price was 24.74 euro/100 litre (fat content: 42.29 g/litre and protein content: 34.54 g/litre). It is 23.8% under the level of 2008. For the first 4 months of 2010 the milk price is 23%, or 5.5 €/100 litre, higher than in the same period in 2009.

The turnover of the dairy industry in 2009 was 11% under 2008. The level of investment is going up (+ 27% in 2009 vs. 2008) while it decreased about 15% for the food industry. Imports, expressed in quantity and value, decreased. Exports increased in quantity (+ 5.2%) but decreased in value (- 12.5%).

The Belgian dairy industry is most influenced by European legislation. For the Regulation on nutrition and health claims, unclarity remains concerning the nutrient profiles. This is a topic of high concern for the dairy industry. Another topic important for the dairy industry is the proposal for Food Information to Consumers. A lot of work has to be done before food labeling will be homogenous throughout the EU.
Salt reduction stays an important health topic in Belgium. The Belgian government launched a salt reduction plan: a reduction in the use of salt with -10% in 2012. Therefore the food industry established salt reduction targets on a voluntary basis (or example salt reduction in natural and processed cheeses).

Source: BCZ-CBL (www.bcz-cbl.be), Eurostat, national statistics.

CZECH REPUBLIC

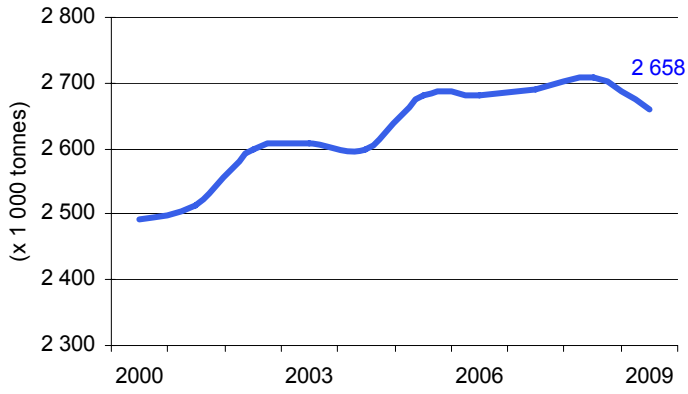
Dairy farming

Cow milk production (x 1 000 tonnes)	2 780
% of worldwide milk production	0.5%
% cow milk deliveries	96%
Number of dairy cows (x 1 000 head)	384

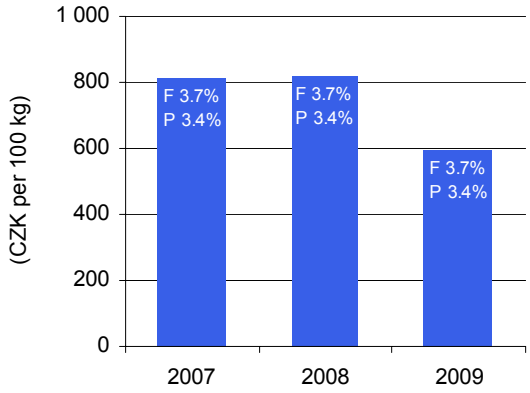
Main processors

Madeta a.s.	www.madeta.cz
Olma a.s.	www.olma.cz
Mlékárna Hlinsko s.r.o.	www.tatramleko.cz
Mlékárna Kunín a.s.	www.mlekarnakunin.cz
Moravia Lacto a.s.	www.moravialacto.cz

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	663	103	92	84	634	101
Fermented products	208	108	38	90	76	124
Cream	50	110	17	123	12	79
Butter and butteroil (A)	40	83	20	128	14	95
Cheese	109	99	74	116	25	115
WMP	9	53	1	110	10	75
SMP	18	79	2	112	15	85

(A) Production of butter only.

Consumption (kg per capita)

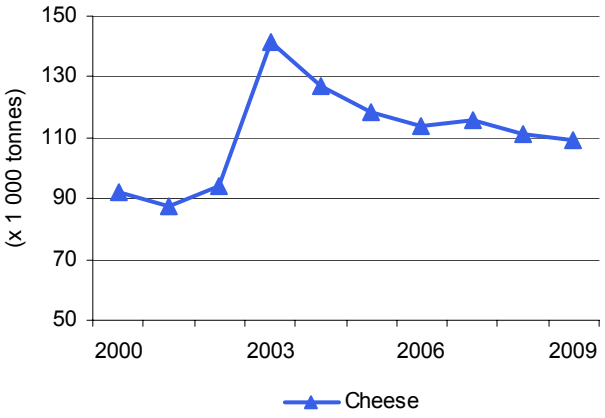
Milk: 59.7 kg

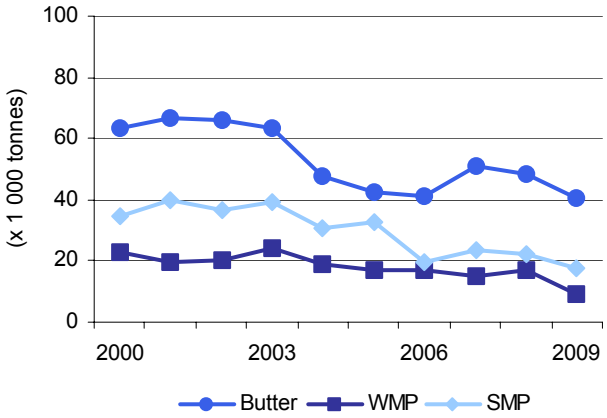
Butter: 5.0 kg

Cheese: 16.7 kg

Population: 10.5 mln.

Production





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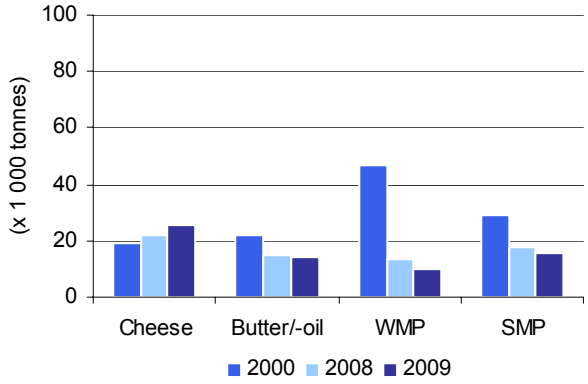

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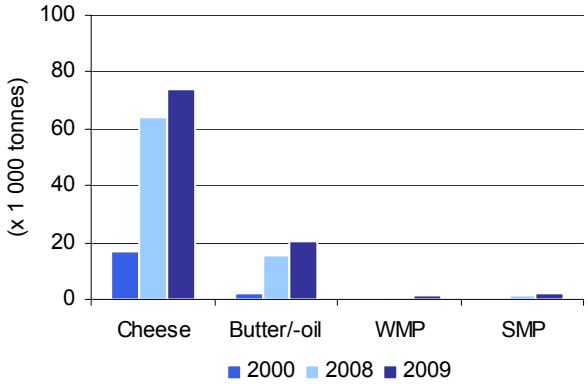


Key developments

The national Farm and Dairy policy has been fully adapted to the crisis situation in the global milk market. The Czech dairy processing industry purchased and processed 2 291.7 billion litres of milk during 2009. In comparison with the previous year, that represents a decrease by –3.25%. However, the Czech farmers sold additional 465.7 million litres abroad, which represents 17.2% of the total milk production. These exports were predominantly to Germany. Due to the critical situation on the international market the average procurement price for milk during 2009 compared to 2008 decreased rapidly from CZK 8.45 /litre to CZK 6.14/litre (-27.3%). This situation, of course, caused breaking-up of dairy production by many farmers.

In the second half year the price development copied more or less the international development on the dairy market. The price of raw milk and also dairy commodities (for example butter and powder) increased again.

In 2009 consumption trends in the Czech Republic activated again after two crisis years, dairy consumption expressed in milk equivalent reached 249.7 kg. (+2.9%) and 5 kg. butter per capita. This trend is expected to continue.

In 2009 the most important issues were the EU-proposal for a Regulation on “Food information to the consumer” and “Implementing of nutrition and health claims”. Nevertheless, this process stagnated because of changing the EU-representation and was very often criticized by stakeholders. Another issue was a public discussion about the EU – CAP beyond 2015 and work of the High Level Expert Group on Milk.
The economic situation in the Czech Republic is still characterized by the consequences of the global economic recession and their successive weakening.

Source: Czech & Moravian Dairy Association (www.cmsm.cz), Eurostat.

DENMARK

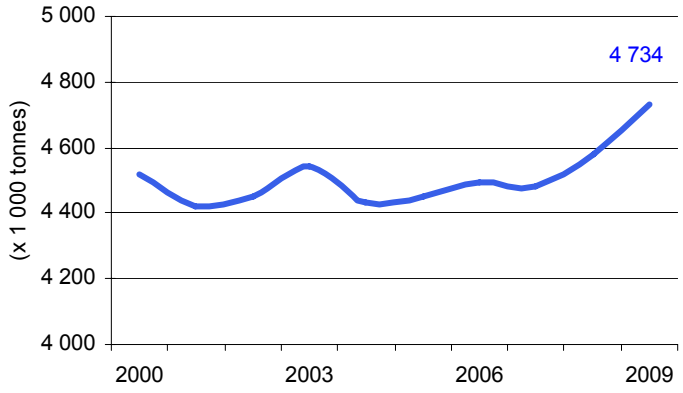
Dairy farming

Cow milk production (x 1 000 tonnes)	4 869
% of worldwide milk production	0.8%
% cow milk deliveries	97%
Number of dairy cows (x 1 000 head)	580

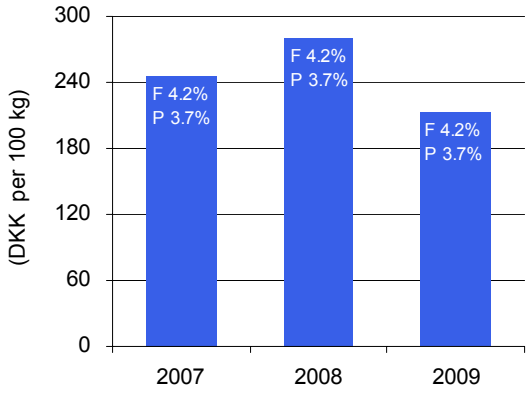
Main processors

Arla Foods	www.arlafoods.dk
Thise Mejeri	www.thise.dk
Mammen Mejeri	www.mammenost.dk
Them Andelsmejeri	www.them-andelsmejeri.dk
Bornholm Andelsmejeri	www.st-clemens.dk

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	482	95	57	144	345	154
Fermented products	109	98	20	119	21	91
Cream	63	109	16	97	17	117
Butter and butteroil	37	94	24	63	60	97
Cheese	321	101	68	91	264	111
WMP	93	122	4	115	100	137
SMP	21	119	8	118	15	90

Consumption (kg per capita)

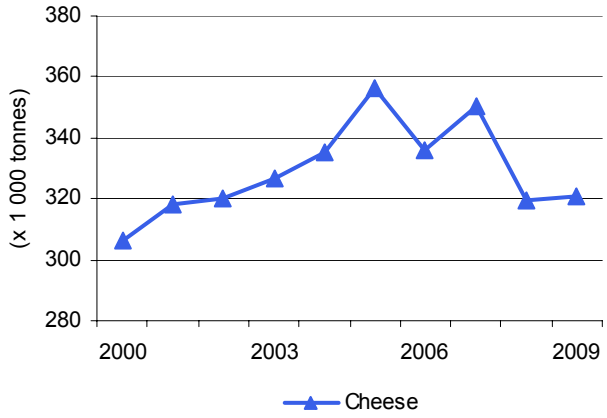
Milk: 89.9 kg

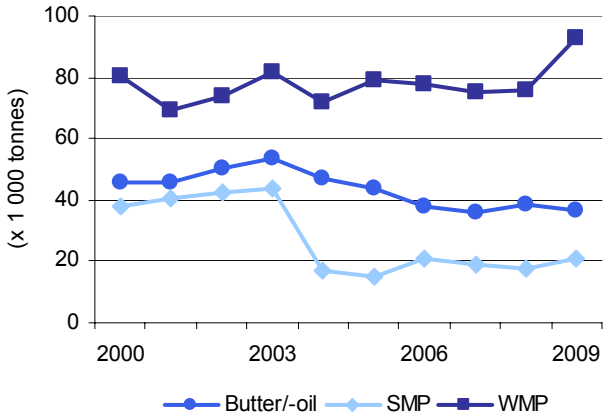
Butter: 1.8 kg

Cheese: 16.3 kg

Population: 5.5 mln.

Production





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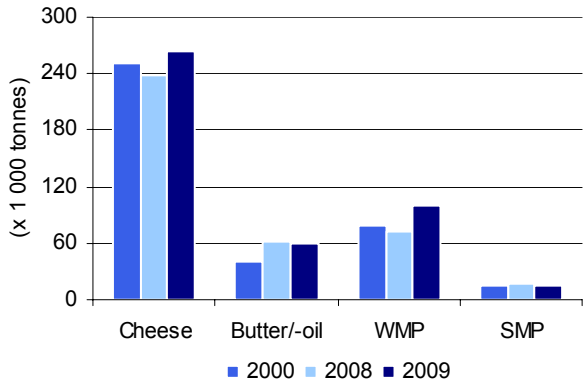

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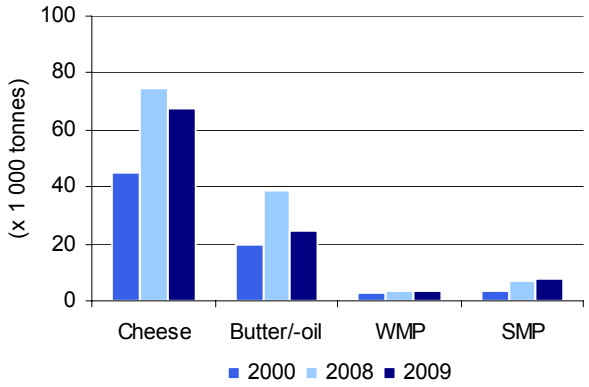


Key developments

Structural development continues. The number of dairy farms has declined between 2007-2009 from 4 916 to 4 311, whereas the number of dairy cows (`000 head) has increased from 511 to 580. The production of cow milk (`000 tonnes) has increased from 4 619 to 4 869 between 2007-2009. The deliveries to the dairies increased from (`000 tonnes) 4 484 to 4 734 between 2007-2009. Average milk price paid by the dairy companies to farmers per 100 kg (in Danish krone) was 212. Overall the Danish milk sector is recovering from the milk crisis in 2009. Exports of SMP, butter and butteroil have decreased slightly in 2009 compared to 2008, whereas exports of whole and semi-skimmed milk powder and cheese have improved.

Danish fat tax

After five days of negotiations the Liberal-Conservative minority government has reached a new agreement with its parliamentary safety net, the Danish People's Party, on a new mini-tax reform. The mini-tax reform replaces a political agreement from February 2009.

Saturated fats in dairy products such as butter and cheese, oils (including margarine) and meat sold in Denmark will be levied at 13-14 kroner per kilo. The revenue generated by the levy will be 1.5 billion kroner. The levy is to be implemented by 1st of July 2011.

High Level Group Milk

The High Level Expert Group on Milk (HLG) was established by the European Commission to look into whether new arrangements should be put in place that can further contribute to stabilising the market and producers' incomes, particularly in view of the phasing-out of milk quotas in April 2015.

It is of great importance that new requirements at the EU-level are *voluntary* in order to avoid unnecessary interference in the regulatory framework and statutes of the Danish co-operative dairies.

Source: Danish Agriculture & Food Council (www.lf.dk), Comtrade, Eurostat.

ESTONIA

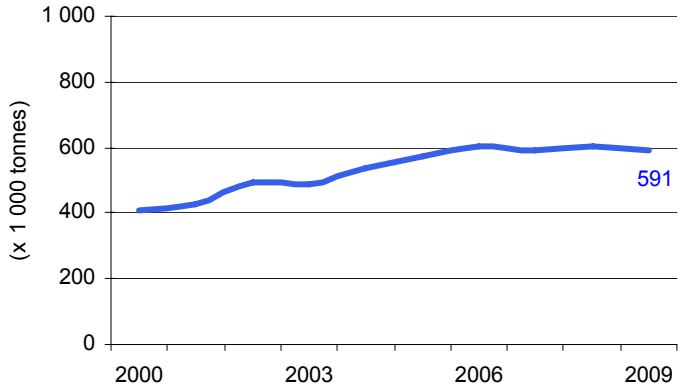
Dairy farming

Cow milk production (x 1 000 tonnes)	676
% of worldwide milk production	0.1%
% cow milk deliveries	87%
Number of dairy cows (x 1 000 head)	96

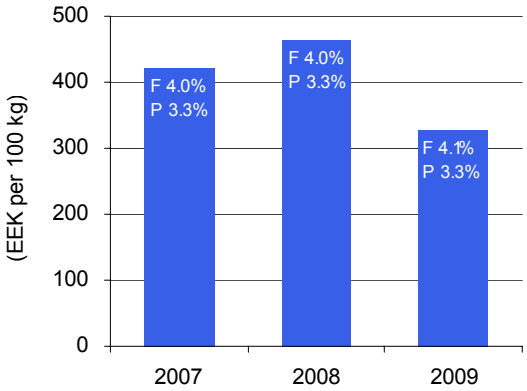
Main processors

Valio Eesti AS	www.valio.ee
Tere AS	www.tere.eu
Coop E-Piim	www.epiim.ee
Maag Piimatööstus	www.maag.ee
Saaremaa Piimatööstus	www.saarejuust.ee

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	89	108	2	125	13	22
Fermented products	39	93	5	92	9	106
Cream	27	100	1	200	2	74
Butter and butteroil	9	123	0	100	4	101
Cheese	37	103	1	20	16	112
WMP	4	80	3	208	6	96
SMP	7	140	1	91	5	79

Consumption (kg per capita)

Milk: 140.4 kg (A)

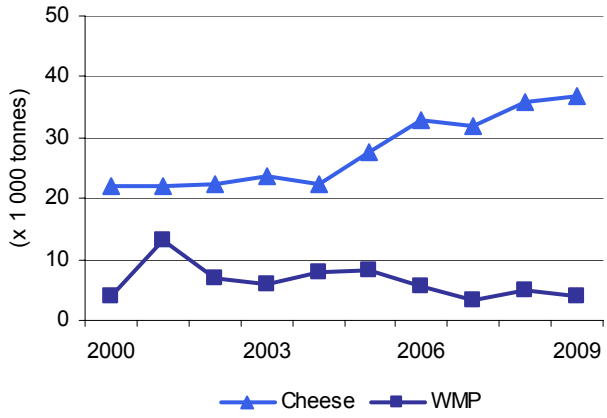
Butter: 4.3 kg

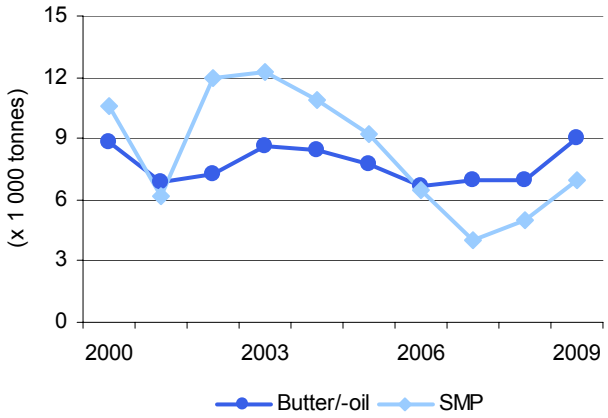
Cheese: 17.1 kg

Population: 1.3 mln.

(A) Including milk drinks, fermented products.

Production





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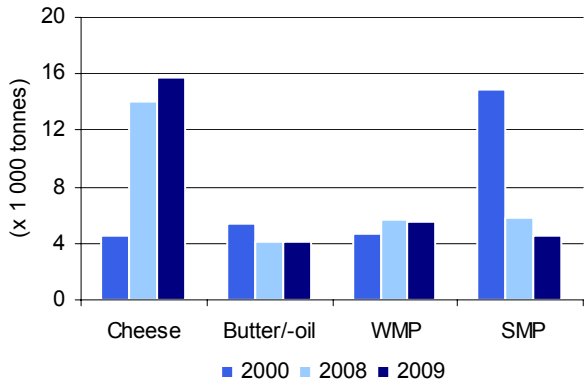
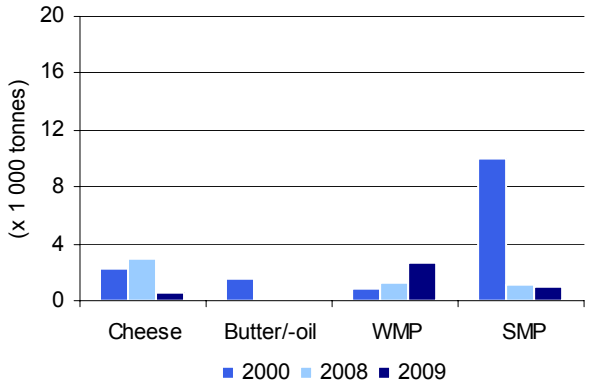


Import



Key developments

The production of milk is still concentrated in big agricultural enterprises. In the year 2008, 26% of milk (28% in 2009) was produced by herds of more than 600 cows. Today there are 1 200 farms with more than 100 cows. This is also the number of milk quota owners.

The average milk yield has risen up to 6 849 kg per cow.

The raw milk price is going to rise in the 2nd half of the year 2010.

On industry level, in 2008 the share of the 5 major dairy companies (processing raw milk) in total sales of sector was 61%. The share of the two main dairies is 40.4%.

In April 2010, compared to April 2009, foodstuffs prices had risen by 1.5%.

Source: Estonian Dairy Association (piimaliit@piimaliit.ee), Ministry of agriculture, national statistics, ZMP, Comtrade, Eurostat.

FINLAND

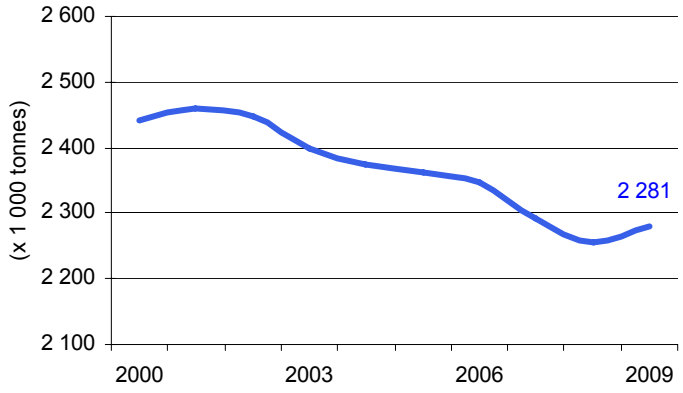
Dairy farming

Cow milk production (x 1 000 tonnes)	2 332
% of worldwide milk production	0.4%
% cow milk deliveries	98%
Number of dairy cows (x 1 000 head)	288

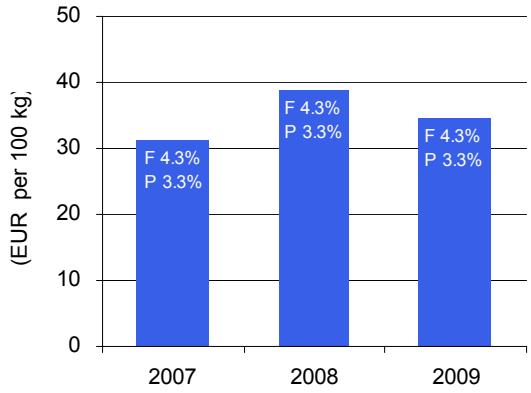
Main processors

Valio Ltd	www.valio.fi
Arla Ingman Oy Ab	www.arlaingman.fi
Osuuskunta Satamaito	www.satamaito.fi
Osuuskunta Maitokolmio	www.maitokolmio.fi
Juustoportti Food Oy	www.juustoportti.fi

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	733	99	34	> 1 000	6	118
Fermented products	203	100	34	107	32	108
Cream	34	104	1	53	4	141
Butter and butteroil	56	104	1	38	36	110
Cheese	105	98	45	123	49	121
WMP	3	97	1	233	1	133
SMP	17	212	1	133	13	323

Consumption (kg per capita)

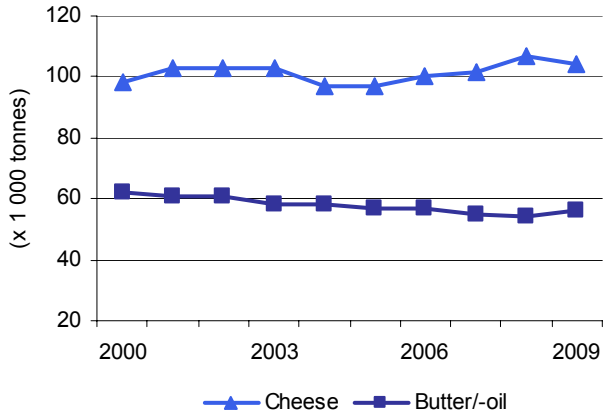
Milk: 131.0 kg

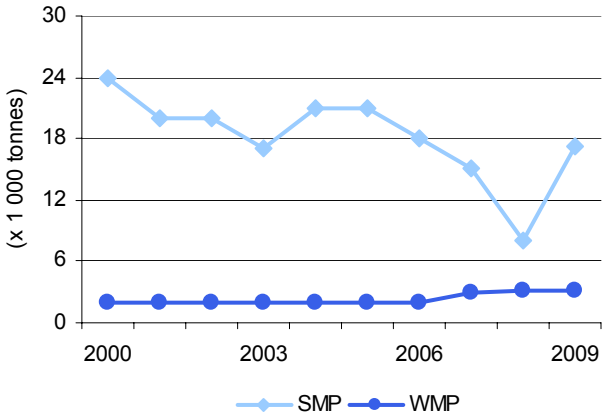
Butter: 2.9 kg

Cheese: 20.7 kg

Population: 5.3 mln.

Production





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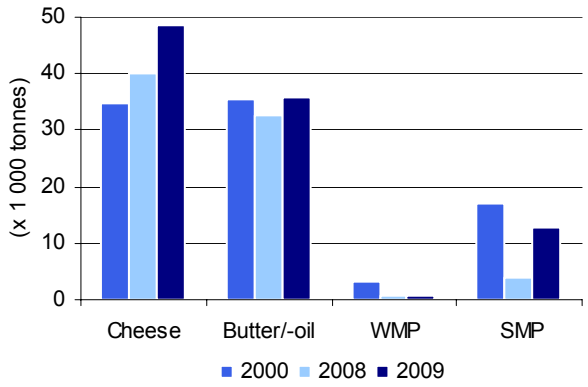

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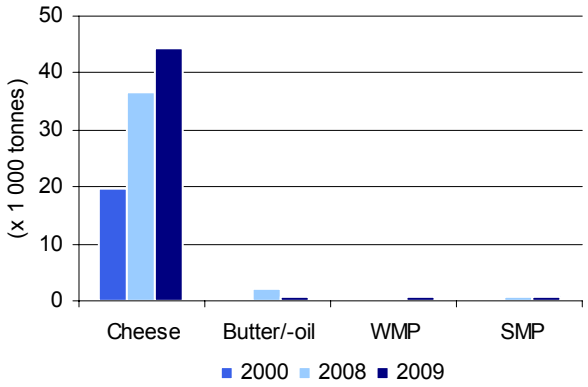


Key developments

Milk production has been declining since 2001 by as much as 7%. The downward trend turned to 1.2% growth in 2009. National milk quota was fulfilled only to 91.2%. The reduction in the number of milk farmers slowed down to -5.5%. Since 2000 the number of dairy farms has nearly halved. The number of dairy cows increased by 0.2% in 2009 after years of declining trend. The average herd size was 26 cows per farm.

The milk prices started to go down in March 2009. It was 10% less than in 2008. Consumer prices declined for two reasons. The value added tax was decreased from 17% to 12% at the beginning of October 2009. The other reason was increased competition on the market. More cheeses and even raw milk for drinking milk were imported. Retail prices for drinking milk went down by 6% and butter by 30%.

The consumption of cheeses, butter, cream and yoghurts increased, but drinking milk continued its downward trend.

Source: Valio Ltd (www.valio.fi), Finnish Food and Drink Industries´ Federation, Comtrade, Eurostat.

FRANCE

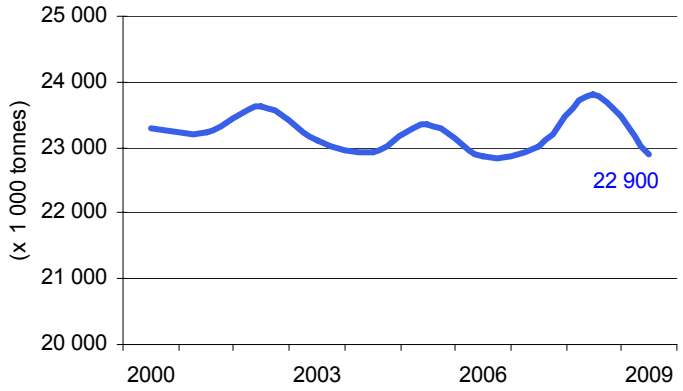
Dairy farming

Cow milk production (x 1 000 tonnes)	23 341
% of worldwide milk production	4.0%
% cow milk deliveries	98%
Number of dairy cows (x 1 000 head)	3 737

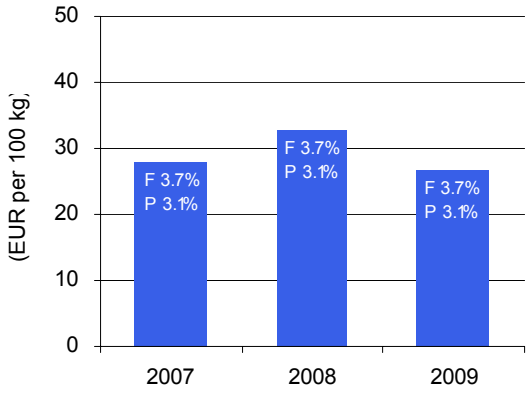
Main processors

Danone	www.danone.com
Groupe Lactalis	www.lactalis.fr
Bongrain	www.bongrain.com
Sodiaal	www.sodiaal.fr
Fromagerie Bel	www.groupe-bel.com

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	3 681	95	400	117	908	95
Fermented products	1 586	100	109	84	410	98
Cream	359	103	191	115	183	179
Butter and butteroil	405	95	144	103	72	108
Cheese (A)	1 693	98	287	112	587	98
WMP	121	73	21	127	86	58
SMP	312	109	27	92	118	97

(A) Production: not including goat milk cheese (94 764 t) and sheep milk cheese (57 328 t).

Consumption (kg per capita)

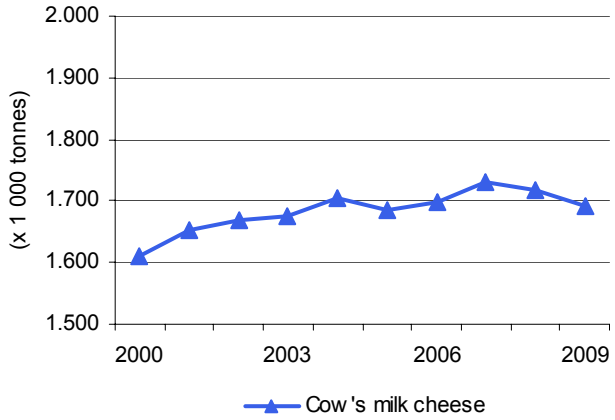
Milk: 59.2 kg

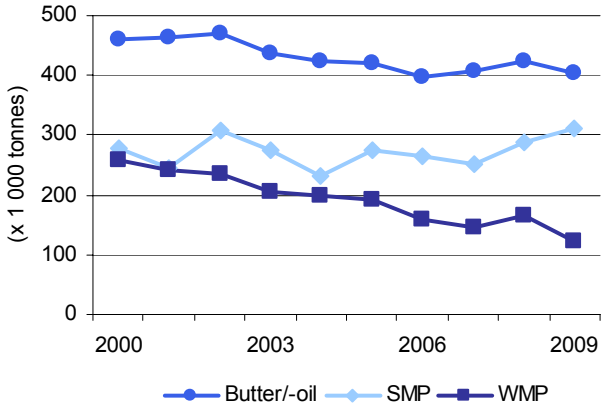
Butter: 7.9 kg

Cheese: 26.1 kg

Population: 62.5 mln.

Production





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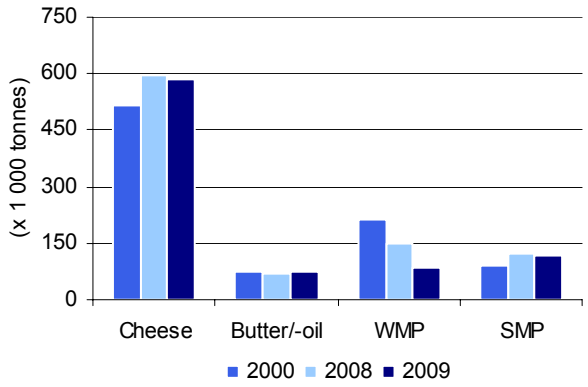

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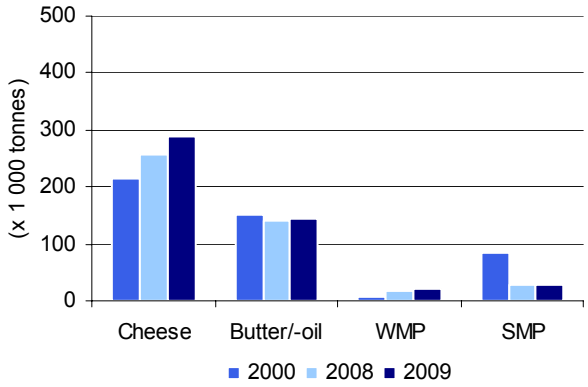


Key developments

In France, milk production decreased in 2009 by around 4%. After strong growth in 2008 (+3.5%), this was a clear turnaround. Low milk prices certainly restrained production, but other factors also explained this setback. In an attempt to regulate supply on a saturated market, no temporary allocation of unused quota was permitted during the last dairy year, as is usually the case. This sharp decrease of French milk production is expected to stop in 2010, under the effect of market and milk price improvements. Furthermore, an increase by 2% of the national quota for the 2010-2011 dairy year will be applied.

Production of all dairy products also declined in 2009, except for skim milk powder, and for yoghurts and other fresh consumer-ready products, which were still on a structurally positive trend.

Industrial and retail prices for all dairy products showed a significant drop during the year, which had a slightly positive impact on domestic sales in volume (+0.3%), especially of yoghurts and other fresh products, and of cheeses (+2.4%).

In 2009, reorganization within the French dairy sector sped up again, with the pooling of a number of cooperatives. Other mergers are also going to be implemented in 2010.

Source: CNIEL (www.cniel.com), Eurostat.

GERMANY

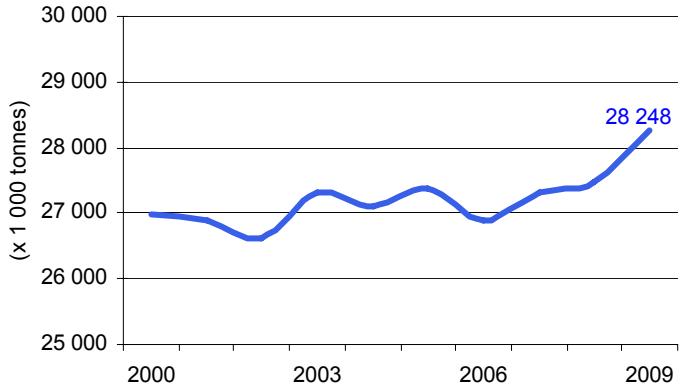
Dairy farming

Cow milk production (x 1 000 tonnes)	29 000
% of worldwide milk production	4.9%
% cow milk deliveries	97%
Number of dairy cows (x 1 000 head)	4 169

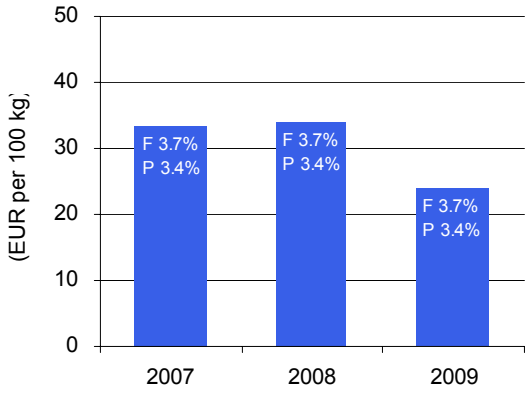
Main processors

Nordmilch	www.nordmilch.de
Humana Gruppe	www.humana-unternehmensgruppe.com
Müller Gruppe	www.muellermilch.de
Hochwald	www.hochwald.de
MUH	www.muh.de

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk (A)	5 288	103	1 731	96	2 355	100
Fermented products	1 856	98	166	105	526	91
Cream	568	103	139	82	181	102
Butter and butteroil	453	98	114	87	91	92
Cheese	2 088	103	567	96	945	105
WMP	150	89	38	80	54	91
SMP	289	125	56	81	193	104

(A) Production of containers < 2 litres only.

Consumption (kg per capita)

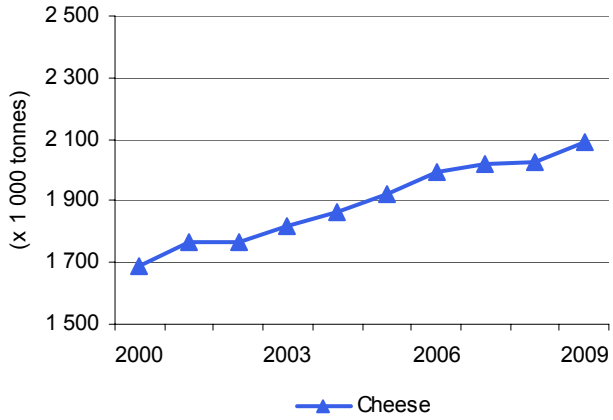
Milk: 53.9 kg

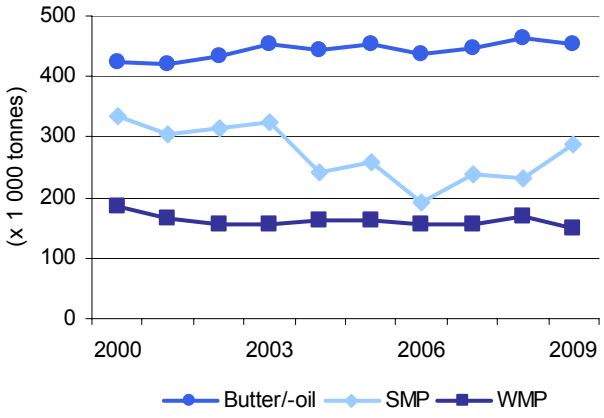
Butter: 5.6 kg

Cheese: 22.6 kg

Population: 81.9 mln.

Production





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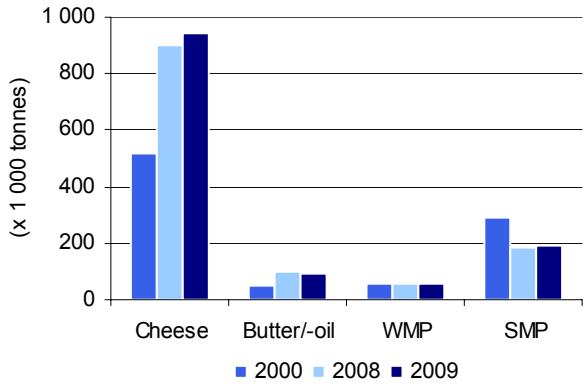

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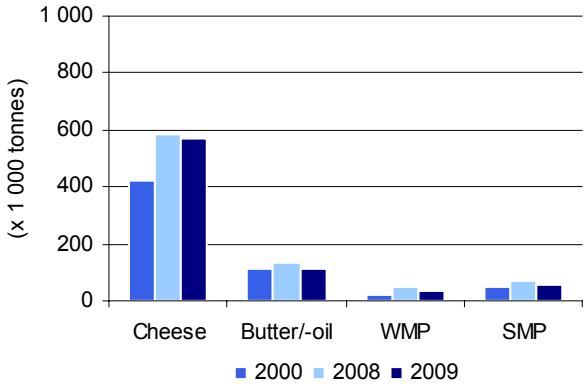


Key developments

The German general economy dealt better with the financial and economic crisis than expected. Unemployment increased only very modestly. The German population has been shrinking since 2004 and was lower than 82 million people for the first time since 1996.

During the milk price crisis more farmers quit dairy farming than in previous years. In May 2010, 4% fewer dairy holdings were counted than a year before. Average herd size increased to 45 cows, 11 more than in 2000.

Despite the crisis milk deliveries in Germany reached 28 613 million tonnes, the highest level since German reunification. However, there was a 2.1% under-use of quotas in the quota year 2009/10. The milk prices paid to farmers fell to 24.08 EUR/100 kg for milk with 3.7% of fat, the lowest level since the mid-1970's.The prices for dairy products in retail decreased and the consumption of most dairy products recovered. In 2010, farmers are more optimistic again because of increased milk prices and are investing more in milk production again.

The new German government recognised the dramatic situation in agriculture and especially in dairy economy in autumn 2009 and funded a 750 million EUR aid programme for farmers. The production of bioenergy (biogas and solar energy) is state-aided in Germany and has been increasing for several years. There is rising competition for maize-silage and arable land between milk and energy production. This development causes rising production costs.

Source: Zentrale Milchmarkt Berichterstattung (www.milk.de), Comtrade, Eurostat.

GREECE

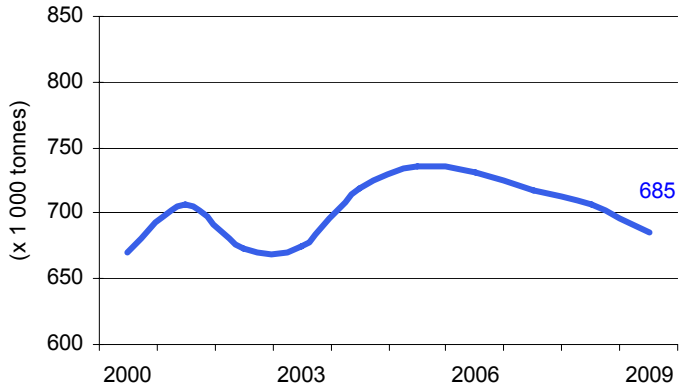
Dairy farming

Cow milk production (x 1 000 tonnes)	755
% of worldwide milk production	0.1%
% cow milk deliveries	91%
Number of dairy cows (x 1 000 head)	152

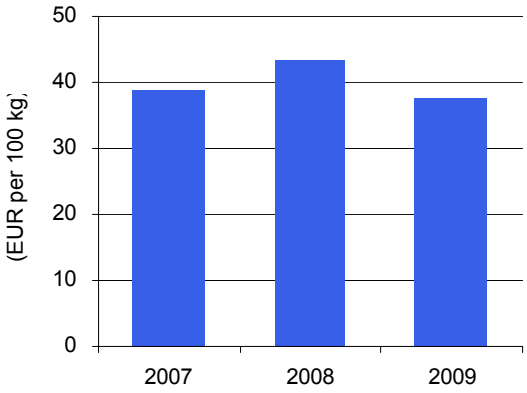
Main processors

Vivartia SA	www.vivartia.com
Mevgal SA	www.mevgal.gr
Fage SA	www.fage.gr
Agno SA	www.agno.gr
Kolios SA	www.kolios.gr

Cow milk deliveries



Cow milk prices (A)



(A) Real fat and protein contents.

Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	465	104	144	106	1	364
Fermented products	215	98	22	107	23	96
Cream	18	120	28	131	1	558
Butter and butteroil	2	100	10	101	0	33
Cheese (B)	195	107	125	111	42	102
WMP	-	-	9	125	0	110
SMP	-	-	11	87	1	192

(B) Production cheese of all kinds of milk.

Consumption (kg per capita)

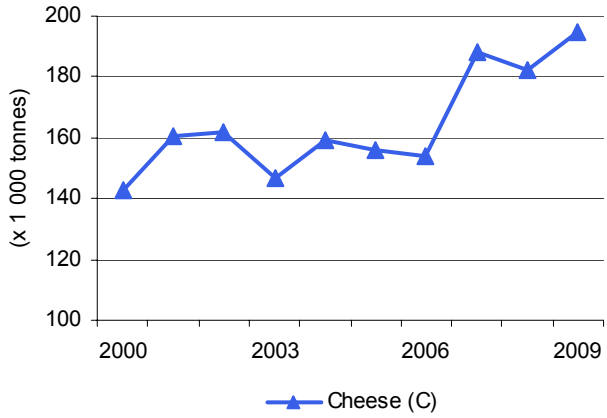
Milk: -

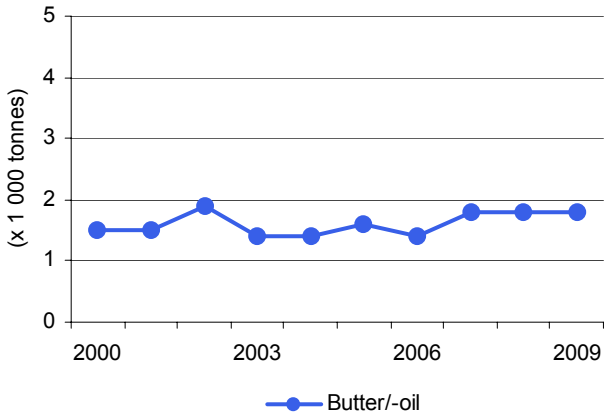
Butter: 0.7 kg

Cheese: 31.1 kg

Population: 11.3 mln.

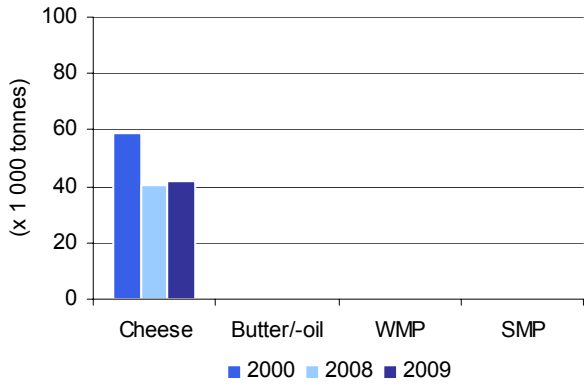
Production





(C) Cheese of all kinds.

Export



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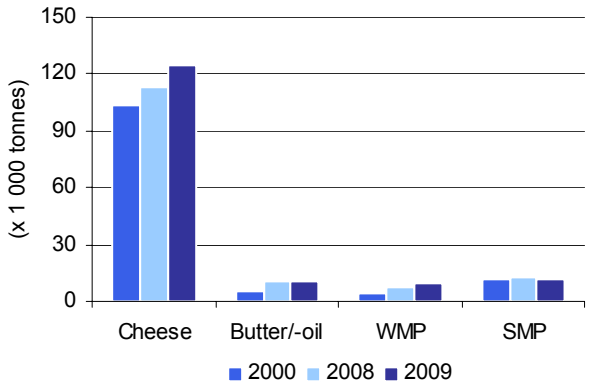


Key developments

The dairy sector in Greece is based on three kinds of milk production, meaning cow's, sheep's and goat's milk production. The observed trend is clearly towards the concentration of both the primary production and the processing stage to a smaller number of establishments but with an increased production capacity. There are no recognized producer organizations or inter professional organization in the dairy sector in Greece yet. There are associations at producer level but not organized in a way that they can represent their members in collective negotiations. They are coordinated at a local level.
Cow's milk is not usually marketed through cooperatives but in the best case through private agreements between individual producers and processors. These agreements, where in place, favour the processors who are the ones who shape their content, due to the lack of bargaining power on the part of the producers.

The urgent need for collective actions by the producers is becoming clear to them but, they lack organization and coordination and the essential resources to go further. The processors dominated the market for such a long time that it seems impossible to change to a more balanced situation.

Farm prices went through the crisis that became more serious in the summer of 2009, then went up again but started to decline again due to the general economical difficulties the country is facing. Milk production is down. Low cost milk comes into the country leaving the local production unused. Up to now consumer demand did not seem to have decreased and consumer prices were still high, but it is a very unstable overall situation with no safe estimations possible.

The general financial situation affects all the milk chain (lower sales, lower demand for raw milk, lower farm prices). The lack of balance in the distribution of added value throughout the chain is still a problem.

Source: Hellenic Ministry of Rural Development and Food (www.minagric.gr), Eurostat.

HUNGARY

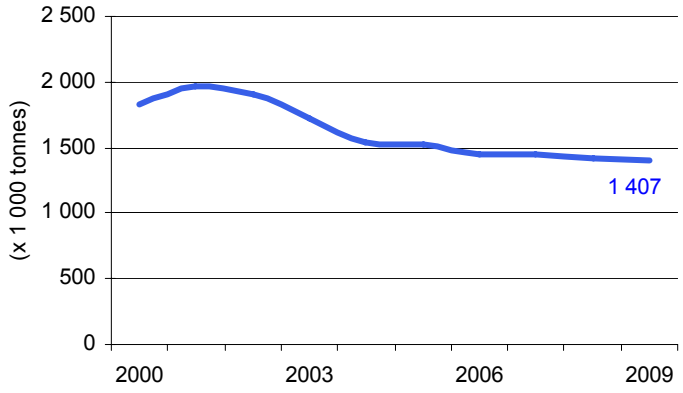
Dairy farming

Cow milk production (x 1 000 tonnes)	1 841
% of worldwide milk production	0.3%
% cow milk deliveries	76%
Number of dairy cows (x 1 000 head)	248

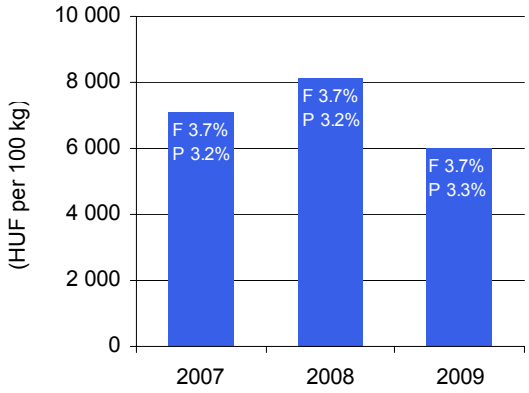
Main processors

Sole-Mizo ZRt	www.solemizo.hu
Alföldi Tej Kft.	www.alfolditej.hu
Danone Kft.	www.danone.hu
FrieslanCampina Hungária Zrt	www.frieslandcampina.com
Tolnatej Zrt.	www.tolle.hu

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	387	93	140	155	305	106
Fermented products	169	111	33	104	11	831
Cream	6	92	10	145	13	144
Butter and butteroil	8	104	5	116	2	123
Cheese	75	103	38	100	15	113
WMP (A)	1	100	1	143	2	81
SMP (A)	0	100	4	97	0	-

(A) Production: year 2008.

Consumption (kg per capita)

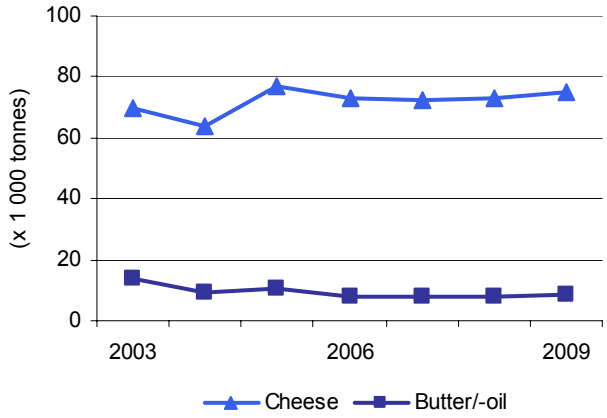
Milk: 58.7 kg

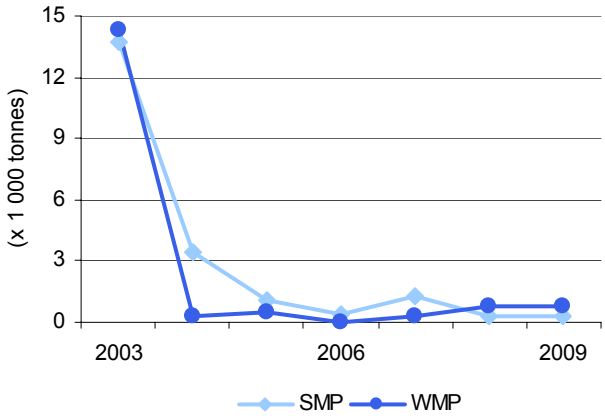
Butter: 1.0 kg

Cheese: 11.0 kg

Population: 10.0 mln.

Production





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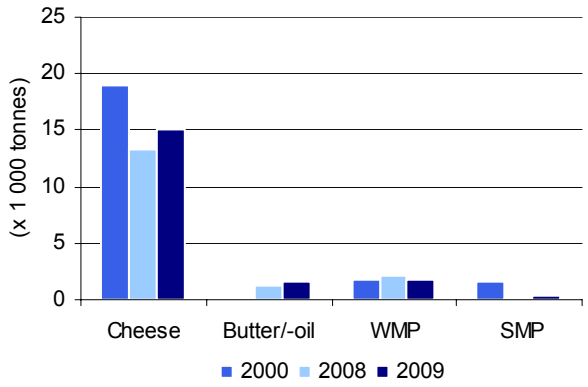

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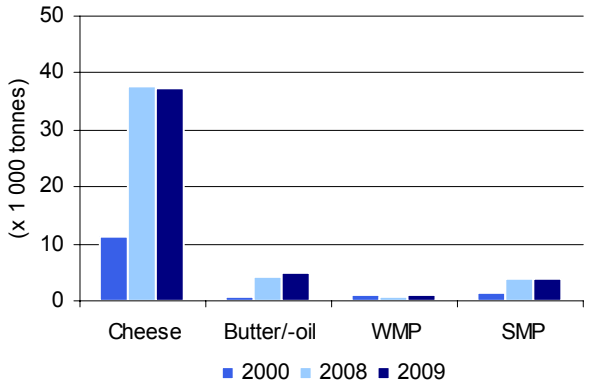


Key developments

Structural changes in farming and industry
Due to the decreased milk price and the effect of world market changes, cow numbers decreased. Most milk is produced on farms with more than 300 cows. The processing industry consists of small plants; concentration is slow.

Price trends
The milk price is among the lowest in the EU. There is a big difference between producer/wholesale prices and retail prices for milk/milk products. Due to the high import rate wholesale prices are under pressure and this has a negative impact on profitability for both producers and processors.

Consumption trends
Consumption is low in comparison to the rest of Europe. Generally it is showing a slow increase with import playing an important role. This is reflected in consumption data for liquid milk and fermented products. Butter increased but its level is still very low. About half of cheese consumption is fresh cheese (quarg), mainly from domestic supply; the consumption of ripened cheese involves mainly imported product.

Economic situation
Due to low wholesale prices producers and processors are in a bad economic situation with limited chances for development. The generally higher retail prices hinder a quicker increase in consumption.

Source: Association of Milk Industry (www.mtki.hu), Comtrade, Eurostat.

IRELAND

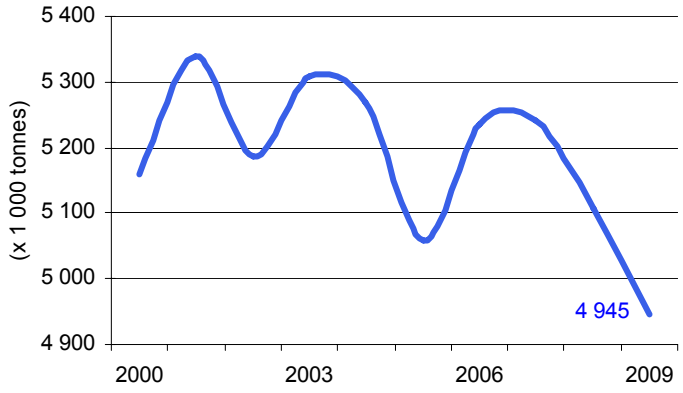
Dairy farming

Cow milk production (x 1 000 tonnes)	5 046
% of worldwide milk production	0.9%
% cow milk deliveries	98%
Number of dairy cows (x 1 000 head)	1 107

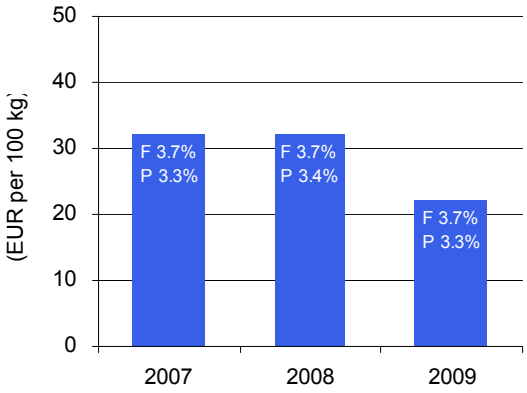
Main processors

Glanbia	www.glanbia.com
Kerry Group	www.kerrygroup.com
Dairygold	www.dairygold.ie
Lakeland Dairies	www.lakeland.ie

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	509	95	232	81	195	122
Fermented products	33	93	44	82	21	69
Cream	23	85	6	103	2	227
Butter and butteroil	121	97	8	134	120	97
Cheese	158	96	40	95	172	104
WMP	25	76	3	53	46	86
SMP	75	136	2	62	35	94

Consumption (kg per capita)

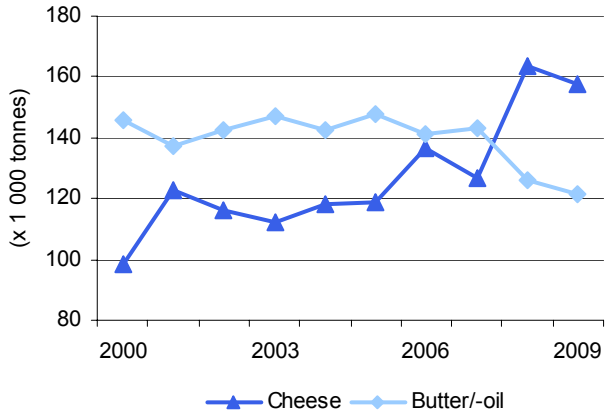
Milk: 140.2 kg

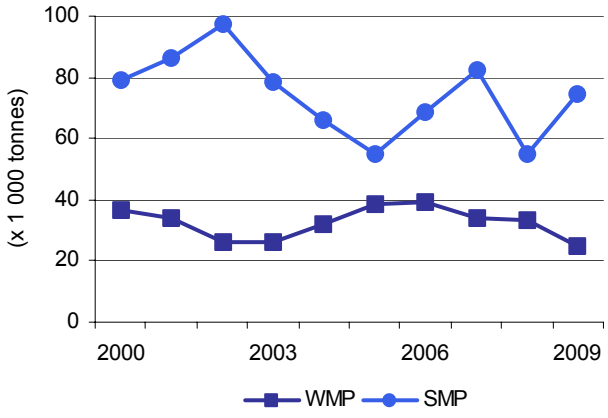
Butter: 2.5 kg

Cheese: 6.1 kg

Population: 4.5 mln.

Production





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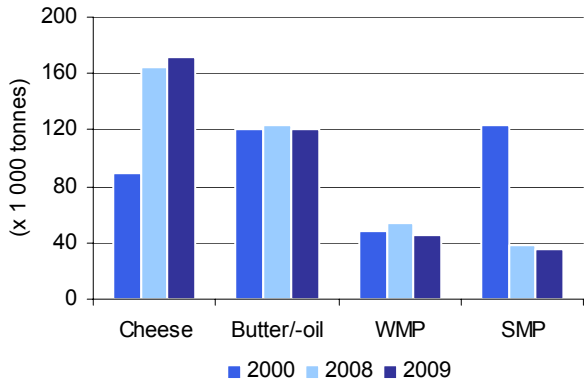

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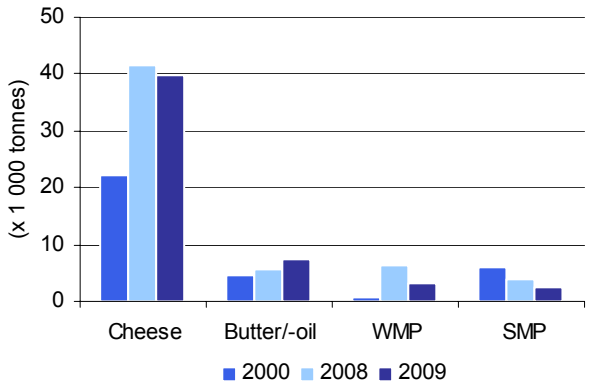


Key developments

The year 2009 was characterised by weak markets and recourse to intervention selling. Production of milk was reduced by 3% although weather related considerations contributed to this together with the consequences of poor supplier returns.

Consumption of most dairy products is stable or slightly positive.

Source: Irish Dairy Board (www.idb.ie).

ITALY

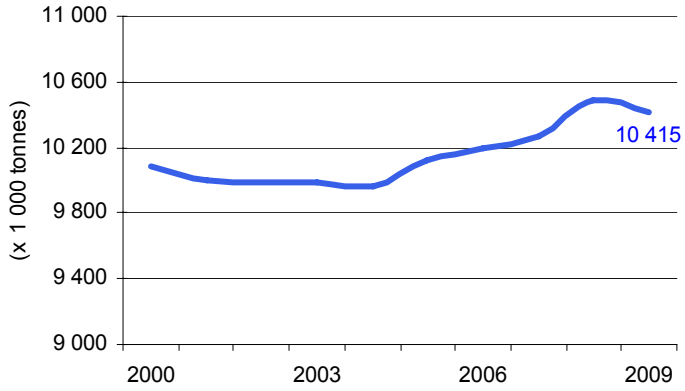
Dairy farming

Cow milk production (x 1 000 tonnes)	11 206
% of worldwide milk production	1.9%
% cow milk deliveries	93%
Number of dairy cows (x 1 000 head)	1 878

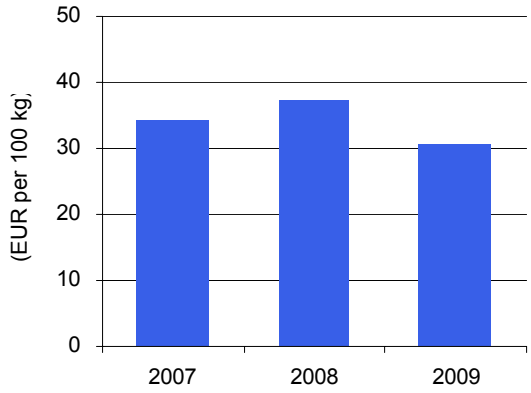
Main processors

Parmalat	www.parmalat.com
Galbani	www.galbani.com
Granarolo	www.granarolo.it
Danone Italia	www.danone.it

Cow milk deliveries



Cow milk prices (A)



(A) Real fat and protein contents.

Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	2 770	100	2 124	103	15	142
Fermented products	297	97	194	96	4	105
Cream	127	87	103	98	5	81
Butter and butteroil	93	87	52	95	10	112
Cheese (B)	1 059	101	448	102	250	101
WMP	-	-	25	107	2	209
SMP	-	-	80	95	14	77

(B) Production of cow 's milk cheese only.

Consumption (kg per capita)

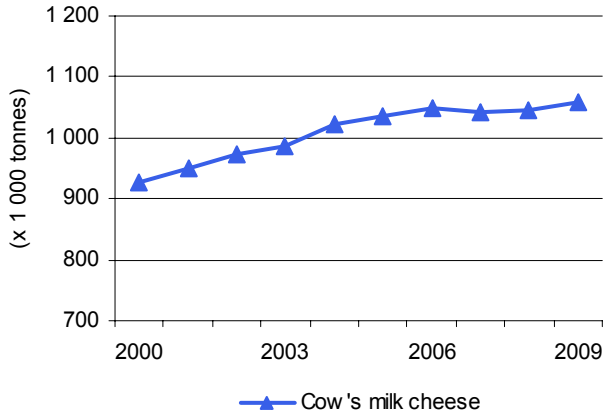
Milk: 53.5 kg

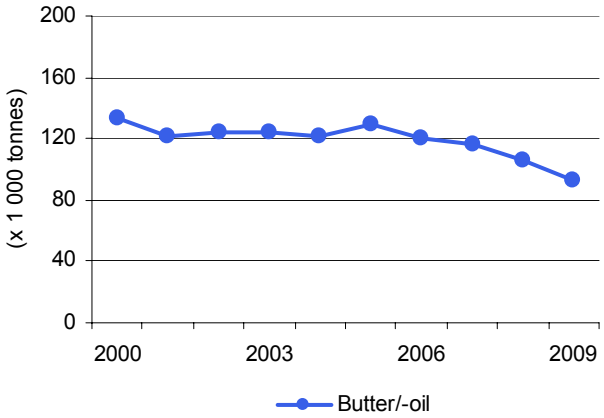
Butter: 1.6 kg

Cheese: 20.9 kg

Population: 60.0 mln.

Production





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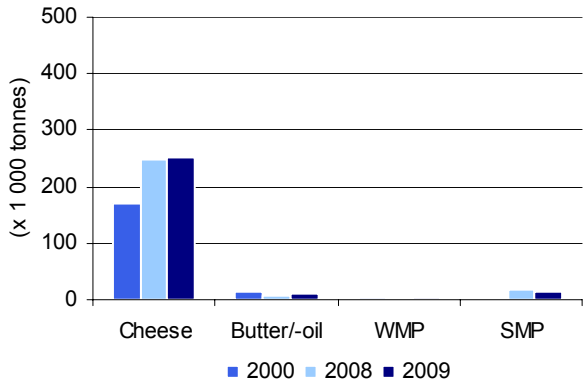

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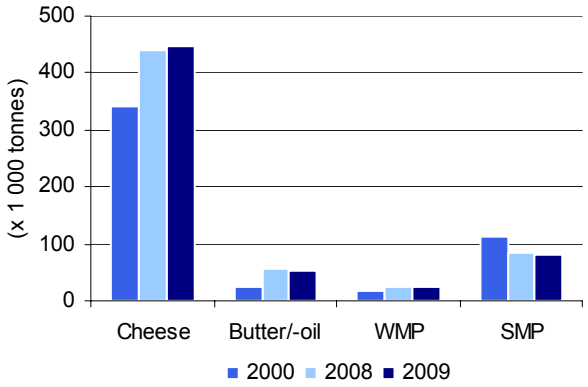


Source: ZMP, Istat, CNIEL, PZ, Comtrade, Eurostat.

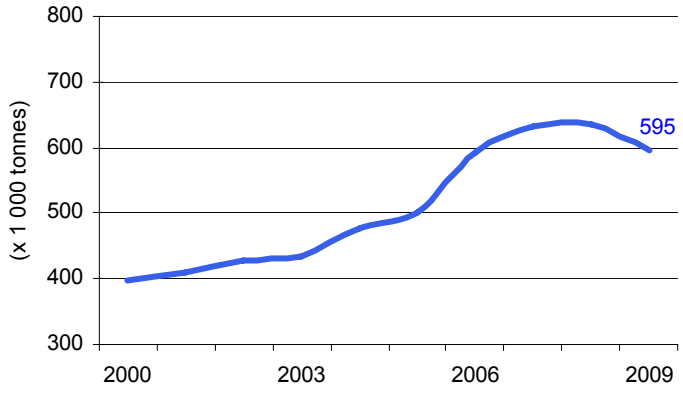
LATVIA

Dairy farming

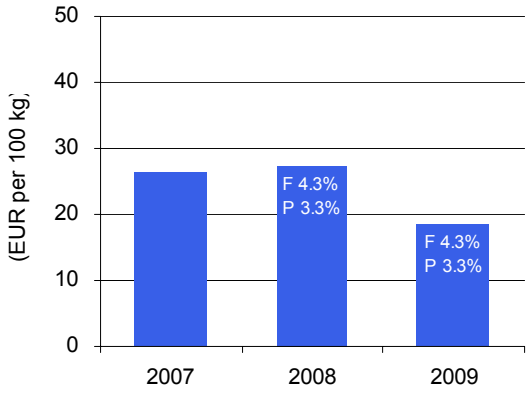
Cow milk production (x 1 000 tonnes)	832
% of worldwide milk production	0.1%
% cow milk deliveries	72%
Number of dairy cows (x 1 000 head)	170

Rigas piena kombinats www.rpk.lv

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	75	85	17	34	170	94
Fermented products	40	95	12	125	6	87
Cream	28	101	1	218	1	117
Butter and butteroil (A)	4	103	2	100	2	136
Cheese	24	73	11	103	9	62
WMP	4	78	0	60	5	169
SMP	3	567	1	175	4	327

(A) Production of butter only.

Consumption (kg per capita)

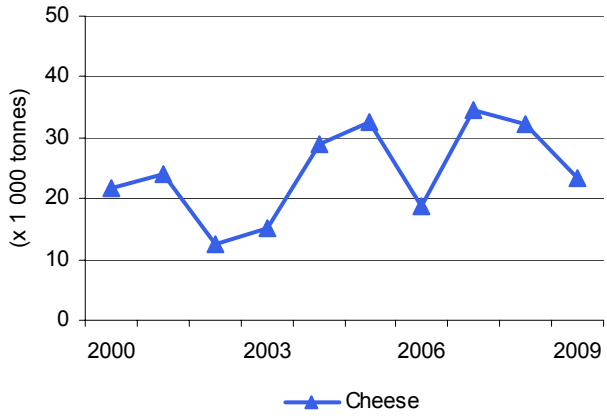
Milk: -

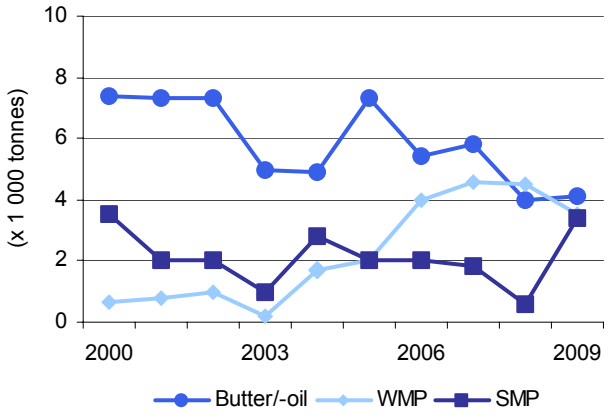
Butter: 2.7 kg

Cheese: 13.1 kg

Population: 2.3 mln.

Production





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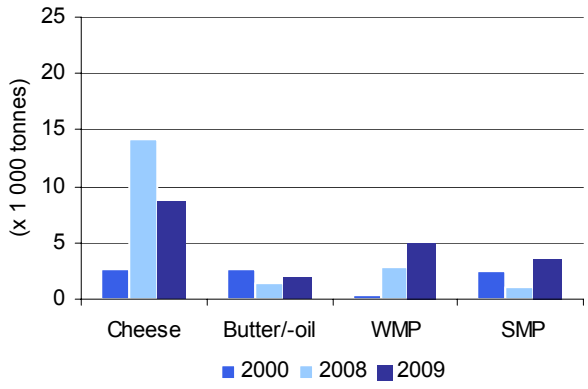

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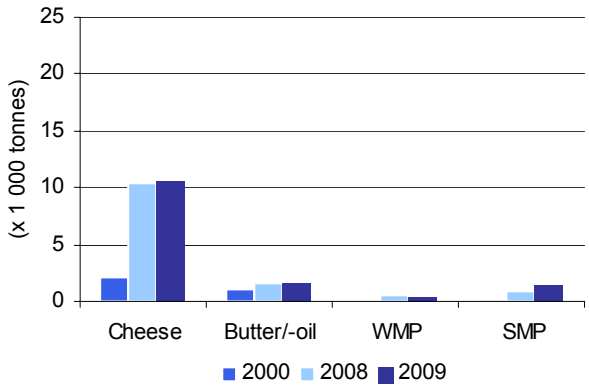


Key developments

Dairy farming is one of the basic sectors of agriculture in Latvia. 832 000 tons of cow's milk were produced in 2009, or 2% less than in previous year. Production of goat milk in Latvia is insignificant, about 4 000 tons per year (number of goats 13.2 thousand).
Structural changes have already been taking place in the dairy sector for several years; decreasing quantity of small farms (1-9 cows) and increasing number of big farms (30-200 cows). The average herd in Latvia in 2009 was 17.3 cows. The total quantity of milking cows is decreasing, but yield per cow becoming higher, 5 735 kg per cow in the milk record-keeping system (+4.3%) and 4 892 kg statistical (+1.4%).

Average milk price in 2009 was low, 18.4 euro per 100 kg. In the first half of 2010 milk price is 24.4 euro per 100 kg and remains stable.

The main changes in production of milk products in 2009 compared with 2008 were the 27% decrease of cheese production, the 24% decrease of WMP production. In 2009 one observed increasing of skimmed milk powder and butter production.

About half of produced milk products were exported from Latvia. Main export markets are Lithuania, Germany, Estonia, the Netherlands, Italy and to third countries (Russia and Azerbaijan). Main export product from Latvia to Lithuania is raw milk (approximately 20% from produced raw milk).

Purchasing capacity in Latvia remains low and consumption of milk and milk production in Latvia is not high.

Source: Dairy Laboratory Ltd. (SIA Piensaimnieku Laboratorija) (www.pienslabs.lv).

LITHUANIA

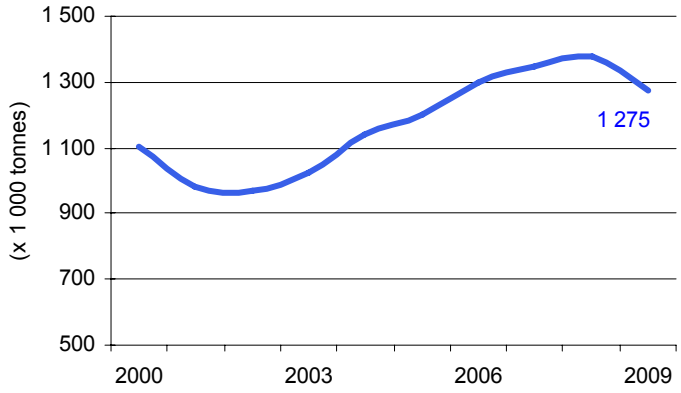
Dairy farming

Milk production (x 1 000 tonnes)	1 762
% of worldwide milk production	0.3%
% cow milk deliveries	72%
Number of dairy cows (x 1 000 head)	357

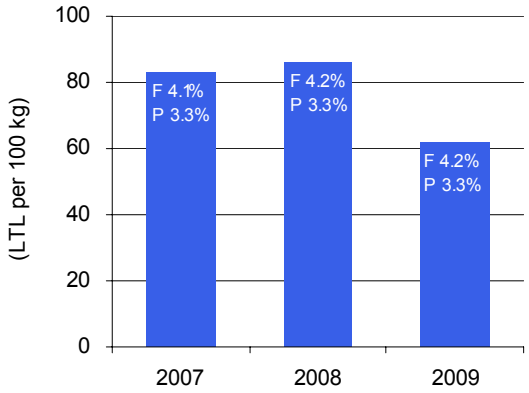
Main processors

SC Pieno žvaigždės	www.pienozvaigzdes.lt
SC Rokiškio sūris	www.rokiskio.com
SC Žemaitijos pienas	www.zpienas.lt
SC Vilkyškių pieninė	www.suriai.lt
CST MPK	www.milk.lt

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	88	102	176	85	22	203
Fermented products	69	103	10	86	5	113
Cream	1	109	0	79	38	90
Butter and butteroil	12	133	0	57	5	100
Cheese	94	88	5	98	69	101
WMP	2	33	1	200	4	157
SMP	20	200	1	65	11	103

Consumption (kg per capita)

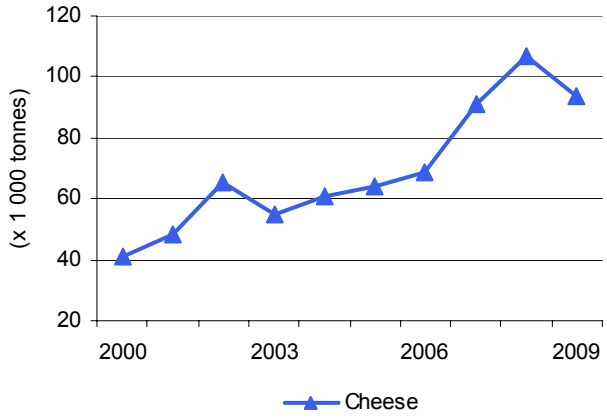
Milk: 30.3 kg

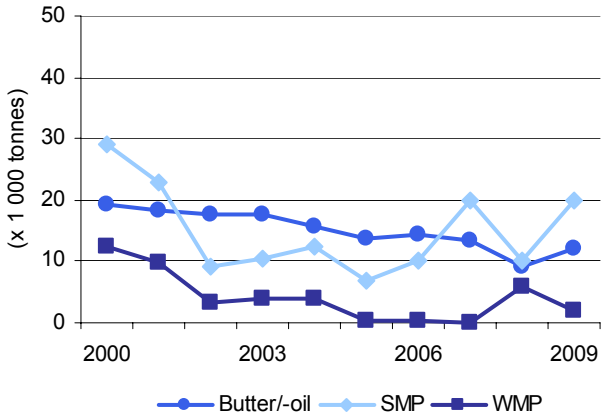
Butter: 2.2 kg

Cheese: 14.5 kg

Population: 3.3 mln.

Production





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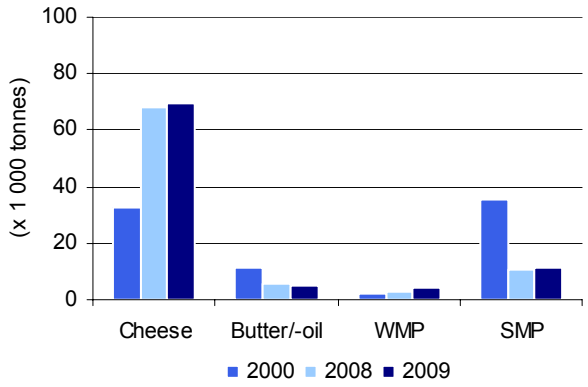

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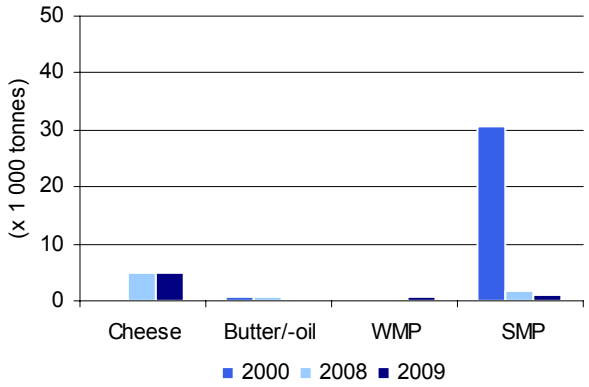


Key developments

Lithuania exports about 50% of its dairy products, so the big fluctuation of prices on the world market in 2007-2009 influenced wholesale prices for dairy products in Lithuania. The milk purchase price went approximately in the same direction as wholesale prices, but the difference was much more accentuated: in December 2007 compared to December 2006 wholesale prices increased by 36.6% and milk purchase price by 52.5%; in September 2009 wholesale prices reached 105.5% of December 2006 level and milk purchase price -78.7%. The big fluctuation of milk purchase price reinforced the trend to larger dairy farms because a lot of small dairy farms left production. During the period from the end of 2007 to the end of 2009 the number of 1-9 cow farms decreased by 21.2 thousand (18.4%). The average dairy farm grew from 3.3 cows in 2007 to 3.6 cows in 2009. Concentration of the dairy processing industry took place until 2007 and during the period 2007-2009 there were only small changes. The 4 biggest Lithuanian dairy processing enterprises process about 80% of raw milk. Consumption of milk and dairy products depends on prices of dairy products and income of consumers. In 2007 consumption decreased because of increased prices; it increased again in 2008 and in 2009 consumption decreased because of decreased income during the economic crisis. Over a longer period there is a visible tendency towards a decrease in consumption of milk and dairy products.

Up to the year 2009 the Lithuanian economy was growing. In 2007 the GDP grew by 19%, in 2008 by 13% and in 2009 it then decreased by 17%. There was a similar tendency wages and salaries changes. Unemployment increased from 4.3% in 2007 to 13.7% in 2009. The Government forecasts that the GDP will rise by 1.6% in 2010.

Lithuania, as a member of the EU, has to implement all elements of the EU dairy policy, the most important of them being the protection of internal market with high import duties and quotas, export refunds, intervention buying-in, aid for private storage. Lithuania, in their direct payment system, has a dairy premium per tonne of individual reference quantity of delivered milk.

Source: Lithuanian Institute of Agrarian Economics (www.laei.lt), Comtrade, Eurostat.

NETHERLANDS

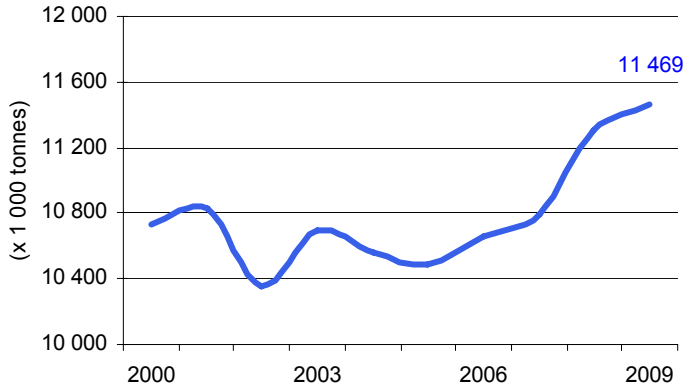
Dairy farming

Cow milk production (x 1 000 tonnes)	11 791
% of worldwide milk production	2.0%
% cow milk deliveries	97%
Number of dairy cows (x 1 000 head)	1 489

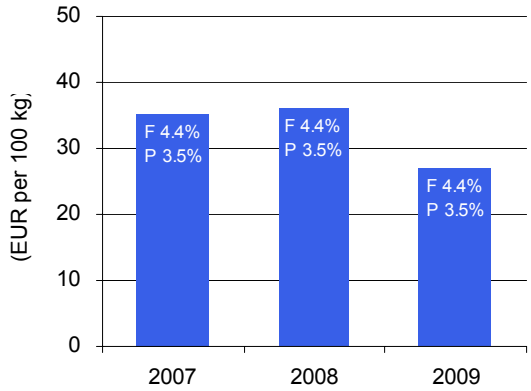
Main processors

Royal FrieslandCampina	www.frieslandcampina.com
Vreugdenhil Dairy Foods	www.vreugdenhil.nl
Bel Leerdammer	www.belgroup.nl
DOC Kaas	www.dockaas.nl
Arla Foods	www.arla.nl

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	701	99	450	93	409	115
Fermented products	451	96	192	106	24	149
Cream	34	107	49	70	110	124
Butter and butteroil	165	96	83	131	147	101
Cheese	714	99	187	103	544	96
WMP	146	115	59	100	166	110
SMP	58	106	101	89	75	140

Consumption (kg per capita)

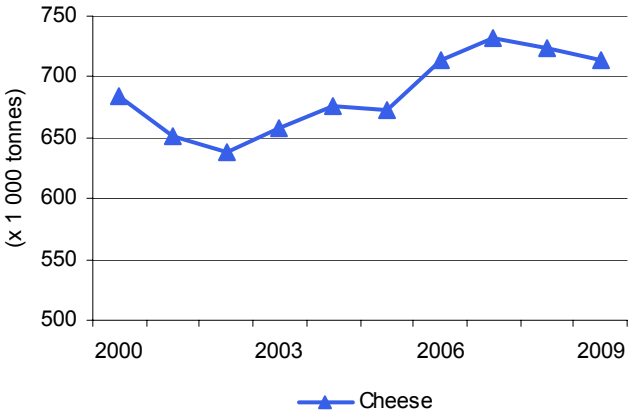
Milk: 59.6 kg

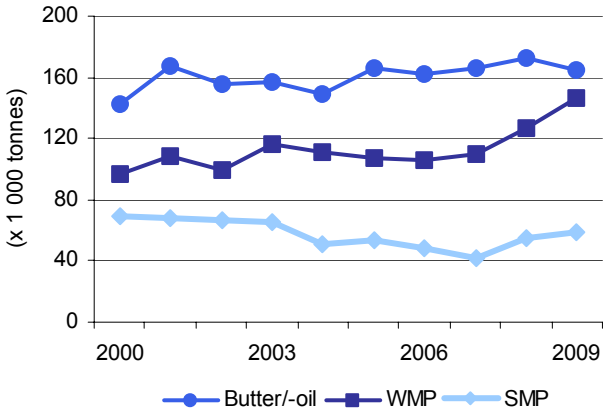
Butter: 3.4 kg

Cheese: 21.0 kg

Population: 16.6 mln.

Production





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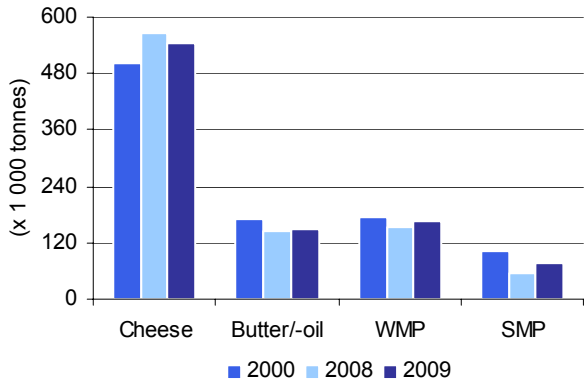

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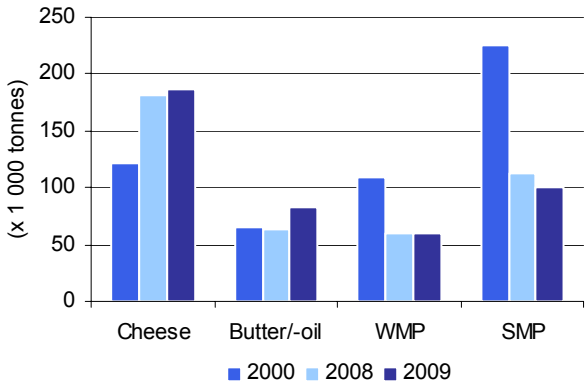


Key developments

Industry development: FrieslandCampina makes its debut
2009 became the first operational year for the Dutch dairy giant FrieslandCampina. The new company had become effective as from December 31st 2008, following the merger of the two main Dutch cooperatives Friesland Foods and Campina. It is a global player with turnover of over 9 billion euro and about 100 production sites and sales offices in 24 countries. Its 17 thousand farmer members produce 8.3 billion kg of milk annually. As part of the merger conditions, the European Commission imposed the divestment of various activities. Consequently, in spring 2009 FrieslandCampina sold the Friesland Foods Fresh plant in Nijkerk (NL) to Scandinavian dairy coop Arla Foods, while in December 2009, the Campina cheese plant in Bleskensgraaf (NL) was sold to the Dutch farmer's coop DeltaMilk.

Dutch farm size keeps enlarging
Dutch farm structure further develops towards larger scale operations. In the 2009/10 quota season, farms with quota larger than 800 thousand kg consisted the only growth category. Farms in this size category represented nearly 41% of the national quota. Scale enlargement also leads to fewer farmers: in the 2009/10 season the number of quota holders further dropped by 2%, to about 19 500. Meanwhile, Dutch deliveries to factories kept rising. In the 2009/10 quota season, deliveries to factories exceeded the EU reference quantity for The Netherlands by about 0.4% (47 million kg), resulting in a super levy bill of €13.1 million.

Bad milk price year
The economic setback, which at the end of 2008 already had started to effect global markets, in 2009 also heavily affected the Dutch dairy complex. For most of that year, price sentiments as reflected by the Dutch quotations were fairly weak. As a result, the average milk price pay-out to farmers experienced an all-time low, dropping to a level nearly 25% below the 2008 average.

Source: Productschap Zuivel (www.prodzuivel.nl).

POLAND

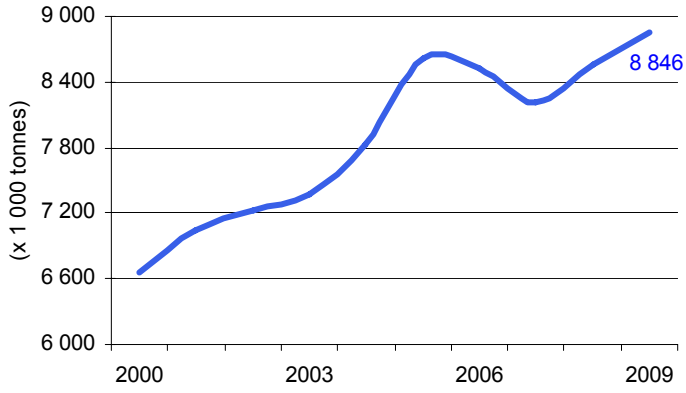
Dairy farming

Cow milk production (x 1 000 tonnes)	12 447
% of worldwide milk production	2.1%
% cow milk deliveries	71%
Number of dairy cows (x 1 000 head)	2 678

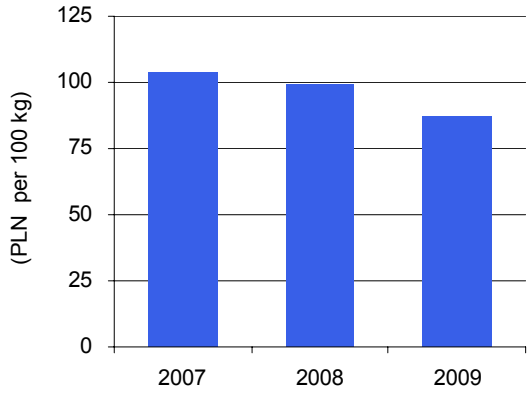
Main processors

Mlekpol	www.mlekpol.com.pl
Mlekovita	www.mlekovita.com.pl
Polmlek	www.polmlek.com
Danone PL	www.danone.pl
Hochland Polska	www.hochland.pl

Cow milk deliveries



Cow milk prices (A)



(A) Real fat and protein contents.

Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	2 575	107	37	109	236	124
Fermented products	503	112	21	69	108	111
Cream	345	93	13	96	46	71
Butter and butteroil	169	94	9	141	18	60
Cheese	610	99	38	125	143	92
WMP	33	69	3	115	20	73
SMP	98	82	11	108	81	92

Consumption (kg per capita)

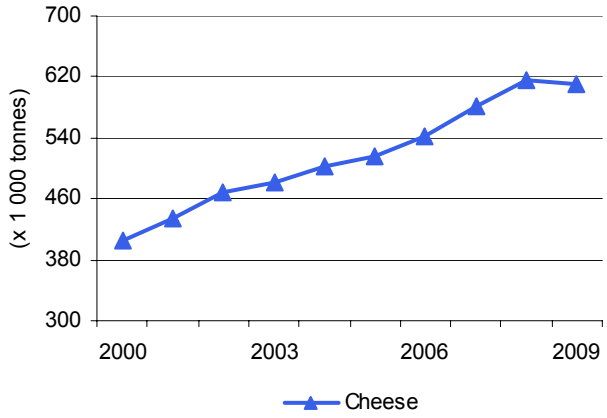
Milk: 43.0 kg

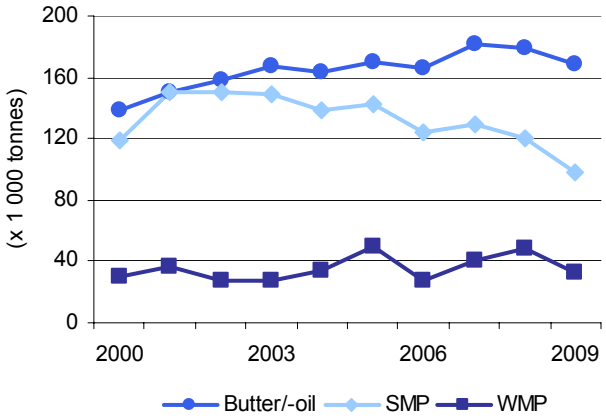
Butter: 4.4 kg

Cheese: 10.8 kg

Population: 38.2 mln.

Production





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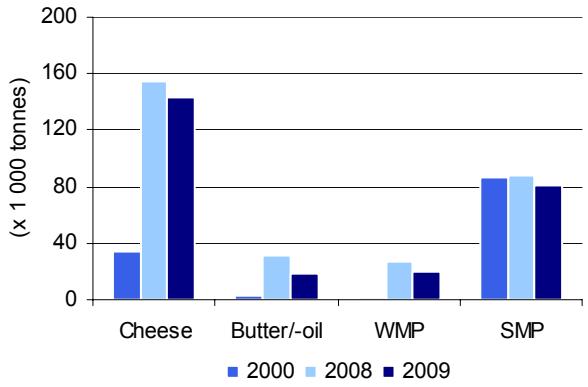
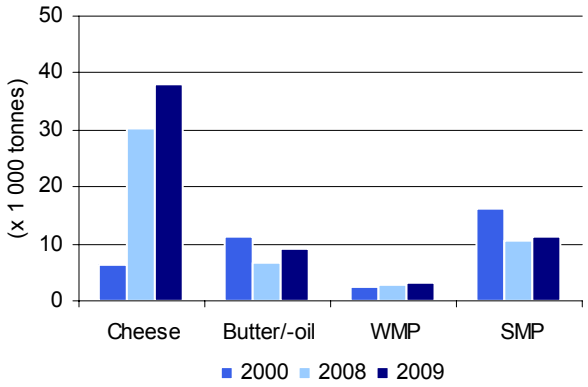


Import



Key developments

The Polish economy was the only one to note a positive GDP growth among EU members in 2009. However, the dairy sector, strongly dependent on the general EU and international situation, had a difficult year 2009. Milk procurement prices fell from record 2007-08 highs to levels not seen since the accession (2004); recovery did not occur until the end of 2009.

Milk producer numbers continued to fall as well. There were some half a million holdings with dairy cows in 2009, of which only some 200 thousand may be regarded as active producers. There was thus a slump in the quota holders of more than 50%, as compared to the 2004 accession. The concentration process was fully underway; it was, however, not reflected in the average milk yield which increased much more slowly and reached 4 735 kg. Average milk volume of a dairy holding was some 50 thousand kg (quota holders).

Almost all milk complied with EU standards.

The concentration process in the processing sector was again much slower than on the producer level; there were still more than 200 dairy companies (mainly cooperatives) of which only 1 exceeded the purchased quantity of 1 million tonnes (and the second was near to this). The fragmentation of the processing level remains one of the major weaknesses of the Polish dairy sector. The output of most dairy products, especially broadly traded commodities, fell - with the exception of fluid milk and milk drinks (yoghurts, desserts etc.).

2009 saw the worst situation in the Polish trade in dairy products since the accession 2004 (in value terms). After several years of dynamic growth, exports fell by one fourth to EUR 916 million, with imports diminishing by 8% to EUR 261 million. However, a net positive balance was maintained.

Source: FAPA (www.fapa.org.pl), Comtrade, Eurostat.

SLOVAKIA

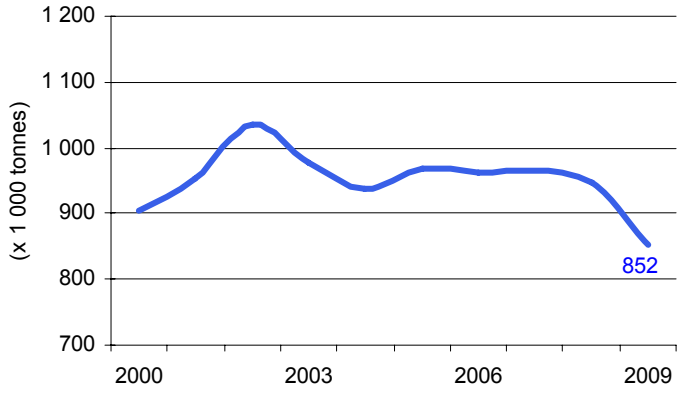
Dairy farming

Cow milk production (x 1 000 tonnes)	957
% of worldwide milk production	0.2%
% cow milk deliveries	89%
Number of dairy cows (x 1 000 head)	166

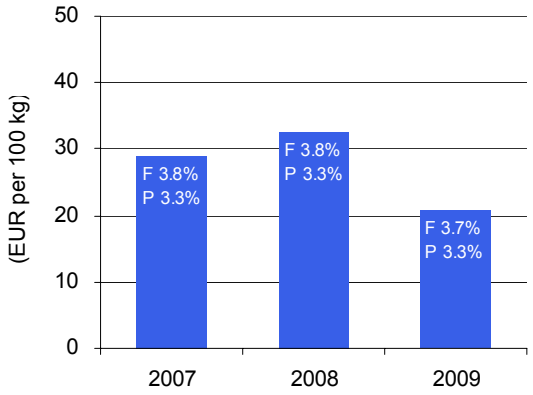
Main processors

Rajo, a. s.	www.rajo.sk
Liptovská mliekareň, a. s.	www.liptmilk.sk
Levická mliekareň, a s.	www.levmilk.sk
Milsy, a. s.	www.milsy.sk
Syráreň Bel Slovensko, a. s.	www.bel-slovakia.sk

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	263	109	71	81	165	96
Fermented products	51	100	37	111	15	93
Cream	27	72	3	107	12	99
Butter and butteroil	10	85	9	175	2	100
Cheese (A)	31	91	28	114	23	90
WMP	3	76	1	58	3	69
SMP	4	57	4	85	4	47

(A) Production: not including goat milk cheese and sheep milk cheese (4 555 t).

Consumption (kg per capita)

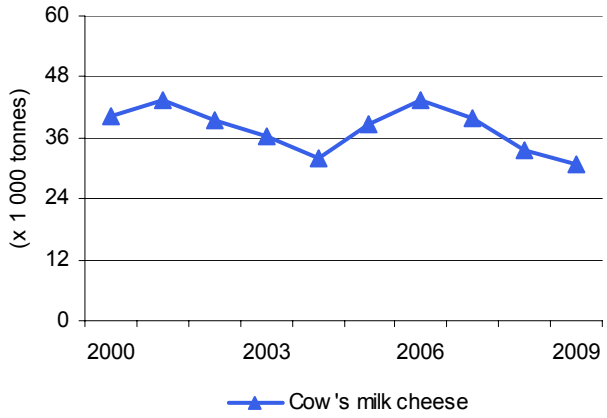
Milk: 49.5 kg

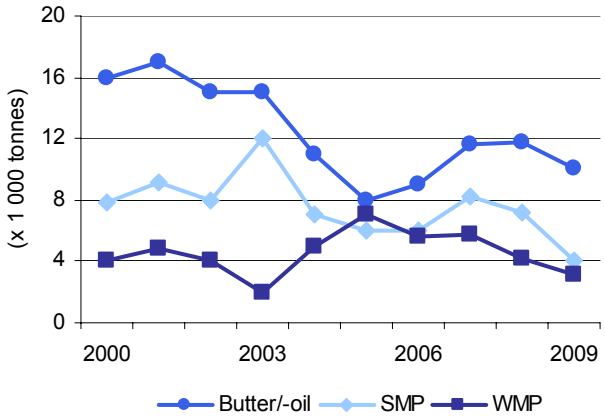
Butter: 2.8 kg

Cheese: 9.5 kg

Population: 5.4 mln.

Production





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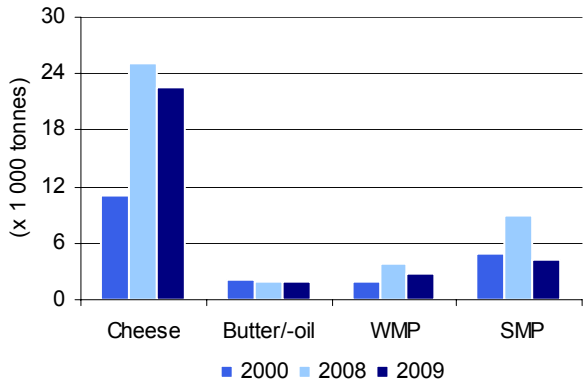

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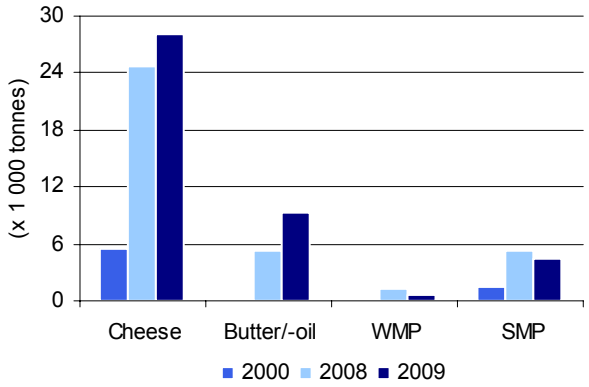


Key developments

During the quota year 09/10, Slovakia fulfilled its 1 072 220 t. quota by 78/79%. The number of dairy farms dropped from 1 111 to 1 046 in 2009. The number of dairy cows has continued decreasing by 5.5%. The average milk yield per cow declined by 4.2% to 5 769.8 kg. Milk production has declined by 9.5%. In 2009, milk deliveries to industries reached 852.4 thousand tonnes, 89% of the total production. Of the volume purchased by approved buyers, 94.9% of cow's milk met class Q and I quality parameters. There are 32 dairy industries in Slovakia. Compared to 2008, dairy cooperatives account for a significant share of raw milk sales. The average milk producer price in 2009 was 20.82 €/100 kg, 38.3% less than 2008. Processor prices for selected dairy products decreased in 2009, between 37.8% (SMP) and 11.5% (butter, consumer packing). Consumer prices also decreased between 21.6% (Edam) and 1.4% (unsweetened condensed milk). According to preliminary figures, per capita consumption of dairy products increased slightly (+ 1%) over 2008 to 154.5 kg milk equivalent-butter excluded. Consumption of liquid milk and fermented products has risen, as well as consumption of cheeses, by 3.3%, and butter, by 27.3%. Consumption of cream has declined by 45.5%. Slovak dairy policy is directed by Community law and national legislation. From September 2008 to June 2009 "school milk" got 1 661.6 thousand € in support. The Slovak Dairy Association and the Slovak Association of Dairy Farmers promote consumption through the programmes "milk and dairy products consumption support among children and young" and *"Discover milk – Objav mlieko!"* (Oct. 2008 to Oct. 2011).

In 2009, the Slovak GDP sank by -5.8%. Inflation rate reached 1.6%. Investment in the dairy sector has increased by 29% to 97 million € vs. 2008. The dairy sector employed 4 609 people (+ 1.9%). In 2009, significant reduction of domestic dairy production was caused by increasing volume of imports. Production of liquid milk has increased by 8.6% to 262.7 thousand tonnes, whereas production of cream has declined by 28.5% to 27.1 thousand tonnes, yoghurt and fermented products by 0.4%, SMP by 43.5% and WMP by 24.4%. Production of butter has declined by 14.8% and cheeses by 8.4% (processed cheeses -11.8%). In 2009, dairy exports declined to 180.9 million € (-37.4%) and imports increased to 204.8 million € (1.3%). The negative trade dairy balance reached -23.8 million €.

Source: Agricultural Paying Agency (www.apa.sk), Comtrade, Eurostat.

SPAIN

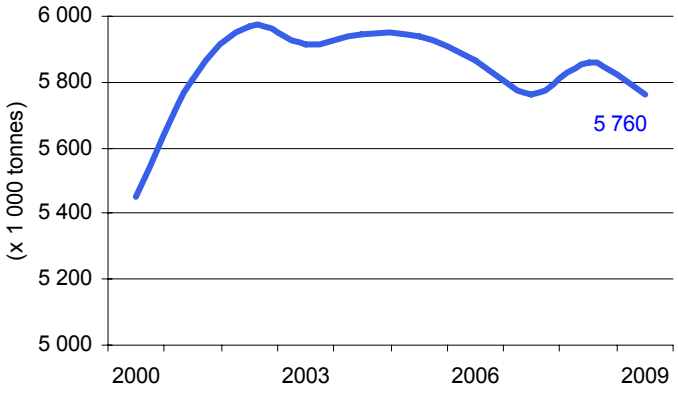
Dairy farming

Cow milk production (x 1 000 tonnes)	6 300
% of worldwide milk production	1.1%
% cow milk deliveries	91%
Number of dairy cows (x 1 000 head)	838

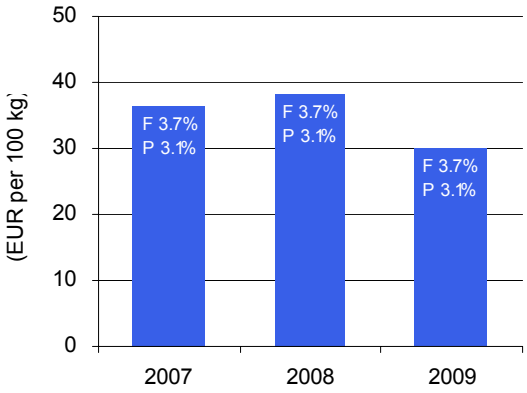
Main processors

Danone	www.danone.es
Capsa	www.capsa.es
Leche Pascual	www.lechepascual.es
Puleva	www.puleva.es
Ilas	www.renypicot.es

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	3 665	102	697	86	109	69
Fermented products	790	98	185	92	105	81
Cream	154	127	25	74	50	104
Butter and butteroil	37	98	17	97	13	87
Cheese (A)	126	99	230	107	38	102
WMP	2	60	20	106	7	80
SMP	10	221	46	93	4	64

(A) Production: cow 's milk cheese only (all milk cheeses: 317 000 tonnes in 2008).

Consumption (kg per capita)

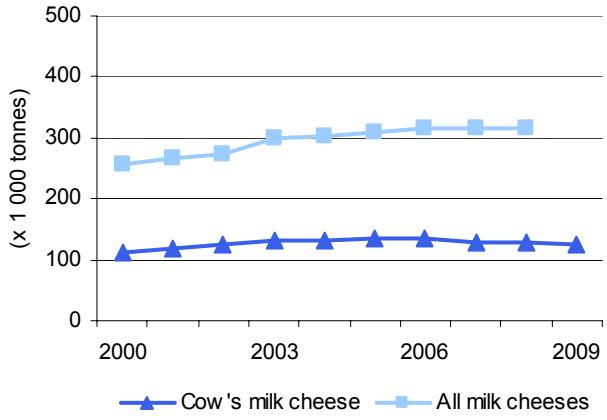
Milk: 88.4 kg

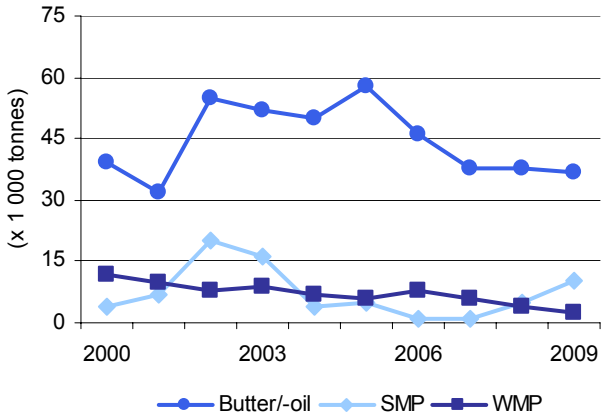
Butter: 0.5 kg

Cheese: 8.2 kg

Population: 46.7 mln.

Production





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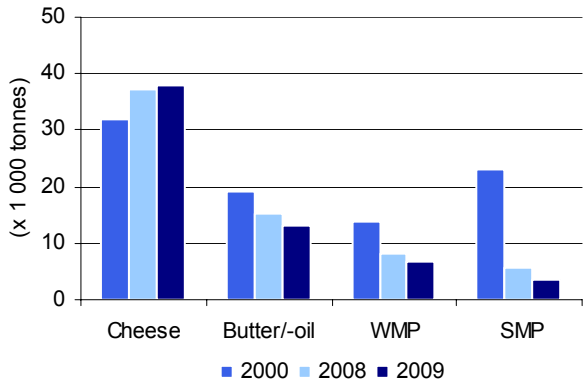

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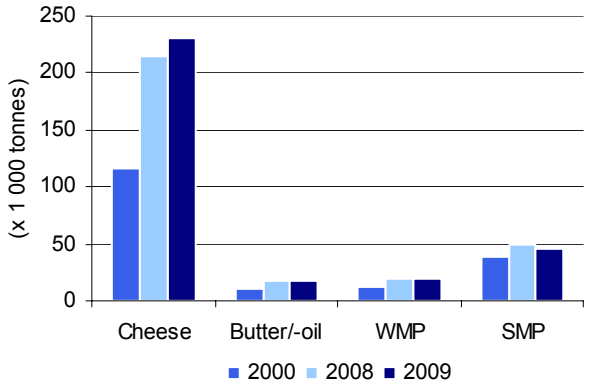


Key developments

Production sector
Deliveries of milk to the industry were lower in 2009 compared to the previous year. The price of milk paid to the farmer continued to decline in the first 7 months of 2009, a trend that began in January 2008. Starting in August the price began to rise and then stabilized at the end of the year. The number of dairy cattle farms in 2009 decreased by 3%. Production costs experienced a slight decrease compared to 2008, especially through the decline of feeding costs. Implementation of the contract for buying and selling milk, approved in 2008, began during 2009, although its scope is still very limited since, at the end of the year, it did not reach 15% of farms that had signed a contract.

Intervention products
During 2009, butter sold to Community intervention amounted to 9 335 tonnes (in the first half of the year) and 138 tonnes of skimmed milk powder (April-September). 1 473 tonnes of butter have benefited from aid to private storage.

Consumption
Consumption of liquid milk in 2009 increased in volume but decreased in value. In contrast, consumption of dairy products increased in volume and value.

Commercial distribution
During 2009 there was an increase in the market share of private labels, particularly in drinking milks.

Plan on nutrition, health and communication 2007/2010
The Plan on Nutrition, Health and Communication continues, with the catch phrases "Dairy products are irreplaceable" and "There is a dairy product for you", and with actions directed towards different categories of doctors, schools and with radio and television spots.

Source: FeNIL (www.fenil.org), Comtrade, Eurostat.

SWEDEN

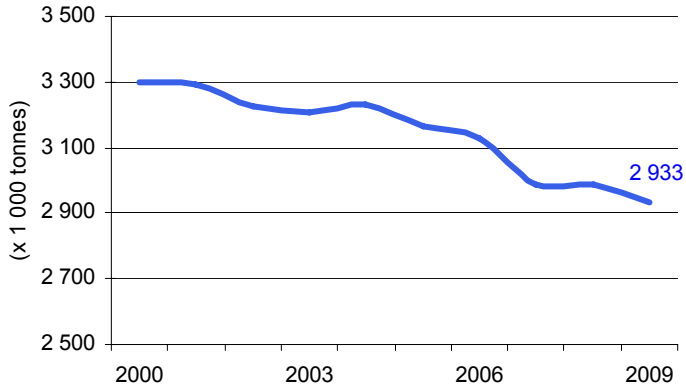
Dairy farming

Cow milk production (x 1 000 tonnes)	2 971
% of worldwide milk production	0.5%
% cow milk deliveries	99%
Number of dairy cows (x 1 000 head)	357

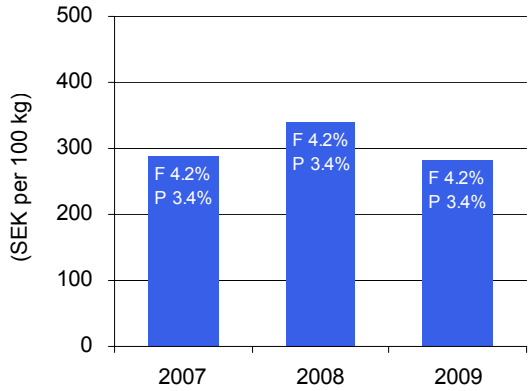
Main processors

Arla Foods	www.arlafoods.se
Skånemejerier	www.skanemejerier.se
Milko	www.milko.se
Norrmejerier	www.norrmejerier.se
Falköpings Mejeri	www.falkopingsmejeri.se

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	905	99	141	241	53	417
Fermented products	267	98	67	101	8	119
Cream	104	108	13	135	1	17
Butter and butteroil	26	111	5	138	7	104
Cheese	108	95	88	108	17	83
WMP	31	77	3	119	35	92
SMP	27	157	5	98	20	185

Consumption (kg per capita)

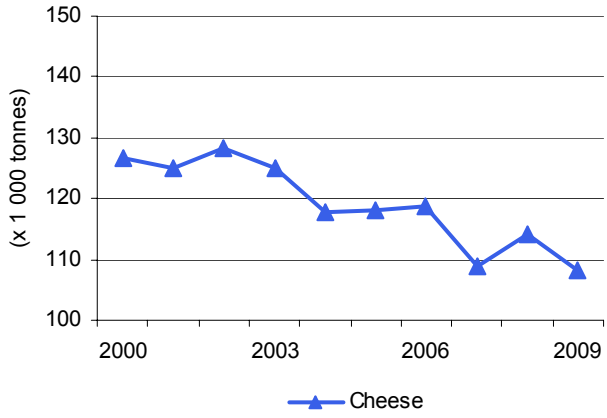
Milk: 99.4 kg

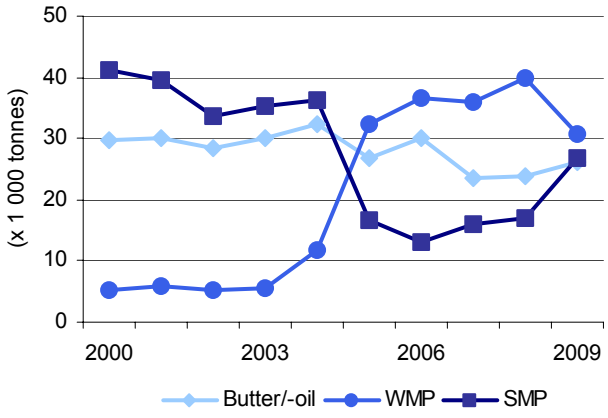
Butter: 1.8 kg

Cheese: 18.9 kg

Population: 9.3 mln.

Production





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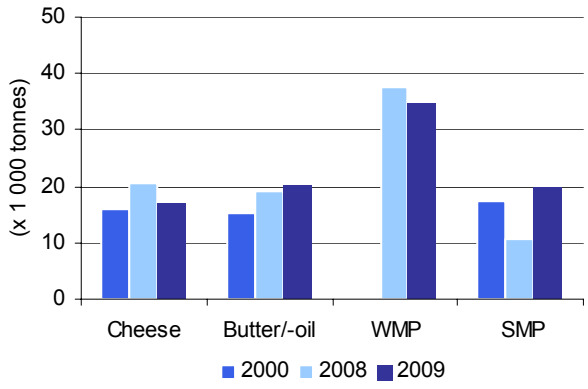

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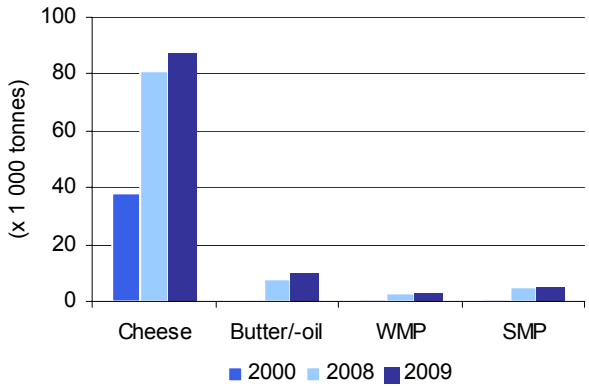


Key developments

Since 1999 Swedish milk production has decreased by 11%. In 2009 the five largest dairy processors represent 96.4% of all collected milk.
The number of dairy herds decreased in 2009 compared to 2008 by 7% to a total of 6 137 farms. No mergers between dairy companies. Increasing number of small, local dairies. Farm prices fell and retail prices are quite stable.

After increasing of the milk prices in 2008 the prices fell in 2009.

Consumption of cream, butter and cheese increased, but consumption of liquid milk and fermented products decreased.

The import of cheese and fermented products increased in 2009 compared to previous year. The import of skim milk powder increased by 2%.
In 2009 the export of skim milk powder increased by 85% compared to 2008. Export of cheese decreased by 17%.

Source: Swedish Dairy Association (www.svenskmjolk.se).

UNITED KINGDOM

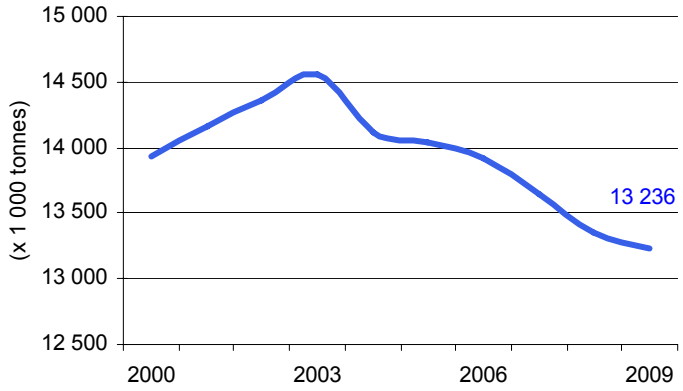
Dairy farming

Cow milk production (x 1 000 tonnes)	13 619
% of worldwide milk production	2.3%
% cow milk deliveries	97%
Number of dairy cows (x 1 000 head)	1 857

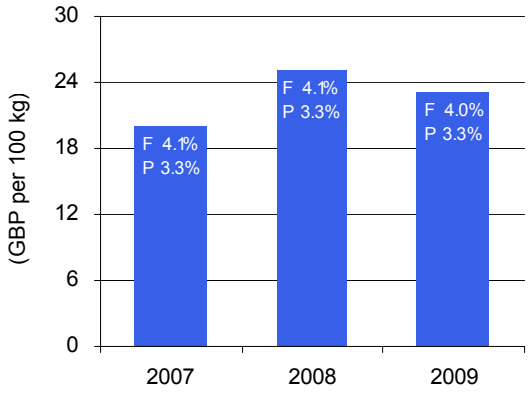
Main processors

Dairy Crest	www.dairycrest.co.uk
Arla Foods UK	www.arlafoods.co.uk
Robert Wiseman Dairies	www.wiseman-dairies.co.uk
First Milk	www.firstmilk.co.uk
Milk Link	www.milklink.com

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	6 716	99	92	89	474	98
Fermented products	369	119	295	96	38	123
Cream	262	103	66	129	64	102
Butter and butteroil	118	106	96	118	27	112
Cheese	323	93	414	98	105	118
Milk powder	102	108	82	124	71	72
-WMP	-	-	36	123	49	69
-SMP	-	-	45	125	21	81

Consumption (kg per capita)

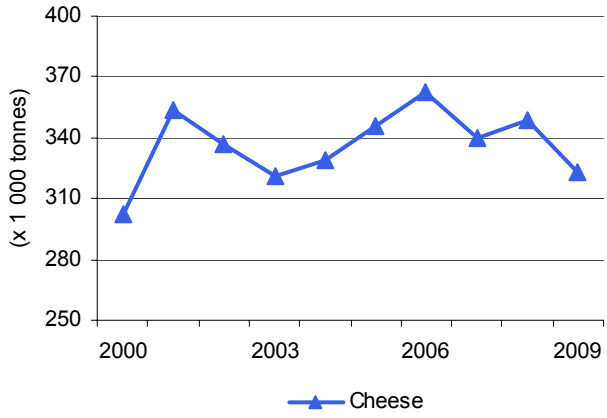
Milk: 104.4 kg

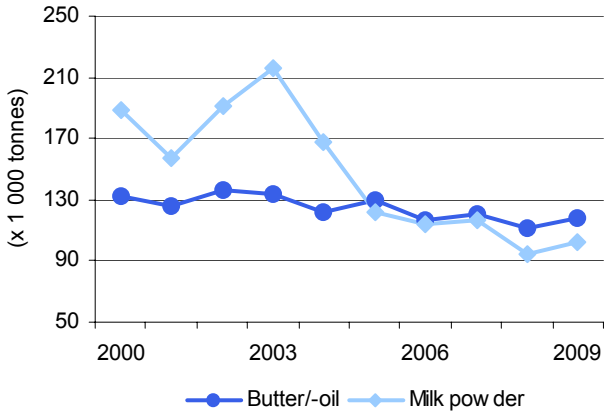
Butter: 3.0 kg

Cheese: 10.9 kg

Population: 61.8 mln.

Production





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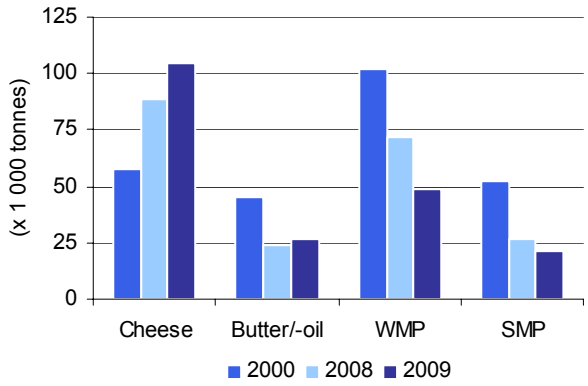

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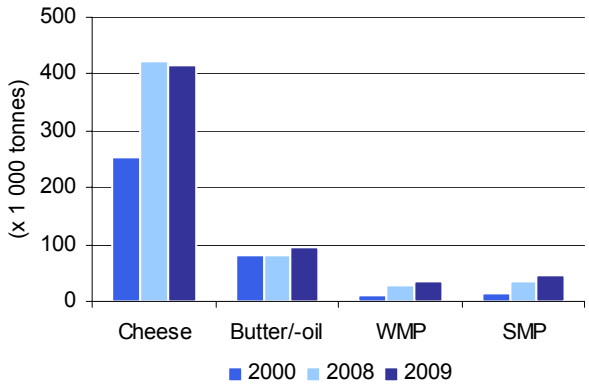


Key developments

Structural changes in farming and industry

The process of farm rationalisation continued over the past year but a recovery in producer confidence has meant that the investment in expansion by farmers remaining in the industry will result in the trend in milk production beginning to stabilise after falling by a total of 8.6% over six years.

Liquid milk processors are continuing to make substantial investments in new processing facilities. Overall the outlook for the industry is felt to be broadly positive.

Price trends

Commodity markets were weak in the first half of 2009 but recovered strongly in the second half of 2009 and the upward trend continued in the first half of 2010. Farm gate prices were on a downward trend over 2009 but the recovery in commodity markets has seen some upward movement in farm gate prices in 2010. Retail prices for milk and cheese have been broadly stable over the past year but retail prices for butter have risen by over 10% in the past 12 months. The relative lags in price movements in the supply chain reflect increasing stability in commercial relationships.

Consumption trends

Liquid milk sales are recording a positive growth trend of 0.9% according to the latest figures which may reflect on increased marketing activity and product innovation. Cheese sales grew by 4.2%.

Dairy policy

The economy has managed to climb out of recession but growth remains weak and may be impacted by retrenchment in government expenditure in order to tackle the public sector deficit. The elections in May brought a new Government based on a coalition between centre and centre-right parties. The new Government has indicated greater concern for maintaining the productive capacity of the industry but many of the environmental and nutritional policy stands from the previous government are expected to remain.

The industry is implementing its obligations under the Milk Roadmap to demonstrate its commitment to improving its environmental impact. The industry is also working with the Government to reduce the consumption of saturated fat and salt.

Source: Dairy UK (www.dairyuk.org).

CANADA

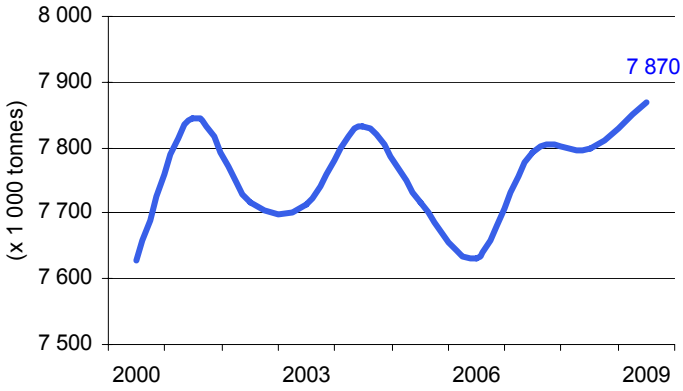
Dairy farming

Cow milk production (x 1 000 tonnes)	8 421
% of worldwide milk production	1.4%
% cow milk deliveries	93%
Number of dairy cows (x 1 000 head)	978

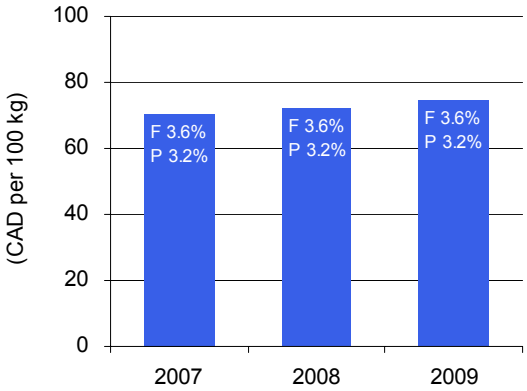
Main processors

Saputo	www.saputo.com
Agropur Cooperative	www.agropur.com
Parmalat Canada	www.parmalat.ca
Kraft Canada	www.kraftcanada.com
Danone Canada	www.danone.ca

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	2 612	101	25	110	1	281
Fermented products	295	102	1	80	2	119
Cream	292	100	4	101	2	93
Butter and butteroil (A)	90	103	10	134	0	143
Cheese	331	101	24	94	9	96
WMP	-	-	2	18	1	121
SMP	85	95	3	68	10	97

(A) Production butter and whey butter only.

Consumption (kg per capita)

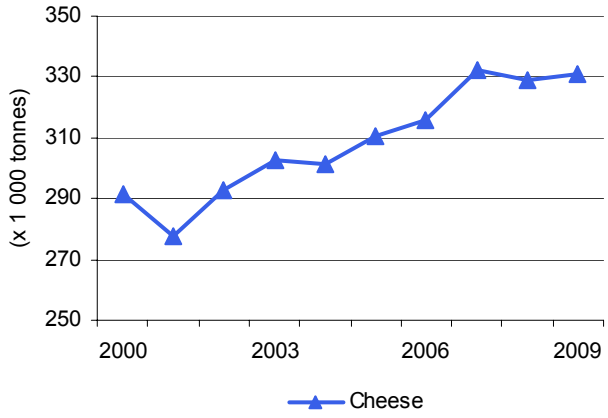
Milk: 84.0 kg

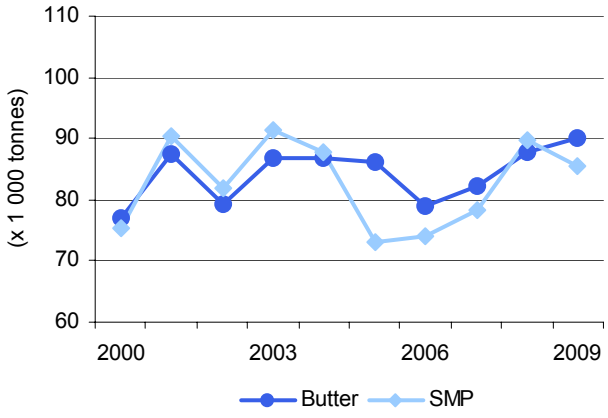
Butter: 2.8 kg

Cheese: 12.3 kg

Population: 33.7 mln.

Production





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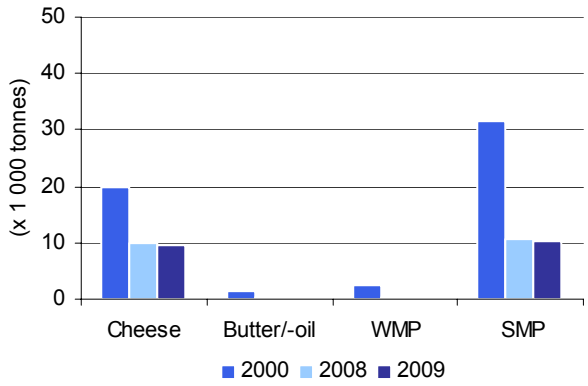

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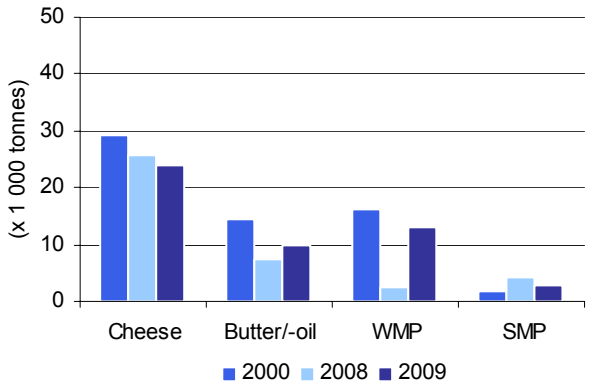


Key developments

Economic situation, trade policy

Dairy production in Canada generated total net farm receipts of $5.5 billion and generated sales of $13.6 billion, representing 15% of the Canadian food and beverage sector.

The current global recession has had a significant impact in Canada, particularly in the goods-oriented sectors. Nevertheless, Canada fared better than many countries through the crisis. Canada's economic recovery started in the third quarter of 2009. At the same time, the weakness of the recovery in the U.S. economy and the persistent strength of the Canadian dollar have exerted a drag on Canada's growth. While their counterparts in the EU and in the U.S. struggled to remain profitable, Canadian dairy producers were insulated from a sharp and rapid decline in world dairy prices because of Canada's supply management system. Canada remains actively engaged in the World Trade Organization (WTO) negotiations. Canada is also active on regional and bilateral trade negotiations with discussions under the Canada-EU free trade agreement (CETA).

Price trends – retail level

At the retail level, average prices of fluid milk (4L partly-skimmed) and cream (half & half) increased 3.4% and 1.1%, respectively, while the average price for cheddar type cheese increased slightly (2.2%) and yoghurt prices increased 2.4%.

Consumption trends

Two percent milk is by far the most consumed and Canadians continue to shift away from full-fat and toward semi-skimmed and fat-free milk due to dietary concerns. The economic downturn has had only a limited impact on volume sales of fresh white milk. However, many higher value products, such as calcium enriched and omega-3 enhanced milk, have been adversely affected by the recession, with sales slowing down and even declining in 2009. Growth continues in the specialty cheese categories. The yoghurt market in Canada remains strong. The yoghurt category is almost exclusively occupied by branded products. In recent years brand image has become more important than price.

Source: Agriculture & Agri-Food Canada (Dairy Section) (www.dairyinfo.gc.ca).

UNITED STATES OF AMERICA

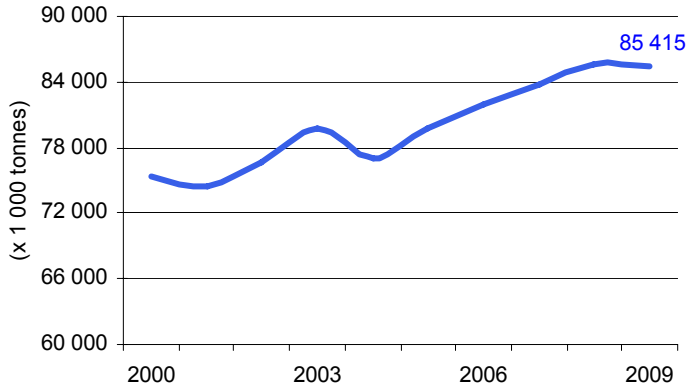
Dairy farming

Cow milk production (x 1 000 tonnes)	85 874
% of worldwide milk production	14.6%
% cow milk deliveries	99%
Number of dairy cows (x 1 000 head)	9 201

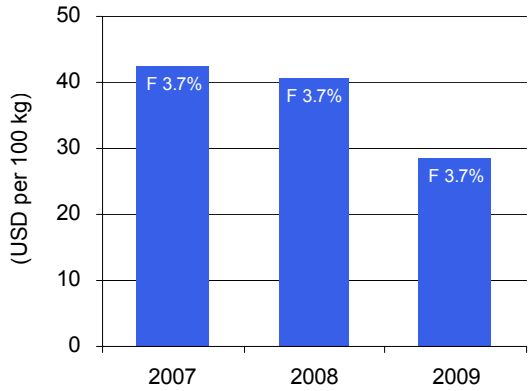
Main processors

Dean Foods	www.deanfoods.com
Dairy F. of America	www.dfamilk.com
Kraft Foods	www.kraftfoodscompany.com
Land O'Lakes, Inc.	www.landolakesinc.com
Schreiber Foods	www.schreiberfoods.com

Cow milk deliveries



Cow milk prices (F = fat%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	25 168	101	1	185	38	99
Fermented products (A)	2 525	105	7	93	7	118
Cream (B)	1 116	100	9	148	13	264
Butter	712	95	9	138	22	28
Cheese	4 585	102	130	96	106	83
WMP	27	118	22	113	23	57
SMP	778	91	0	8	249	64

(A) Production of milk drinks and sour cream included. (B) Production: year 2008.

Consumption (kg per capita)

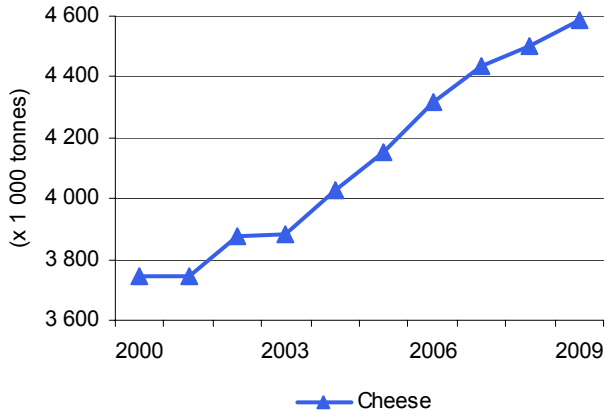
Milk: 81.9 kg

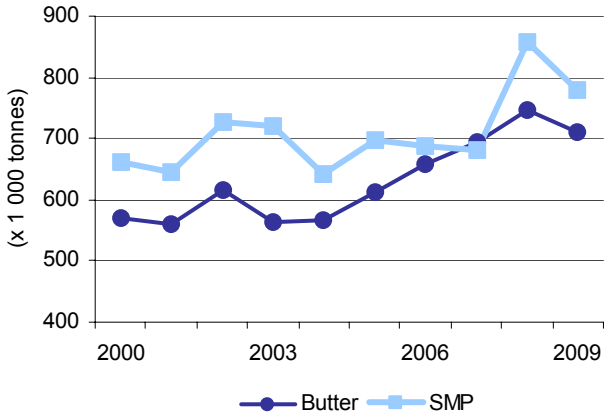
Butter: 2.3 kg

Cheese: 14.8 kg

Population: 307.2 mln.

Production





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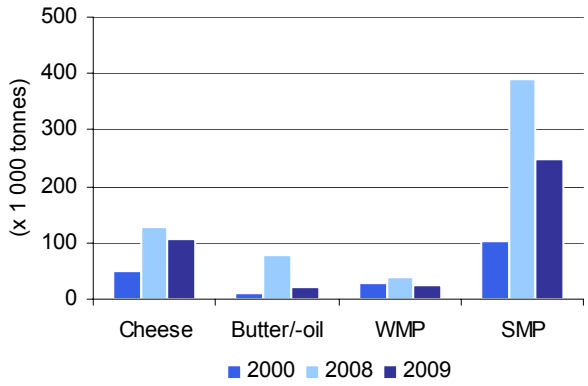

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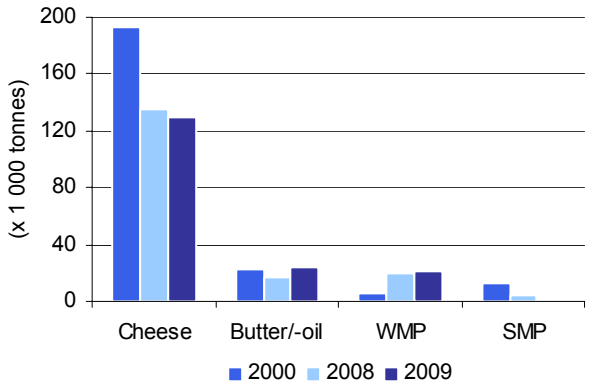


Key developments

Dairy farmers in the United States suffered their worst ever year financially in 2009. Very low milk prices that year resulted from a loss of export sales following a buildup of milk production over the two previous years in response to strong export demand. In addition, feed costs remained high in 2009, although at somewhat lower levels than the previous year. U.S. dairy farmers' total cash receipts from milk delivered to dairies was US$ 24.3 billion, compared with US$ 34.8 billion in 2008 and US$ 35.5 billion in 2007. The voluntary Cooperatives Working Together (CWT) program removed about 250 000 cows in 2009, but additional, market-driven culling of excess dairy cows has not yet been sufficient to fully restore market balance. Milk prices recovered partially in the last part of 2009, but have not yet returned to profitable levels.

Regional milk production trends have been mostly constant over the past several years. Milk production in the West and Southwestern U.S. has generally continued to grow, but dropped in 2009. Production has held basically steady in the Northeast but continues to decline in the Southeast. After many years of slow decline, milk production has been growing in the Midwest over the past several years. The region, traditionally dominated by small dairy farms, has seen growth in family dairy farms milking 500 to 1 000 cows, as well as a rise in very large farms with several thousand cows, which had previously been seen almost entirely in the West.

The members of the National Milk Producers Federation have approved in concept a change in federal dairy policy which shifts emphasis from price supports to direct payments, coupled with temporary limits on the milk volumes on which producers would be paid, when the margin of milk price over feed costs falls below certain target levels.

Source: National Milk Producers Federation (www.nmpf.org).

BELARUS

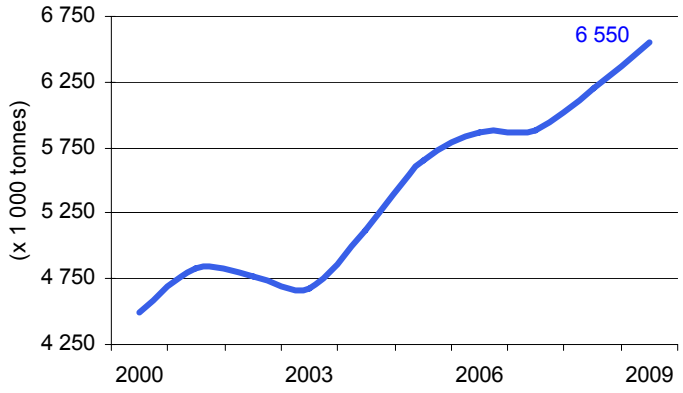
Dairy farming

Cow milk production (x 1 000 tonnes)	6 550
% of worldwide milk production	1.1%
% cow milk deliveries	78%
Number of dairy cows (x 1 000 head)	1 445

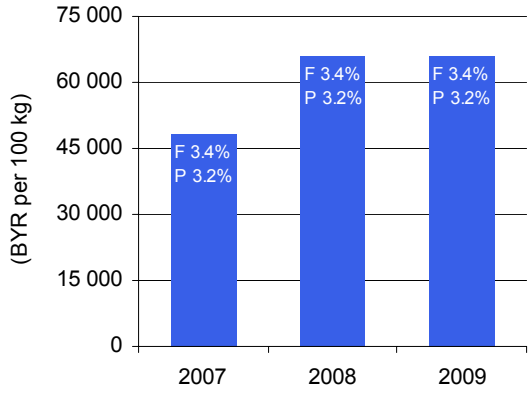
Main processors

Savushkin product	-
Slutski SK	-
Babushkina Krynka	www.babushkina.by
Rumjancevskoe	-
Beresovski SK	-

Cow milk production



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk products (A)	1 308	98	22	103	129	141
Butter and butteroil (B)	116	118	0	35	86	139
Cheese	134	105	7	100	121	119
WMP	41	100	1	126	33	121
SMP	55	110	0	46	80	130

(A) Liquid milk, fermented products, milk drinks and cream. (B) Production of butter only.

Consumption (kg per capita)

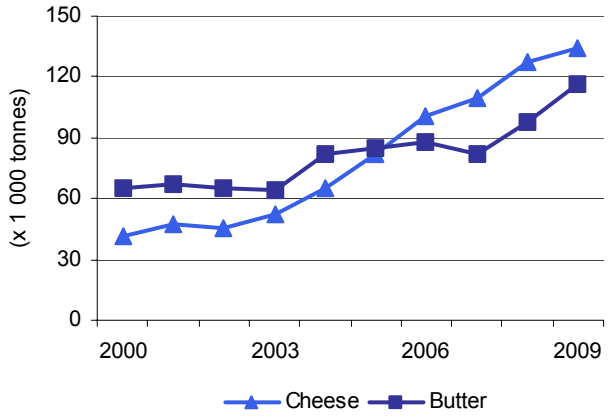
Milk: -

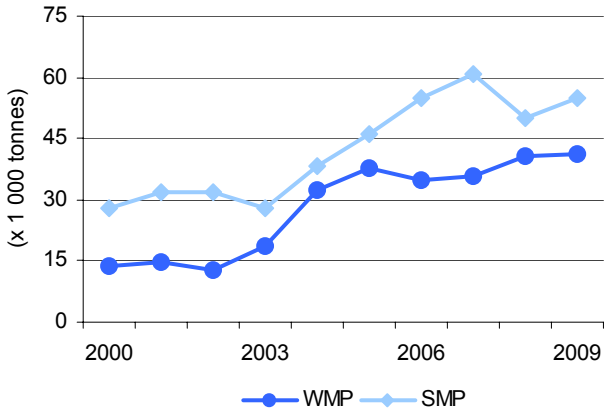
Butter: -

Cheese: -

Population: 9.5 mln.

Production





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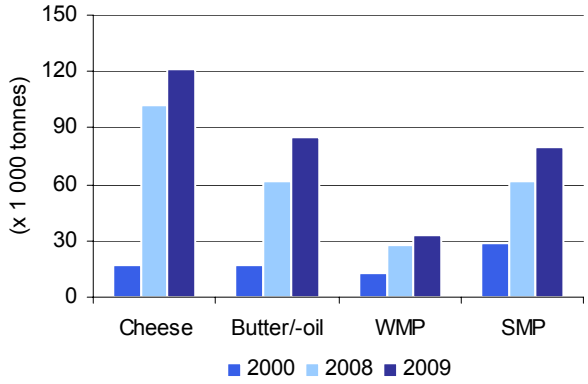

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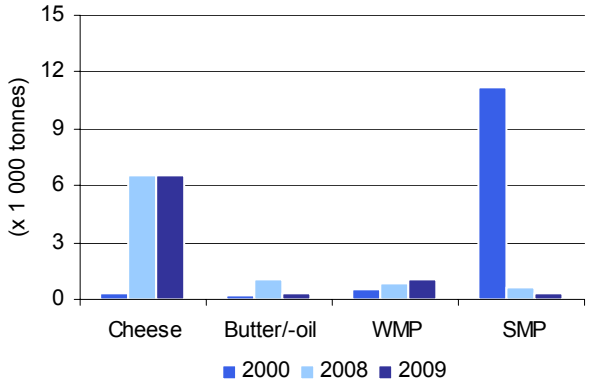


Source: IFCN Dairy Research Centre (www.ifcndairy.org), Comtrade, FAO, national statistics.

CROATIA

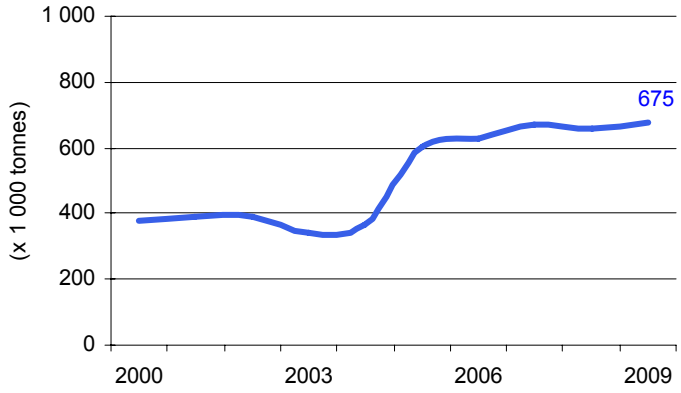
Dairy farming

Cow milk production (x 1 000 tonnes)	818
% of worldwide milk production	0.1%
% cow milk deliveries	83%
Number of dairy cows (x 1 000 head)	212

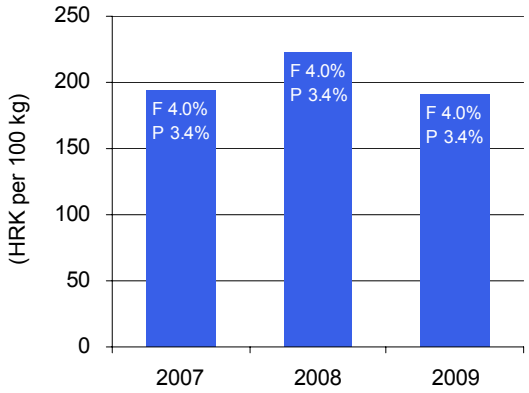
Main processors

Dukat	www.dukat.hr
Vindija	www.vindija.hr
Meggle	www.meggle-hrvatska.hr
Ledo	www.ledo.hr
Zdenka	www.zdenka.hr

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	322	94	39	86	35	135
Fermented products	82	101	5	123	18	101
Cream	27	102	1	57	1	117
Butter and butteroil	6	113	1	86	1	105
Cheese	29	100	11	106	2	89
WMP	1	538	2	20	0	>1 000
SMP	1	165	2	79	0	2

Consumption (kg per capita)

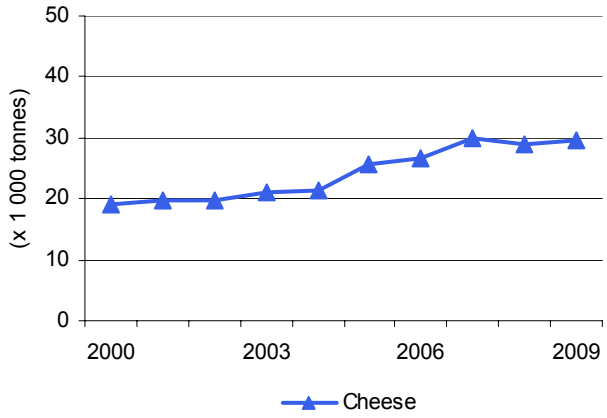
Milk: 72.1 kg

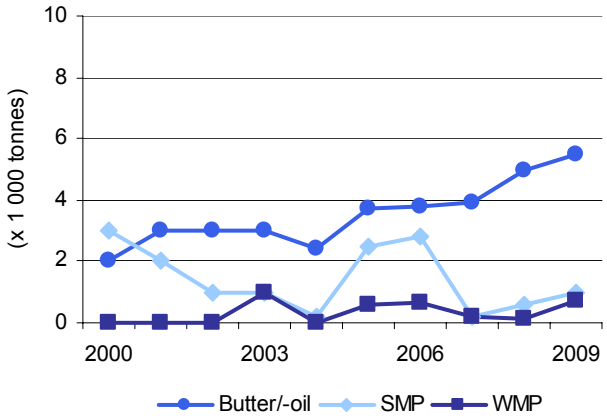
Butter: 1.1 kg

Cheese: 6.9 kg

Population: 4.5 mln.

Production





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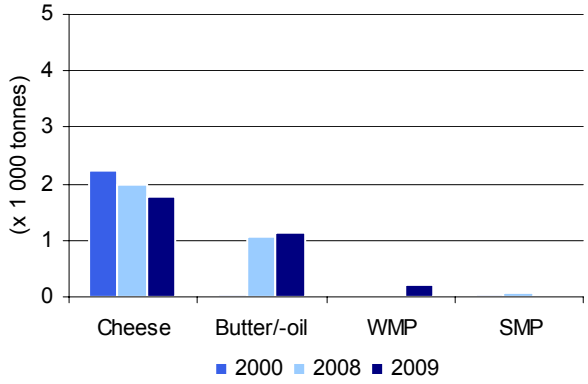

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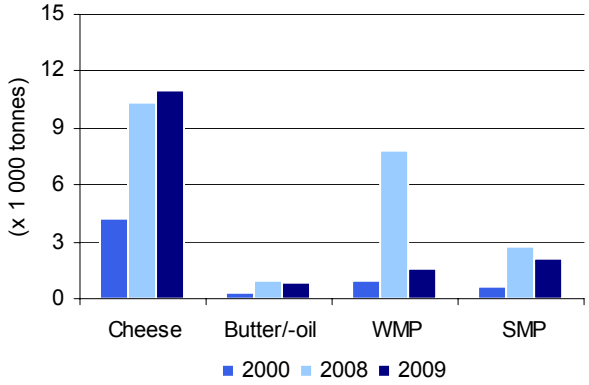


Key developments

Economic situation

As Croatia is the country with the highest price for fresh raw milk compared to prices in the countries of the region and the EU, the Croatian dairy industry has been confronted with an extreme decline in competitiveness and an unfavourable market situation. Hence, the manufacturing industry is trying to build the price for fresh raw milk on the basis of the prices in neighbouring countries and the EU. In the price calculation they use a market model of quarterly average prices in 25 countries of the EU in order to smooth over any possible sudden fluctuations in milk prices. With that kind of correction in milk prices, they also made a correction in prices for finished products.

Farm and dairy policy

Farm policy measures encourage clustering of farms and an increase in herd size and average milk production in order to reduce production costs and also increase product quality. The goal is to encourage better use of natural resources, like pastures, but also the use of agricultural machinery and other equipment on farms.

Price trends

The year 2009 was unfavourable for producers and processors. Producers suffered a decrease in the price paid for milk while their costs increased.

Consumption trends

According to preliminary figures, per capita consumption of milk and dairy products decreased slightly in 2009 compared to 2008. Consumption of butter increased, while consumption of liquid milk (5%), fermented products (3.2%) and cheese (4%) decreased.

Source: Agronomski fakultet Sveučilišta u Zagrebu (www.agr.hr), Comtrade, Eurostat.

ICELAND

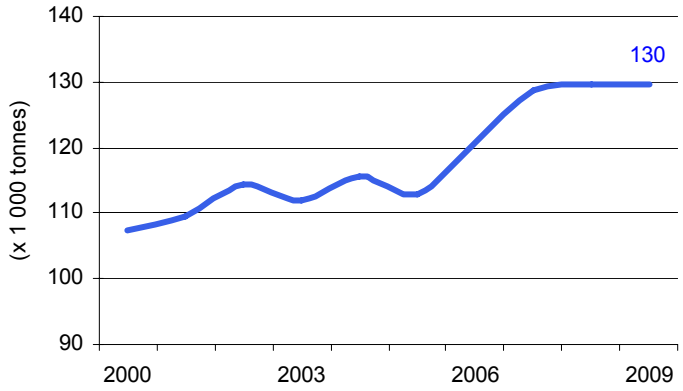
Dairy farming

Cow milk production (x 1 000 tonnes)	136
% of worldwide milk production	0.0%
% cow milk deliveries	95%
Number of dairy cows (x 1 000 head)	26

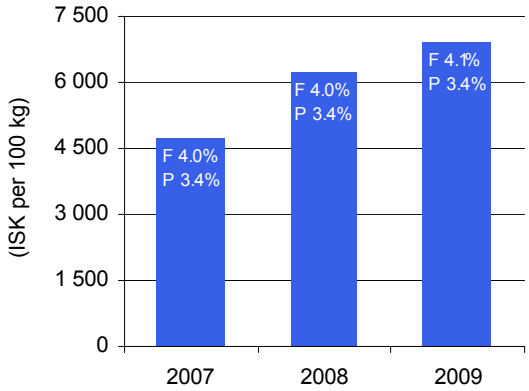
Main processors

Mjólkursamsalan ehf	www.ms.is
Mjólkursamlag KS	www.ks.is
Mjólka ehf	www.mjolka.is

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk (A)	38	104	0	100	0	100
Fermented products (A)	12	102	0	100	0	100
Cream (A)	2	100	0	100	0	100
Butter	2	105	0	-	1	75
Cheese	8	100	0	100	0	100
WMP	0	100	0	-	0	-
SMP	1	100	0	-	1	56

(A) Import and export data: year 2008.

Consumption (kg per capita)

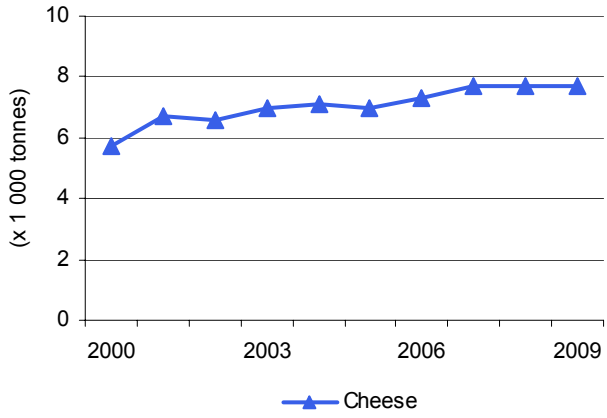
Milk: 120.3 kg

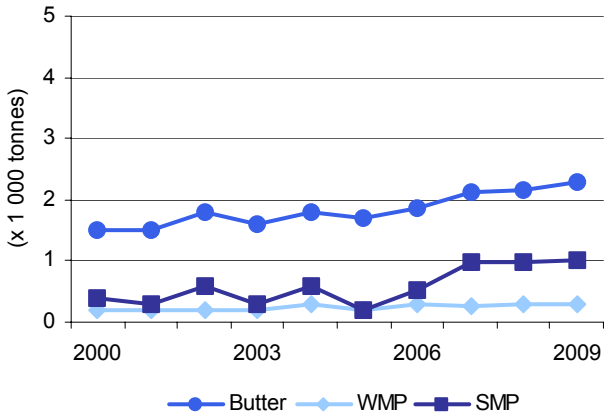
Butter: 5.0 kg

Cheese: 25.4 kg

Population: 0.3 mln.

Production





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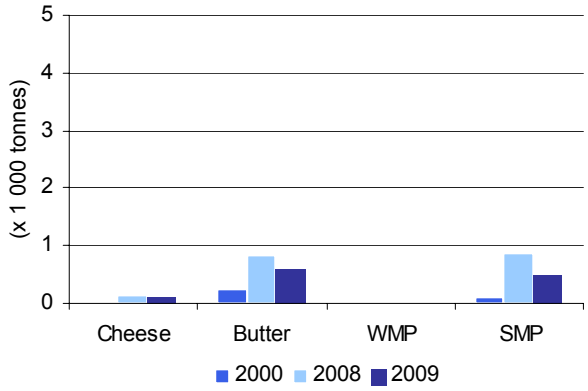
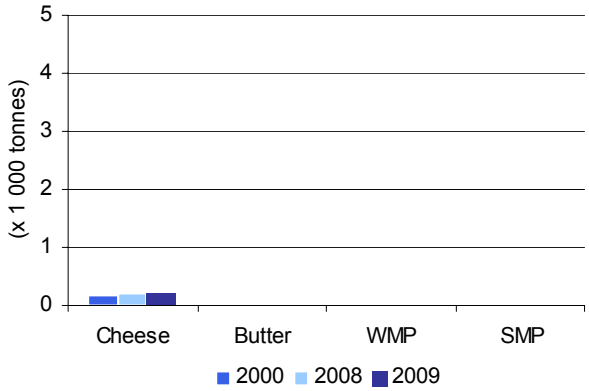


Import



Source: Icelandic Dairies Association (www.sam.is).

NORWAY

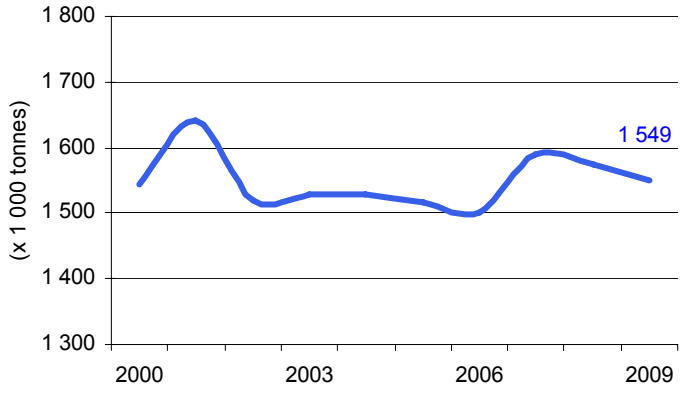
Dairy farming

Cow milk production (x 1 000 tonnes)	1 589
% of worldwide milk production	0.3%
% cow milk deliveries	97%
Number of dairy cows (x 1 000 head)	249

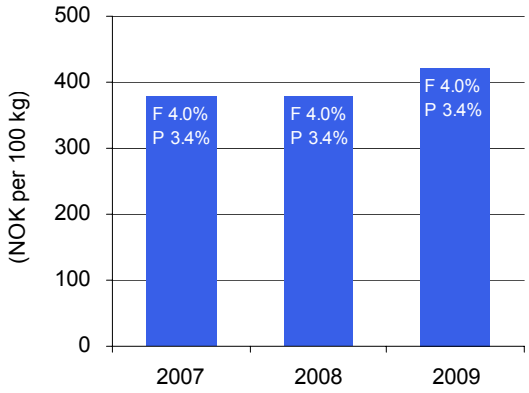
Main processors

Tine SA	www.tine.no
Synnøve Finden ASA	www.synnove.no
Q-meieriene AS	www.q-meieriene.no
Normilk AS	www.normilk.no

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	448	101	0	-	0	-
Fermented products	127	102	1	106	0	-
Cream	25	96	0	-	0	119
Butter and butteroil	11	107	0	80	3	106
Cheese	86	101	9	105	12	96
WMP	1	100	0	-	0	-
SMP	7	100	0	-	0	-

Consumption (kg per capita)

Milk: 92.4 kg

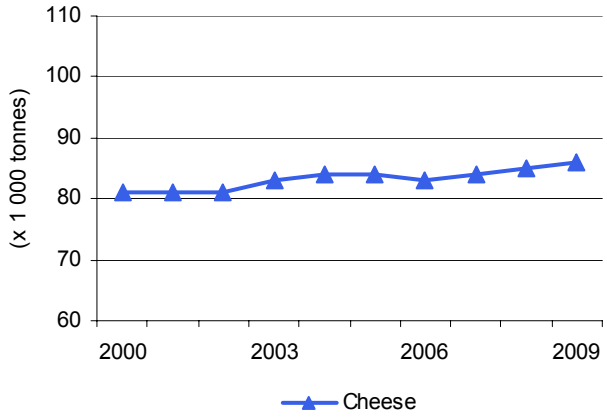
Butter: 3.9 kg (A)

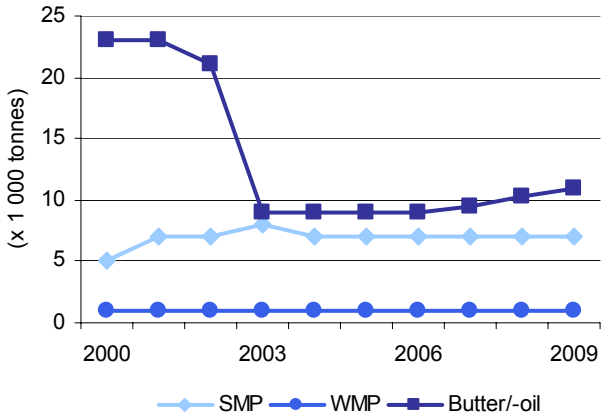
Cheese: 15.3 kg

Population: 4.9 mln.

(A) Including blends.

Production





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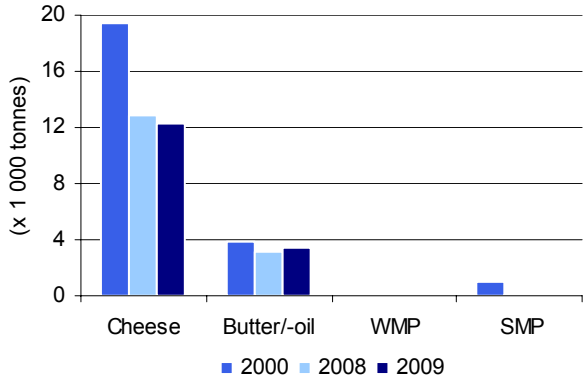

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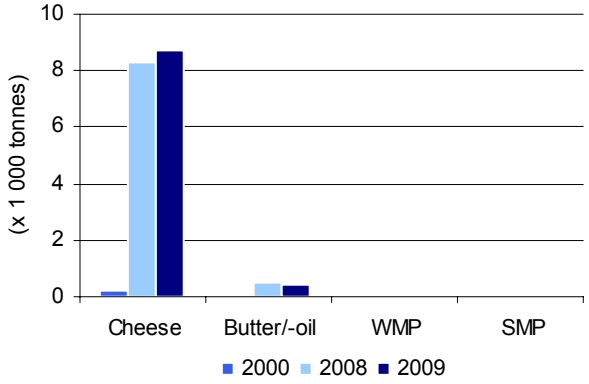


Key developments

General economic situation
The economic situation in Norway is still in excellent shape. Unemployment came to 3.5%. In May/June the negotiations for a general new salary level ended in an increase of 3.4%. The average level of wages is the highest in Europe.

Agriculture political topics
The Parliament will have a Governmental message on the table early 2011, with a proposal for a resolution for a new agriculture policy. The mandate still demands production all over the country, but the framework is based on the WTO-text (DOHA) from December 2008. Another group will look into the forces of the different participants (producer-industry-retailer) in the value-chain of food.

Dairy policy
Consensus has been reached between EU and Norway on a new trade agreement for cheese.

Structural change
The number of milk producers is 15 000, and declines 5% every year. TINE SA will close down 7 plants and build 1 new, in the next two years.

Price trends
Once a year, the farmers negotiate with the Government about the milk price and different kinds of support. The milk price was increased by 13 øre/litre. Despite one of the highest milk prices in the world, the income of a milk producer is modest, compared to the average level in Norway.

Consumption trends
The consumption of drinking milk is stable. Yoghurt increased by 5%, due mainly to growing import. Cream and sour cream also show positive growth. Cheese import expanded 3% in 2009. Despite the challenging market situation in USA, cheese export from Norway increased in 2010 compared to 2009.

Source: Tine BA (www.tine.no), Comtrade, Eurostat.

RUSSIA

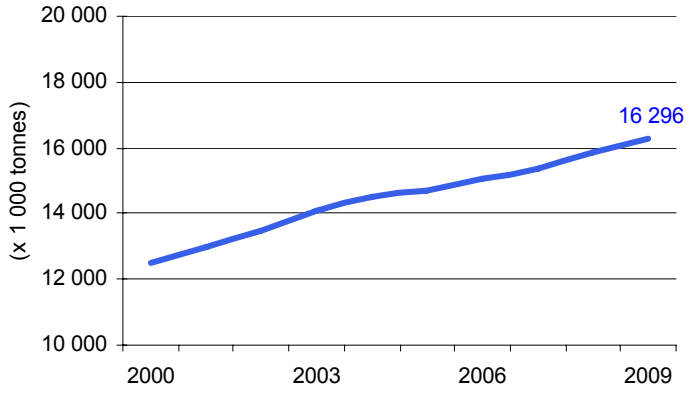
Dairy farming

Cow milk production (x 1 000 tonnes)	32 592
% of worldwide milk production	5.5%
% cow milk deliveries	50%
Number of dairy cows (x 1 000 head)	9 000

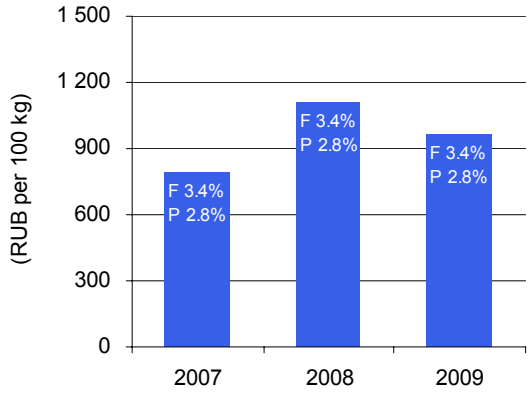
Main processors

Unimilk	www.unimilk.ru
Wimm Bill Dann	www.wbd.ru
Danone	www.danone.ru
Voronezhskiy Dairy Plant	www.molvest.ru
Ostankinskiy Dairy Plant (MilkiLand, Ukraine)	www.omk-moloko.ru

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	4 262	101	17	24	22	180
Fermented products	2 160	100	35	77	67	82
Cream	69	99	9	114	1	77
Butter and butteroil	232	91	125	89	4	68
Cheese	436	101	353	101	24	92
WMP	50	60	20	71	2	84
SMP	108	82	52	83	0	80

Consumption (kg per capita)

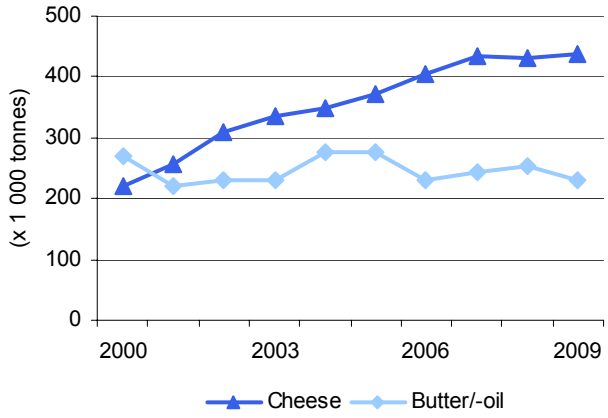
Milk: 70.0 kg

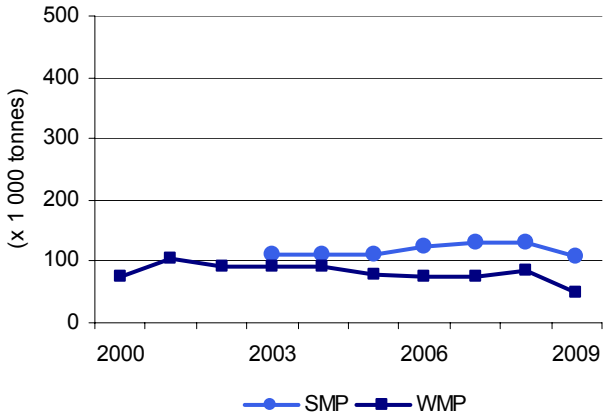
Butter: 2.5 kg

Cheese: 5.6 kg

Population: 141.8 mln.

Production





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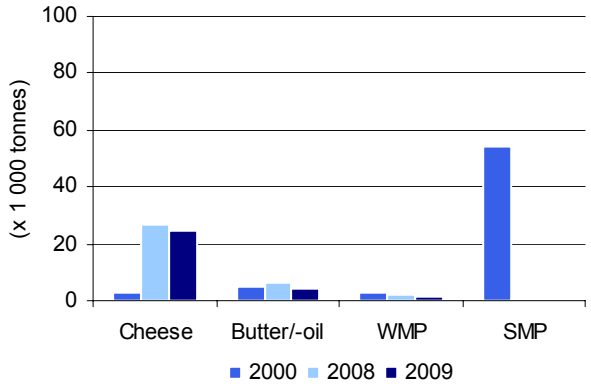

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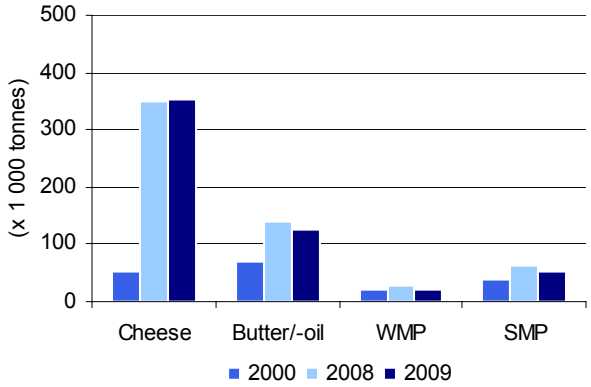


Source: Russian Dairy Union (www.dairyunion.ru), Comtrade.

SWITZERLAND

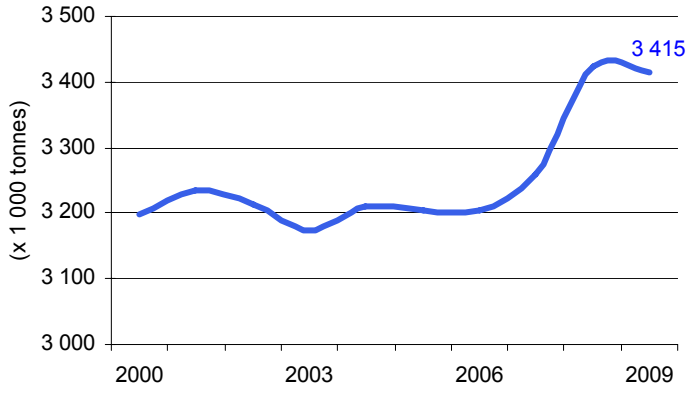
Dairy farming

Cow milk production (x 1 000 tonnes)	4 114
% of worldwide milk production	0.7%
% cow milk deliveries	83%
Number of dairy cows (x 1 000 head)	601

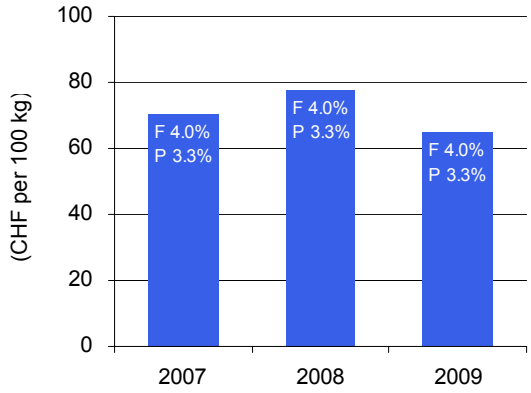
Main processors

Nestlé Ltd.	www.nestle.ch
Emmi AG	www.emmi.ch
Cremo SA	www.cremo.ch
Hochdorf AG	www.hochdorf.com
Elsa SA	www.elsa.ch

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	492	101	23	102	0	98
Fermented products	269	98	11	119	8	85
Cream	68	101	2	144	4	189
Butter and butteroil	48	105	0	20	4	>1 000
Cheese	178	99	44	107	62	102
WMP	20	90	0	177	3	124
SMP	37	134	3	110	25	406

Consumption (kg per capita)

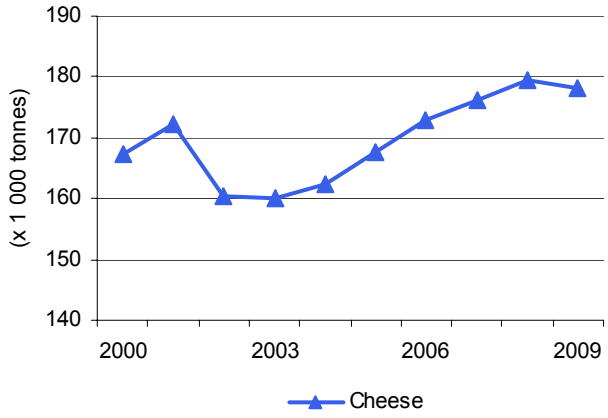
Milk: 83.7 kg

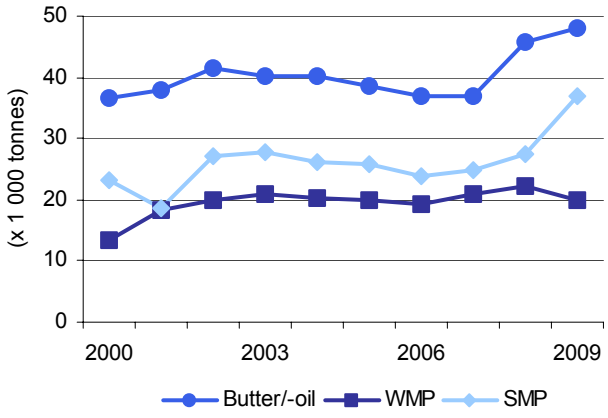
Butter: 5.4 kg

Cheese: 21.4 kg

Population: 7.8 mln.

Production





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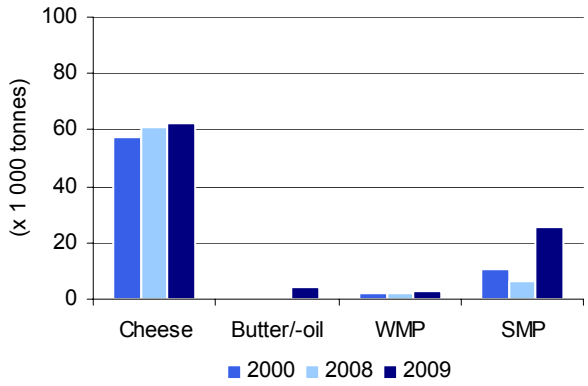

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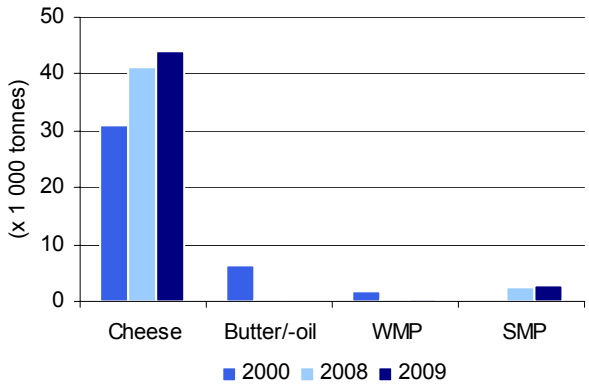


Key developments

For three years the Swiss Dairy Economy has been preparing the process of phasing out the milk quota after 33 years of restricted production. The quota system was to end on 1st May 2009. After a long period of discussions the “Swiss Milk Interprofession” has been founded in the end of June 2009 as a private (non public) platform of demand and supply of (Swiss) milk and to define a common (producer, processor, retailer) strategy on the milk market. Different rules have been established (quantity control, recommended price index, quality issues, transparency, export of surplus, information). The partners of the vertical business line are still working in this direction. The (new) competition between the farmers and the influence of the market in 2007 and 2008 have created an overproduction of milk, butter and SMP in 2009. Influenced by the EU price, in 2009 the milk price in Switzerland dropped about 17% to a level, lower than in 2007.

On a global view the economic situation in Switzerland is better than in the others countries of Europe (financial crises, public finance, consumption etc.). The total per capita consumption of milk (included fluid milk, cheese, butter, cream, yoghurt, SMP, WMP etc.) is about 380 kg milk equivalents. The consumption of cheese is still increasing. On the retail-level the prices of milk and milk products have moved in the other direction (+7.3 %) than on the farmer-level.

The Swiss government is negotiating a free trade agreement for the (total) agricultural sector with the EU. The result of this negotiating process is open. In 2012/13 the Swiss Parliament will decide, which be the direction for the future for Swiss agriculture. Everything depends on the development of the WTO-negotiations.

Source: Swiss Milk Commission/Swiss National Committee of IDF (www.swissmilk.ch).

UKRAINE

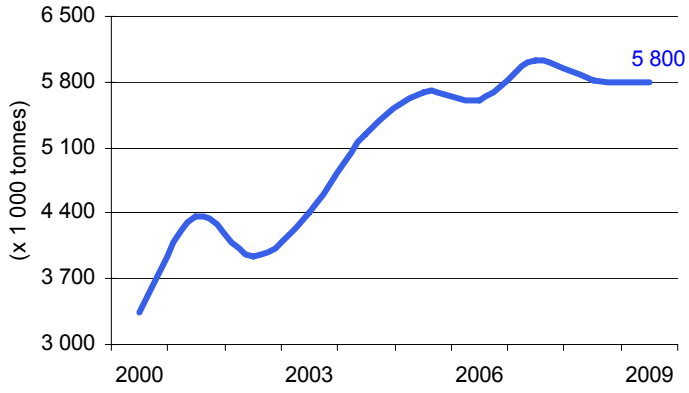
Dairy farming

Cow milk production (x 1 000 tonnes)	11 610
% of worldwide milk production	2.0%
% cow milk deliveries	50%
Number of dairy cows (x 1 000 head)	2 891

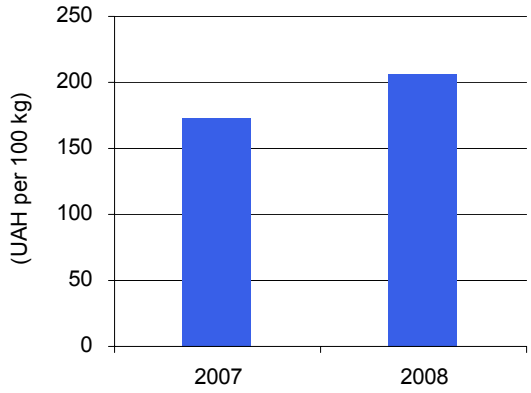
Main processors

Wimm-Bill-Dann	www.wbd.com
Danone-Ukraine	www.danone.com
Lactalis Ukraine	www.lactalis.com.ua
UniMilk Ukraine	www.unimilk.ru
Milkiland-Ukraine	www.milkiland.com

Cow milk deliveries



Cow milk prices (A)



(A) Real fat and protein contents.

Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	758	96	0	49	18	111
Fermented products	492	93	7	29	3	224
Cream	16	87	1	100	0	109
Butter and butteroil	75	88	16	582	1	15
Cheese	312	95	10	74	77	99
Milk powder	67	70	8	>1 000	32	49
-WMP	-	-	0	-	5	22
-SMP	-	-	8	>1 000	27	62

Consumption (kg per capita)

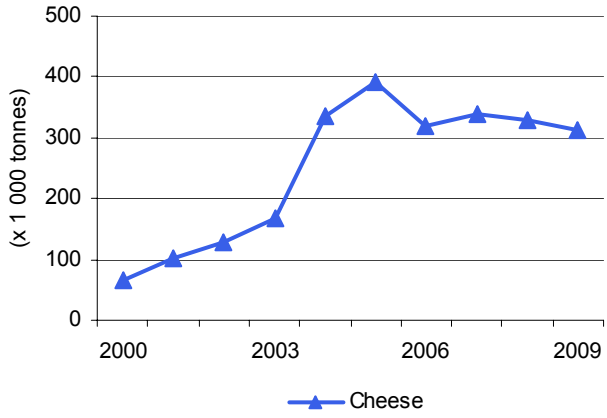
Milk: 76.6 kg

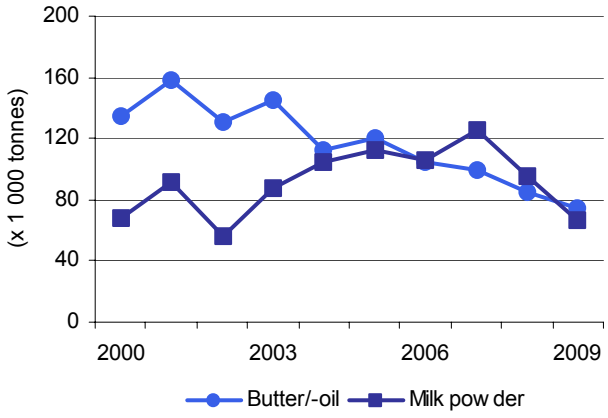
Butter: 1.9 kg

Cheese: 4.0 kg

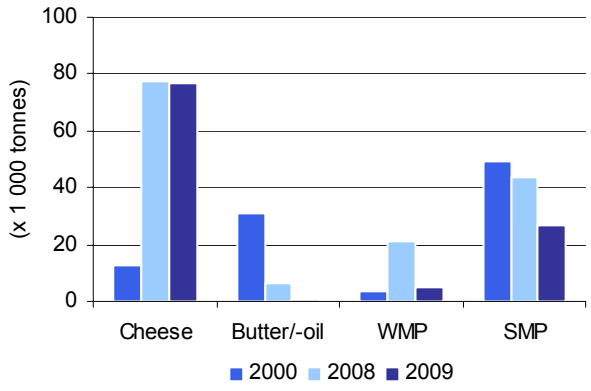
Population: 46.1 mln.

Production





Export



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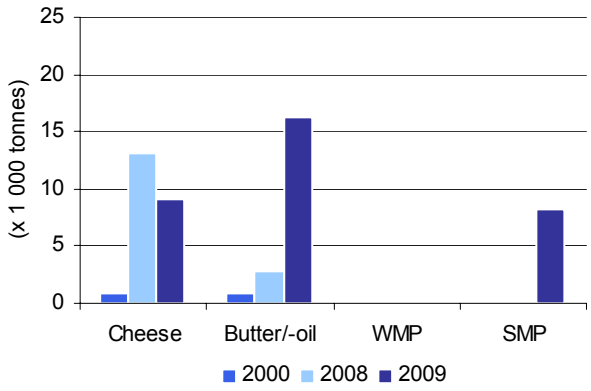


Key developments

On April 27, 2010, the Verkhovna Rada passed the 2010 national budget in which the parliament stipulated, for the first time ever, that state subsidies to producers of milk and meat would be paid per head instead of being paid according to the previous scheme. With the creation of a special fund in the national budget, the VAT accumulated by the processing companies will not be paid as before as an additional payment per liter of supplied milk and kilogram of meat. Instead, the processing companies will have to transfer the money to the special fund and the Cabinet of Ministers of Ukraine will distribute the funds among cow owners for each head of cow.

Producers of milk and meat have not presented their position concerning the new system of subsidizing. In the meantime, the producers of consumer-ready products believe the new scheme does not stimulate farmers to boost production and enhance the quality of milk and meat.

The previous scheme of subsidizing stimulated growth in the production of milk, enhancement of the marketable value of milk, while the new system stimulates only "presence of heads" on farms. If there is no stimulus to boost the production of milk and enhance its quality, the new system can lead to the reduction in milk exports from the country. The transition to the new subsidy system will only cause a surge in prices of consumer-ready milk and meat products. In this connection, prices for milk and meat products may climb in the near future by up to 20%.

Source: DerzhZovnishInform (www.ukrdzi.com).

ARGENTINA

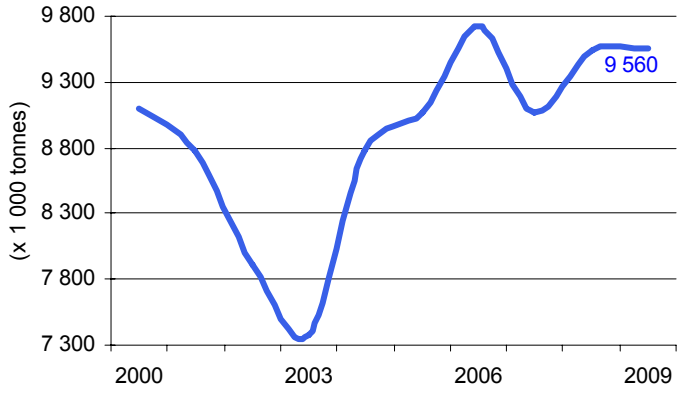
Dairy farming

Cow milk production (x 1 000 tonnes)	10 340
% of worldwide milk production	1.8%
% cow milk deliveries	92%
Number of dairy cows (x 1 000 head)	2 100

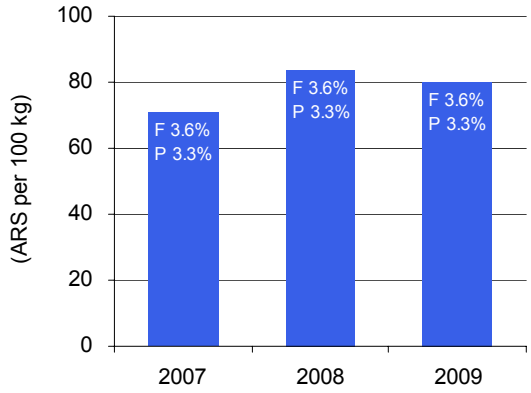
Main processors

Mastellone Hnos SA	www.laserenisima.com.ar
SanCor Coop. Unidas Ltda	www.sancor.com.ar
Molfino Hnos SA	www.molfino.com.ar
Danone Argentina SA	www.danone.com
Suc. Alfredo Williner SA	www.williner.com.ar

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	1 770	99	0	-	22	96
Fermented products	592	102	1	65	9	80
Cream	44	113	0	-	1	133
Butter and butteroil (A)	49	96	0	-	17	77
Cheese	509	106	3	98	48	131
WMP	235	118	1	73	154	113
SMP	47	188	0	-	13	89

(A) Production of butter only.

Consumption (kg per capita)

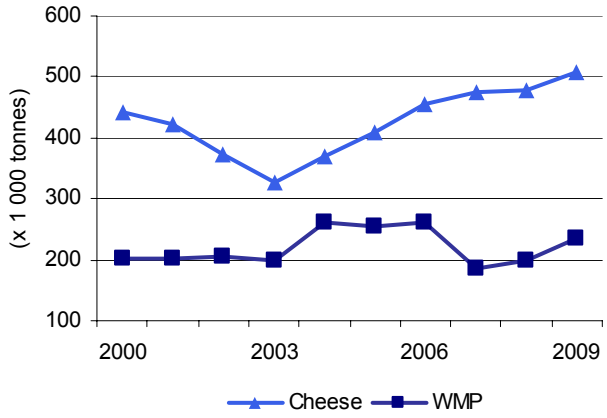
Milk: 42.2 kg

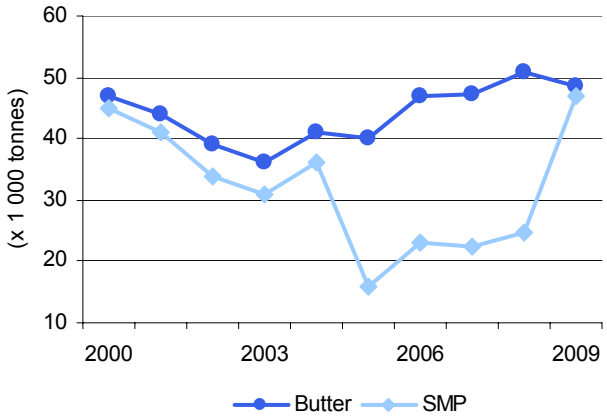
Butter: 1.3 kg

Cheese: 11.3 kg

Population: 40.1 mln.

Production





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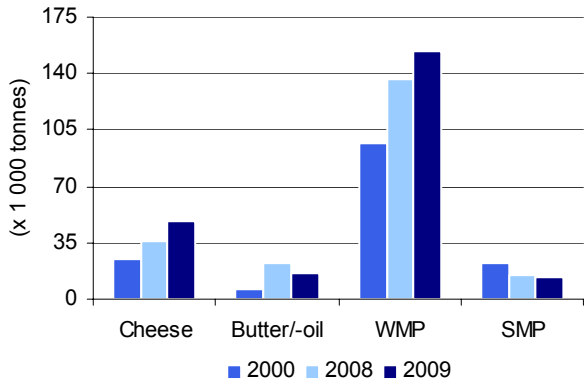

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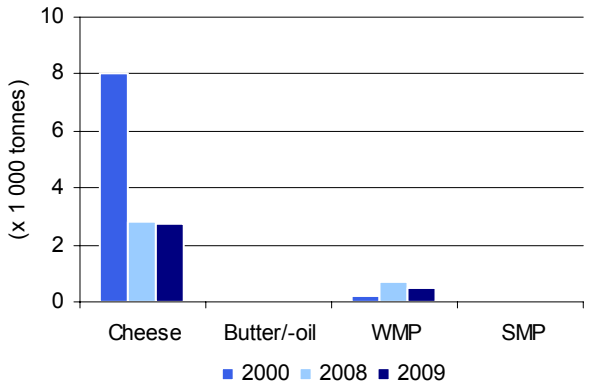


Key developments

Milk Production: After a period of strong growth (6% per year during the 90's) followed by a deep crisis (loss of 25% of production during 2000 to 2004), there has been a moderate recovery, reaching the same level of production in 2009 as that recorded 10 years ago. We expect the same level of production for the year 2010. In the recent years there has been some consolidation process with an increase in the average herd size, while the number of dairy farms decreased at an average rate of about 4.5% per year. Most dairy farms are located in the central region of the country; consequently, dairy competes with crops like soybeans, etc., resulting in a milk production unusually sensitive to any change in their relative profitability.

Milk Processing: Still characterized by a high level of fragmentation, with 4 distinctive groups: a) The 10 biggest companies averaging 1.5 million litres per day processed in multiple dairy products for domestic and export markets (90% of the total dairy exports are made by this group), b) A second group of about 25 to 30 companies with a daily milk intake average of 200 000 litres per day, mostly focused on the domestic markets, c) There are approximately 50 more companies with an average milk intake of fewer than 20 000 litres per day, entirely focused on cheese production and d) Finally there are more than 700 small and micro scale plants which process cheeses on very low scale, and which represent 21% of the total milk production.

Consumption & Trade: Domestic consumption remains strong at 205 litres of Milk Equivalent per person per year. Around 20% to 25% of the total milk production is sold to external markets. However, dairy exports are highly dynamic as a consequence of the volatility of domestic prices, FOB prices and also to the changing governmental export policies.

Source: Centro de la Industria Lechera (www.cil.org.ar), SanCor (www.sancor.com.ar), Comtrade.

BRAZIL

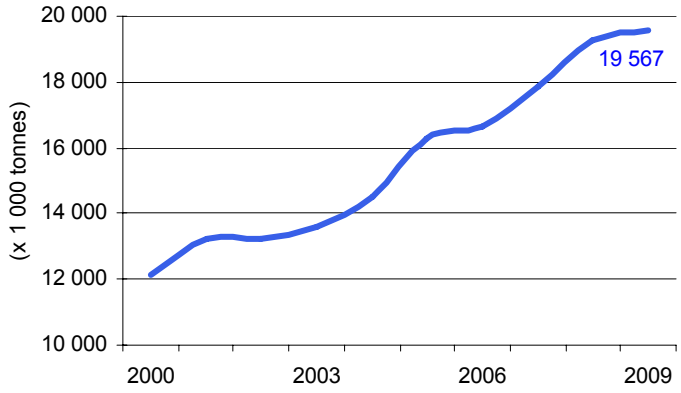
Dairy farming

Cow milk production (x 1 000 tonnes)	27 983
% of worldwide milk production	4.8%
% cow milk deliveries	70%
Number of dairy cows (x 1 000 head)	21 833

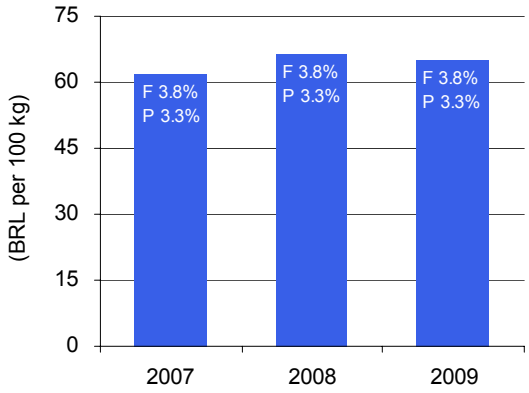
Main processors

DPA/Nestle	www.nestle.com.br
Brasil Foods	www.perdigao.com.br
Bom Gosto	www.bomgosto.ind.br
Itambé	www.itambe.com.br
Parmalat	www.parmalat.com.br

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	10 900	102	10	311	0	122
Fermented products	-	-	3	> 1 000	2	114
Cream	-	-	0	218	6	95
Butter and butteroil	76	90	7	637	2	51
Cheese	614	101	16	350	6	84
WMP	473	83	57	249	13	16
SMP	125	98	11	148	1	238

Consumption (kg per capita)

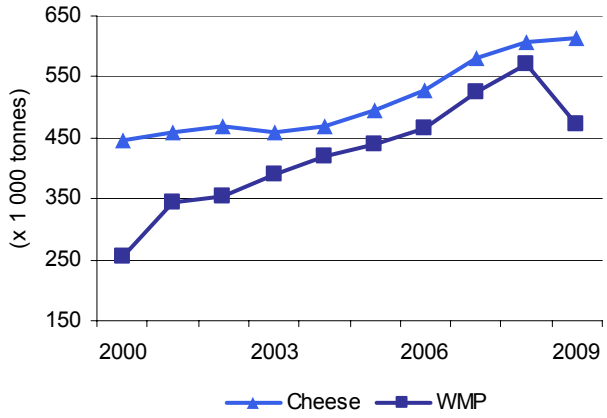
Milk: 56.5 kg

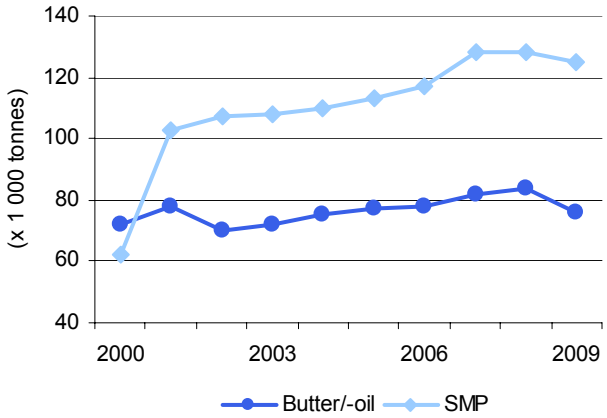
Butter: 0.4 kg

Cheese: 3.2 kg

Population: 193.1 mln

Production





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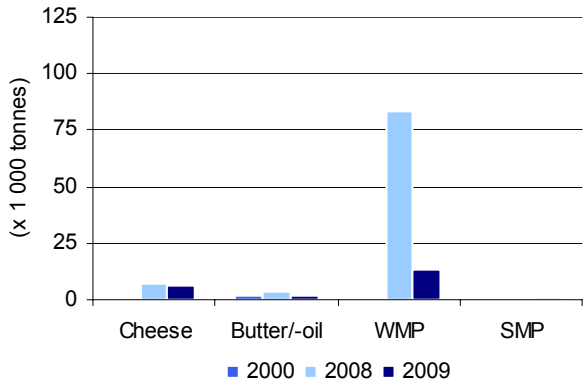
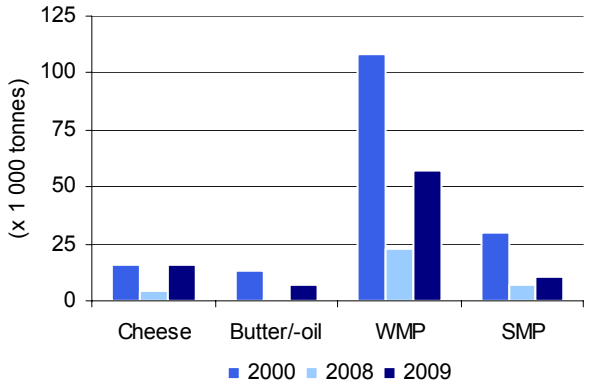


Import



Key developments

Milk is produced in the whole country, but production is concentrated in Southeast and Southern Regions (36% and 31% of the production, respectively). Climatic conditions allow production to adapt to all regions. Milk is produced in a range of farms, from small ones that use little technology and a daily production of less than 10 litres, to large farms with production over 60 000 litres. There are approximately 1.3 million milk producers in Brazil. They are classified as small (less than 50 litres a day; 82% of the total) and are responsible for only 20% of milk production. A second group (51-200 litres a day; 15% of farms) is responsible for 20% of the total production. The remaining farms (3%; above 200 litres a day) account for 60% of the milk produced.

The Brazilian dairy industry has approximately 1 680 plants that are inspected by the Ministry of Agriculture. A similar number is submitted to State or Municipality inspections. The 14 biggest dairies (2008) processed 9.27 billion litres. The five biggest processed 6.1 billion litres (approximately 66%). Some dairy companies increased their share (2009 compared to 2008) by more than 30% of processed milk.

Until 2004 Brazil was an important importer of dairy products. In recent years a change was observed with exports surpassing the imports. This trend is expected to continue. In 2002 the Ministry of Agriculture established new regulations for milk quality. Somatic cell counts (SCC) and total bacterial counts (TBC) parameters were proposed, as well as a more strict control for antibiotic residues and the need to refrigerate the milk on the farm, among other measures. In 2011 the parameters for SCC and TBC will be the same as in the UE in the Southeast, Southern and Central-Western Regions. This may help allow Brazil to gain new markets.

Source: Embrapa Gado de Leite (www.cnpgl.embrapa.br), Comtrade, IBGE.

CHILE

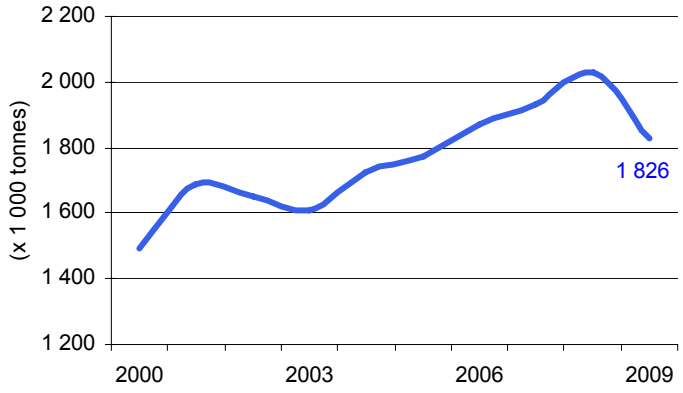
Dairy farming

Cow milk production (x 1 000 tonnes)	2 350
% of worldwide milk production	0.4%
% cow milk deliveries	78%
Number of dairy cows (x 1 000 head)	1 000

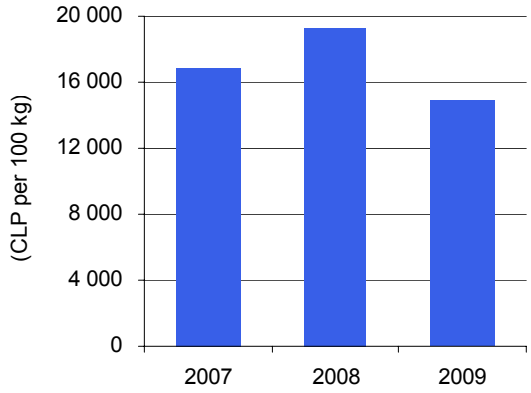
Main processors

Soprole	www.soprole.cl
Colun	www.colun.cl
Nestlé	www.nestle.cl
Watt's	www.wattschile.com
Mulpulmo	www.mulpulmo.cl

Cow milk deliveries



Cow milk prices (A)



(A) Real fat and protein contents.

Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	352	106	0	0	2	> 1 000
Fermented products	209	106	3	47	0	26
Cream	27	93	0	0	1	146
Butter and butteroil	17	100	1	568	1	50
Cheese	65	100	9	130	9	75
WMP	58	68	2	415	14	96
SMP	15	83	5	64	0	4

Consumption (kg per capita)

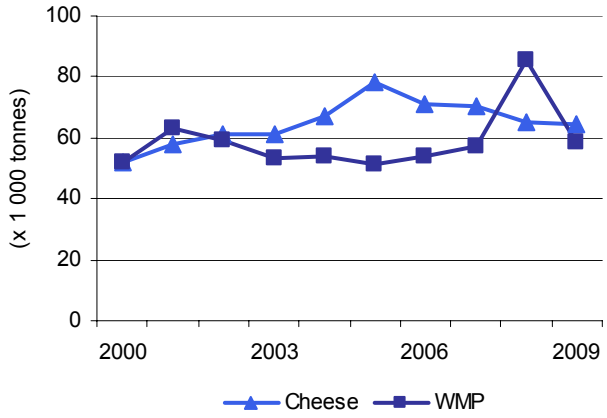
Milk: -

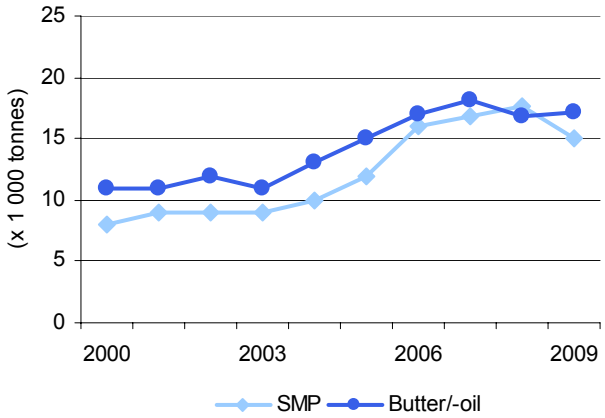
Butter: -

Cheese: -

Population: 16.9 mln.

Production





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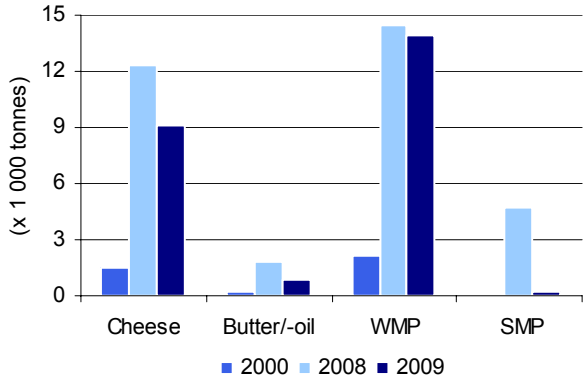

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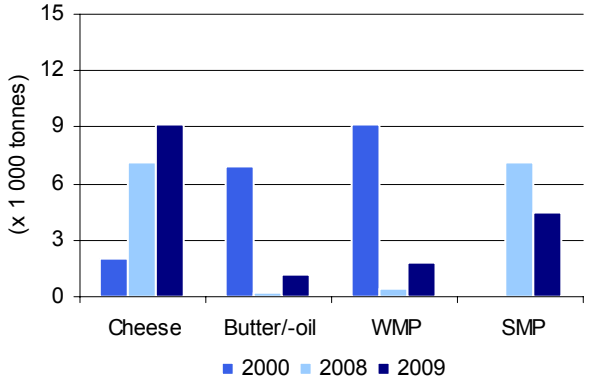


Source: ODEPA, Comtrade, INE, FAO.

URUGUAY

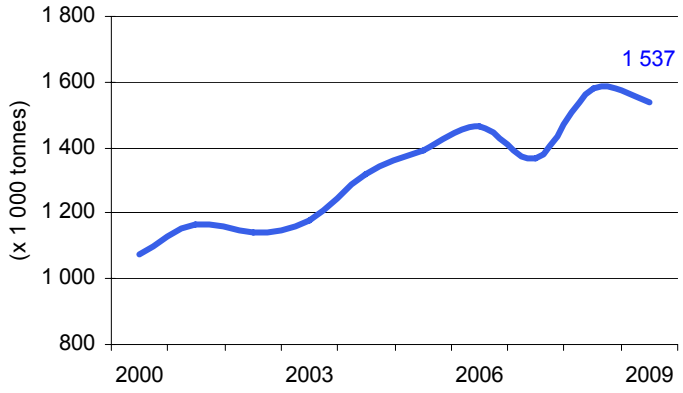
Dairy farming

Cow milk production (x 1 000 tonnes)	1 803
% of worldwide milk production	0.3%
% cow milk deliveries	85%
Number of dairy cows (x 1 000 head)	673

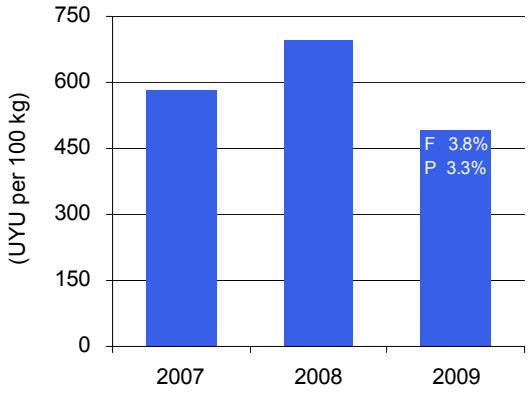
Main processors

Conaprole	www.conaprole.com.uy
Indulacsa	-
Ecolat S.A.	www.ecolat.com
Calcar	www.calcar.com.uy
Pili S.A.	www.pili.com.uy

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	248	101	0	-	9	148
Fermented products (A)	30	110	6	114	12	103
Cream (B)	6	100	0	-	0	>1 000
Butter and butteroil	16	73	0	46	19	210
Cheese	53	103	1	81	37	137
WMP (B)	44	100	0	-	56	160
SMP (B)	19	100	0	>1 000	20	209

(A) Production of yogurt only. (B) Production data: year 2008.

Consumption (kg per capita)

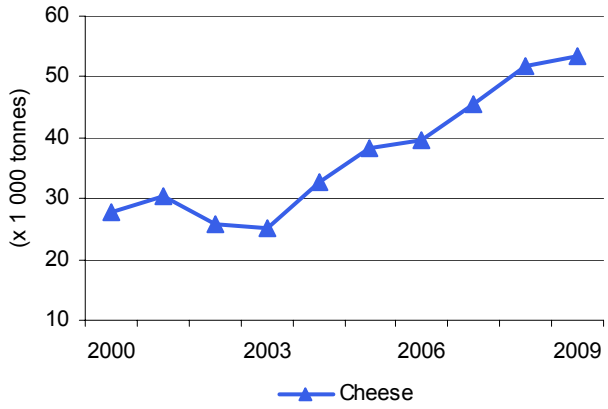
Milk: 74.2 kg

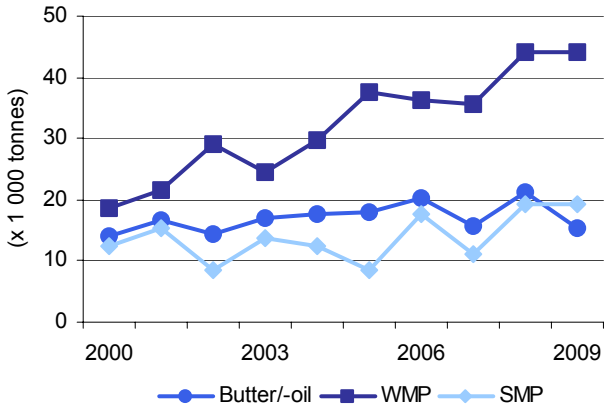
Butter: 1.5 kg

Cheese: 6.0 kg

Population: 3.3 mln.

Production





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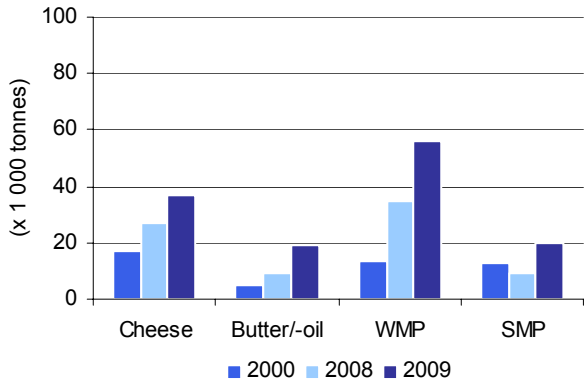

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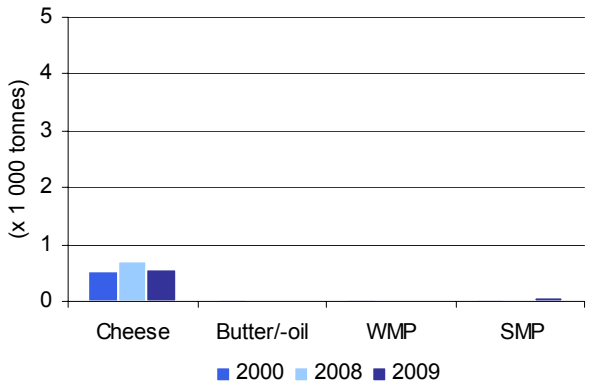


Key developments

The dairy sector in Uruguay is clearly export oriented. 70% of production is sold on the international markets. The major markets in the past year were Brazil (27%), Mexico (17%), Venezuela (11%), Cuba (6%) and South Korea (5%). The most important exported products are milk powder, skimmed milk powder, cheese and butter.

Milk production increased 4% per year on average for 20 years. The production cost of milk is one of the lowest in the world (US$ 0.20 per litre).

Consumption of milk equivalent is the highest in Latin America with 228 litres/capita/year.

Regarding policies for the sector, the most important development in the past years was the creation of the National Milk Institute (INALE). Created by law in 2007, the institution began its work in late 2008. INALE brings together representatives of the institutions of the sector (industry, milk producers, government). The main task of INALE is to advise the central government in policies to Uruguayan dairy. At this moment INALE is working on the strategic plan for dairy development in Uruguay over the next five years.

The sector has suffered major losses in 2009 due to low prices and the worst drought in 40 years in Uruguay. Currently, the sector is recovering thanks to good prices and good weather. High yields are expected as a result of the good weather conditions.

In 2010 the Uruguayan dairy sector received strong investments in the industrial sector by foreign dairy companies Schreiber Foods (USA) and Bom Gosto (Brazil). It is expected that both companies will be operating in Uruguay by the end of 2011.

Source: Instituto Nacional de la Leche (www.inale.org).

SOUTH AFRICA

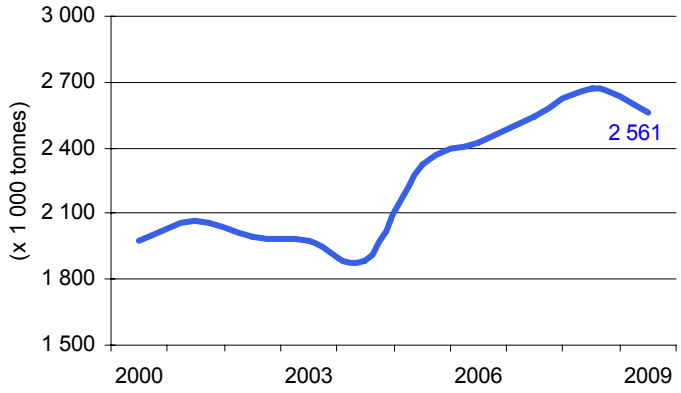
Dairy farming

Cow milk production (x 1 000 tonnes)	2 667
% of worldwide milk production	0.5%
% cow milk deliveries	96%
Number of dairy cows (x 1 000 head)	535

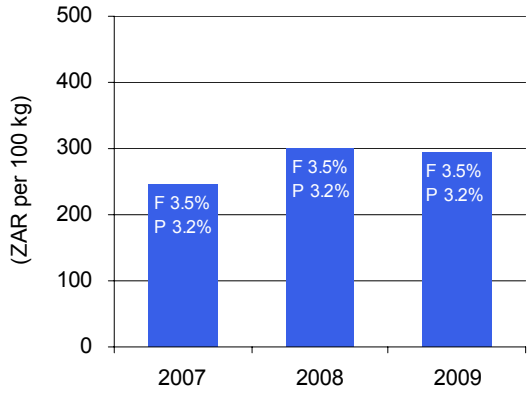
Main processors

Clover SA	www.clover.co.za
Parmalat	www.parmalat.co.za
Woodlands	www.woodlandsdairy.co.za
Dairybelle	www.dairybelle.co.za
Nestle	www.nestle.co.za

Cow milk deliveries



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	1 197	103	10	80	15	98
Fermented products	290	104	1	206	6	101
Cream	-	-	1	158	7	161
Butter and butteroil	12	100	3	114	1	86
Cheese	43	100	5	121	2	121
WMP (A)	15	97	2	104	7	57
SMP	15	100	3	50	-	-

(A) Export: all milk pow der.

Consumption (kg per capita)

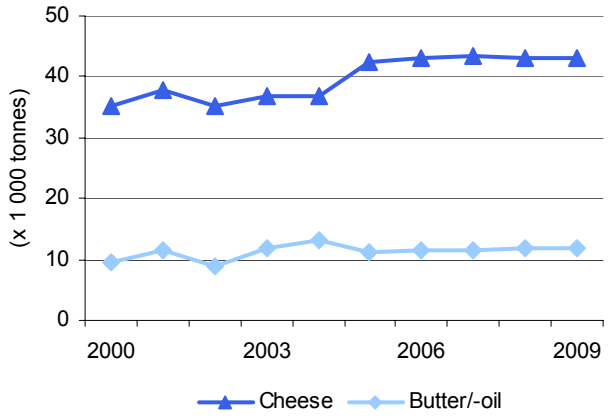
Milk: 39.1 kg

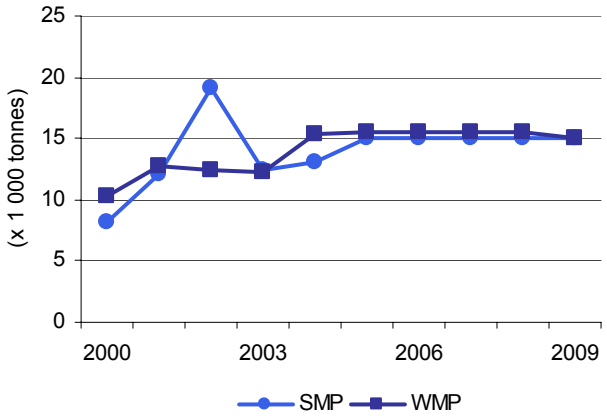
Butter: -

Cheese: -

Population: 46.0 mln.

Production





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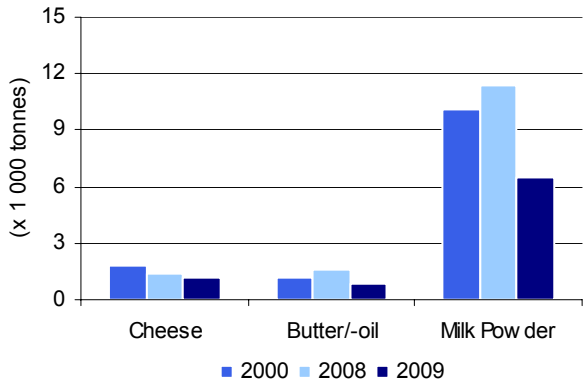

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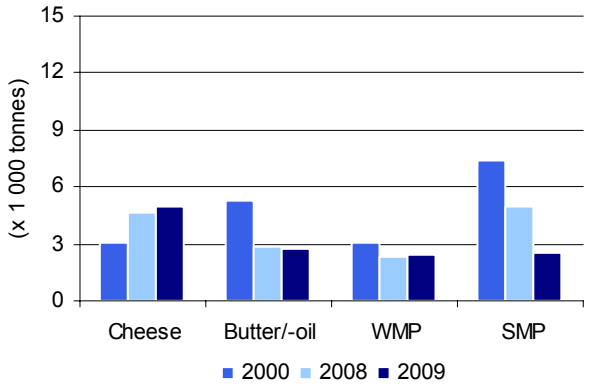


Key developments

The number of milk producers and milk processors continued to decrease. Average farm size has increased since 2008 while milk production decreased from 2008 to 2009. The main cause for decrease in production was the decrease in producer prices in 2008 and into 2009.

On farm level, producer prices decreased from 2008 to mid 2009. Retail prices were stable and decreased during 2009.

Producer prices recovered from mid-2009 but decreased again during the last quarter of 2009. Prices are, with some exceptions, expected to remain stable for the rest of the year.

Retail prices are generally firmer than a year ago.

South Africa did not suffer as much as result of the financial crisis. However, recovery is very slow and uncertain with unemployment at high levels. Consumer expenditure is still stagnant and improves very slowly. The consumption of dairy products did increase from 2008 to 2009.

Source: Milk Producers' Organisation (www.mpo.co.za), Comtrade, FAO.

AUSTRALIA (A)

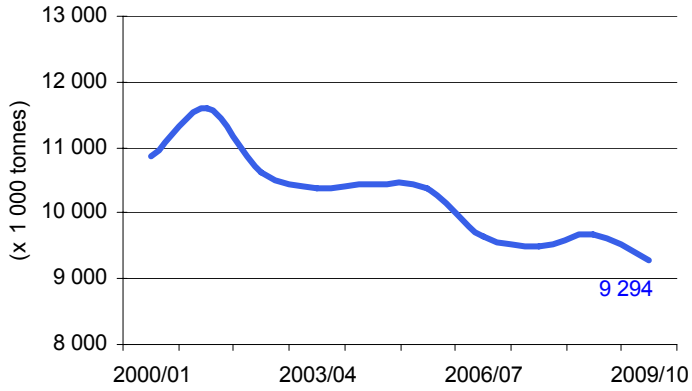
Dairy farming

Cow milk production (x 1 000 tonnes)	9 294
% of worldwide milk production	1.6%
% cow milk deliveries	99%
Number of dairy cows (x 1 000 head)	1 650

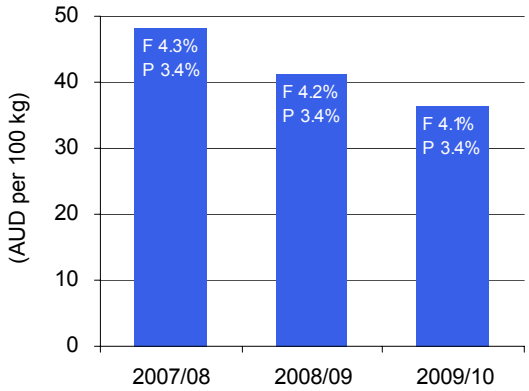
Main processors

Murray Goulburn	www.mgc.com.au
Fonterra Australia	www.fonterra.com.au
National Foods	www.natfoods.com.au
Warrnambool Cheese & Butter	www.wcbf.com.au
Bega Cheese (incl. Tatura Milk)	www.begacheese.com.au

Cow milk production



Cow milk prices (F = fat%, P = protein%)



Processing and trade

Volume (x 1 000 tonnes)	Production 2009/10	Production Index (08/09=100)	Import 2009/10	Import Index (08/09=100)	Export 2009/10	Export Index (08/09=100)
Liquid milk (B)	2 348	102	5	120	62	112
Fermented products (B)	-	-	3	92	18	161
Cream (B)	-	-	2	89	10	100
Butter and butteroil	130	88	20	146	69	104
Cheese	330	96	72	122	168	116
WMP	126	85	17	118	117	74
SMP	190	90	6	100	137	80

(B) Calendar year 2009 for trade.

Consumption (kg per capita)

Milk: 106.0 kg

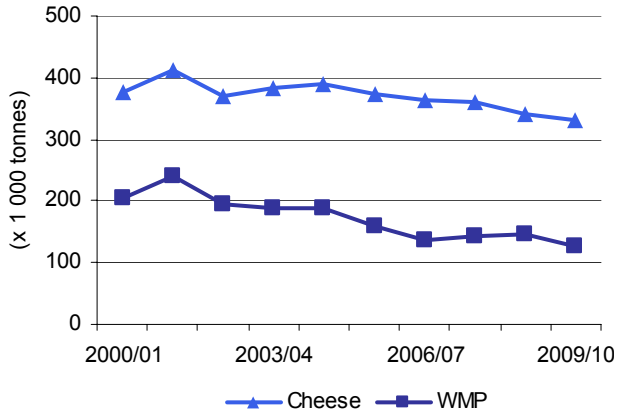
Butter: 3.9 kg

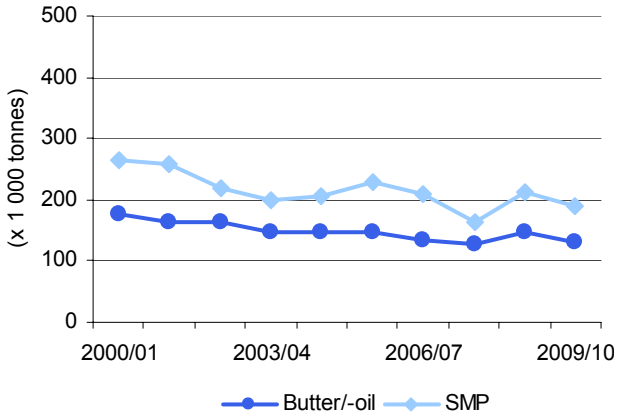
Cheese: 12.0 kg

Population: 22.2 mln.

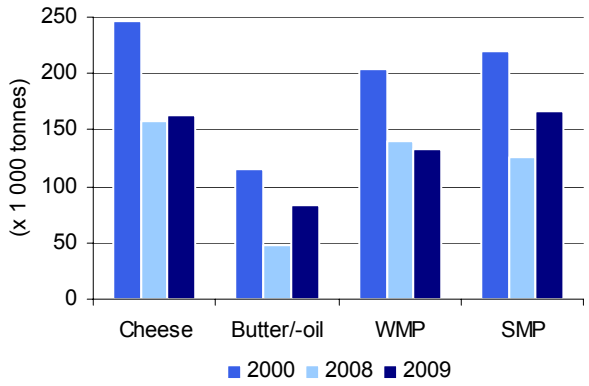
(A) Dairy years ending June of the following year.

Production





Export (C)



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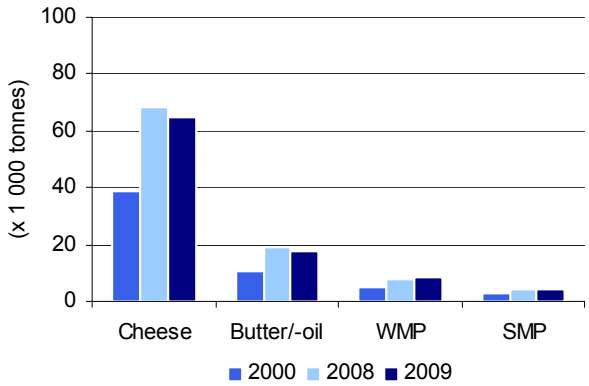


(C) Calender years.

Key developments

After a very difficult start - with the lowest farmgate milk prices in a number of years - the 2009/10 season finished strongly; with Australian milk production just 4% below last year at 9 billion litres. Milk volumes in the three months from April to June were up by 4% on last year and the monthly year-on-year growth is expected to continue for some months into the new season. Nevertheless, the next few months will provide a guide as to the impact of last season's culling decisions on the size of the local dairy herd and just how much capacity there is for growth in milk production.

Strong 2010/11 opening prices for farmgate milk from exporting companies – up 25 to 30% on last year; significant rainfall across most of southern and eastern Australia with more 'traditional' winter weather patterns; the best early-season irrigation allocations in years; and good pasture growth all suggest that the local industry will start the new season on a positive and potentially profitable note.

The major uncertainties are currently around the timing of any milk price step-ups – which come from positive international dairy commodity price signals; a looming spring locust plague; volatile feed grain prices and rising interest rates on high farm debt levels. With average farm debt estimated to have increased by 20% over the two last years, higher interest rates on increased debt loads will maintain pressure on farm finances despite better milk prices.

While the dairy market fundamentals support a positive price outlook, the wider global economic situation remains the greatest threat to a sustained market recovery.

While the turnaround in external operating conditions for most farmers is very positive, confidence levels overall remain unchanged. The market and margin volatility of the industry is undermining confidence in the outlook for many farmers who are seeking reliable returns on which to build a longer term future.

Source: Dairy Australia (www.dairyaustralia.com.au), Comtrade.

NEW ZEALAND

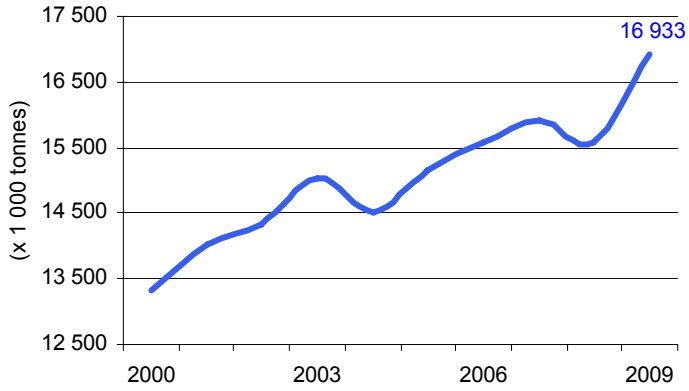
Dairy farming

Cow milk production (x 1 000 tonnes)	16 955
% of worldwide milk production	2.9%
% cow milk deliveries	100%
Number of dairy cows (x 1 000 head)	4 597

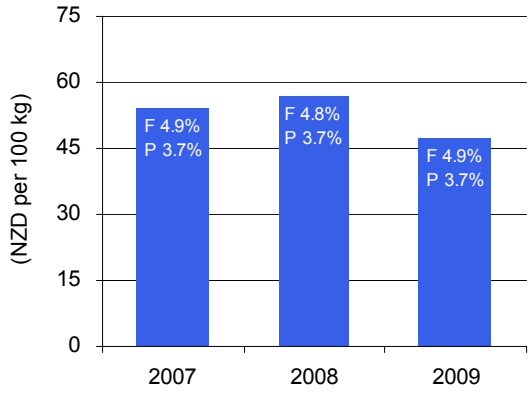
Main processors

Fonterra	www.fonterra.com
Open Country Dairy	www.opencountry.co.nz
Westland Milk Products	www.westland.co.nz
Tatua	www.tatua.com
Synlait Milk	www.synlait.co.nz

Cow milk deliveries (A)



Cow milk prices (F = fat%, P = protein%)



(A) The years 2000-2006 refer to the dairy seasons 2000/01 till 2006/07.

Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk (B)	362	101	7	98	156	110
Butter and butteroil	470	109	1	133	451	138
Cheese (C)	270	92	6	138	290	117
WMP	790	121	0	36	811	137
SMP	360	136	4	450	408	169

(B) Fermented milk products, cream and concentrated milk (fluid) included. (C) Processed cheese included.

Consumption (kg per capita)

Milk (D): 77.6 kg

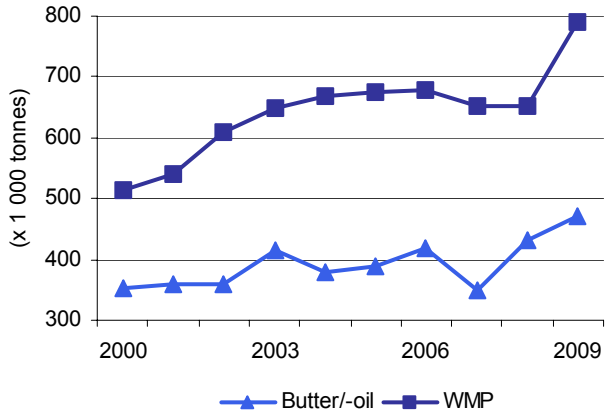
Butter: 3.7 kg

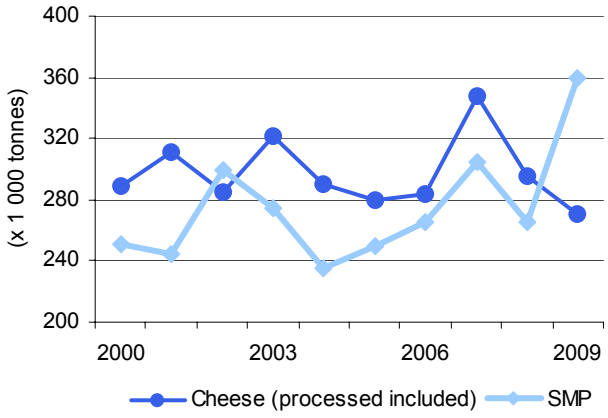
Cheese: 6.0 kg

Population: 4.3 mln.

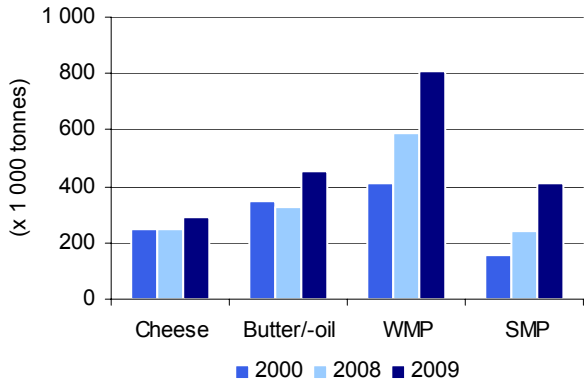
(D) Fermented milk products and milk drinks included.

Production

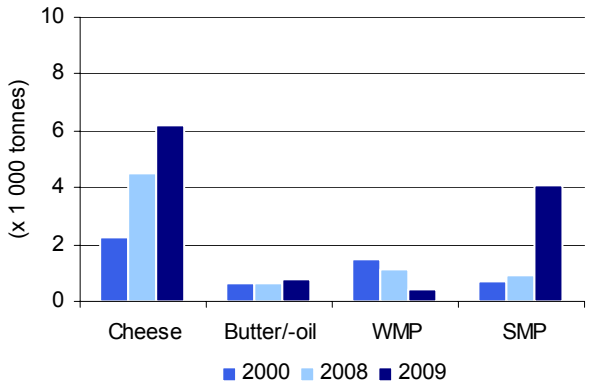




Export



Import



Key developments

Milk Production
New Zealand is experiencing a poor end to the 2009/10 season due to drought, with lower than average rainfall in most key dairy regions. The upper and central North Island, which account for approximately 40% of milk production, have been hit hardest by the dry weather.

Competition
The competition for New Zealand milk continues to increase. There are now six significant dairy exporting companies and investment proposals for at least five more. Fonterra' share of New Zealand milk collection has dropped from 96% in 2001 to approximately 90% in the 2009/10 season.

Raw Milk Regulations
The New Zealand Government has confirmed changes to the Dairy Industry Restructuring Act (DIRA). DIRA sets the basis for the price of milk other processors can access from Fonterra, with the new basis set at Fonterra's Milk Price plus 10 cents/kg MS.

Sustainability
From 1 July 2010 the energy sector joins New Zealand's Emissions Trading Scheme (ETS). The ETS introduces a price on greenhouse gas emissions to provide an incentive to reduce those emissions. The costs associated with the energy sector joining the scheme are of particular concern to farmers, as price increases for electricity and fuel are anticipated. The agriculture sector will be required to report their greenhouse gas emissions from 1 January 2012 and is expected to be a full participant in the scheme from 1 January 2015.

Price Volatility
Significant price volatility for dairy is still expected in the short term at least, driven by global supply/demand imbalances. Demand growth in Asia continues, while dairy production in several key markets, including New Zealand, has been adversely impacted by climactic conditions.

Source: DairyNZ (www.dairynz.co.nz), Fonterra, LIC statistics, national statistics.

MEXICO

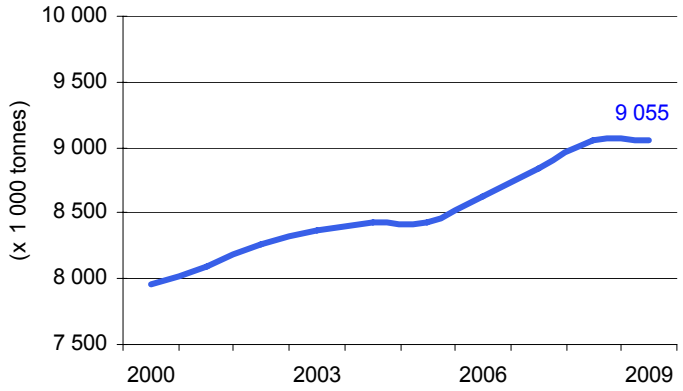
Dairy farming

Cow milk production (x 1 000 tonnes)	10 910
% of worldwide milk production	1.9%
% cow milk deliveries	83%
Number of dairy cows (x 1 000 head)	2 334

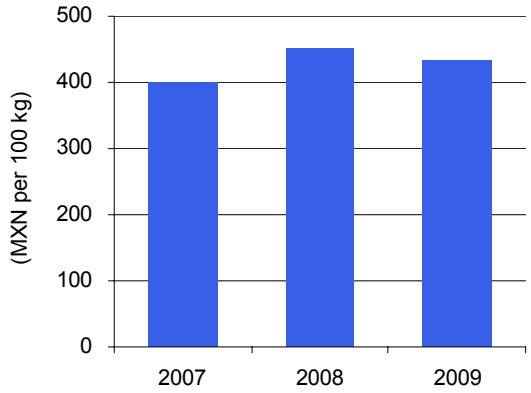
Main processors

Grupo Lala	www.lala.com.mx
Nestlé Mexico	www.nestle.com.mx
Alpura	www.alpura.com.mx

Cow milk deliveries



Cow milk prices (A)



(A) LICONSA prices ; real fat and protein contents.

Processing and trade

Volume (x 1 000 tonnes)	Production 2009	Production Index (2008=100)	Import 2009	Import Index (2008=100)	Export 2009	Export Index (2008=100)
Liquid milk	4 570	100	26	55	2	628
Fermented products (B)	631	100	17	104	7	129
Cream (B)	95	100	18	127	3	71
Butter and butteroil (B)	24	100	60	148	0	75
Cheese (B)	142	100	73	107	4	91
WMP (B)	190	100	27	114	6	92
SMP (B)	23	100	165	108	0	50

(B) Production: year 2008.

Consumption (kg per capita)

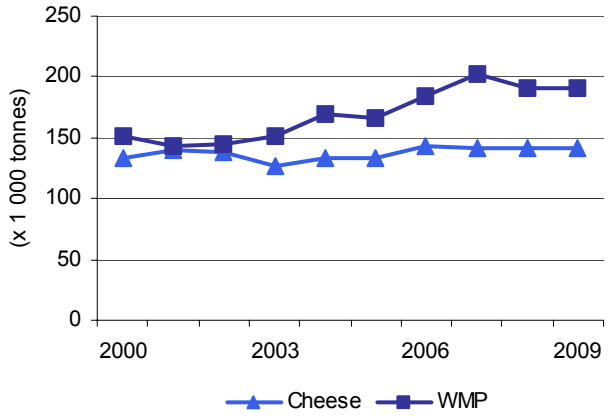
Milk: 35.3 kg

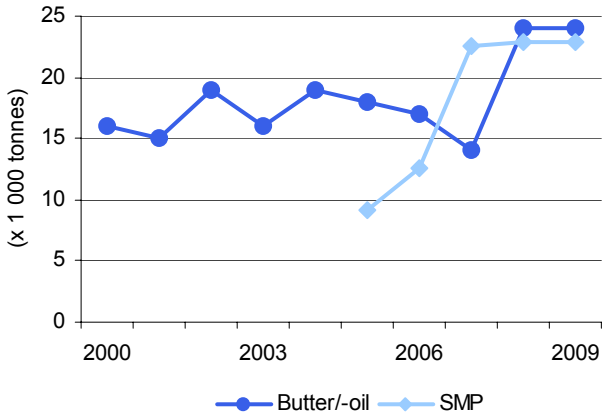
Butter: 1.8 kg

Cheese: 2.2 kg

Population: 108.4 mln.

Production





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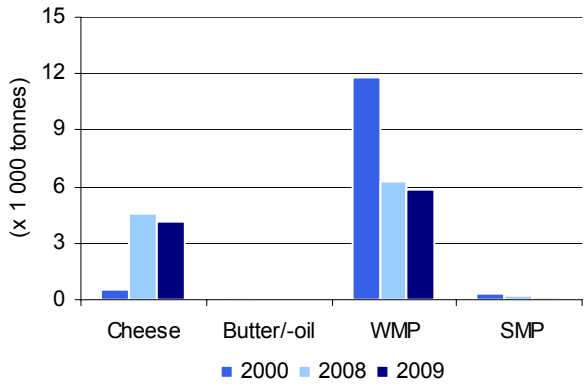
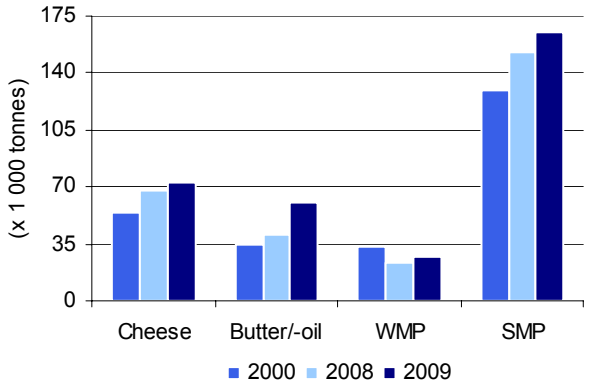


Import



Source: Lactodata, INEGI, SIAP, Canilec, Comtrade, FAPRI.

Annex 2: Tables

General remarks

- The following tables are based on information sent by IDF National Committees and by other national organisations.
- Other sources used: CNIEL, Comtrade, European Dairy Association, Eurostat, FAO, FAPRI, PZ, USDA, ZMB, ZMP, FED, ECB, DNB, National Statistics.
- 2009 data are preliminary.
- The '-' sign is used when figures are not available, confidential or senseless (as a numeric result from calculations).

  The value '0' (zero) is used when volume is < 500 tonnes or null.
- Milk prices table: for fat and protein contents, see country reports.

Contents

Table 1. World milk production by species of milk animal

´000 tonnes Type of milk	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Cow milk	491 948	547 371	572 487	584 164	587 446	+ 0.6%	+ 2.0%
Buffalo milk	67 016	79 487	85 388	87 291	89 960	+ 3.1%	+ 3.3%
Goat milk	12 728	14 670	15 006	15 412	15 333	- 0.5%	+ 2.1%
Sheep milk	8 035	8 849	9 191	9 070	8 975	- 1.0%	+ 1.2%
Other	1 441	1 569	1 618	1 636	1 636	+ 0.0%	+ 1.4%
Total world milk production	**581 168**	**651 946**	**683 690**	**697 573**	**703 350**	**+ 0.8%**	**+ 2.1%**

Table 2. World cow's milk production

´000 tonnes Region	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Asia	94 661	131 034	147 904	151 514	154 368	+ 1.9%	+ 5.6%
EU 27	149 501	148 966	147 414	148 932	147 870	- 0.7%	- 0.1%
Northern America	84 168	88 496	92 551	94 521	94 297	- 0.2%	+ 1.3%
Other Europe	59 310	61 768	61 190	61 345	61 645	+ 0.5%	+ 0.4%
South America	46 633	53 616	55 439	59 438	59 809	+ 0.6%	+ 2.8%
Africa	19 629	23 470	27 020	27 199	27 223	+ 0.1%	+ 3.7%
Oceania	24 259	25 621	25 501	25 336	26 315	+ 3.9%	+ 0.9%
Central America	12 262	13 148	13 984	14 336	14 322	- 0.1%	+ 1.7%
Caribbean	1 524	1 251	1 482	1 543	1 598	+ 3.6%	+ 0.5%
World	**491 948**	**547 371**	**572 487**	**584 164**	**587 446**	**+ 0.6%**	**+ 2.0%**

Table 3. World buffalo milk production

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
India (A)	43 428	52 070	56 788	57 961	59 874	+ 3.3%	+ 3.6%
Pakistan (B)	17 454	20 488	20 985	21 622	22 279	+ 3.0%	+ 2.7%
China	2 650	2 800	2 900	2 950	3 000	+ 1.7%	+ 1.4%
Egypt	2 030	2 300	2 610	2 641	2 641	0.0%	+ 3.0%
Iran	216	232	245	239	240	+ 0.4%	+ 1.2%
Italy	107	206	235	217	211	- 2.9%	+ 7.8%
Other	1 131	1 391	1 625	1 662	1 716	+ 3.3%	+ 4.7%
World	**67 016**	**79 487**	**85 388**	**87 291**	**89 960**	**+ 3.1%**	**+ 3.3%**

(A) Dairy years ending March of the following year. (B) Dairy years ending June of the following year.

Table 4. Number of dairy cows

´000 head Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Asia	**73 970**	**86 664**	**90 818**	**92 503**	**93 468**	**+ 1.0%**	**+ 2.6%**
India	32 883	36 586	37 429	38 500	38 500	0.0%	+ 1.8%
China	5 238	12 161	12 180	12 335	12 607	+ 2.2%	+ 10.3%
Pakistan	6 815	7 504	9 049	9 390	9 740	+ 3.7%	+ 4.0%
Turkey	5 280	3 998	4 229	4 080	4 133	+ 1.3%	- 2.7%
Iran	3 640	3 600	3 700	3 900	3 900	0.0%	+ 0.8%
Uzbekistan	2 305	2 821	2 983	3 124	3 327	+ 6.5%	+ 4.2%
Kazakhstan	1 735	2 206	2 285	2 295	2 350	+ 2.4%	+ 3.4%
Afghanistan	1 650	2 083	2 050	1 870	1 870	0.0%	+ 1.4%
Azerbaijan	787	969	1 217	1 242	1 130	- 9.1%	+ 4.1%
Japan	1 150	1 055	1 011	998	985	- 1.3%	- 1.7%
Turkmenistan	620	1 010	974	974	974	0.0%	+ 5.1%
Syria	459	561	630	607	605	- 0.3%	+ 3.1%
Kyrgyzstan	505	538	585	607	636	+ 4.7%	+ 2.6%
Korea, Republic of	255	271	256	248	248	0.0%	- 0.3%
Israel	115	115	115	121	114	- 5.8%	- 0.1%
Saudi Arabia	84	106	112	112	112	0.0%	+ 3.2%
Other	10 449	11 080	12 014	12 100	12 237	+ 1.1%	+ 1.8%
Africa	**43 011**	**53 441**	**56 767**	**56 925**	**57 179**	**+ 0.4%**	**+ 3.2%**
Sudan	9 300	14 972	14 972	14 350	14 400	+ 0.3%	+ 5.0%
Kenya	4 690	5 500	7 500	7 200	7 330	+ 1.8%	+ 5.1%
Ethiopia	4 340	5 300	5 800	6 400	6 500	+ 1.6%	+ 4.6%
Egypt	1 372	1 700	1 690	1 724	1 700	- 1.4%	+ 2.4%
Morocco	1 308	1 400	1 428	1 500	1 500	0.0%	+ 1.5%
Algeria	900	950	836	854	850	- 0.4%	- 0.6%
Tunisia	550	560	585	585	585	0.0%	+ 0.7%
South Africa	545	540	550	540	535	- 0.9%	- 0.2%
Other	20 006	22 519	23 405	23 772	23 779	+ 0.0%	+ 1.9%
South America	**31 481**	**33 929**	**32 494**	**32 919**	**34 413**	**+ 4.5%**	**+ 1.0%**
Brazil	17 885	20 820	21 122	21 600	21 833	+ 1.1%	+ 2.2%
Colombia	5 734	5 456	4 212	4 024	5 301	+ 31.7%	- 0.9%
Argentina	2 450	2 100	2 150	2 150	2 100	- 2.3%	- 1.7%
Venezuela	1 372	1 307	1 240	1 240	1 240	0.0%	- 1.1%
Ecuador	1 117	934	937	992	1 021	+ 3.0%	- 1.0%
Chile	1 450	1 585	1 023	1 025	1 000	- 2.4%	- 4.0%
Peru	513	690	803	861	886	+ 2.9%	+ 6.3%
Uruguay	650	650	652	673	673	0.0%	+ 0.4%
Other	311	387	354	354	359	+ 1.4%	+ 1.6%
EU 27	**27 585**	**25 062**	**24 194**	**24 228**	**23 798**	**- 1.8%**	**- 1.6%**
Germany	4 564	4 164	4 087	4 229	4 169	- 1.4%	- 1.0%
France	4 153	3 958	3 846	3 859	3 737	- 3.1%	- 1.2%
Poland	3 047	2 795	2 738	2 772	2 678	- 3.4%	- 1.4%
Italy	2 172	1 842	1 839	1 831	1 878	+ 2.6%	- 1.6%
United Kingdom	2 339	2 007	1 954	1 909	1 857	- 2.7%	- 2.5%
Netherlands	1 504	1 433	1 413	1 466	1 489	+ 1.6%	- 0.1%
Romania	1 692	1 625	1 573	1 483	1 419	- 4.3%	- 1.9%
Ireland	1 153	1 122	1 088	1 105	1 107	+ 0.2%	- 0.5%

Table 4. Number of dairy cows (continued)

´000 head Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
EU 27 (continued)							
Spain	1 141	1 113	903	888	838	- 5.7%	- 3.4%
Denmark	644	558	551	568	580	+ 2.1%	- 1.2%
Austria	621	538	526	527	532	+ 0.9%	- 1.7%
Belgium	594	523	500	495	504	+ 1.8%	- 1.8%
Czech Republic	547	439	410	403	384	- 4.6%	- 3.9%
Lithuania	494	438	396	380	357	- 6.1%	- 3.5%
Sweden	426	391	370	352	357	+ 1.4%	- 1.9%
Bulgaria	421	348	336	315	314	- 0.4%	- 3.2%
Portugal	355	324	306	301	289	- 4.0%	- 2.3%
Finland	361	316	293	289	288	- 0.3%	- 2.5%
Hungary	380	285	266	263	248	- 5.7%	- 4.6%
Latvia	205	185	178	175	170	- 2.4%	- 2.0%
Slovakia	246	199	181	176	166	- 5.5%	- 4.3%
Greece	180	152	150	154	152	- 1.3%	- 1.9%
Estonia	131	113	103	100	96	- 4.2%	- 3.4%
Other	216	194	189	190	189	- 0.5%	- 1.4%
Other Europe	**23 624**	**18 010**	**17 035**	**16 461**	**16 007**	**- 2.8%**	**- 4.2%**
Russia	13 100	9 647	9 400	9 200	9 000	- 2.2%	- 4.1%
Ukraine	5 431	3 965	3 347	3 096	2 891	- 6.6%	- 6.8%
Belarus	1 845	1 565	1 459	1 452	1 445	- 0.5%	- 2.7%
Switzerland	669	619	613	615	601	- 2.3%	- 1.2%
Serbia	775	551	582	566	570	+ 0.8%	- 3.4%
Norway	316	275	259	262	249	- 4.8%	- 2.6%
Croatia	287	239	234	213	212	- 0.5%	- 3.3%
Iceland	27	24	26	26	26	+ 1.1%	- 0.2%
Other	1 174	1 125	1 115	1 031	1 012	- 1.9%	- 1.6%
Northern America	**10 348**	**10 084**	**10 194**	**10 304**	**10 180**	**- 1.2%**	**- 0.2%**
United States of America	9 206	9 043	9 189	9 315	9 201	- 1.2%	- 0.0%
Canada	1 142	1 041	1 005	989	978	- 1.0%	- 1.7%
Other	0	0	0	0	0	0.0%	+ 0.3%
Oceania	**5 700**	**6 020**	**5 858**	**6 075**	**6 298**	**+ 3.7%**	**+ 1.1%**
New Zealand	3 485	4 100	4 167	4 348	4 597	+ 5.7%	+ 3.1%
Australia	2 165	1 870	1 640	1 676	1 650	- 1.6%	- 3.0%
Other	50	50	51	51	51	- 0.0%	+ 0.2%
Central America	**4 497**	**5 026**	**5 369**	**5 418**	**5 376**	**- 0.8%**	**+ 2.0%**
Mexico	2 075	2 197	2 305	2 341	2 334	- 0.3%	+ 1.3%
Other	2 422	2 829	3 064	3 077	3 042	- 1.1%	+ 2.6%
Caribbean	**1 160**	**998**	**1 072**	**1 077**	**1 106**	**+ 2.7%**	**- 0.5%**
World	**221 377**	**239 235**	**243 801**	**245 911**	**247 824**	**+ 0.8%**	**+ 1.3%**

Table 5. Production of cow's milk

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Asia	**94 661**	**131 034**	**147 904**	**151 514**	**154 368**	**+ 1.9%**	**+ 5.6%**
India (A)	32 967	39 759	44 162	46 565	48 102	+ 3.3%	+ 4.3%
China	8 420	27 534	35 250	35 558	35 188	- 1.0%	+ 17.2%
Pakistan (B)	8 192	10 726	11 550	11 985	12 437	+ 3.8%	+ 4.7%
Turkey	8 732	10 026	11 279	11 255	11 583	+ 2.9%	+ 3.2%
Iran	5 200	6 841	8 190	8 111	8 405	+ 3.6%	+ 5.5%
Japan	8 497	8 285	8 007	7 982	7 910	- 0.9%	- 0.8%
Uzbekistan	3 560	4 447	5 061	5 387	5 732	+ 6.4%	+ 5.4%
Kazakhstan	3 686	4 693	5 038	5 163	5 267	+ 2.0%	+ 4.0%
Korea, Republic of	2 253	2 230	2 189	2 140	2 110	- 1.4%	- 0.7%
Saudi Arabia	710	940	1 670	1 670	1 670	0.0%	+ 10.0%
Syria	1 156	1 506	1 706	1 609	1 600	- 0.5%	+ 3.7%
Azerbaijan	1 014	1 226	1 314	1 355	1 460	+ 7.8%	+ 4.1%
Turkmenistan	989	1 869	1 333	1 333	1 333	0.0%	+ 3.4%
Afghanistan	1 320	1 458	1 434	1 310	1 310	0.0%	- 0.1%
Kyrgyzstan	1 079	1 151	1 197	1 231	1 274	+ 3.4%	+ 1.9%
Israel	1 162	1 185	1 221	1 311	1 256	- 4.2%	+ 0.9%
Other	5 724	7 158	7 302	7 550	7 731	+ 2.4%	+ 3.4%
EU 27	**149 501**	**148 966**	**147 414**	**148 932**	**147 870**	**- 0.7%**	**- 0.1%**
Germany	28 331	28 453	28 403	28 657	29 000	+ 1.2%	+ 0.3%
France	24 975	24 885	23 452	24 272	23 341	- 3.8%	- 0.7%
United Kingdom	14 489	14 470	14 024	13 715	13 619	- 0.7%	- 0.7%
Poland	11 900	11 901	12 096	12 426	12 447	+ 0.2%	+ 0.5%
Netherlands	11 125	10 836	11 227	11 624	11 791	+ 1.4%	+ 0.6%
Italy	10 877	10 897	11 062	11 286	11 206	- 0.7%	+ 0.3%
Spain	5 900	6 553	6 335	6 340	6 300	- 0.6%	+ 0.7%
Ireland	5 260	5 163	5 346	5 199	5 046	- 2.9%	- 0.5%
Denmark	4 717	4 586	4 619	4 715	4 869	+ 3.3%	+ 0.4%
Romania	5 002	4 977	4 997	4 854	4 701	- 3.2%	- 0.7%
Belgium	3 425	3 082	3 162	3 142	3 245	+ 3.3%	- 0.6%
Austria	3 233	3 114	3 155	3 196	3 229	+ 1.0%	- 0.0%
Sweden	3 348	3 206	3 026	3 025	2 971	- 1.8%	- 1.3%
Czech Republic	2 708	2 813	2 756	2 801	2 780	- 0.7%	+ 0.3%
Finland	2 524	2 433	2 356	2 311	2 332	+ 0.9%	- 0.9%
Portugal	1 970	2 061	1 967	2 020	1 997	- 1.1%	+ 0.2%
Hungary	2 137	1 928	1 844	1 842	1 841	- 0.1%	- 1.6%
Lithuania	1 725	1 862	1 931	1 879	1 762	- 6.2%	+ 0.2%
Bulgaria	1 409	1 287	1 148	1 143	1 073	- 6.1%	- 3.0%
Slovakia	1 099	1 100	1 075	1 057	957	- 9.4%	- 1.5%
Latvia	823	811	841	850	832	- 2.1%	+ 0.1%
Greece	789	761	774	760	755	- 0.7%	- 0.5%
Estonia	629	670	692	694	676	- 2.6%	+ 0.8%
Other	1 105	1 118	1 125	1 124	1 099	- 2.2%	- 0.1%
Northern America	**84 168**	**88 496**	**92 551**	**94 521**	**94 297**	**- 0.2%**	**+ 1.3%**
United States of America	76 004	80 254	84 211	86 174	85 874	- 0.3%	+ 1.4%
Canada	8 163	8 241	8 338	8 345	8 421	+ 0.9%	+ 0.3%
Other	1	1	1	2	2	0.0%	+ 0.5%

Table 5. Production of cow's milk (continued)

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Other Europe	**59 310**	**61 768**	**61 190**	**61 345**	**61 645**	**+ 0.5%**	**+ 0.4%**
Russia	31 938	31 440	31 988	32 362	32 592	+ 0.7%	+ 0.2%
Ukraine	12 658	13 714	12 262	11 761	11 610	- 1.3%	- 1.0%
Belarus	4 490	5 651	5 875	6 196	6 550	+ 5.7%	+ 4.3%
Switzerland	3 872	3 933	3 984	4 170	4 114	- 1.3%	+ 0.7%
Norway	1 690	1 590	1 609	1 599	1 589	- 0.6%	- 0.7%
Serbia	1 635	1 664	1 620	1 580	1 509	- 4.5%	- 0.9%
Croatia	607	1 073	965	826	818	- 1.0%	+ 3.4%
Iceland	115	119	136	137	136	- 0.2%	+ 2.0%
Other	2 306	2 584	2 751	2 715	2 727	+ 0.5%	+ 1.9%
South America	**46 633**	**53 616**	**55 439**	**59 438**	**59 809**	**+ 0.6%**	**+ 2.8%**
Brazil	22 134	25 384	26 134	27 579	27 983	+ 1.5%	+ 2.6%
Argentina	9 794	9 493	9 813	10 310	10 340	+ 0.3%	+ 0.6%
Colombia	6 148	6 770	6 725	7 431	7 545	+ 1.5%	+ 2.3%
Ecuador	2 007	4 570	4 759	5 326	5 229	- 1.8%	+ 11.2%
Chile	2 250	2 365	2 450	2 550	2 350	- 7.8%	+ 0.5%
Venezuela	1 415	1 348	1 728	2 220	2 220	0.0%	+ 5.1%
Peru	903	1 236	1 456	1 566	1 661	+ 6.1%	+ 7.0%
Uruguay	1 381	1 724	1 700	1 782	1 803	+ 1.2%	+ 3.0%
Other	601	727	675	674	679	+ 0.7%	+ 1.4%
Africa	**19 629**	**23 470**	**27 020**	**27 199**	**27 223**	**+ 0.1%**	**+ 3.7%**
Sudan	4 000	5 480	5 292	5 309	5 328	+ 0.4%	+ 3.2%
Kenya	2 224	2 650	4 230	3 990	4 070	+ 2.0%	+ 6.9%
Egypt	1 638	2 100	3 187	3 211	3 200	- 0.4%	+ 7.7%
South Africa	2 197	2 368	2 650	2 782	2 667	- 4.1%	+ 2.2%
Morocco	1 185	1 400	1 600	1 700	1 700	0.0%	+ 4.1%
Algeria	1 170	1 400	1 570	1 500	1 500	0.0%	+ 2.8%
Ethiopia	900	1 150	1 250	1 350	1 400	+ 3.7%	+ 5.0%
Tunisia	887	900	1 006	1 046	1 046	0.0%	+ 1.8%
Other	5 428	6 022	6 235	6 310	6 312	+ 0.0%	+ 1.7%
Oceania	**24 259**	**25 621**	**25 501**	**25 336**	**26 315**	**+ 3.9%**	**+ 0.9%**
New Zealand (C)	13 333	15 163	15 935	15 600	16 955	+ 8.7%	+ 2.7%
Australia (D)	10 862	10 392	9 500	9 670	9 294	- 3.9%	- 1.7%
Other	65	65	66	66	66	0.0%	+ 0.3%
Central America	**12 262**	**13 148**	**13 984**	**14 336**	**14 322**	**- 0.1%**	**+ 1.7%**
Mexico	9 591	10 164	10 656	10 907	10 910	+ 0.0%	+ 1.4%
Other	2 671	2 984	3 328	3 429	3 412	- 0.5%	+ 2.8%
Caribbean	**1 524**	**1 251**	**1 482**	**1 543**	**1 598**	**+ 3.6%**	**+ 0.5%**
World	**491 948**	**547 371**	**572 487**	**584 164**	**587 446**	**+ 0.6%**	**+ 2.0%**

(A) Dairy years ending March of the following year. (B) Dairy years ending June of the following year. (C) The years 2000 and 2005 refer to the seasons 2000/01 and 2005/06 (period June-May). (D) Dairy years ending June of the following year

Table 6. Deliveries of cow's milk to dairies

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
EU 27	**131 163**	**134 347**	**132 871**	**134 606**	**134 170**	**- 0.3%**	**+ 0.3%**
Germany	26 984	27 380	27 321	27 466	28 248	+ 2.8%	+ 0.5%
France	23 303	23 353	23 003	23 811	22 900	- 3.8%	- 0.2%
United Kingdom	13 932	14 038	13 647	13 350	13 236	- 0.9%	- 0.6%
Netherlands	10 734	10 486	10 799	11 303	11 469	+ 1.5%	+ 0.7%
Italy	10 377	10 897	10 265	10 489	10 415	- 0.7%	+ 0.0%
Poland	6 662	8 612	8 222	8 567	8 846	+ 3.3%	+ 3.2%
Spain	5 454	5 940	5 765	5 863	5 760	- 1.8%	+ 0.6%
Ireland	5 160	5 060	5 242	5 106	4 945	- 3.2%	- 0.5%
Denmark	4 517	4 451	4 484	4 580	4 734	+ 3.4%	+ 0.5%
Belgium	3 034	3 025	3 099	3 088	3 191	+ 3.3%	+ 0.6%
Sweden	3 296	3 163	2 986	2 987	2 933	- 1.8%	- 1.3%
Austria	2 664	2 619	2 661	2 716	2 709	- 0.3%	+ 0.2%
Czech Republic	2 493	2 681	2 689	2 710	2 658	- 1.9%	+ 0.7%
Finland	2 442	2 362	2 293	2 254	2 281	+ 1.2%	- 0.8%
Portugal	1 893	1 921	1 837	1 886	1 868	- 1.0%	- 0.1%
Hungary	1 830	1 518	1 448	1 425	1 407	- 1.3%	- 2.9%
Lithuania	1 103	1 202	1 349	1 376	1 275	- 7.3%	+ 1.6%
Romania	1 300	1 109	1 136	1 051	992	- 5.7%	- 3.0%
Slovakia	903	968	964	946	852	- 9.9%	- 0.6%
Greece	670	735	717	706	685	- 3.0%	+ 0.2%
Bulgaria	719	803	746	705	600	- 14.9%	- 2.0%
Latvia	398	502	631	634	595	- 6.1%	+ 4.6%
Estonia	409	571	593	606	591	- 2.5%	+ 4.2%
Other	887	953	974	981	980	- 0.1%	+ 1.1%
Northern America							
United States of America	75 413	79 736	83 717	85 691	85 415	- 0.3%	+ 1.4%
Canada	7 629	7 717	7 793	7 799	7 870	+ 0.9%	+ 0.3%
Asia							
China	5 050	19 270	24 680	24 890	25 020	+ 0.5%	+ 19.5%
Japan	8 391	8 205	7 923	7 901	7 835	- 0.8%	- 0.8%
Iran	2 200	3 250	4 415	4 460	4 500	+ 0.9%	+ 8.3%
Korea, Republic of	2 253	2 229	2 188	2 139	2 110	- 1.4%	- 0.7%
Israel	1 128	1 150	1 197	1 285	1 231	- 4.2%	+ 1.0%
Kazakhstan	430	900	1 000	1 050	1 050	0.0%	+ 10.4%
Other Europe							
Russia	12 500	14 700	15 354	15 857	16 296	+ 2.8%	+ 3.0%
Ukraine	3 335	5 689	6 029	5 820	5 800	- 0.3%	+ 6.3%
Belarus (A)	2 300	3 800	4 400	4 700	5 100	+ 8.5%	+ 9.3%
Switzerland	3 197	3 203	3 260	3 423	3 415	- 0.2%	+ 0.7%
Norway	1 544	1 515	1 590	1 575	1 549	- 1.7%	+ 0.0%
Croatia	380	605	673	658	675	+ 2.7%	+ 6.6%
Iceland	107	113	129	130	130	+ 0.0%	+ 2.1%

Table 6. Deliveries of cow's milk to dairies (continued)

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
South America							
Brazil	12 108	16 284	17 889	19 285	19 567	+ 1.5%	+ 5.5%
Argentina	9 103	9 070	9 062	9 541	9 560	+ 0.2%	+ 0.5%
Chile	1 490	1 775	1 931	2 031	1 826	- 10.1%	+ 2.3%
Uruguay	1 077	1 393	1 368	1 581	1 537	- 2.8%	+ 4.0%
Oceania							
New Zealand (B)	13 313	15 143	15 915	15 580	16 933	+ 8.7%	+ 2.7%
Australia (C)	10 862	10 392	9 500	9 670	9 294	- 3.9%	- 1.7%
Central America							
Mexico	7 960	8 436	8 845	9 053	9 055	+ 0.0%	+ 1.4%
Africa							
South Africa	1 977	2 321	2 544	2 671	2 561	- 4.1%	+ 2.9%

(A) Calculated. (B) The years 2000 and 2005 refer to the seasons 2000/01 and 2005/06 (period June-May).
(C) Dairy years ending June of the following year

Table 7. Production of liquid milk

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
EU 27	**32 566**	**32 969**	**32 917**	**32 731**	**32 781**	**+ 0.2%**	**+ 0.1%**
United Kingdom	6 814	6 749	6 819	6 773	6 716	- 0.8%	- 0.2%
Germany (A)	4 916	5 165	5 059	5 132	5 288	+ 3.0%	+ 0.8%
France	3 894	3 836	3 847	3 870	3 681	- 4.9%	- 0.6%
Spain	3 562	3 677	3 578	3 609	3 665	+ 1.5%	+ 0.3%
Italy	3 230	2 941	2 852	2 760	2 770	+ 0.4%	- 1.7%
Poland	1 803	2 363	2 481	2 414	2 575	+ 6.7%	+ 4.0%
Sweden	996	987	926	915	905	- 1.1%	- 1.1%
Finland	740	734	734	737	733	- 0.5%	- 0.1%
Austria	513	575	663	710	715	+ 0.7%	+ 3.8%
Netherlands	858	841	758	709	701	- 1.2%	- 2.2%
Czech Republic	475	557	605	644	663	+ 3.0%	+ 3.8%
Belgium	642	588	631	645	640	- 0.8%	- 0.0%
Ireland	546	536	544	536	509	- 5.1%	- 0.8%
Denmark	518	457	491	510	482	- 5.5%	- 0.8%
Greece	408	436	448	446	465	+ 4.3%	+ 1.5%
Hungary	607	567	526	415	387	- 6.9%	- 4.9%
Slovakia	332	245	252	242	263	+ 8.6%	- 2.6%
Estonia	59	80	83	82	89	+ 8.1%	+ 4.6%
Lithuania	75	74	81	86	88	+ 2.4%	+ 1.8%
Latvia	106	100	104	89	75	- 15.2%	- 3.7%
Other	1 473	1 462	1 435	1 407	1 372	- 2.5%	- 0.8%
Asia							
China	1 230	9 748	11 960	12 658	13 240	+ 4.6%	+ 30.2%
India (B)	-	-	7 127	7 534	7 899	+ 4.8%	
Japan	4 571	4 290	4 160	4 069	3 919	- 3.7%	- 1.7%
Iran	-	1 325	1 600	1 800	1 875	+ 4.2%	
Korea, Republic of	1 672	1 691	1 697	1 702	1 702	0.0%	+ 0.2%
Turkey	-	-	1 524	1 539	1 539	0.0%	
Israel (C)	348	379	418	418	423	+ 1.2%	+ 2.2%
Northern America							
United States of America	24 979	24 740	24 987	25 011	25 168	+ 0.6%	+ 0.1%
Canada	2 632	2 593	2 605	2 589	2 612	+ 0.9%	- 0.1%
South America							
Brazil	12 690	13 400	10 170	10 684	10 900	+ 2.0%	- 1.7%
Argentina	1 598	1 623	1 747	1 789	1 770	- 1.1%	+ 1.1%
Chile	284	307	340	333	351	+ 5.7%	+ 2.4%
Uruguay	234	219	237	245	248	+ 1.5%	+ 0.7%
Other Europe							
Russia	-	4 188	4 188	4 218	4 262	+ 1.0%	
Belarus (D)	954	1 122	1 379	1 332	1 308	- 1.8%	+ 3.6%
Ukraine	-	863	846	791	758	- 4.3%	
Switzerland	509	488	489	488	492	+ 0.7%	- 0.4%
Norway	490	430	439	443	448	+ 1.1%	- 1.0%
Croatia	296	325	327	341	322	- 5.5%	+ 0.9%
Iceland	39	37	35	37	38	+ 4.1%	- 0.2%

Table 7. Production of liquid milk (continued)

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Central America							
Mexico	3 765	4 313	4 405	4 553	4 570	+ 0.4%	+ 2.2%
Oceania							
Australia	1 978	2 127	2 254	2 296	2 348	+ 2.3%	+ 1.9%
New Zealand (D)	346	385	360	360	362	+ 0.6%	+ 0.5%
Africa							
South Africa	-	-	-	1 162	1 197	+ 3.0%	

(A) Only containers <2 litres. (B) Production by cooperative dairies; dairy years ending March of the following year.
(C) Milk drinks included. (D) Liquid milk, fermented products, milk drinks and cream.

Table 8. Production of milk drinks and fermented products

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
EU 27	**8 597**	**9 942**	**10 547**	**10 346**	**10 386**	**+ 0.4%**	**+ 2.1%**
Germany	2 733	2 956	3 056	2 961	2 950	- 0.4%	+ 0.9%
France	1 389	1 564	1 622	1 632	1 626	- 0.3%	+ 1.8%
Spain	744	1 192	1 241	1 183	1 190	+ 0.6%	+ 5.4%
Poland	375	475	567	557	609	+ 9.3%	+ 5.5%
Belgium	348	434	445	439	433	- 1.3%	+ 2.5%
United Kingdom	336	368	348	311	370	+ 19.0%	+ 1.1%
Netherlands	444	341	371	407	351	- 13.7%	- 2.6%
Austria	140	252	300	309	306	- 0.9%	+ 9.1%
Italy	279	295	312	314	303	- 3.5%	+ 0.9%
Sweden	265	270	271	272	267	- 1.7%	+ 0.1%
Denmark	161	249	263	262	253	- 3.4%	+ 5.2%
Greece	161	160	236	219	215	- 1.7%	+ 3.3%
Hungary	123	203	209	194	214	+ 10.3%	+ 6.4%
Czech Republic	128	157	202	193	208	+ 7.6%	+ 5.5%
Finland	207	203	205	204	203	- 0.4%	- 0.2%
Lithuania	31	68	79	67	69	+ 2.1%	+ 9.2%
Slovakia	46	52	54	51	51	- 0.4%	+ 1.1%
Latvia	47	46	50	46	45	- 2.3%	- 0.7%
Estonia	25	33	38	42	39	- 7.1%	+ 5.0%
Ireland	35	34	31	35	33	- 7.1%	- 0.9%
Other	580	591	648	650	653	+ 0.5%	+ 1.3%
Asia							
China	270	1 702	2 450	2 593	3 176	+ 22.5%	+ 31.5%
Japan (A)	2 147	2 242	2 399	2 301	2 264	- 1.6%	+ 0.6%
Turkey	-	-	2 066	2 081	2 081	0.0%	
Iran	-	623	792	870	905	+ 4.0%	
Korea, Republic of	530	482	485	455	446	- 2.0%	- 1.9%
Israel (B)	151	152	167	170	172	+ 1.2%	+ 1.5%
Other Europe							
Russia	-	1 856	2 188	2 159	2 160	+ 0.0%	
Ukraine	158	499	534	531	492	- 7.2%	+ 13.5%
Switzerland	99	229	236	275	269	- 2.3%	+ 11.7%
Norway	75	98	121	125	127	+ 1.6%	+ 6.0%
Croatia	55	83	92	100	104	+ 4.4%	+ 7.4%
Iceland	10	13	13	12	12	+ 1.6%	+ 2.4%
Northern America							
United States of America	1 515	2 096	2 331	2 411	2 525	+ 4.7%	+ 5.8%
Canada	306	429	464	497	494	- 0.5%	+ 5.5%
South America							
Argentina	243	405	576	583	592	+ 1.5%	+ 10.4%
Chile	-	-	182	197	208	+ 5.6%	
Uruguay	18	25	27	28	31	+ 10.1%	+ 6.0%

Table 8. Production of milk drinks and fermented products (continued)

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Central America							
Mexico	370	536	636	631	631	0.0%	+ 6.1%
Africa							
South Africa	-	-	-	279	290	+ 3.9%	

(A) Bacteria drinks included. (B) Dairy desserts and cream included.

Table 9. Production of cream for consumption

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
EU 27	**2 299**	**2 463**	**2 458**	**2 479**	**2 510**	**+ 1.2%**	**+ 1.0%**
Germany	671	678	561	554	568	+ 2.6%	- 1.8%
France	301	337	338	348	359	+ 3.3%	+ 2.0%
Poland	300	313	351	372	345	- 7.1%	+ 1.6%
United Kingdom	270	305	290	254	262	+ 3.1%	- 0.3%
Spain	68	75	95	121	154	+ 27.4%	+ 9.4%
Belgium	95	123	130	131	133	+ 1.7%	+ 3.9%
Italy	119	117	126	147	127	- 13.1%	+ 0.8%
Sweden	96	89	94	97	104	+ 7.7%	+ 0.9%
Denmark	58	63	68	58	63	+ 9.0%	+ 1.0%
Austria	55	59	63	62	61	- 1.9%	+ 1.2%
Czech Republic	37	40	43	46	50	+ 9.9%	+ 3.6%
Finland	39	39	32	33	34	+ 4.0%	- 1.5%
Netherlands	47	29	34	32	34	+ 6.6%	- 3.6%
Latvia	2	26	29	28	28	+ 1.4%	+ 34.9%
Estonia	19	24	31	27	27	0.0%	+ 4.2%
Slovakia	20	35	35	38	27	- 28.5%	+ 3.7%
Ireland	22	22	22	27	23	- 15.1%	+ 0.6%
Greece	10	9	17	15	18	+ 19.7%	+ 7.0%
Hungary	9	9	7	6	6	- 7.8%	- 5.0%
Lithuania	1	1	1	1	1	+ 9.1%	+ 2.0%
Other	63	70	91	86	85	- 1.5%	+ 3.4%
Northern America							
United States of America	-	-	1 147	1 116	1 116	+ 0.0%	
Canada	216	278	296	290	292	+ 0.5%	+ 3.4%
Other Europe							
Russia	-	-	80	70	69	- 0.7%	
Switzerland	68	65	67	68	68	+ 1.0%	- 0.0%
Croatia	-	-	24	26	27	+ 1.7%	
Norway	25	26	26	26	25	- 3.8%	+ 0.1%
Ukraine	-	-	14	18	16	- 13.2%	
Iceland	2	2	2	2	2	0.0%	+ 2.3%
Asia							
Iran	-	-	-	-	140		
Japan	73	92	103	108	105	- 2.4%	+ 4.0%
India (A)	-	46	37	38	38	0.0%	
Korea, Republic of	-	-	23	20	20	0.0%	
Central America							
Mexico	88	73	85	95	95	0.0%	+ 0.8%
South America							
Argentina	32	38	36	39	44	+ 12.8%	+ 3.6%
Chile	-	20	21	29	27	- 7.6%	
Uruguay	-	4	5	6	6	0.0%	

(A) Production by cooperative dairies; dairy years ending March of the following year.

Table 10. Production of butter and butteroil

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Asia							
India (A)	1 900	2 712	3 283	3 608	3 855	+ 6.9%	+ 8.2%
Pakistan (B) (C)	493	580	594	612	630	+ 3.0%	+ 2.8%
Iran	-	-	219	191	191	0.0%	
Turkey	118	130	143	143	147	+ 2.5%	+ 2.4%
Japan	88	84	75	72	81	+ 13.0%	- 0.9%
China	15	30	30	37	35	- 4.1%	+ 9.9%
Israel	5	6	6	6	6	+ 2.4%	+ 1.5%
Korea, Republic of	4	4	4	4	3	- 6.0%	- 2.9%
EU 27	**2 096**	**2 124**	**2 039**	**2 020**	**1 979**	**- 2.0%**	**- 0.6%**
Germany	425	455	446	465	453	- 2.6%	+ 0.7%
France	462	419	406	425	405	- 4.7%	- 1.4%
Poland	139	170	182	179	169	- 5.6%	+ 2.2%
Netherlands	143	167	167	172	165	- 4.1%	+ 1.6%
Ireland	146	148	143	126	121	- 4.0%	- 2.0%
United Kingdom	132	130	120	111	118	+ 5.9%	- 1.3%
Italy	133	130	116	106	93	- 12.7%	- 4.0%
Belgium (D)	141	155	134	114	128	+ 12.3%	- 1.1%
Finland	62	57	55	54	56	+ 3.7%	- 1.1%
Czech Republic	64	42	51	49	40	- 16.9%	- 4.9%
Spain	39	58	38	38	37	- 2.4%	- 0.6%
Denmark	46	44	36	39	37	- 5.7%	- 2.5%
Austria	36	31	34	33	32	- 1.5%	- 1.2%
Sweden	30	27	24	24	26	+ 10.5%	- 1.4%
Lithuania	19	14	13	9	12	+ 33.3%	- 5.2%
Slovakia	16	8	12	12	10	- 14.8%	- 5.0%
Estonia	9	8	7	7	9	+ 28.6%	+ 0.3%
Hungary	11	11	8	8	8	+ 3.7%	- 2.4%
Latvia	7	7	6	4	4	+ 3.5%	- 6.4%
Greece	2	2	2	2	2	0.0%	+ 2.0%
Other	36	44	41	43	53	+ 22.5%	+ 4.3%
Northern America							
United States of America	570	611	695	746	712	- 4.6%	+ 2.5%
Canada	77	86	82	88	90	+ 2.8%	+ 1.8%
Oceania							
New Zealand	353	390	350	432	470	+ 8.8%	+ 3.2%
Australia (B)	176	146	128	149	130	- 12.3%	- 3.3%
Other Europe							
Russia	270	277	245	255	232	- 9.1%	- 1.7%
Belarus	65	85	82	98	116	+ 18.5%	+ 6.6%
Ukraine	135	120	100	85	75	- 11.8%	- 6.3%
Switzerland	37	39	37	46	48	+ 4.7%	+ 3.0%
Norway	23	9	9	10	11	+ 6.8%	- 7.9%
Croatia	2	4	4	5	6	+ 13.2%	+ 12.0%
Iceland	2	2	2	2	2	+ 6.5%	+ 4.9%

Table 10. Production of butter and butteroil (continued)

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
South America							
Brazil	72	77	82	84	76	- 9.5%	+ 0.6%
Argentina	47	40	47	51	49	- 4.5%	+ 0.3%
Chile	11	15	18	17	17	+ 1.8%	+ 5.0%
Uruguay	14	18	16	21	16	- 27.3%	+ 1.1%
Central America							
Mexico	16	18	14	24	24	0.0%	+ 4.6%
Africa							
South Africa	9	11	12	12	12	+ 1.6%	+ 3.1%

(A) Dairy years ending March of the following year. (B) Dairy years ending June of the following year. (C) Year 2009: calculated.
(D) Reprocessed included. Years 2007, 2008 and 2009: calculated.

Table 11. Production of cheese

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
EU 27	**7 198**	**7 936**	**8 263**	**8 306**	**8 287**	**- 0.2%**	**+ 1.6%**
Germany	1 686	1 924	2 019	2 025	2 088	+ 3.1%	+ 2.4%
France (A)	1 612	1 685	1 732	1 719	1 693	- 1.5%	+ 0.5%
Italy (B)	927	1 034	1 043	1 047	1 059	+ 1.2%	+ 1.5%
Netherlands	684	672	732	724	714	- 1.3%	+ 0.5%
Poland	404	515	582	617	610	- 1.1%	+ 4.7%
United Kingdom	302	346	339	349	323	- 7.3%	+ 0.8%
Denmark	306	356	351	319	321	+ 0.5%	+ 0.5%
Greece (C)	143	156	188	182	195	+ 6.9%	+ 3.5%
Ireland	99	119	127	163	158	- 3.6%	+ 5.4%
Austria	119	145	149	148	146	- 1.2%	+ 2.3%
Spain (B)	111	136	128	127	126	- 0.8%	+ 1.4%
Czech Republic	92	118	116	111	109	- 1.4%	+ 1.9%
Sweden	127	118	109	114	108	- 5.2%	- 1.7%
Finland	98	97	102	107	105	- 2.2%	+ 0.7%
Lithuania	40	64	91	107	94	- 12.3%	+ 9.9%
Hungary	101	77	72	73	75	+ 2.9%	- 3.3%
Belgium	58	61	66	66	68	+ 4.0%	+ 1.8%
Estonia	22	28	32	36	37	+ 2.8%	+ 5.9%
Slovakia	40	39	40	34	31	- 8.7%	- 3.0%
Latvia	22	33	34	32	24	- 27.1%	+ 0.8%
Other	207	213	213	208	205	- 1.4%	- 0.1%
Northern America							
United States of America	3 746	4 150	4 435	4 499	4 585	+ 1.9%	+ 2.3%
Canada	292	310	332	329	331	+ 0.7%	+ 1.4%
South America							
Brazil	445	495	580	607	614	+ 1.2%	+ 3.6%
Argentina	443	408	474	478	509	+ 6.5%	+ 1.6%
Chile	52	78	70	65	65	- 0.9%	+ 2.5%
Uruguay	28	38	46	52	53	+ 2.8%	+ 7.5%
Other Europe							
Russia	221	371	434	430	436	+ 1.5%	+ 7.8%
Ukraine	67	391	337	327	312	- 4.7%	+ 18.6%
Switzerland	167	168	176	179	178	- 0.6%	+ 0.7%
Belarus	41	82	110	128	134	+ 4.9%	+ 14.1%
Norway	81	84	84	85	86	+ 1.2%	+ 0.7%
Croatia	19	26	30	29	30	+ 1.4%	+ 4.9%
Iceland	6	7	8	8	8	0.0%	+ 3.4%
Oceania							
Australia (D)	376	373	361	342	330	- 3.6%	- 1.5%
New Zealand (E)	289	280	348	295	270	- 8.5%	- 0.8%

Table 11. Production of cheese (continued)

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Asia							
Iran	221	220	230	234	245	+ 4.7%	+ 1.1%
Turkey (F)	129	143	151	151	153	+ 1.4%	+ 1.9%
Israel	99	106	115	119	121	+ 1.5%	+ 2.2%
Japan	34	39	43	43	45	+ 4.5%	+ 3.3%
China (E)	-	15	18	15	15	0.0%	
Korea, Republic of	4	12	9	10	8	- 17.5%	+ 7.7%
India (G)	-	4	6	5	5	0.0%	
Central America							
Mexico	134	134	142	142	142	0.0%	+ 0.6%
Africa							
South Africa	35	42	44	43	43	0.0%	+ 2.2%

(A) Not including goat milk cheese (94 764 t) and sheep milk cheese (57 328 t). (B) Production of cow's milk cheese only.
(C) Cheese all kinds. (D) Dairy years ending June of the following year. (E) Processed cheese included.
(F) FAO estimates based on dairies production; total production (including farm products) : 1.6 million tonnes.
(G) Production by cooperative dairies; dairy years ending March of the following year.

Table 12. Production of whole and semi-skimmed milk powder

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Asia							
China (A)	522	918	1 150	1 120	977	- 12.8%	+ 7.2%
India (B)	-	74	73	74	74	0.0%	
Japan	18	14	14	14	13	- 6.7%	- 4.1%
Turkey	-	-	11	11	11	0.0%	
Korea, Republic of	5	5	4	3	3	0.0%	- 6.5%
Oceania							
New Zealand	515	675	653	651	790	+ 21.4%	+ 4.9%
Australia (C)	205	158	142	148	126	- 14.6%	- 5.3%
South America							
Brazil	256	440	526	572	473	- 17.3%	+ 7.1%
Argentina	202	254	185	200	235	+ 17.5%	+ 1.7%
Chile	52	51	57	85	58	- 31.6%	+ 1.3%
Uruguay	19	37	35	44	44	- 0.0%	+ 10.1%
EU 27	**941**	**850**	**768**	**837**	**739**	**- 11.6%**	**- 2.6%**
Germany	185	161	157	168	150	- 11.0%	- 2.3%
Netherlands	97	107	109	127	146	+ 14.9%	+ 4.7%
France	258	193	145	165	121	- 26.7%	- 8.1%
Denmark	81	79	75	76	93	+ 21.9%	+ 1.5%
Belgium	65	79	71	84	63	- 25.0%	- 0.3%
United Kingdom (D)	105	52	48	40	40	0.0%	- 10.2%
Poland	30	50	41	48	33	- 31.1%	+ 0.9%
Sweden	5	32	36	40	31	- 22.6%	+ 21.6%
Ireland	37	39	34	33	25	- 24.5%	- 4.2%
Czech Republic	23	17	15	17	9	- 47.0%	- 9.8%
Estonia	4	8	3	5	4	- 20.0%	- 0.3%
Latvia	1	2	5	5	4	- 22.2%	+ 20.3%
Slovakia	4	7	6	4	3	- 24.4%	- 2.9%
Finland	2	2	3	3	3	- 3.1%	+ 5.0%
Spain	12	6	6	4	2	- 40.0%	- 16.4%
Lithuania	12	0	0	6	2	- 66.7%	- 18.3%
Hungary	3	1	0	1	1	0.0%	- 14.9%
Austria	3	1	1	1	1	0.0%	- 18.1%
Other	14	15	13	11	10	- 6.2%	- 3.3%
Central America							
Mexico	151	166	202	190	190	0.0%	+ 2.6%
Other Europe							
Russia	75	80	75	84	50	- 40.6%	- 4.4%
Belarus	14	38	36	41	41	+ 0.5%	+ 13.0%
Switzerland	13	20	21	22	20	- 10.3%	+ 4.5%
Norway	1	1	1	1	1	0.0%	0.0%
Croatia	-	1	0	0	1	+ 438.5%	
Iceland	0	0	0	0	0	- 0.7%	+ 4.6%
Ukraine (E)	-	-	-	-	-		

Table 12. Production of whole and semi-skimmed milk powder (continued)

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Northern America							
United States of America	51	15	14	23	27	+ 18.1%	- 6.9%
Canada	4	-	-	-	-		
Africa							
South Africa	10	16	16	16	15	- 3.9%	+ 4.1%

(A) Including infant formulas. (B) Production by cooperative dairies; dairy years ending March of the following year.
(C) Dairy years ending June of the following year. (D) Years 2008 and 2009: estimated.
(E) Figures not available, for total production of milk powder: see table 13.

Table 13. Production of skim milk powder

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
EU 27	**1 256**	**1 063**	**1 009**	**983**	**1 120**	**+ 14.0%**	**- 1.3%**
France	279	276	252	287	312	+ 8.5%	+ 1.3%
Germany	335	257	237	231	289	+ 24.9%	- 1.6%
Poland	119	142	130	120	98	- 18.4%	- 2.1%
Belgium	70	77	79	71	81	+ 14.6%	+ 1.8%
Ireland	79	55	83	55	75	+ 35.8%	- 0.6%
United Kingdom (A)	83	69	69	54	62	+ 14.8%	- 3.2%
Netherlands	69	53	42	55	58	+ 5.6%	- 1.9%
Sweden	41	17	16	17	27	+ 56.7%	- 4.7%
Denmark	38	15	19	18	21	+ 19.3%	- 6.4%
Lithuania	29	7	20	10	20	+ 100.0%	- 4.0%
Czech Republic	35	32	23	23	18	- 21.3%	- 7.1%
Finland	24	21	15	8	17	+ 112.3%	- 3.6%
Spain	4	5	1	5	10	+ 121.3%	+ 11.2%
Estonia	11	9	4	5	7	+ 40.0%	- 4.5%
Slovakia	8	6	8	7	4	- 43.5%	- 7.0%
Austria	13	8	3	3	4	+ 2.9%	- 13.6%
Latvia	4	2	2	1	3	+ 466.7%	- 0.3%
Hungary	5	1	1	0	0	0.0%	- 26.3%
Other	13	10	4	13	14	+ 15.0%	+ 1.6%
Northern America							
United States of America	661	698	680	859	778	- 9.4%	+ 1.8%
Canada	75	73	78	90	85	- 4.7%	+ 1.4%
Asia							
India (B)	145	251	314	339	364	+ 7.4%	+ 10.8%
Japan	194	187	173	158	167	+ 5.8%	- 1.6%
China	58	60	58	53	54	+ 1.9%	- 0.8%
Iran	-	10	12	15	16	+ 6.7%	
Korea, Republic of	24	24	22	20	15	- 25.0%	- 5.2%
Israel	-	-	5	11	6	- 42.1%	
Pakistan (C)	0	0	1	1	1	0.0%	
Oceania							
New Zealand	251	250	304	265	360	+ 35.8%	+ 4.1%
Australia (C)	265	228	164	212	190	- 10.3%	- 3.6%
Other Europe							
Russia	97	110	132	131	108	- 17.6%	+ 1.2%
Ukraine (D)	68	112	125	95	67	- 29.6%	- 0.2%
Belarus	28	46	61	50	55	+ 10.0%	+ 7.8%
Switzerland	23	26	25	28	37	+ 33.8%	+ 5.2%
Norway	5	7	7	7	7	0.0%	+ 3.8%
Croatia	3	3	0	1	1	+ 66.7%	- 11.5%
Iceland	0	0	1	1	1	+ 0.5%	+ 10.7%

Table 13. Production of skim milk powder

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
South America							
Brazil	62	113	128	128	125	- 2.3%	+ 8.1%
Argentina	45	16	23	25	47	+ 89.5%	+ 0.5%
Uruguay	12	9	11	19	19	- 0.1%	+ 5.1%
Chile	8	12	17	18	15	- 14.7%	+ 7.3%
Central America							
Mexico	-	9	23	23	23	0.0%	
Africa							
South Africa	8	15	15	15	15	0.0%	+ 7.1%

(A) Years 2008 and 2009: estimated. (B) Dairy years ending March of the following year.
(C) Dairy years ending June of the following year. (D) Corresponding volume refers to total production of milk powder.

Table 14. Production of condensed milk

´000 tonnes Country	2000	2005	2007	2008	2009		Annual growth 08/'09		CAGR 00-'09
EU 27	**1 276**	**1 149**	**1 134**	**1 142**	**1 104**	**-**	**3.4%**	**-**	**1.6%**
Germany	567	458	446	416	421	+	1.2%	-	3.2%
Netherlands	274	292	331	342	320	-	6.5%	+	1.8%
United Kingdom (A)	162	143	109	110	104	-	5.1%	-	4.8%
Belgium	68	80	75	90	87	-	3.8%	+	2.7%
Spain	58	60	47	46	47	+	0.9%	-	2.4%
Poland	24	33	36	37	38	+	2.7%	+	5.2%
Greece	35	33	23	24	23	-	5.4%	-	4.8%
Lithuania	4	5	22	30	21	-	29.5%	+	20.2%
Czech Republic	24	16	19	17	17	-	2.3%	-	3.9%
France	32	14	11	12	12	+	0.5%	-	10.6%
Sweden	10	1	1	4	2	-	41.0%	-	14.9%
Italy	1	1	1	1	1		0.0%		0.0%
Hungary	2	1	0	0	0		0.0%	-	23.4%
Estonia	1	0	0	1	0	-	100.0%	-	100.0%
Other	14	12	13	12	11	-	5.1%	-	2.4%
South America									
Peru	222	328	389	389	360	-	7.5%	+	5.5%
Brazil (B)	250	250	280	290	300	+	3.4%	+	2.0%
Chile	24	40	45	42	33	-	19.8%	+	3.7%
Argentina	12	6	8	7	6	-	15.9%	-	7.8%
Other Europe									
Russia	249	227	304	346	333	-	3.9%	+	3.3%
Ukraine	47	104	113	108	96	-	10.4%	+	8.3%
Belarus	41	57	85	88	84	-	4.3%	+	8.3%
Norway	14	11	11	11	11		0.0%	-	2.5%
Switzerland	3	3	3	3	2	-	5.3%	-	1.8%
Croatia	7	0	0	0	0			-	100.0%
Northern America									
United States of America	259	289	283	326	307	-	5.7%	+	1.9%
Canada	103	46	44	41	38	-	7.5%	-	10.5%
Asia									
China	80	150	150	173	160	-	7.6%	+	8.0%
Japan	41	42	45	44	46	+	3.2%	+	1.2%
Korea, Republic of	4	4	4	4	4		0.0%	-	1.7%
Central America									
Mexico	153	162	162	162	162		0.0%	+	0.6%
Africa									
South Africa	57	54	54	54	54		0.0%	-	0.6%
Oceania									
Australia	25	19	19	19	19		0.0%	-	2.8%

(A) Chocolate crumb included. (B) Estimation, based on consumption and trade figures.

Table 15. Production of whey powder

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
EU 27	**1 888**	**1 652**	**1 779**	**1 774**	**1 654**	**- 6.8%**	**- 1.5%**
France	622	614	642	643	562	- 12.5%	- 1.1%
Germany	228	356	358	362	341	- 5.8%	+ 4.6%
Netherlands	340	233	253	238	238	+ 0.1%	- 3.9%
Poland	50	75	149	158	160	+ 1.1%	+ 13.8%
Italy	348	164	125	129	114	- 11.5%	- 11.7%
Finland	89	36	35	38	38	+ 1.0%	- 8.9%
Ireland	35	35	35	35	35	0.0%	0.0%
Denmark	37	36	32	32	32	0.0%	- 1.7%
Czech Republic	20	29	49	34	28	- 17.8%	+ 3.7%
Austria	2	11	20	18	26	+ 43.6%	+ 34.4%
Lithuania	6	18	27	28	20	- 27.6%	+ 14.7%
Spain	10	12	13	15	17	+ 18.6%	+ 6.3%
Slovakia	20	13	13	13	13	0.0%	- 4.7%
Estonia	0	1	4	7	7	+ 6.1%	+ 48.4%
Hungary	10	2	5	9	5	- 47.3%	- 7.8%
Sweden	6	4	3	3	3	- 5.8%	- 6.1%
United Kingdom	56	-	-	-	-		
Other	9	12	13	14	15	+ 8.5%	+ 6.1%
Northern America							
United States of America (A)	591	517	559	531	492	- 7.3%	- 2.0%
Canada	59	24	32	27	20	- 26.2%	- 11.4%
South America							
Argentina	-	13	21	25	72	+ 188.8%	
Chile	15	24	28	25	24	- 4.1%	+ 5.2%
Uruguay	-	8	18	14	14	0.0%	
Oceania							
Australia	105	98	79	85	85	0.0%	- 2.4%
New Zealand	-	-	-	-	15		
Other Europe							
Russia	-	-	44	43	45	+ 3.7%	
Croatia	-	-	4	5	5	- 7.7%	
Switzerland	3	2	2	2	1	- 27.9%	- 8.5%
Norway	1	1	1	1	1	0.0%	0.0%
Africa							
South Africa	-	-	-	13	13	0.0%	

(A) Condensed whey included.

Table 16. World and selected countries exports in butter and butteroil

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
New Zealand	345	324	357	326	451	+ 38.3%	+ 3.0%
EU 27 (A)	**186**	**317**	**211**	**150**	**148**	**- 1.3%**	**- 2.5%**
Netherlands	46	78	57	44	43	- 1.7%	- 0.8%
Finland	22	24	22	22	23	+ 4.9%	+ 0.6%
France	27	31	22	20	22	+ 12.7%	- 2.4%
Belgium	15	45	28	15	16	+ 3.0%	+ 0.6%
Germany	12	22	19	13	15	+ 14.0%	+ 3.0%
Denmark	18	18	12	10	10	- 3.6%	- 6.2%
Ireland	13	25	20	12	7	- 39.7%	- 6.2%
Other EU	34	73	33	14	12	- 13.4%	- 10.4%
Belarus	17	51	50	62	86	+ 39.1%	+ 19.7%
Australia	115	68	66	48	84	+ 75.9%	- 3.5%
United States of America	9	9	41	80	22	- 71.9%	+ 10.8%
Uruguay	5	13	15	9	19	+ 110.4%	+ 15.6%
Argentina	7	7	19	22	17	- 25.5%	+ 10.8%
Singapore	4	5	9	10	8	- 16.0%	+ 8.2%
India (B)	2	6	9	16	7	- 55.1%	+ 16.3%
Rest of world	63	111	59	66	70	+ 7.1%	+ 1.3%
World	**753**	**911**	**836**	**788**	**912**	**+ 15.8%**	**+ 2.2%**

Table 17. World and selected countries exports trade in cheese

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
EU 27 (A)	**526**	**554**	**594**	**551**	**573**	**+ 4.1%**	**+ 1.0%**
Germany	81	97	110	109	104	- 4.3%	+ 2.8%
Netherlands	78	78	92	80	83	+ 4.2%	+ 0.7%
France	92	81	84	79	77	- 3.1%	- 2.0%
Italy	56	66	74	71	68	- 3.6%	+ 2.2%
Denmark	70	59	54	41	43	+ 4.3%	- 5.2%
Finland	21	26	33	31	36	+ 16.6%	+ 5.8%
Lithuania	26	24	33	35	31	- 11.4%	+ 1.9%
Other EU	102	123	114	105	131	+ 24.6%	+ 2.9%
New Zealand	246	264	305	247	290	+ 17.4%	+ 1.8%
Australia	246	208	217	158	162	+ 3.1%	- 4.5%
Belarus	17	65	92	102	121	+ 19.0%	+ 24.5%
United States of America	50	58	99	128	106	- 17.4%	+ 8.7%
Ukraine	12	116	62	77	77	- 1.0%	+ 22.3%
Switzerland	57	52	54	61	62	+ 1.6%	+ 0.9%
Argentina	25	52	45	36	48	+ 31.3%	+ 7.6%
Uruguay	17	32	28	27	37	+ 36.6%	+ 9.2%
Rest of world	111	230	346	373	374	+ 0.2%	+ 14.5%
World	**1 308**	**1 630**	**1 843**	**1 761**	**1 850**	**+ 5.1%**	**+ 3.9%**

(A) Intra-trade excluded for all member states. (B) India uses April-March fiscal years: data for 2008/09 are accounted for under 2008, etc.

Table 18. World and selected countries exports in whole and semi-skimmed milk powder

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
New Zealand	409	589	675	590	811	+ 37.5%	+ 7.9%
EU 27 (A)	**584**	**498**	**367**	**484**	**463**	**- 4.4%**	**- 2.5%**
Netherlands	158	143	122	135	153	+ 13.4%	- 0.4%
Denmark	71	74	68	64	89	+ 37.5%	+ 2.5%
Belgium	42	73	50	90	75	- 16.7%	+ 6.6%
France	168	71	44	46	41	- 10.0%	- 14.5%
United Kingdom	73	48	26	50	30	- 39.7%	- 9.4%
Sweden	0	19	17	31	29	- 5.6%	+ 82.9%
Other EU	71	70	40	69	47	- 32.4%	- 4.5%
Argentina	97	162	100	136	154	+ 13.3%	+ 5.3%
Australia	203	157	116	141	133	- 5.3%	- 4.6%
Oman	13	50	42	78	66	- 14.5%	+ 19.8%
Uruguay	14	37	31	35	56	+ 60.2%	+ 16.9%
Singapore	5	26	42	62	54	- 13.5%	+ 30.6%
Belarus	13	31	27	27	33	+ 20.7%	+ 10.8%
Philippines	7	36	42	45	29	- 36.4%	+ 16.2%
Indonesia	2	32	18	41	26	- 37.2%	+ 30.1%
Rest of world	139	276	300	395	310	- 21.6%	+ 9.3%
World	**1 486**	**1 893**	**1 760**	**2 034**	**2 135**	**+ 4.9%**	**+ 4.1%**

Table 19. World and selected countries exports in skim milk powder

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
New Zealand	159	221	277	242	408	+ 68.6%	+ 11.0%
United States of America	101	277	258	391	249	- 36.4%	+ 10.5%
EU 27 (A)	**449**	**190**	**202**	**179**	**231**	**+ 29.2%**	**- 7.1%**
Belgium	66	19	42	38	58	+ 53.2%	- 1.4%
Netherlands	67	28	24	23	44	+ 90.8%	- 4.6%
France	35	14	16	36	33	- 7.4%	- 0.6%
Germany	72	29	26	23	29	+ 25.6%	- 9.6%
Poland	71	38	27	24	21	- 13.6%	- 12.8%
Ireland	50	12	30	11	11	- 0.8%	- 15.2%
Other EU	88	51	37	24	35	+ 46.4%	- 9.7%
Australia	219	166	134	126	167	+ 33.3%	- 2.9%
Belarus	28	44	60	61	80	+ 30.1%	+ 12.2%
Ukraine	49	57	58	44	27	- 38.1%	- 6.5%
Switzerland	11	14	6	6	25	+ 305.8%	+ 9.8%
Uruguay	13	11	10	9	20	+ 108.9%	+ 5.2%
India (B)	8	47	32	24	16	- 32.1%	+ 8.7%
Argentina	22	16	11	15	13	- 11.3%	- 5.3%
Rest of world	148	89	93	93	92	- 1.2%	- 5.1%
World	**1 207**	**1 132**	**1 139**	**1 191**	**1 329**	**+ 11.6%**	**+ 1.1%**

(A) Intra-trade excluded for all member states. (B) India uses April-March fiscal years: data for 2008/09 are accounted for under 2008, etc.

Table 20. World and selected countries imports in butter and butteroil

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Russia	71	133	128	141	125	- 11.1%	+ 6.5%
Egypt	51	50	50	35	70	+ 100.9%	+ 3.5%
EU 27 (A)	**78**	**80**	**91**	**64**	**62**	**- 3.4%**	**- 2.6%**
Netherlands	12	40	50	25	42	+ 68.8%	+ 14.6%
Denmark	4	36	33	33	17	- 47.4%	+ 16.3%
Other EU	61	4	8	6	2	- 60.6%	- 30.3%
Mexico	34	71	59	41	60	+ 47.3%	+ 6.5%
Saudi Arabia	23	43	38	37	40	+ 8.2%	+ 6.6%
Iran	20	43	40	50	40	- 20.0%	+ 8.2%
China	3	13	14	14	28	+ 109.2%	+ 28.0%
Morocco	25	36	23	34	27	- 21.8%	+ 0.9%
Nigeria	3	5	17	7	25	+ 275.6%	+ 27.0%
United States of America	22	63	41	17	24	+ 36.2%	+ 0.7%
India (B)	8	1	1	1	23	> 1 000%	+ 12.0%
Singapore	18	29	30	25	21	- 16.4%	+ 1.4%
Philippines	12	12	12	14	20	+ 43.0%	+ 5.2%
Australia	11	10	14	19	18	- 8.7%	+ 5.8%
Rest of world	374	324	276	290	332	+ 14.2%	- 1.3%
World	**753**	**911**	**836**	**788**	**912**	**+ 15.8%**	**+ 2.2%**

Table 21. World and selected countries imports in cheese

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Russia	52	312	318	350	353	+ 0.9%	+ 23.7%
Japan	205	212	225	187	184	- 1.2%	- 1.2%
United States of America	192	211	200	136	130	- 4.5%	- 4.3%
EU 27 (A)	**143**	**95**	**94**	**84**	**83**	**- 0.2%**	**- 5.8%**
United Kingdom	29	20	21	18	20	+ 9.2%	- 3.9%
Germany	22	16	19	19	20	+ 2.0%	- 1.1%
Other EU	92	58	54	46	43	- 4.9%	- 8.0%
Mexico	54	79	86	68	73	+ 7.1%	+ 3.4%
Australia	38	54	65	68	65	- 4.4%	+ 6.0%
Korea, Republic of	31	44	49	47	49	+ 3.5%	+ 5.4%
Switzerland	31	32	37	41	44	+ 7.4%	+ 4.1%
Saudi Arabia	73	103	106	77	42	- 44.7%	- 5.9%
Egypt	16	17	20	20	30	+ 47.1%	+ 6.7%
Kazakhstan	1	6	20	24	26	+ 6.2%	+ 37.6%
El Salvador	8	18	25	26	25	- 3.7%	+ 12.7%
Canada	29	25	26	26	24	- 6.2%	- 2.2%
Algeria	19	23	24	16	19	+ 23.2%	+ 0.3%
Rest of world	271	305	453	509	620	+ 21.8%	+ 9.6%
World	**1 308**	**1 630**	**1 843**	**1 761**	**1 850**	**+ 5.1%**	**+ 3.9%**

(A) Intra-trade excluded. (B) India uses April-March fiscal years: data for 2008/09 are accounted for under 2008, etc.

Table 22. World and selected countries imports in whole and semi-skimmed milk powder

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
China	51	64	58	70	193	+ 175.1%	+ 16.0%
Algeria	117	170	158	160	169	+ 5.9%	+ 4.2%
Venezuela	76	95	124	306	156	- 49.0%	+ 8.3%
Singapore	22	61	61	73	74	+ 0.8%	+ 14.2%
United Arab Emirates	32	38	40	53	74	+ 38.9%	+ 9.7%
Oman	9	49	44	74	73	- 0.7%	+ 25.7%
Nigeria	37	56	64	62	71	+ 13.0%	+ 7.5%
Saudi Arabia	43	75	74	76	67	- 11.9%	+ 5.0%
Brazil	108	29	19	23	57	+ 149.1%	- 6.9%
Sri Lanka	46	46	57	57	57	- 0.1%	+ 2.4%
Indonesia	26	67	85	84	50	- 40.3%	+ 7.8%
Senegal	14	26	21	24	41	+ 72.1%	+ 13.1%
Philippines	56	36	38	46	34	- 25.6%	- 5.3%
Malaysia	58	67	59	50	29	- 40.9%	- 7.3%
Sudan	4	15	19	18	29	+ 61.5%	+ 26.5%
Bangladesh	24	21	26	14	28	+ 91.3%	+ 1.4%
Mexico	34	44	46	23	27	+ 14.3%	- 2.6%
Thailand	48	33	29	25	24	- 6.8%	- 7.6%
Rest of world	681	898	738	795	882	+ 10.9%	+ 2.9%
World	**1 486**	**1 893**	**1 760**	**2 034**	**2 135**	**+ 4.9%**	**+ 4.1%**

Table 23. World and selected countries imports in skim milk powder

´000 tonnes Country	2000	2005	2007	2008	2009	Annual growth 08/'09	CAGR 00-'09
Mexico	129	155	121	152	165	+ 8.3%	+ 2.8%
Philippines	111	87	94	80	112	+ 40.5%	+ 0.1%
Indonesia	83	87	91	77	104	+ 34.6%	+ 2.6%
Algeria	91	84	91	105	93	- 11.5%	+ 0.1%
Malaysia	75	57	85	78	84	+ 7.4%	+ 1.3%
China	22	43	40	55	70	+ 28.2%	+ 13.9%
Singapore	39	61	62	54	61	+ 13.0%	+ 5.2%
Egypt	27	20	18	29	52	+ 79.9%	+ 7.5%
Thailand	53	70	57	61	50	- 17.4%	- 0.6%
Viet Nam	30	50	59	36	46	+ 27.0%	+ 4.9%
Yemen	7	12	20	23	35	+ 49.5%	+ 19.8%
Japan	52	34	35	32	34	+ 6.5%	- 4.6%
Saudi Arabia	38	53	63	34	30	- 10.9%	- 2.4%
Nigeria	13	17	19	24	24	+ 0.0%	+ 7.1%
Jordan	7	13	7	20	19	- 4.9%	+ 11.3%
Bangladesh	9	37	19	8	18	+ 130.1%	+ 7.8%
United Arab Emirates	3	7	15	13	14	+ 7.5%	+ 18.7%
Turkey	5	4	8	11	12	+ 14.8%	+ 10.8%
Rest of world	413	242	234	298	305	+ 2.3%	- 3.3%
World	**1 207**	**1 132**	**1 139**	**1 191**	**1 329**	**+ 11.6%**	**+ 1.1%**

Table 24. Liquid milk consumption

Country	´000 tonnes 2007	2008	2009	Annual growth 08/'09	CAGR 07-'09	kg per capita 2007	2008	2009
Asia								
India (A)	41 990	44 060	45 116	+ 2,4%	+ 3,7%	36.9	38.2	38.6
China	12 067	12 681	15 007	+ 18,3%	+ 11,5%	9.1	9.5	11.2
Japan (A)	4 463	4 367	4 367	0,0%	- 1,1%	34.9	34.2	34.2
Iran	2 400	2 576	2 625	+ 1,9%	+ 4,6%	33.6	35.0	35.1
Turkey	1 726	1 861	1 861	0,0%	+ 3,8%	24.5	26.0	26.0
Korea, Republic of	1 697	1 702	1 702	0,0%	+ 0,1%	35.0	35.0	34.9
Israel	418	418	423	+ 1,2%	+ 0,6%	58.2	57.2	56.8
EU 27	**32 795**	**32 563**	**32 188**	**- 1,2%**	**- 0,9%**	**66.2**	**65.4**	**64.5**
United Kingdom	6 429	6 351	6 449	+ 1,6%	+ 0,2%	105.4	103.4	104.4
Germany	4 327	4 435	4 409	- 0,6%	+ 0,9%	52.6	54.0	53.9
Spain	4 140	4 110	4 130	+ 0,5%	- 0,1%	91.6	89.2	88.4
France	3 767	3 699	3 699	0,0%	- 0,9%	60.6	59.2	59.2
Italy	3 706	3 708	3 211	- 13,4%	- 6,9%	62.7	62.2	53.5
Poland	1 757	1 678	1 641	- 2,2%	- 3,4%	46.1	44.0	43.0
Netherlands	1 009	991	989	- 0,2%	- 1,0%	61.6	60.3	59.6
Sweden	966	955	925	- 3,2%	- 2,1%	105.6	103.6	99.4
Finland	706	700	694	- 0,8%	- 0,8%	133.2	132.1	131.0
Austria (B)	654	660	660	0,0%	+ 0,5%	78.7	79.2	79.2
Czech Republic	524	554	627	+ 13,3%	+ 9,4%	50.5	52.9	59.7
Ireland	625	625	625	0,0%	0,0%	144.0	141.3	140.2
Hungary	573	540	589	+ 8,9%	+ 1,4%	56.9	53.8	58.7
Belgium	580	574	574	- 0,0%	- 0,5%	54.8	53.9	53.5
Denmark	492	497	496	- 0,3%	+ 0,4%	90.1	90.6	89.9
Slovakia	283	261	268	+ 2,7%	- 2,6%	52.4	48.3	49.5
Estonia (B)	183	188	188	0,0%	+ 1,5%	136.1	140.4	140.4
Lithuania	89	95	101	+ 6,3%	+ 6,5%	26.4	28.3	30.3
Other	1 986	1 941	1 913	- 1,5%	- 1,9%	34.9	34.1	33.6
Northern America								
United States of America	24 987	25 011	25 168	+ 0,6%	+ 0,4%	82.9	82.3	81.9
Canada	2 826	2 852	2 834	- 0,6%	+ 0,1%	85.8	84.7	84.0
Other Europe								
Russia (C)	9 955	9 799	9 926	+ 1,3%	- 0,1%	70.0	69.0	70.0
Ukraine	3 641	3 520	3 527	+ 0,2%	- 1,6%	78.3	76.1	76.6
Switzerland	612	617	651	+ 5,6%	+ 3,2%	80.6	80.1	83.7
Norway	439	443	448	+ 1,1%	+ 1,0%	95.4	93.5	92.4
Croatia	343	342	324	- 5,3%	- 2,8%	77.2	77.0	72.1
Iceland	35	37	38	+ 4,4%	+ 4,2%	112.7	114.9	120.3
South America								
Brazil	10 170	10 684	10 900	+ 2,0%	+ 3,5%	55.3	56.9	56.5
Argentina	1 708	1 678	1 678	0,0%	- 0,9%	43.0	42.2	42.2
Uruguay	237	245	248	+ 1,5%	+ 2,4%	71.3	73.4	74.2
Central America								
Mexico	4 275	4 265	4 421	+ 3,7%	+ 1,7%	40.4	40.0	41.1

Table 24. Liquid milk consumption (continued)

Country	´000 tonnes 2007	2008	2009	Annual growth 08/'09	CAGR 07-'09	kg per capita 2007	2008	2009
Oceania								
Australia (D)	2 254	2 296	2 348	+ 2,3%	+ 2,1%	106.1	105.7	106.0
New Zealand (B)	320	325	335	+ 3,1%	+ 2,3%	75.6	76.1	77.6
Africa								
South Africa	1 680	-	-			39.1	-	-

(A) Dairy years ending March of the following year. (B) Including milk drinks, fermented products.
(C) Including farm products. (D) Dairy years ending June of the following year

Table 25. Butter consumption

Country	´000 tonnes 2007	2008	2009	Annual growth 08/'09	CAGR 07-'09	kg per capita 2007	2008	2009
Asia								
India (A)	3 284	3 600	3 871	+ 7,5%	+ 8,6%	2.9	3.1	3.3
Turkey	221	228	228	0,0%	+ 1,6%	3.1	3.2	3.2
Iran (B)	215	221	224	+ 1,5%	+ 2,2%	3.0	3.0	3.0
China	123	133	138	+ 4,2%	+ 5,8%	0.1	0.1	0.1
Japan (A)	92	78	78	0,0%	- 7,9%	0.7	0.6	0.6
Korea, Republic of	8	7	8	+ 14,3%	0,0%	0.2	0.1	0.2
Israel	6	6	6	+ 1,8%	- 4,1%	0.9	0.8	0.8
EU 27	**1 815**	**1 769**	**1 740**	**- 1,6%**	**- 2,1%**	**3.7**	**3.6**	**3.5**
France	501	493	493	0,0%	- 0,8%	8.1	7.9	7.9
Germany	524	510	462	- 9,5%	- 6,2%	6.4	6.2	5.6
United Kingdom	195	169	183	+ 8,2%	- 3,1%	3.2	2.8	3.0
Poland	160	164	168	+ 2,4%	+ 2,4%	4.2	4.3	4.4
Italy	120	111	98	- 11,6%	- 9,6%	2.0	1.9	1.6
Netherlands	56	54	56	+ 3,9%	+ 0,6%	3.4	3.3	3.4
Czech Republic	43	50	53	+ 5,8%	+ 11,1%	4.1	4.7	5.0
Austria	42	40	40	0,0%	- 2,4%	5.1	4.8	4.8
Belgium	25	26	26	+ 0,8%	+ 0,8%	2.4	2.4	2.4
Spain	21	22	22	+ 2,8%	+ 3,3%	0.5	0.5	0.5
Sweden	14	14	17	+ 18,2%	+ 9,9%	1.5	1.6	1.8
Finland	15	14	15	+ 7,4%	+ 1,8%	2.8	2.7	2.9
Slovakia	11	12	15	+ 27,8%	+ 15,8%	2.1	2.2	2.8
Ireland	11	11	11	0,0%	0,0%	2.6	2.6	2.5
Denmark	10	10	10	+ 3,1%	+ 2,6%	1.7	1.8	1.8
Hungary	9	9	10	+ 10,0%	+ 6,1%	0.9	0.9	1.0
Greece	8	8	8	0,0%	0,0%	0.7	0.7	0.7
Lithuania (C)	4	5	7	+ 52,1%	+ 30,3%	1.3	1.4	2.2
Latvia	6	6	6	0,0%	+ 2,7%	2.4	2.6	2.7
Estonia	5	6	6	0,0%	+ 10,1%	3.5	4.3	4.3
Other	36	37	35	- 5,5%	- 2,0%	0.8	0.9	0.8
Northern America								
United States of America	653	689	694	+ 0,7%	+ 3,1%	2.2	2.3	2.3
Canada	90	89	95	+ 6,3%	+ 2,8%	2.7	2.7	2.8
Other Europe								
Russia	374	399	356	- 10,8%	- 2,4%	2.6	2.8	2.5
Ukraine	97	82	89	+ 8,5%	- 4,2%	2.1	1.8	1.9
Switzerland	44	45	42	- 5,6%	- 2,4%	5.8	5.8	5.4
Norway	18	19	19	0,0%	+ 2,7%	3.9	4.0	3.9
Croatia	3	4	5	+ 25,9%	+ 30,4%	0.7	0.9	1.1
Iceland	1	1	2	+ 14,3%	+ 6,9%	4.5	4.5	5.0
Central America								
Mexico	284	229	223	- 2,6%	- 11,4%	2.7	2.1	2.1

Table 25. Butter consumption (continued)

Country	´000 tonnes			Annual growth		CAGR	kg per capita		
	2007	2008	2009	08/'09		07-'09	2007	2008	2009
South America									
Brazil	80	81	82	+	1,2%	+ 1,2%	0.4	0.4	0.4
Argentina	47	51	51		0,0%	+ 3,4%	1.2	1.3	1.3
Uruguay	5	5	5	+	2,6%	+ 2,5%	1.5	1.5	1.5
Oceania									
Australia (D)	87	87	86	-	1,0%	- 0,4%	4.1	4.0	3.9
New Zealand	15	16	16		0,0%	+ 3,3%	3.5	3.7	3.7

(A) Dairy years ending March of the following year. (B) Cream included.

(C) Blends included. Including intervention buying in 2009. (D) Dairy years ending June of the following year.

Table 26. Cheese consumption

Country	´000 tonnes 2007	2008	2009	Annual growth 08/'09	CAGR 07-'09	kg per capita 2007	2008	2009
EU 27	**8 142**	**8 223**	**8 297**	**+ 0,9%**	**+ 0,9%**	**16.4**	**16.5**	**16.6**
Germany	1 835	1 825	1 852	+ 1,5%	+ 0,5%	22.3	22.2	22.6
France	1 591	1 624	1 627	+ 0,2%	+ 1,1%	25.6	26.0	26.1
Italy	1 234	1 239	1 256	+ 1,4%	+ 0,9%	20.9	20.8	20.9
United Kingdom	684	721	676	- 6,2%	- 0,6%	11.2	11.7	10.9
Poland	408	408	412	+ 1,0%	+ 0,5%	10.7	10.7	10.8
Spain	335	345	385	+ 11,6%	+ 7,2%	7.4	7.5	8.2
Greece	326	350	350	0,0%	+ 3,6%	29.2	31.2	31.1
Netherlands	352	337	349	+ 3,4%	- 0,5%	21.5	20.5	21.0
Sweden	161	170	176	+ 3,1%	+ 4,5%	17.6	18.5	18.9
Czech Republic	176	170	175	+ 3,2%	- 0,1%	16.9	16.2	16.7
Belgium	170	168	167	- 0,6%	- 0,9%	16.1	15.8	15.6
Austria	147	145	145	0,0%	- 0,7%	17.7	17.4	17.4
Hungary	108	110	110	+ 0,5%	+ 1,2%	10.7	10.9	11.0
Finland	105	106	110	+ 3,5%	+ 2,0%	19.9	20.0	20.7
Denmark	90	90	90	0,0%	0,0%	16.5	16.4	16.3
Slovakia	53	50	52	+ 3,5%	- 1,3%	9.8	9.2	9.5
Lithuania	46	48	49	+ 1,3%	+ 2,8%	13.6	14.3	14.5
Latvia	29	30	30	0,0%	+ 1,0%	12.7	13,0	13.0
Ireland	31	27	27	0,0%	- 6,7%	7.1	6.1	6.1
Estonia	25	23	23	0,0%	- 4,7%	18.8	17.1	17.1
Other	237	237	237	- 0,1%	+ 0,0%	5.4	5.5	5.4
Northern America								
United States of America	4 504	4 489	4 556	+ 1,5%	+ 0,6%	14.9	14.8	14.8
Canada	408	418	414	- 0,9%	+ 0,8%	12.4	12.5	12.3
Asia								
Turkey	1 348	1 388	1 388	0,0%	+ 1,5%	19.1	19.4	19.4
Iran	330	340	357	+ 5,0%	+ 4,0%	4.6	4.6	4.8
Japan (A)	263	223	223	0,0%	- 7,9%	2.1	1.7	1.7
Israel	116	120	122	+ 1,7%	+ 2,6%	16.1	16.4	16.4
Korea, Republic of	74	72	72	0,0%	- 1,4%	1.5	1.5	1.5
Other Europe								
Russia	764	779	789	+ 1,3%	+ 1,6%	5.4	5.5	5.6
Ukraine	194	185	182	- 1,6%	- 3,1%	4.2	4.0	4.0
Switzerland	172	177	167	- 5,9%	- 1,7%	22.7	23.0	21.4
Norway	71	73	74	+ 1,4%	+ 2,1%	15.4	15.4	15.3
Croatia	37	32	31	- 4,0%	- 7,7%	8.2	7.3	6.9
Iceland	7	8	8	+ 6,6%	+ 4,9%	23.5	23.8	25.4
South America								
Brazil	576	605	617	+ 2,0%	+ 3,5%	3.1	3.2	3.2
Argentina	481	451	451	0,0%	- 3,2%	12.1	11.3	11.3
Uruguay	20	20	20	0,0%	0,0%	6.0	6.0	6.0
Central America								
Mexico	266	251	293	+ 16,7%	+ 5,0%	2.5	2.4	2.7
Oceania								
Australia (B)	266	266	266	- 0,2%	+ 0,1%	12.5	12.3	12.0
New Zealand	25	26	26	0,0%	+ 2,0%	5.9	6.1	6.0

(A) Dairy years ending March of the following year. (B) Dairy years ending June of the following year.

Table 27. Average producer milk prices

Country	Currency	2007	2008	2009	2009	2009
		Milk price/100 kg			USD/100 kg	EUR/100 kg
Africa						
South Africa	ZAR	245.63	300.97	293.20	34.86	25.12
Asia						
China	CNY	256.00	289.00	292.00	42.75	30.65
India	INR	1 137.00	1 279.00	1 394.00	28.84	20.69
Iran	USD	37.00	40.00	39.00	39.00	27.96
Israel	ILS	172.82	203.88	192.23	48.88	35.15
Japan	JPY	7 890.00	8 300.00	8 960.00	95.64	68.74
Korea	KRW	68 780.00	73 300.00	80 960.00	63.52	45.67
Turkey	TRY	52.82	58.64	65.83	42.45	30.43
Central America						
Mexico	MXN	399.03	450.49	433.01	32.08	23.03
EU 27 (A)	EUR	32.00	34.83	26.64	37.16	26.64
Austria	EUR	33.75	38.90	29.00	40.45	29.00
Belgium	EUR	35.11	31.53	24.02	33.50	24.02
Czech Republic	CZK	811.65	820.39	596.12	31.45	22.55
Denmark	DKK	245.00	280.00	212.00	39.57	28.47
Estonia	EEK	420.20	463.80	328.50	29.28	20.99
Finland	EUR	31.11	38.79	34.60	48.26	34.60
France	EUR	27.96	32.60	26.61	37.12	26.61
Germany	EUR	33.46	33.84	24.08	33.59	24.08
Greece	EUR	38.67	43.20	37.69	52.57	37.69
Hungary	HUF	7 070.00	8 138.00	6 021.00	29.96	21.48
Ireland	EUR	32.21	32.08	22.04	30.74	22.04
Italy	EUR	34.37	37.39	30.57	42.64	30.57
Latvia	EUR	26.39	27.26	18.38	25.64	18.38
Lithuania	LTL	83.00	86.20	61.70	24.92	17.87
Netherlands	EUR	35.14	35.95	27.06	37.74	27.06
Poland	PLN	104.00	99.25	87.01	28.04	20.11
Slovakia	EUR	28.86	32.49	20.82	29.04	20.82
Spain	EUR	36.21	38.16	29.90	41.71	29.90
Sweden	SEK	286.41	339.81	280.58	36.66	26.42
United Kingdom	GBP	20.06	25.16	23.02	36.05	25.84
Northern America						
Canada	CAD	70.60	72.09	74.31	41.08	46.89
United States of America	USD	42.40	40.70	28.50	28.50	20.43
Oceania						
Australia (B)	AUD	48.16	41.17	36.41	28.86	20.54
New Zealand	NZD	53.99	56.60	47.47	30.18	21.46

Table 27. Average producer milk prices (continued)

Country	Currency	2007	2008	2009	2009	2009
		Milk price/100 kg			USD/100 kg	EUR/100 kg
Other Europe						
Belarus	BYR	48 000.00	66 000.00	65 800.00	23.56	16.94
Croatia	HRK	193.96	222.89	191.15	36.32	26.04
Iceland	ISK	4 722.33	6 213.59	6 905.83	55.79	40.00
Norway	NOK	379.61	379.61	421.36	66.98	48.28
Russia	RUB	790.00	1 110.00	963.90	30.43	21.84
Switzerland	CHF	70.04	77.65	64.78	59.65	42.90
Ukraine	UAH	172.79	206.51	-	-	-
South America						
Argentina	ARS	70.64	83.77	79.80	21.39	15.34
Brazil	BRL	61.80	66.54	64.95	32.51	23.47
Chile	CLP	16 846.60	19 243.69	14 849.51	26.54	19.10
Uruguay	UYU	583.34	697.57	488.85	21.66	15.53

(A) Weighted average (source: European Commission). (B) Dairy years ending June of the following year.

Table 28. Butter prices in selected countries

Country	2007	2008	2009	2007	2008	2009
	USD/tonne			EUR/tonne		
Asia						
China	3 289	3 453	3 953	2 400	2 348	2 834
Iran	-	-	4 200	-	-	3 011
Israel	3 735	4 945	4 268	2 726	3 362	3 060
Japan (A)	8 192	11 635	11 891	5 978	7 910	8 525
Korea	3 111	4 795	3 318	2 270	3 260	2 379
Pakistan	4 948	4 813	4 913	3 610	3 272	3 523
EU 27						
Belgium	4 649	4 189	3 530	3 392	2 848	2 531
Czech Republic (B)	-	3 581	4 621	-	2 662	3 162
Estonia	3 985	4 343	3 049	2 908	2 953	2 186
France	4 454	3 836	3 356	3 250	2 608	2 406
Germany	4 701	3 956	3 557	3 430	2 690	2 550
Hungary	5 741	6 374	5 125	4 189	4 334	3 674
Lithuania	4 259	4 439	3 527	3 108	3 018	2 528
Netherlands	4 631	3 863	3 471	3 379	2 627	2 488
Poland	3 803	4 351	3 590	2 775	2 958	2 574
Slovakia	4 879	4 810	3 278	3 560	3 270	2 350
Spain	3 378	3 721	3 034	2 465	2 530	2 175
United Kingdom	4 572	3 883	3 641	3 336	2 640	2 611
Northern America						
Canada	7 544	7 682	-	5 505	5 223	-
United States of America	2 963	3 165	2 667	2 162	2 152	1 912
Oceania						
Australia (C)	1 930	3 800	2 800	1 420	2 440	2 063
New Zealand	2 758	3 158	2 245	2 012	2 147	1 609
Other Europe						
Croatia	4 483	6 108	5 131	3 271	4 153	3 678
Iceland	5 942	5 210	4 020	4 335	3 542	2 882
Norway	4 787	5 187	5 593	3 493	3 526	4 010
Russia	3 447	4 169	3 406	2 515	2 834	2 442
Ukraine	3 336	3 649	3 677	2 434	2 481	2 636
South America						
Argentina	2 934	3 305	2 984	2 141	2 247	2 139
Uruguay	3 031	4 523	3 766	2 211	3 075	2 700
World market price (D)	**3 039**	**3 502**	**2 349**	**2 217**	**2 381**	**1 684**

(A) Fiscal year, ending March of the following year. (B) December of each year.
(C) Dairy years ending June of the following year. (D) Oceania export prices (F.O.B. port).

Table 29. Cheese prices in selected countries

Country	Type	2007	2008	2009	2007	2008	2009
		USD/tonne			EUR/tonne		
Asia							
Iran	Feta type	-	-	2 500	-	-	1 792
Korea	Cheddar	4 960	6 924	5 665	3 619	4 708	4 062
EU 27							
Belgium (A)	Cheddar	3 799	5 772	3 589	2 863	3 930	2 588
Czech Republic (B)	Edam	-	4 004	4 223	-	2 977	2 890
Estonia	Edam	4 806	5 740	4 604	3 507	3 902	3 301
Germany	Gouda	-	4 662	3 278	-	3 170	2 350
Hungary	Not specified	5 660	6 012	4 080	4 130	4 087	2 925
Lithuania	Fermented	4 362	5 231	4 177	3 183	3 557	2 995
Poland	Gouda	4 285	5 155	3 607	3 127	3 505	2 586
Slovakia	Edam	5 359	5 761	4 714	3 910	3 917	3 380
United Kingdom	Cheddar	4 860	5 203	3 940	3 546	3 538	2 825
Northern America							
Canada	Cheddar	9 692	-	-	7 072	-	-
United States of America	Not specified	3 831	4 179	2 858	2 795	2 841	2 049
Oceania							
Australia (C)	Cheddar	2 820	4 740	4 800	2 070	3 050	3 540
New Zealand	Cheddar	3 997	4 280	2 826	2 917	2 910	2 026
Other Europe							
Croatia	Not specified	6 724	9 162	7 601	4 906	6 229	5 450
Iceland	Gouda	11 495	10 080	7 778	8 388	6 853	5 576
Norway	Gouda	9 403	10 016	9 429	6 861	6 810	6 760
Russia	Tilsiter	4 661	5 895	4 375	3 401	4 008	3 136
Ukraine	Not specified	4 586	5 465	4 004	3 346	3 716	2 871
South America							
Argentina	Fynbo type	3 319	3 846	3 525	2 422	2 615	2 527
Uruguay	Not specified	3 602	5 376	4 020	2 628	3 655	2 882
World market price (D)	**Cheddar**	**4 009**	**4 629**	**2 954**	**2 926**	**3 147**	**2 118**

(A) 1st January of each year. (B) December of each year. (C) Dairy years ending June of the following year.
(D) Oceania export prices (F.O.B. port).

Table 30. Whole milk powder prices in selected countries

Country	2007	2008	2009	2007	2008	2009
	USD/tonne			EUR/tonne		
Asia						
China	3 684	3 884	4 245	2 688	2 641	3 044
Iran	-	-	3 800	-	-	2 724
Japan (A)	6 828	8 315	9 262	4 819	5 847	6 552
Korea	4 260	6 672	4 738	3 108	4 536	3 397
Pakistan	5 385	5 674	4 660	3 929	3 858	3 341
EU 27						
Belgium	4 759	4 090	3 053	3 473	2 781	2 189
Czech Republic (B)	-	3 128	-	-	2 326	-
Estonia	3 619	3 881	3 010	2 641	2 639	2 158
France	4 631	4 012	2 954	3 379	2 728	2 118
Germany	4 678	3 914	2 837	3 413	2 661	2 034
Lithuania	3 997	3 557	2 771	2 916	2 418	1 987
Netherlands	4 557	3 973	2 845	3 325	2 701	2 040
Poland	4 283	3 864	2 625	3 125	2 627	1 882
Slovakia	4 468	4 972	3 630	3 260	3 380	2 603
Northern America						
United States of America	4 512	3 122	2 714	3 292	2 122	1 946
Oceania						
Australia (C)	3 430	4 130	3 250	2 510	2 660	2 400
New Zealand	4 175	3 623	2 375	3 047	2 463	1 703
Other Europe						
Croatia	4 296	5 701	4 561	3 135	3 876	3 270
Iceland	12 957	11 362	9 451	9 454	7 725	6 776
Norway	4 958	5 187	5 114	3 618	3 526	3 666
Russia	2 963	3 525	2 590	2 162	2 397	1 857
Ukraine	3 617	2 959	2 860	2 639	2 012	2 050
South America						
Argentina	2 908	3 321	3 045	2 122	2 258	2 183
Uruguay	2 949	4 080	2 555	2 152	2 774	1 832
World market price (D)	**4 328**	**3 718**	**2 458**	**3 158**	**2 528**	**1 762**

(A) Fiscal year, ending March of the following year. (B) December of each year.
(C) Dairy years ending June of the following year. (D) Oceania export prices (F.O.B. port).

Table 31. Skim milk powder prices in selected countries

Country	2007	2008	2009	2007	2008	2009
	USD/tonne			EUR/tonne		
Asia						
China	3 815	4 316	4 099	2 784	2 934	2 939
India (A)	3 265	2 892	2 891	2 304	2 034	2 045
Israel	4 447	5 924	5 116	3 245	4 028	3 668
Japan (A)	4 616	5 861	6 491	3 258	4 122	4 592
Korea	4 245	5 198	3 154	3 097	3 534	2 261
EU 27						
Belgium	4 447	3 325	2 512	3 245	2 261	1 801
Czech Republic (B)	-	2 285	2 855	-	1 699	1 953
Estonia	4 187	3 212	2 320	3 055	2 184	1 664
France	4 484	3 242	2 495	3 272	2 204	1 789
Germany	4 480	3 356	2 483	3 269	2 282	1 780
Lithuania	4 025	3 216	2 375	2 937	2 187	1 703
Netherlands	4 345	3 130	2 461	3 170	2 128	1 764
Poland	3 861	3 564	2 430	2 817	2 423	1 742
Slovakia	4 591	4 430	2 612	3 350	3 012	1 873
United Kingdom	4 278	3 757	2 445	3 121	2 554	1 753
Northern America						
Canada	5 943	-	-	4 336	-	-
United States of America	3 732	2 702	2 033	2 723	1 837	1 458
Oceania						
Australia (C)	3 610	3 260	3 050	2 650	2 100	2 250
New Zealand	4 226	2 993	2 250	3 083	2 035	1 613
Other Europe						
Croatia	3 922	5 497	4 371	2 862	3 738	3 134
Iceland	6 709	5 883	5 065	4 895	4 000	3 631
Norway	4 787	5 008	4 954	3 493	3 405	3 552
Russia	2 681	3 276	2 546	1 956	2 228	1 825
Ukraine	3 495	2 549	2 302	2 550	1 733	1 650
South America						
Argentina	2 959	3 653	4 024	2 159	2 484	2 885
Uruguay	2 827	3 342	2 034	2 063	2 272	1 458
World market price (D)	**4 293**	**2 999**	**2 290**	**3 133**	**2 039**	**1 642**

(A) Fiscal year, ending March of the following year. (B) December of each year.
(C) Dairy years ending June of the following year. (D) Oceania export prices (F.O.B. port).

Abbreviations and conventional signs

AMF	Anhydrous milk fat
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
BCZ-CBL	Belgische Confederatie van de Zuivelindustrie / La Confédération Belge de l'Industrie Laitière
CAGR	Compound Annual Growth Rate
CAP	Common agricultural policy (of the EU)
CIS	Commonwealth of Independant States (formerly republics within the USSR)
CNIEL	Centre National Interprofessionnel de l'Economie Laitière
CGIAR	Consultative Group on International Agricultural Research
CME	Chicago Mercantile Exchange
COKZ	Netherlands Controlling Authority for Milk and Milk Products
Cwt	Centum weight or hundredweight: in the US defined as 100 lb, equal to about 45.36 kg
CWT	Cooperatives Working Together
DEIP	Dairy Export Incentive Program
DPSP	Dairy Price Support Program (US)
ECB	European Central Bank
EU	European Union
EUROSTAT	Statistical Office of the European Union
ESL	Extended shelf life (milk)
EUREX	Europe's global financial marketplace
F	Fat
FAO	Food and Agriculture Organization
FAPRI	Food and Department of Agriculture
FED	Federal Reserve: the central bank of the United States of America
FOB	Free on board
FTA	Free trade agreement
GCC	Gulf Cooperation Council
GDA	Global Dairy Alliance
GDP	Gross domestic product
gDT	GlobalDairyTrade: an internet-based electronic trading platform for cross-border trade in dairy
GMO	Genetically modified organisms
HLG	High Level expert Group on Milk (EU)
hl	hectolitre (=100 litres)
IDF	International Dairy Federation
IBGE	Instituto Brasileiro de Geografia e Estatistica
IFCN	International Farm Comparison Network
IGEME	Export promotion center of Turkey
ILRI	International Livestock Research Institute
INEGI	Instituto Nacional de Estadistica y Geografica (Mexico)
LTO	Land- en Tuinbouworganisatie (Dutch Federation of Agriculture and Horticulture)
MT	Metric tonne (equivalent to 1 000 kilograms)
NAFTA	North American Free Trade Agreement
NDM	Nonfat Dry Milk
NSSO	National Sample Survey Organisation (India)
NYSE	New York Stock Exchange
NZX	New Zealand's stock exchange
OECD	Organisation for Economic Co-operation and Development
OIE	World Organisation for Animal Health
P	Protein
PZ	Productschap Zuivel (Dutch Dairy Board)
QM	Quality management
QS	Quality system
SIAP	Statistical Institute for Asia and the Pacific
SMP	Skim milk powder
USDA	United States Department of Agriculture
WMP	Whole milk powder (in this report basically includes all milk powder with fat content > 1.5%)
WPC	Whey protein concentrate
WPN	Whey Protein Nitrogen
WTO	World Trade Organization
ZMB	Zentrale Milchmark Berichterstattung GmBH
ZMP	Zentrale Markt- und Preisberichtstelle (Central Market and Price Reporting Bureau)
-	No figure available or no sense to give numeric figure

WORLD DAIRY SITUATION 2010
ABSTRACT

Annual survey presented at IDF World Dairy Summit, Auckland (NZ), in November 2010. Production, consumption, trade and price figures from dairy sector and other sources. Largest dairy companies by turnover and/or milk intake. Comments and prognoses on the situation in different countries and analysis of the whole, covering all major producing and consuming countries. Review of various forecasts of dairy trade.

Keywords: dairy economics, milk production, consumption trends, dairy situation, dairy markets, world trade, dairy prices, dairy trade projections

206 pp - English only

Bulletin No 446/2010 - Price (electronic): 125 Euro - Date: 2010

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" ..... Usually double quotes and not single quotes
? ! ..... Half-space before and after question marks, and exclamation marks
± ..... Half-space before and after
microorganisms ..... Without a hyphen
Infra-red ..... With a hyphen
et al. ..... Not underlined nor italic
e.g., i.e.,... ..... Spelled out in English - for example, that is
litre ..... Not liter unless the author is American
ml, mg,... ..... Space between number and ml, mg,...
skimmilk ..... One word if adjective, two words if substantive
sulfuric, sulfite, sulfate ..... Not sulphuric, sulphite, sulphate (as agreed by IUPAC)
AOAC International ..... Not AOACI
programme ..... Not program unless a) author is American or b) computer program
milk and milk product ..... rather than "milk and dairy product" - Normally some latitude can be allowed in non scientific texts
-ize, -ization ..... Not -ise, -isation with a few exceptions
Decimal comma ..... in Standards (only) in both languages (as agreed by ISO)
No space between figure and % - i.e. 6%, etc.
Milkfat ..... One word
USA, UK, GB ..... No stops
Figure ..... To be written out in full
1000-9000 ..... No comma
10 000, etc. ..... No comma, but space
hours ..... ø h
second ..... ø s
litre ..... ø l
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