The World Dairy Situation Report 2024[1]

[1] Summary report for MILK SA authored by Bertus van Heerden, Chief Economist MPO based on the IDF Bull. 532/2024 World Dairy Situation. The complete document is available from the IDF www.fil.idf.org

Introduction

The 2024 World Dairy Situation Report was published by the International Dairy Federation (IDF) in October 2024. As always, it provides a general survey and overview of the global dairy industry in the previous year. The compilation includes the most relevant and up-to-date information on global production, processing, trade, prices, and consumption of milk and dairy products. The complete report is available from the IDF. In this article, the most salient points are covered to provide a snapshot of the world dairy situation in 2023.

Executive summary

In 2023 the world saw the World Health Organisation (WHO) declaring the end of the COVID-19 pandemic in May 2023 but increased uncertainty in the world due to a rise in regional conflicts and the continued aggression and imperialistic tendencies of the Russia Federation. World economic growth was underwhelming and registered 3.0% in 2023.

World population increased by 70 million people (+0.9%), reaching a total of 8.09 billion in 2023. The population growth rate has gradually slowed to 0.9% per year over the past five years, compared to 1.1% between 2015 and 2020. Total production of unprocessed milk (all species) increased by 2.1% in 2023, which is slightly lower than the average rate of 2,2% over the period 2015 to 2023. In 2022, limited supply constrained demand, leading to a price surge that particularly impacted lower-income countries. The easing of dairy product prices in 2023 (-17.2% according to the FAO Dairy index), due to increased supply, facilitated a partial recovery in consumption. On average, the calculated per capita consumption of dairy products increased by 1.36% in 2023 from 117.5 kg in 2022 to 119.1kg in milk equivalent. This is much lower than the production growth of unprocessed milk in 2023 (2.1%). This is the second consecutive year where consumption is lower than production growth of unprocessed milk. Nevertheless, the per capita consumption growth is a much-improved situation compared to the previous year where per capita consumption grew negative.

The profitability of dairy farming significantly deteriorated in 2023 compared to the financially strong milk year in 2022. Unprocessed milk prices fell sharply, while the cost of production decreased only slightly. In the USA farmgate prices decreased by 19.9%, in the Netherlands 14.5%, New Zealand 4.8% and China down by 12.2%. The exception was South Africa where the farmgate price continued to increase in lieu of reduced output at farm level.

Global unprocessed milk production (all species) grew by 2.1% in 2023 to reach 964 million tonnes (cow's milk accounted for 81.1%). The average growth rate was only slightly below the 2.2% compounded average growth rate during 2015 – 2023. Unprocessed cow milk productions improved from 2022 to 2023 with the 2023 growth rate on par with CAGR for the period 2015 – 2023 of 2.0%. Unprocessed buffalo milk in 2023 grew by 2.8% (CAGR: 3.8% 2015 - 2023) and other unprocessed milk (sheep, goat, camel, etc.) by 0.7% (CAGR: 1.9% 2015 - 2023). Unprocessed cow's milk delivered for processing increased with 0.7% to 463 million tonnes, which represents 59% of the total production of unprocessed cow's milk.

Dairy products production synopsis:

The production of packaged milk (liquid milk) increased by 0.9% in 2023, notably higher than the annual growth rate of 0.1% in place since 2015. This growth was mainly driven by the production growth in China which rose in 2023 by 3.7% and in India by 2.7%.

The production of fermented dairy products in 2023, declined by 3.1%, registering the fourth consecutive year of decline. Chinese production continued to decline sharply by 21.8%, while in Indian production of fermented products rose for the third year running (+11.8%).

Global cheese production increased by 2.2% to 23.8 million tonnes in 2023, which is on target with the growth rate of 2,2% since 2015. This market analysis is done on cow's milk cheese only. In the EU27, the world's largest producer of cheese, production increased by 1.9%, to a record volume of 9.7 million tonnes, in the USA, the second largest producer the increase was less pronounced at 0.9%.

The demand for butter and other milk fat remained strong in 2023. **Butter and milk fat production** increased by 2.4% to 13.2 million tonnes in 2023, on par with the average growth rate of 2.4% since 2015. Production is dominated by India, which alone accounts for half of the world's dairy fat production.

The production of whole milk powder (WMP) increased by 1.8% in 2023 to 4.7 million tonnes after a decrease of 8.6% in the previous year. The main producer of whole milk powder, New Zealand, increased WMP production by 2.7%, after a sharp decrease in 2022 due to a significant drop in the demand from China. In China, the output of WMP increased with 12.0% to 1.1 million tonnes.

The world skim milk powder (SMP) production increased only slightly by 0.4% to a record volume of 5.1 million tonnes in 2023. In Oceania, SMP production increased in Australia, reaching 142 thousand tonnes (+4.9%) and soared in New Zealand by 23.5%.

<u>Main exporting countries and export destinations synopsis:</u>

Cheese top three exporters: EU27 1 379, USA 438, New Zealand 374, world trade 3 565 (1 000 tonnes).
Top three export destinations: U.K. 420, Russia 300, Japan 260 (1 000 tonnes).

Butter and butter oil to three exports: New Zealand 514, EU27 292, Belarus 81, world trade 1 145 (1 000 tonnes).
Top three export destinations: China 142, Russia 84, USA 81 (1 000 tonnes).

WMP top three exporters: New Zealand 1 366, EU27 260, United Arab Emirates (UAE) 188, world trade 2 475 (1000 tonnes).
Top three export destinations: China 445, Algeria 248, Brazil 182 (1 000 tonnes).

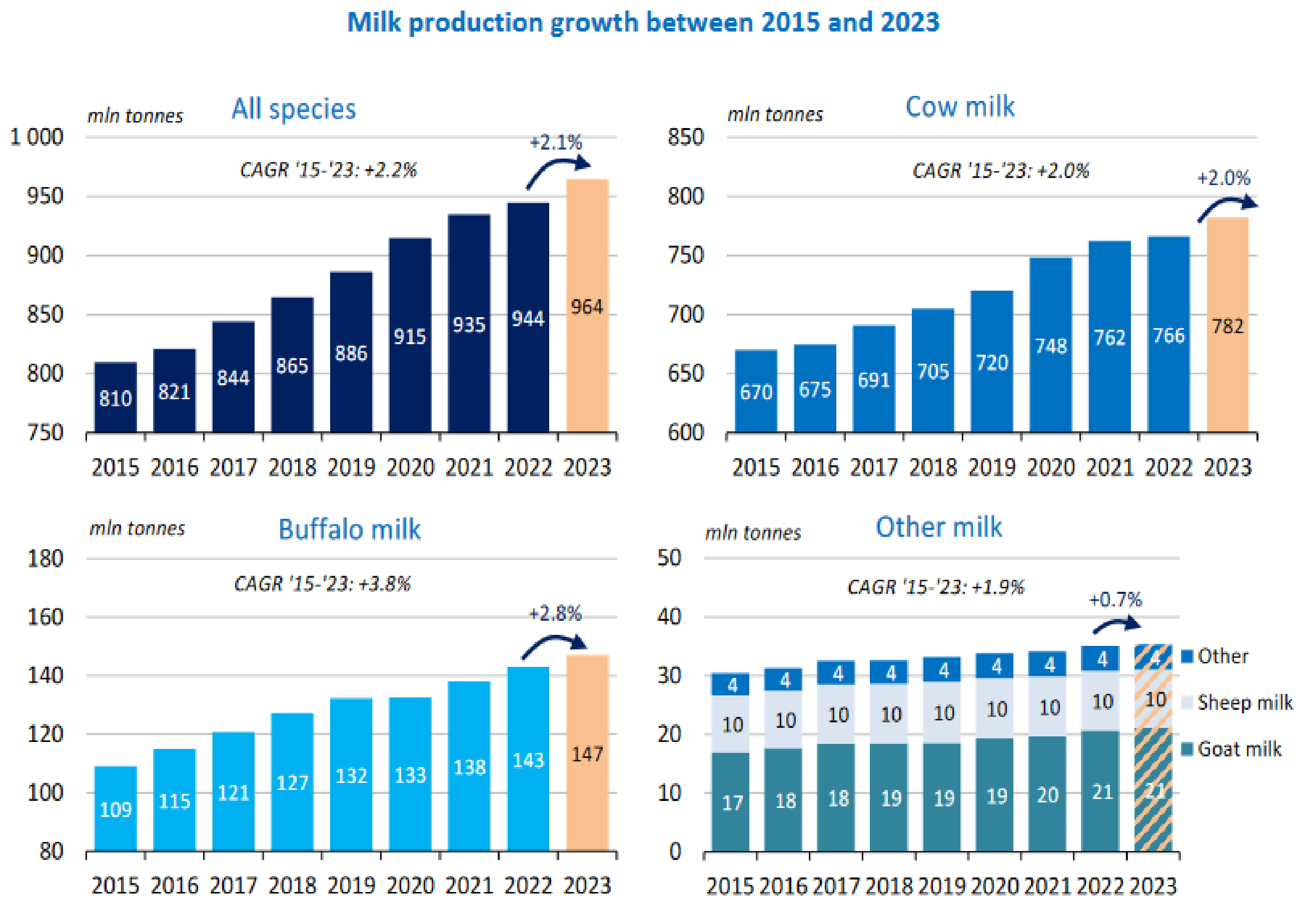
SMP top three exporters: USA 810, EU27 775 New Zealand 451, world trade 2 660 (1 000 tonnes).
Top three export destinations: Mexico 410, China 342, Indonesia 185 (1 000 tonnes).

Milk and cream top three exporters: EU27 1 232, UK 769, New Zealand 406, world trade 4 255 (1000 tonnes).
Top three export destinations: China 875, EU27 753, UAE 246 (1 000 tonnes).

Production of unprocessed milk

Total production of unprocessed milk (all species) increased by 2.1% in 2023, which is slightly lower than the average rate of 2,2% over the period 2015 to 2023. Growth in North America, Europe, Oceania, and South America is well below the average growth rate (CAGR of world milk production from 2015 to 2023: 2.2%). There is an increasing gap in development between the 'traditional' dairy (exporting) regions and the emerging dairy countries/regions, which strive to achieve self- sufficiency and reduce reliance on imports. Strong growth in Asia is evident, driven by growth in local demand, government promotion and generally favourable milk prices. Africa is on the same chart but less pronounced.

Unprocessed cow milk production in Asia for 2023 was 5.0%, slightly above the CAGR of 4.8% for the period 2015 – 2023. All other regions in the world showed below-average growth, with the EU 27 being the only region where volumes decreased. In 2023, India accounted for two-thirds of the increase in Asian milk volume. This represents a growth rate of 7.4%, marginally higher than the CAGR over the period from 2015 to 2023. Besides India, other countries in South Asia, such as Pakistan (+3.8%) and Bangladesh (+7.6%), have also experienced strong growth in cow's milk production. Due to very strong growth China needs fewer imports, which impacts developments in world trade.



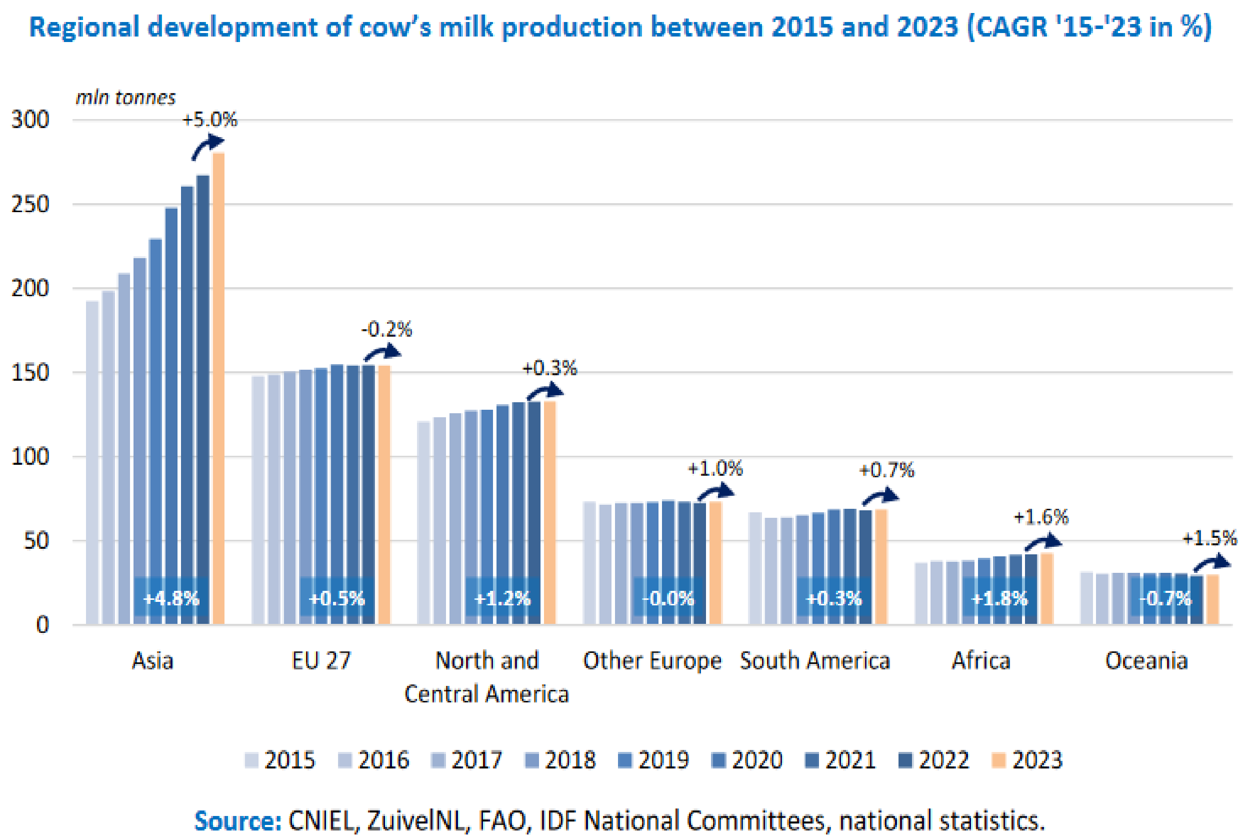
Source: IDF World Dairy Situation 2024

The major unprocessed cow's milk-producing continents are listed in Table 1.

<u>Table 1: Unprocessed cow's milk production per continent, 2023</u>

Continent	Milk production 2023 (mil. tonnes)	Share in total cows' milk production (%)	Annual growth 2022 – 2023 (%)
Asia	281.5	36	5.0
EU-27	156.4	20	-0.2
North and Central America	132.9	17	0.3
South America	70.4	9	0.7
Other Europe	70.4	9	1.0
Africa	39.1	5	1.8
Oceania	31.3	4	1.5
World	**782**	**100**	**2.0**

Source: IDF World Dairy Situation 2024



Source: IDF World Dairy Situation 2024

Table 2: Top 20 producing countries of unprocessed cow's milk in 2023 and South Africa

Country	'mln' Tonnes	Growth 2022 – 2023 (%)
EU 27	154.1	-0.2
Germany	32.6	0.6
France	23.9	-2.6
Poland	15.4	1.5
Netherlands	14.7	0.8
Italy	13.1	-0.8
India(B)	128.6	7.4
USA	102.7	0.0
China	42.0	6.8
Brazil	36.8	3.2
Russia	33.6	2.5
New Zealand	21.3	0.9
Pakistan(C)	20.9	3.8
Turkey	20.0	0.2
United Kingdom	15.5	0.0
Mexico	13.7	1.7
Bangladesh	12.7	7.6
Uzbekistan	11.9	3.0
Argentina	11.7	-2.0
Canada	10.6	1.4
Australia(D)	8.6	3.1
Belarus	8.3	5.9
Iran	7.5	0.0
Colombia	7.3	-4.3
Japan	7.3	-4.2
South Africa	3.3	-0.3

Source: IDF World Dairy Situation 2024

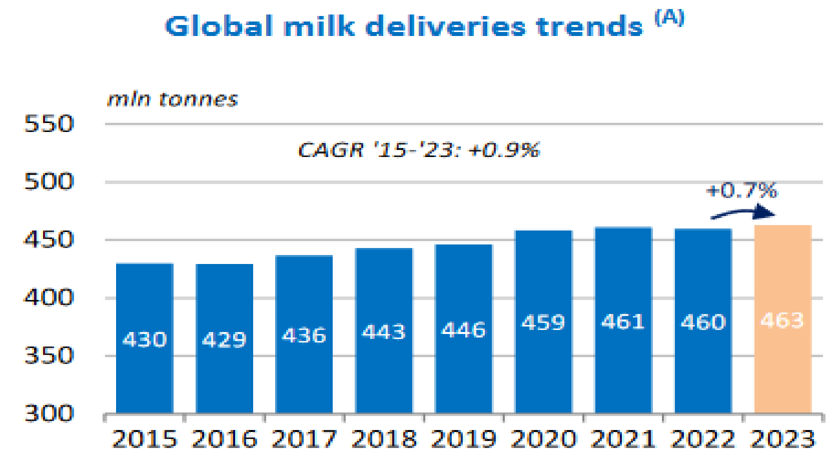
In Table 2, strong growth is observed in India, China, Pakistan, and Belarus. The following countries experienced a noteworthy contraction in the volume of unprocessed cow's milk that was produced in 2023 compared to 2021: France, Argentina, Colombia, and Japan.

The growth rate of unprocessed buffalo milk production in 2023 was 2.8% which is lower than the average annual growth rate of 3.8% for the period 2015 – 2023. The two main producing countries are India and Pakistan, both with a growth rate of 3.0% in 2023. The global volume of unprocessed buffalo milk in 2023 was 147 million tonnes.

Dairy processing

Global cow's milk deliveries to the industry increased by 0.7% in 2023, slightly lower than the CAGR of 0.9% for the period 2015 - 2023. Four hundred and sixty-three million tonnes of cow's milk (59.0% of total cow's milk production) were delivered to dairy processors for further processing. The EU27 processes the largest quantity of milk (31%), followed by the United States (22%), China (7%), and Brazil (5%), with India not being ranked. The trend of the two main producers of unprocessed cow's milk in the EU27 diverged in 2023. Deliveries in France continue to decline (2.3%) while deliveries in Germany rose by 1.4%. In Asia, milk deliveries were lower in Japan (-4.2%) and the Republic of Korea (-2.3%). However, volumes increased in China (+1.5%), but at a much slower pace than the production of unprocessed milk. In the USA deliveries were stable at 102.2 million tonnes and in Oceania deliveries recovered, Australia up by 3.1% and New Zealand up by 0.9%.

World: cow's milk deliveries (2015-2023)



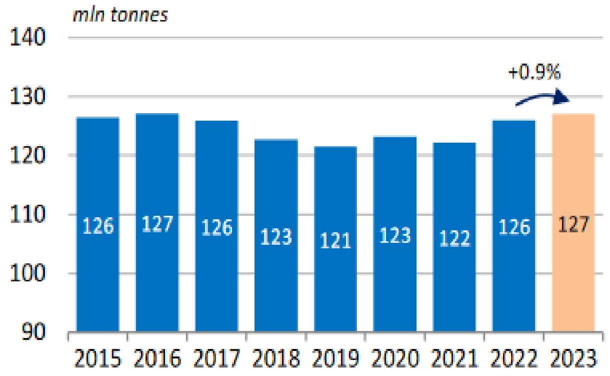
Source: IDF World Dairy Situation 2024, (A) based on 54 countries

The aggregate dairy production statistics used to calculate and indicate dairy product output, represent between 75% and 90% of the estimated total world production. Fresh dairy products are an exception, as a large proportion of these come from and are marketed via the informal global market or are simply excluded from official statistics. Despite that, the IDF 2024 report provides data from 54 countries that form the basis for volume estimates and growth trends. Overall, processors favoured cheese, butter and butter oil, and WMP, whereas output of other dairy products showed smaller growth or declined at a global level.

The production of **packaged milk (liquid milk)** increased by 0.9% in 2023, notably higher than the annual growth rate of 0.1% in place since 2015. This growth was mainly driven by the production growth in China which rose in 2023 by 3.7% and in India by 2.7%. In the EU27, packaged milk production decreased by 1.3% due to a decline in consumption. This trend was also seen in the USA (-1.5%), Japan (-2.7%), and the Republic of Korea down by 2.6%. Packaged milk is less traded than concentrated products and consumption of packaged milk tends to be a function of population growth and income trends.

Liquid milk output

Global production (C)



Trends in leading producing countries

mln tonnes	2023	Growth 2022/23 (%)
China (D)	23.3	+3.7%
EU 27	22.3	-1.3%
USA	19.3	-1.5%
India (E)	16.5	+2.7%
Brazil	7.6	+1.0%
United Kingdom	6.2	+0.3%
Russia	6.0	+4.2%

Source: IDF World Dairy Situation 2024; (C) is based on 55 countries (D) including dairy beverages (E) figures for co-operatives only

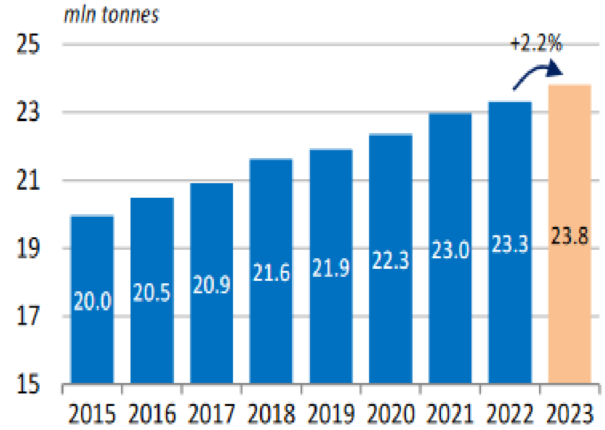
The production of **fermented dairy products** in 2023, declined by 3.1%, registering the fourth consecutive year of decline. Production was on the upswing in the EU27 (+0.9%) driven by increased output in France, Ireland, Poland, and Spain. Chinese production continued to decline sharply by 21.8%, along with decreases in Japan (-4.8%), the Republic of Korea (-10.4%), and the United Kingdom (-8.1%). Indian production of fermented products rose for the third year running (+11.8%).

The production of fresh dairy products is uncertain. Despite a prolonged period of steady growth driven by increased demand and improved nutritional intake, production appears to be stagnating.

Global cheese production increased by 2.2% to 23.8 million tonnes in 2023, which is on target with the growth rate of 2,2% since 2015. This market analysis is done on cow's milk cheese only, which constitutes 90% of total natural cheese production in the world. In the EU27, the world's largest producer of cheese, production increased by 1.9%, to a record volume of 9.7 million tonnes, in the USA, the second largest producer the increase was less pronounced at 0.9%. US production was undermined by a weak demand on the international market (Republic of Korea and Japan and the rising cost of living slowing consumption growth, especially at foodservice level. In Brazil, the third largest producer of cheese, production increased by 3.1% after a decreased by 4.8% in 2022. In Turkey, Mexico and Argentina output also expanded. In Oceania, cheese production grew aggressively by 9.5% in New Zealand, while it dropped by 4.8% in Australia.

Cheese output

Global cheese production (I)



Trends in leading producing countries

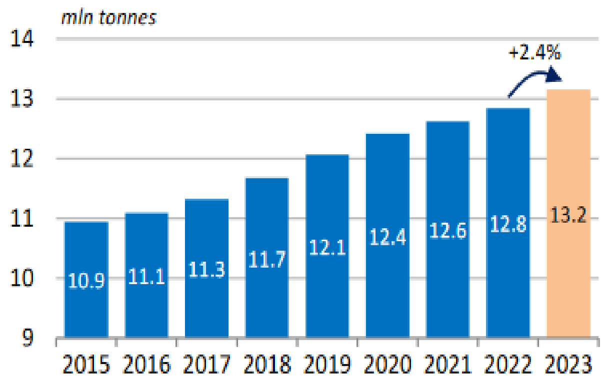
mln tonnes	2023	Growth 2022/23 (%)
EU 27	9.7	+1.9%
USA	6.4	+0.9%
Brazil	1.1	+3.1%
Türkiye (J)	0.8	+11.5%
Russia	0.6	+17.4%
Mexico	0.6	+2.2%
Argentina	0.5	+3.2%

Source: IDF World Dairy Situation 2024; (L) based on 55 countries (J) all types of cheeses

The demand for **butter and other milk fat** remained strong in 2023. Production increased by 2.4% to 13.2 million tonnes in 2023, on par with the average growth rate of 2.4% since 2015. Production is dominated by India, which alone accounts for half of the world's dairy fat production. Indian butter and ghee output grew by 3.8% in 2023 to a volume of 6.75 million tonnes. In 2023, butter output in the EU27, the second largest producer, increased by 1.2%, in the USA output increased by 2.7% after two years of decline and in New Zealand output increased by 3.7%.

Butter and butteroil output

Global production (F)



Trends in leading producing countries

mln tonnes	2023	Growth 2022/23 (%)
India	6.8	+3.8%
EU 27	2.2	+1.2%
Pakistan (G)	1.3	0.0%
USA (H)	1.0	+2.7%
New Zealand	0.5	+3.7%
Russia	0.3	+2.3%
United Kingdom	0.2	-3.6%

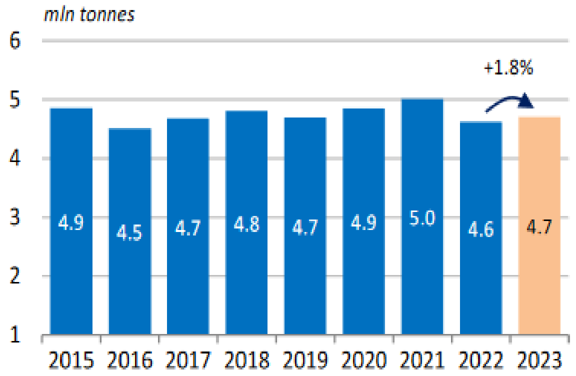
<0% +1% to +3%
+0% to +1% >+3%

Source: IDF World Dairy Situation 2024; (F) is based on 56 countries, (G) Pakistan data is 2020/21 and (H) Butter only

The production of **whole milk powder** (WMP) increased by 1.8% in 2023 to 4.7 million tonnes after a decrease of 8.6% the previous year and is now at the same level as in 2019 but noteworthy below the 2021 level. The main producer of whole milk powder, New Zealand, increased WMP production by 2.7%, after a sharp decrease in 2022 due to a significant drop in demand from China. In 2023 demand again dropped from China but this time round the decline was more than balanced by increased sales to Algeria, United Arab Emirates, and Indonesia. In China, the output increased with 12.0% to 1.1 million tonnes. In the EU27, production declined for the second year in a row by 1.3% with output now at the 0.8 million tonnes, the same level as in 2016. WMP production dropped in the Ireland by 6.9%, the Netherlands by 3.1%, Denmark 22.1% and France 4.8%. In South America output also decreased, in Brazil by 5.0%, Argentina by 15.3% and Chile down by 17.8%.

WMP output

Global WMP production (L)



Trends in leading producing countries

mln tonnes	2023	Growth 2022/23 (%)
New Zealand	1.4	+2.7%
China (M)	1.1	+12.0%
EU 27	0.8	-1.3%
Brazil	0.5	-5.0%
Argentina	0.2	-15.3%
Mexico	0.1	+6.8%
Uruguay	0.1	0.0%

<0% +1% to +3%
+0% to +1% >+3%

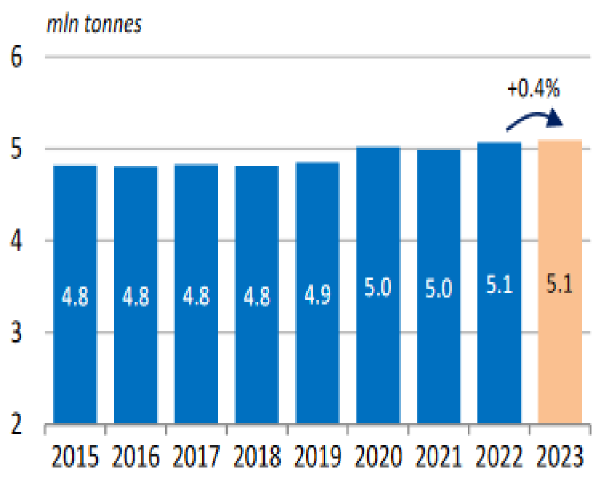
Source: CNIEL, ZuivelNL, IDF national committees, national statistics.

(L) is based on 55 countries (M) including infant formula

The world **skim milk powder** (SMP) production increased only slightly by 0.4% to a record volume of 5.1 million tonnes in 2023. The slight increase is mainly due to low prices and limited demand. In the EU27 SMP production dropped by 3.3%. The decline in output in the EU27 was widespread across many countries with the exceptions being Spain and Poland. In the USA, SMP output decreased for the second year in a row by 1.9% after several years of growth and competitive activity on international markets. In Oceania, SMP production increased in Australia, reaching 142 thousand tonnes (+4.9%) and soared in New Zealand by 23.5%. In South America, Brazil SMP production expanded by 3.2%, while Argentina experienced a decrease of 39.1%.

SMP output

Global SMP production (K)



Trends in leading producing countries

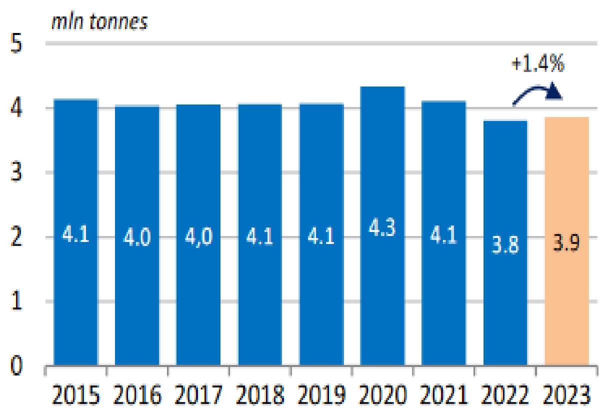
mln tonnes	2023	Growth 2022/23 (%)
EU 27	1.6	-3.3%
USA	1.2	-1.9%
India	0.7	+4.3%
New Zealand	0.4	+23.5%
Brazil	0.2	+3.2%
Japan	0.2	-8.7%
Australia	0.1	+4.9%

Source: IDF World Dairy Situation 2024; (K) is based on 52 countries

Global production of **condensed milk** increased in 2023 by 1.4% after two consecutive years of decline. The EU27 and the USA dominate the market and represent almost 50% of the total market. In the EU27 production increased by 2.2% and in the USA by 3.8% in 2023.

Condensed milk output

Global condensed milk production (N)



Trends in leading producing countries

mln tonnes	2023	Growth 2022/23 (%)
EU 27	1.0	+2.2%
USA	0.9	+3.8%
Brazil	0.6	0.0%
Peru	0.4	-2.8%
Russia	0.3	+2.3%
China	0.2	-1.1%
United Kingdom	0.1	+3.8%

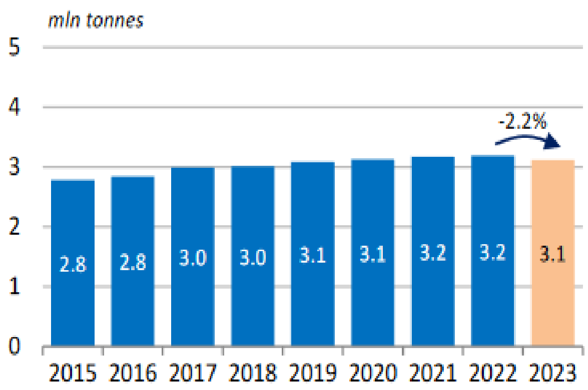
Source: IDF World Dairy Situation 2024; (N) is based on 45 countries

Liquid whey is mostly a cheese manufacturing by-product (producing more than 80%, while the rest is derived from casein production). It is mainly produced in the leading cheese-producing regions such as the EU27 and the USA. Although cheese production increased whey powder output declined by 2.2% in 2023, following a decline in the previous year as well.

The EU27 is by far the world's top producer of whey powder, representing 68% of whey powder produced in the world. Whey ingredients are a growing market worldwide due to usage in infant formula, nutrition foods, and medical use. In the EU27, whey powder output slowed to by 4.4%after two years of stagnation.

Whey powder output

Global whey powder production (O)



Trends in leading producing countries

mln tonnes	2023	Growth 2022/23 (%)
EU 27	2.1	-4.4%
USA	0.4	+2.5%
Russia	0.2	+10.0%
Argentina	0.1	-2.0%
Australia	0.1	-11.0%
Ukraine	0.0	0.0%
Canada	0.0	-1.3%

<0% · +1% to +3% · +0% to +1% · >+3%

Source: IDF World Dairy Situation 2024; (O) is based on 43 countries

Dairy consumption

The world population grew by 70 million people (0.9%) in 2023 bringing the world population to 8.09 billion people. The population growth rate has gradually slowed to 0.9% per year over the past five years, compared to 1.1% between 2015 and 2020. In 2022, limited supply constrained demand, leading to a price surge that particularly impacted consumption in lower-income countries. The easing of dairy product prices in 2023 (-17.2% according to the FAO index), due to increased supply, facilitated a partial recovery in consumption. From 2015 to 2023, average per capita milk consumption increased by 11 kg to more than 119 kg, representing a 10% growth over this period.

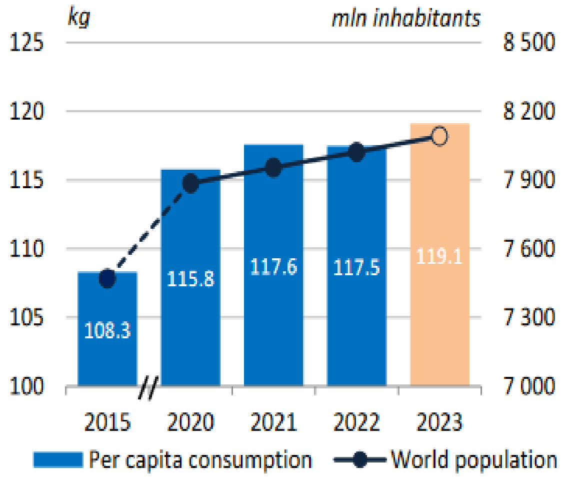
On average, the calculated per capita consumption of dairy products increased by 1.36% in 2023 from 117.5 kg in 2022 to 119.1kg in milk equivalent. This is much lower than the production growth of unprocessed milk in 2023 (2.1%). Nevertheless, the growth is a much-improved situation compared to the previous year where per capita consumption grew negative. In 2023, high inflation persisted in the global economy. Although dairy commodity prices declined from their 2022 peaks, retail prices, which tend to be less responsive, continued to rise in many countries. This, in particular, explains why the growth in demand is playing catch-up to the growth rate of unprocessed milk production.

As per the FAO's assessments of total regional dairy production and trade in 2023, annual per capita consumption varied widely, from 43 kg in Africa to 284 kg in Europe. Europe is the leader in terms of consumption of all major dairy products, India for butter, the United States for cheese, and Oceania for liquid milk. In Asia per capita consumption exceeded the 100 kg threshold for the first time, in 2023, reaching 102 kg. Asia is the largest overall consumer of dairy products globally, accounting for 50% of global consumption. Supply growth in India and Pakistan was the main driver of the 25% increase in consumption over the period 2018 to 2023. In Africa, per capita consumption has reduced slightly with unprocessed milk production mostly equivalent to population growth. In North America and in Europe growth in dairy consumption has registered steady growth of 4% over the past five years. Negative growth of 5% in the EU27 was offset by growth in the other European countries. Annual per capita cheese consumption exceeds 20 kg in almost half of the European countries and in the USA cheese consumption is nearly 18kg per capita.

Asia and Africa are not self-sufficient regarding dairy consumption but both regions improved their self-sufficiency rate over the period 2015 to 2023, while South America’s who falls into the same category did not improve its self-sufficiency rate.

CONSUMPTION

World: per capita consumption and population



World: self-sufficiency rate (per region)

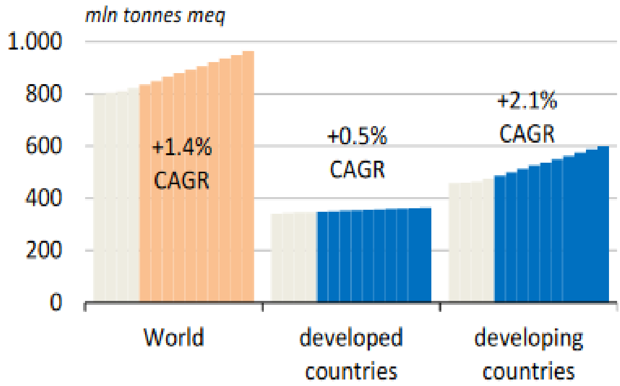
Region		2015	2023
Asia		90%	92%
Europe		111%	110%
	EU 27	*115%*	*115%*
	Non-EU	*100%*	*101%*
North America		108%	110%
South America		101%	100%
Africa		83%	86%
Central America		78%	78%
Oceania		309%	352%

Source: IDF World Dairy Situation 2024

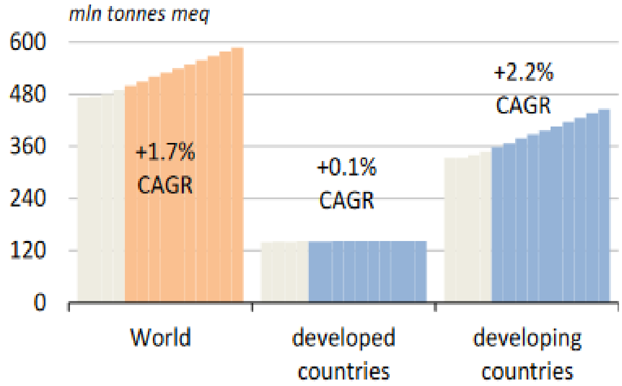
According to the OECD-FAO Agricultural Outlook 2024, demand for dairy products will continue to grow, driven by population growth, rising incomes, and shifts in dietary preferences. Dairy products are expected to be one of the food products with the highest consumption growth, surpassing cereals. Between 2020 and 2033, OECD-FAO anticipates a substantial 20% increase in total dairy consumption, which translates to an average annual growth rate of 1.4%. **However, it is worth noting that from 2020 to 2023, the OECD-FAO observed a much slower growth rate of only 0.2% per year.**

Annual total consumption growth rates between 2020 and 2033

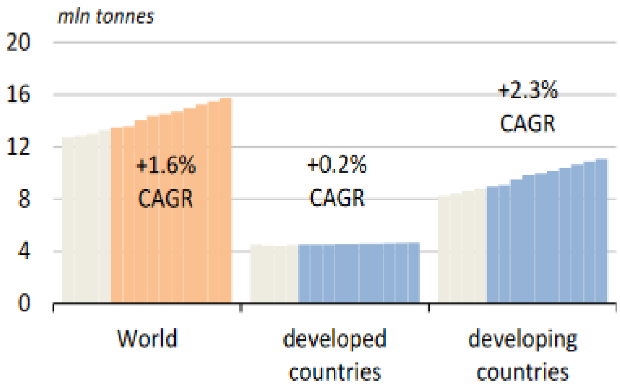
All Dairy Products



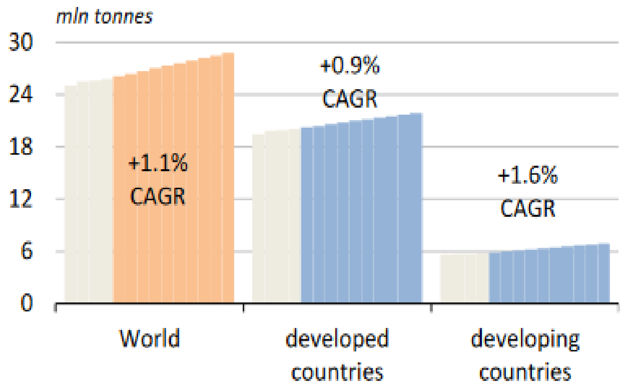
Fresh Dairy Products (B)



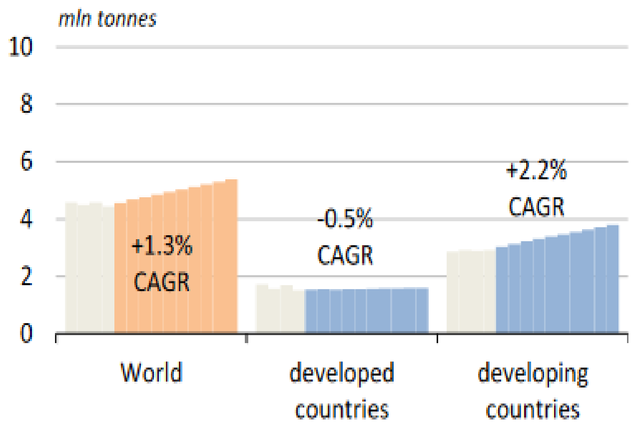
Butter



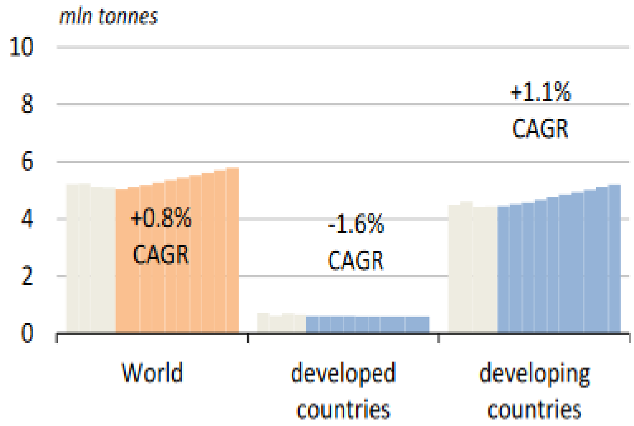
Cheese



SMP



WMP

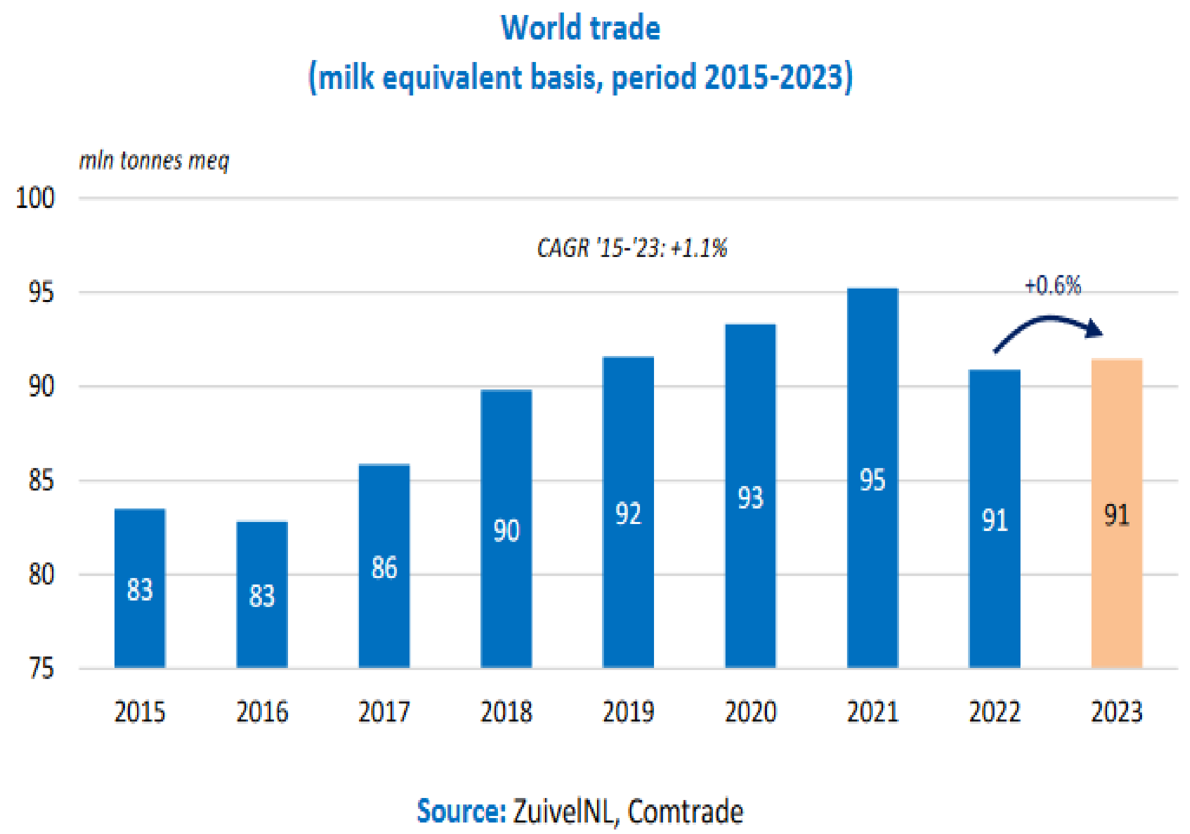


Source: Calculations based on OECD-FAO Agricultural Outlook 2024

International dairy trade

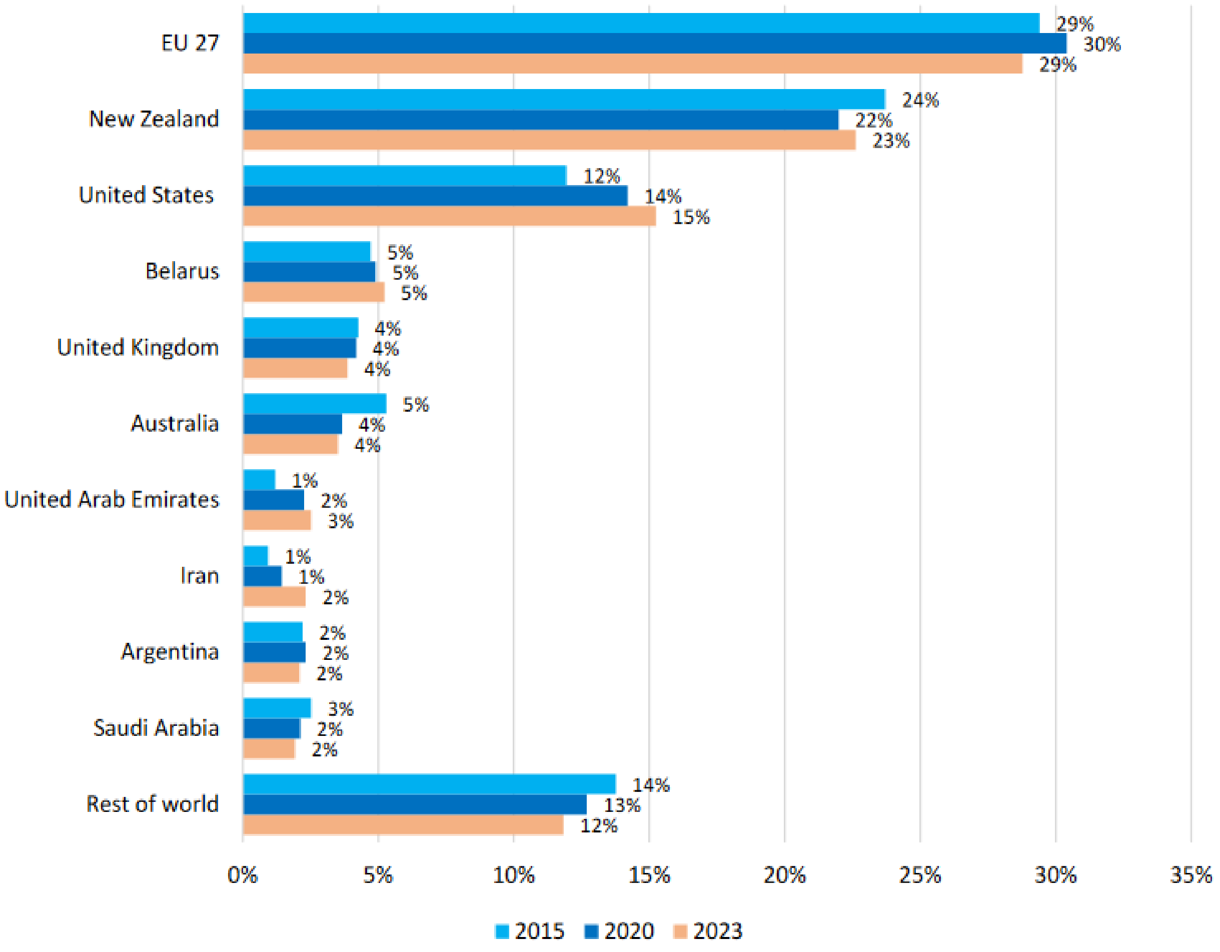
The CAGR for international dairy trade for the period 2015 – 2021 (pre-COVID-19) was 2.3%. In 2022 international dairy trade contracted 4.2% due to COVID-19 lockdown measures and the outbreak of the war in Ukraine in February 2022. In 2023 international dairy trade remained dissappointing growing only at 0.6% compared to the pre-COVID-19 CAGR of 2.3%. The CAGR for international dairy trade for the period 2015 – 2023 reduced from 2.3% to 1.2%. Even comparing at this level, inclusive of the two difficult years the 2023 growth rate is not good.

Unprocessed milk production in key exporting countries/regions showed little growth in the first two quarters of 2023 and from the third quarter onwards, the global dairy market experienced declining unprocessed milk supply in key export countries/regions, leading to a tighter supply of dairy products from those countries. In the meantime, China increasingly managed to meet its domestic dairy demand, with the effect that its import levels remained lower. This led to intensified competition from New Zealand in the global market. With the significant decline in Chinese imports, particularly of WMP, New Zealand companies were forced to shift their focus to other sales markets, often at the expense of export growth in other major exporting regions.



In 2023 the exports share of New Zealand, the USA, Belarus, UAE and Iran increased while the other key exporting countries experienced negative growth.

Export share [C] development of key exporters on the world dairy market (milk equivalent basis, period 2015-2023)



Source: ZuivelNL

(C) As part of total world volume trade: reference volumes used were (expressed in milk equivalents): 2015: 83.5 / 2020: 93.3 / 2023: 91.5

To provide some perspective on the main exporting countries and importing (export destinations) countries of cheese, butter and butter oil, WMP, SMP and milk and cream and the volumes concerned the following graphs were developed.

Cheese top three exporters: EU27 1 379, USA 438, New Zealand 374, world trade 3 565 (1 000 tonnes).
Top three export destinations: U.K. 420, Russia 300, Japan 260 (1 000 tonnes).

Butter and butter oil to three exports: New Zealand 514, EU27 292, Belarus 81, world trade 1 145 (1 000 tonnes).
Top three export destinations: China 142, Russia 84, USA 81 (1 000 tonnes).

WMP top three exporters: New Zealand 1 366, EU27 260, United Arab Emirates (UAE) 188, world trade 2 475 (1000 tonnes).
Top three export destinations: China 445, Algeria 248, Brazil 182 (1 000 tonnes).

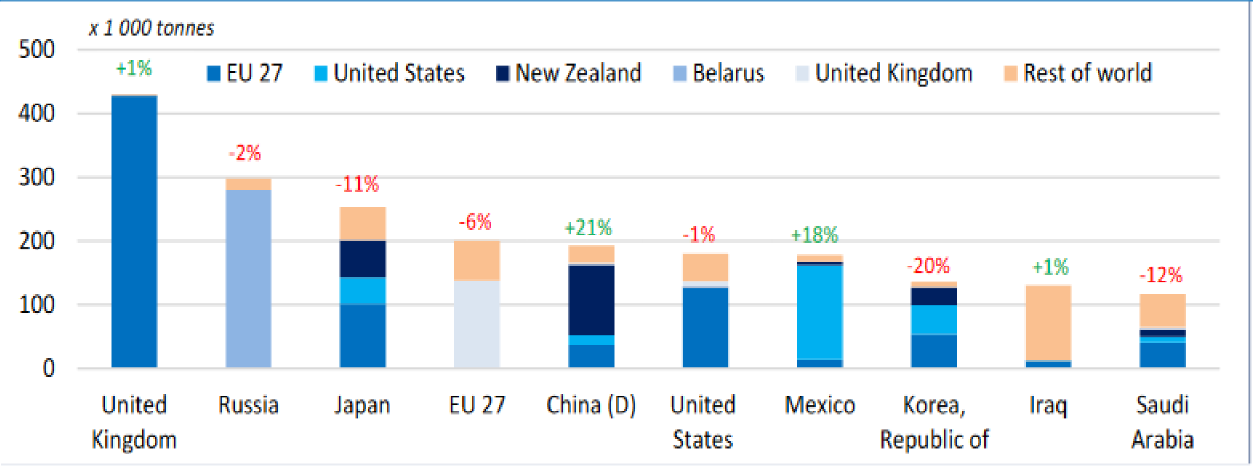
SMP top three exporters: USA 810, EU27 775 New Zealand 451, world trade 2 660 (1 000 tonnes).
Top three export destinations: Mexico 410, China 342, Indonesia 185 (1 000 tonnes).

Milk and cream top three exporters: EU27 1 232, UK 769, New Zealand 406, world trade 4 255 (1000 tonnes).
Top three export destinations: China 875, EU27 753, UAE 246 (1 000 tonnes).

Dynamics in world cheese trade: main exporters, key export markets (volume x 1 000 tonnes)

Top-10 global cheese exporters 2023					
No.	Exporter	Volume	Share	Growth 2022/23	CAGR '15/'23
1.	EU 27	1 379.1	38.7%	+3.4%	+2.2%
2.	United States	437.9	12.3%	-3.6%	+4.1%
3.	New Zealand	373.9	10.5%	+9.8%	+1.7%
4.	Belarus	293.5	8.2%	+0.3%	+6.1%
5.	United Kingdom	178.7	5.0%	+1.8%	+2.2%
6.	Australia	129.8	3.6%	-10.8%	-3.4%
7.	Iran	101.1	2.8%	+6.8%	+10.1%
8.	Saudi Arabia	86.8	2.4%	+7.7%	-4.6%
9.	Argentina	85.2	2.4%	+3.4%	+8.8%
10.	Bahrain	76.2	2.1%	+4.6%	+40.5%
	World trade	**3 565.0**	**100.0%**	**+1.3%**	**+2.3%**

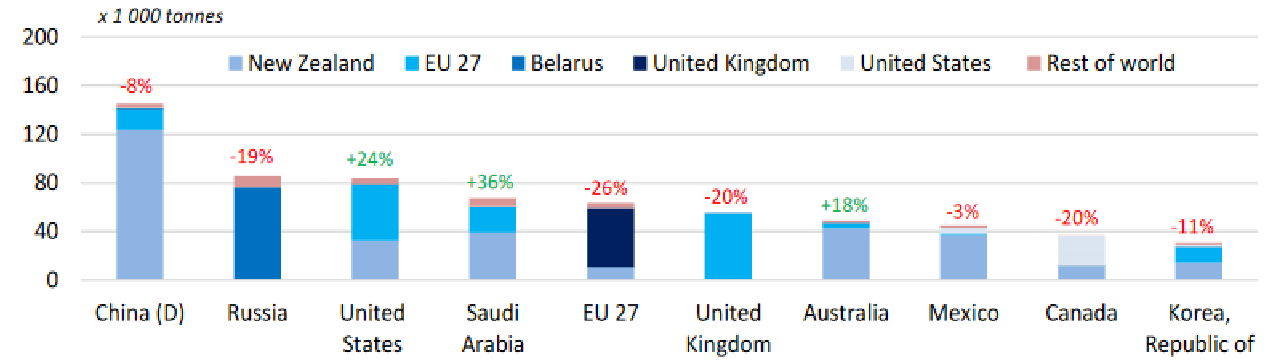
Top-10 cheese export destinations 2023



Dynamics in world butter/-oil trade: main exporters, key export markets (volume x 1 000 tonnes)

Top-10 global butter/-oil exporters 2023					
No.	Exporter	Volume	Share	Growth 2022/23	CAGR '15/'23
1.	New Zealand	513.8	44.9%	+4.5%	-0.8%
2.	EU 27	291.2	25.4%	+13.2%	+0.9%
3.	Belarus	81.2	7.1%	+1.5%	-0.5%
4.	United Kingdom	57.0	5.0%	+12.0%	+1.0%
5.	United States	38.4	3.4%	-55.3%	+6.2%
6.	Argentina	24.2	2.1%	-16.7%	+13.5%
7.	India	23.6	2.1%	-42.7%	+12.8%
8.	Iran	14.9	1.3%	+18.1%	+47.2%
9.	Saudi Arabia	12.7	1.1%	+18.6%	+15.9%
10.	Uruguay	11.2	1.0%	-33.6%	-6.9%
	World trade	**1 145.0**	**100.0%**	**-3.0%**	**0.0%**

Top-10 butter/-oil export destinations 2023



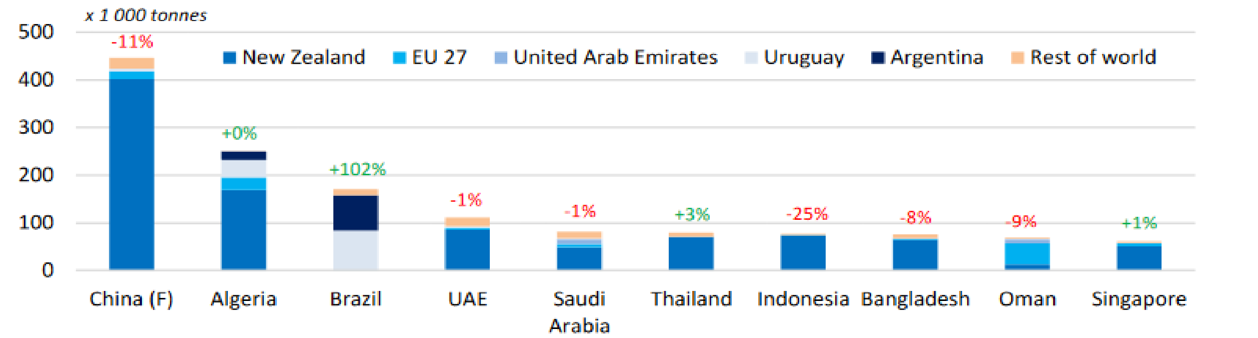
Source: ZuivelNL, Comtrade

(D) Hong Kong, Macao included.

Dynamics in world WMP trade: main exporters, key export markets (volume x 1 000 tonnes)

Top-10 global WMP exporters 2023					
No.	Exporter	Volume	Share	Growth 2022/23	CAGR '15/'23
1.	New Zealand	1 365.8	55.2%	+2.8%	-0.1%
2.	EU 27	260.3	10.5%	+11.3%	-4.8%
3.	United Arab Emirates [(E)]	188.2	7.6%	0.0%	+11.1%
4.	Uruguay	159.0	6.4%	+17.4%	+6.5%
5.	Argentina	111.1	4.5%	-28.0%	-2.7%
6.	Singapore	38.6	1.6%	-5.9%	-4.4%
7.	Australia	38.1	1.5%	-33.8%	-6.5%
8.	Belarus	35.0	1.4%	+2.5%	-1.0%
9.	Malaysia	27.0	1.1%	+30.7%	-0.3%
10.	United States	26.1	1.1%	-32.7%	-3.2%
	World trade	**2 475.0**	**100.0%**	**+0.4%**	**-1.0%**

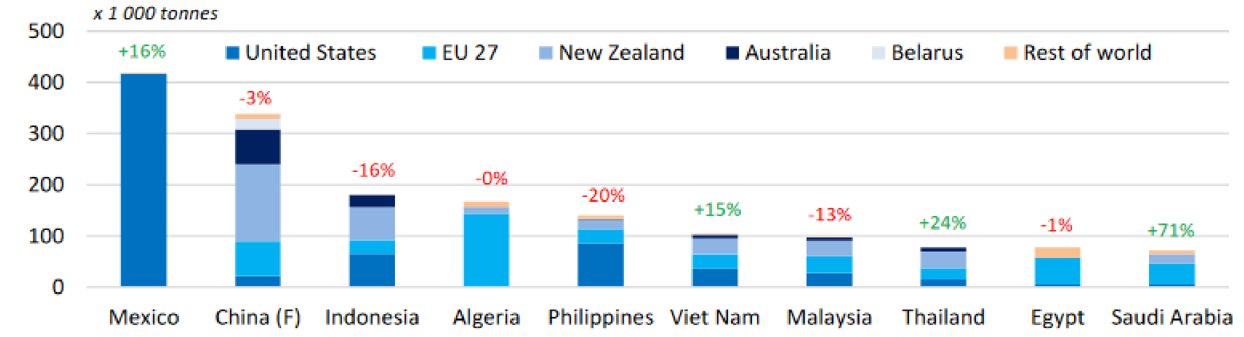
Top-10 WMP export destinations 2023



Dynamics in world SMP trade: main exporters, key export markets (volume x 1 000 tonnes)

Top-10 global SMP exporters 2023					
No.	Exporter	Volume	Share	Growth 2022/23	CAGR '15/'23
1.	United States	809.8	30.4%	-2.5%	+5.8%
2.	EU 27	775.4	29.2%	+9.6%	+0.1%
3.	New Zealand	451.3	17.0%	+26.3%	-2.0%
4.	Australia	133.6	5.0%	-13.2%	-3.7%
5.	Belarus	116.2	4.4%	+6.6%	-1.6%
6.	Iran	105.3	4.0%	+11.0%	+42.5%
7.	United Kingdom	70.9	2.7%	+51.8%	-1.2%
8.	Canada	25.5	1.0%	-14.2%	+11.8%
9.	Ukraine	20.4	0.8%	-5.2%	-6.5%
10.	Argentina	18.3	0.7%	-33.8%	+1.9%
	World trade	**2 660.0**	**100.0%**	**+2.9%**	**+1.8%**

Top-10 SMP export destinations 2023



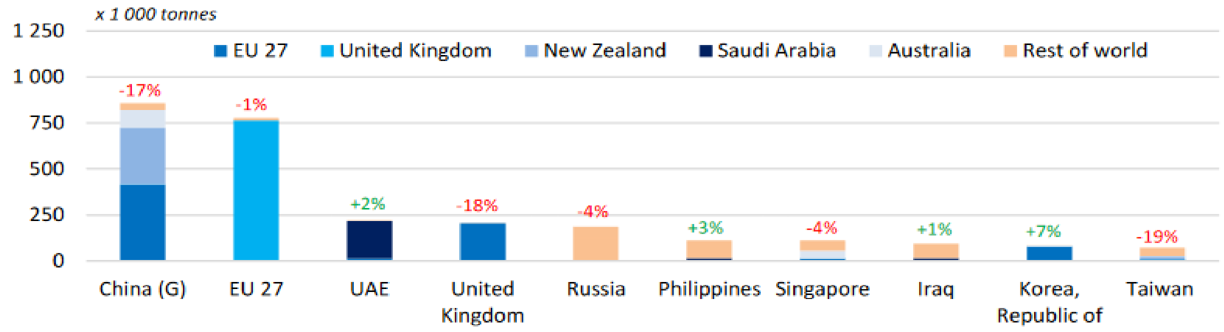
Source: ZuivelNL, Comtrade

(E) Trade data: year 2022.
(F) Hong Kong, Macao included.

Dynamics in world milk and cream trade: main exporters, key export markets (volume x 1 000 tonnes)

Top-10 global milk and cream exporters 2023					
No.	Exporter	Volume	Share	Growth 2022/23	CAGR '15/'23
1.	EU 27	1 231.7	28.9%	-6.6%	+2.4%
2.	United Kingdom	768.7	18.1%	-1.5%	+1.9%
3.	New Zealand	406.4	9.6%	-4.9%	+11.9%
4.	Saudi Arabia	352.6	8.3%	-5.0%	+7.9%
5.	Australia	203.4	4.8%	-37.4%	-6.4%
6.	Belarus	191.9	4.5%	+1.8%	+2.9%
7.	United States	138.9	3.3%	-5.2%	+4.5%
8.	Iran	130.5	3.1%	+17.9%	+0.4%
9.	South Africa	90.9	2.1%	+3.1%	+18.3%
10.	Thailand	90.4	2.1%	-3.8%	+4.0%
	World trade	**4 255.0**	**100.0%**	**-5.3%**	**+2.7%**

Top-10 milk and cream export destinations 2023

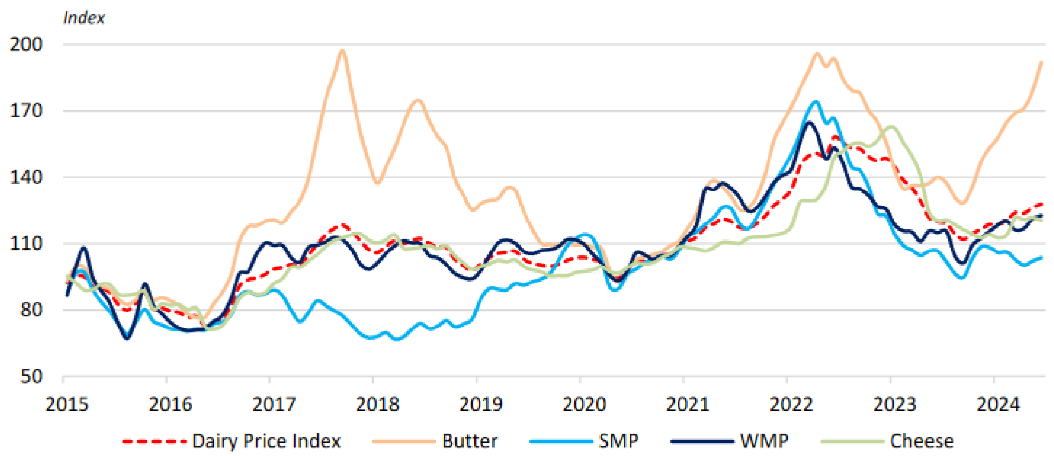


Source: ZuivelNL. Comtrade

Trends in dairy product prices

International dairy product prices, as measured by the FAO Dairy Price Index (FDPI), averaged 123.7 points in 2023, a decrease of 25.8 points (17.2%) from 2022. In 2023, all dairy commodity price indices constituting the FDPI declined from the highs registered in 2022, with SMP registering the steepest drop (-30.3%), followed by butter (-22.8%), WMP (-21.8%) and cheese (-10.2%).

FAO Dairy Price Indices (2014-2016=100)



Source: FAO

Unprocessed milk prices

The profitability of dairy farming significantly deteriorated in 2023 compared to the financially strong milk year in 2022. Unprocessed milk prices fell sharply, while the cost of production decreased only slightly. In the USA farmgate prices decreased by 19.9%, in the Netherlands 14.5%, New Zealand 4.8% and China down by 12.2%. The exception was South Africa where the farmgate price continued to increase in lieu of reduced output at farm level. The downward trend was facilitated by the easing of dairy product prices in 2023 (-17.2% according to the FAO Dairy Index), due to increased supply.

The last column in Table 3 reflects the Rand per litre for the different countries.

Table 3: World average producer price of unprocessed milk

Country	2023 (USD/100kg)	2022/23 %	2023 (ZAR/100kg)	2023 R/l
Argentina	35.15	-8.03	647.81	6.68
Brazil(D)	51.78	-6.94	954.31	9.84
China	54.21	-12.21	999.09	10.31
EU 27(B)	50.79	-3.93	936.06	9.66
France	48.34	8.31	890.91	9.19
Germany	49.03	-12.45	903.62	9.32
Netherlands	51.74	-14.54	953.57	9.84
Poland	47.92	-4.12	883.17	9.11
India (A)	43.85	-3.09	808.16	8.34
New Zealand	46.74	-4.81	861.42	8.89
Russia	38.43	-20.20	708.26	7.31
USA	45.15	-19.91	832.11	8.85
South Africa	41.46	8.53	764.11	7.88
A: Dairy years ending March of the following year. Mixed (cow and buffalo) milk; refers to cooperative dairies only. B: Weighted average (Source: European Commission) D. Deflated price based on December 2023				