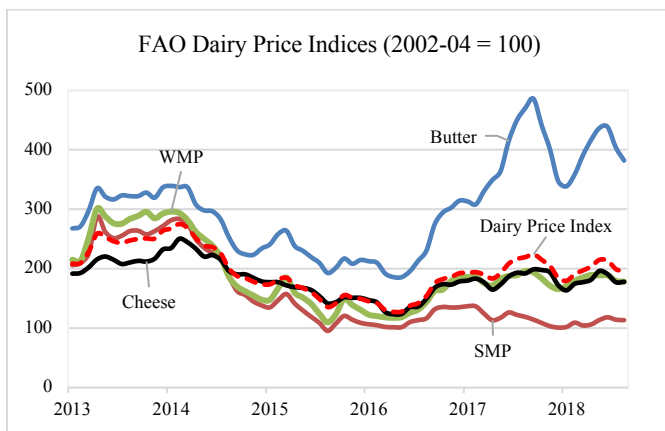


DAIRY MARKET REVIEW

International dairy prices

Buoyed by rising export availabilities, dairy prices weakened in the second half of 2018

The **FAO Dairy Prices Index** averaged 175.6 points in November, 2.3 percent below the level in January this year and 13.9 percent below the corresponding month last year. In the first five months of this year, the index increased by 19.6 percent, reaching a peak in May, but since then it began weakening. Butter prices were mostly behind both upward and downward trends of the index. Cheese and Whole Milk Powder (WMP) prices followed similar patterns, but with moderate intensity. Skim Milk Powder (SMP) prices remained stable throughout the year.

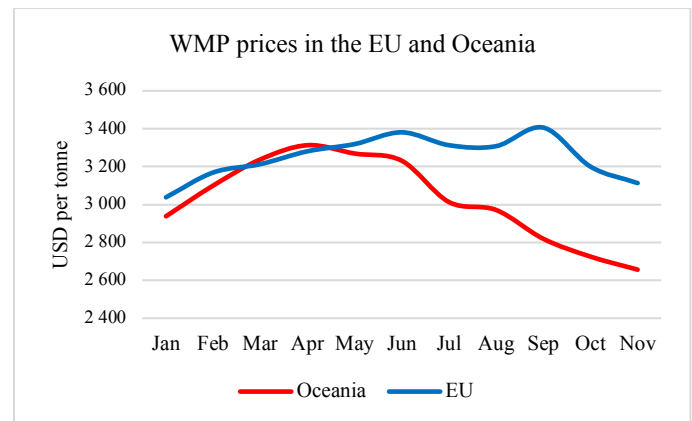


In 2018, average international price quotations for butter (per tonne throughout the document) increased from USD 4 843 in January to a peak of USD 6 271 in June, but since then weakened, ending at USD 5 094 in November 2018. Butter price strength in the first half of the year was associated with reduced export availabilities in Europe and North America, attributed to a rise in consumer demand with a change in perception of butter as not having the negative health effects as it earlier considered. Reflecting this shift in demand, January – September EU exports declined by 11 percent despite production rising by 1.6 percent. In addition to reduced export availabilities, demand for butter continued to increase in developing countries, especially among the middle- and high-income households in Asia. Since June, however, butter prices began easing when firm indications appeared on increased export availabilities from Oceania in the 2018/19 production season (June to May).

International cheese prices increased from USD 3 413 in January to USD 4 094 in May but declined to USD 3 375 by November. Cheese price strength in the first half of the year is coincided with lower than anticipated milk production in New Zealand in the 2017/18 production cycle amid robust import demand. Similar to butter, prices began easing when export supplies conditions improved, especially in New Zealand and the United States.

Global SMP prices in 2018 were relatively stable with an average level of USD 1 906, which hovered below the other dairy products (butter - USD 5 422, cheese - USD 3 685, and WMP - USD 3 112). The current price weakness is seen as a result of excessive global supplies, including stocks available in the EU, India and the United States.

WMP price quotations increased from USD 2 997 in January to USD 3 301 in April, but fell back to USD 2 834 in November. WMP price quotations for Europe and Oceania began widening since April this year, contributing to some market segmentation.



Global milk output

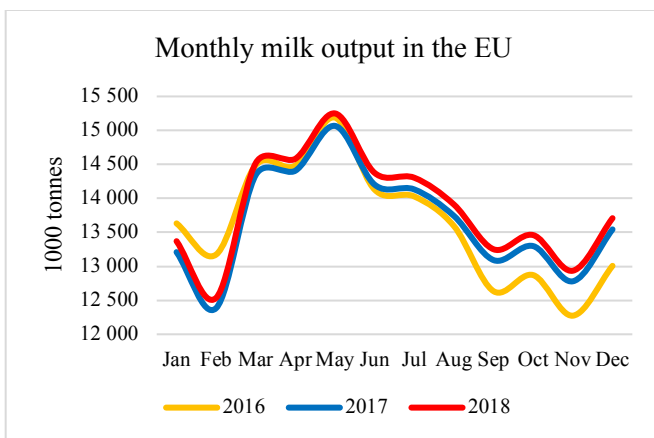
Production increased in key producing countries

World milk output in 2018 was forecast to reach 827 million tonnes, up 2.0 percent from 2017, driven by output increases in all major regions, with the largest gains in Asia, Europe, North America and South America, and recoveries in Africa, Oceania and Central America.

In Asia, milk output continues to rise, but some challenges emerged in recent months. In **India**, rainfall during the monsoon period (June to September) was below average (804 millimetres against the normal average of 887.5). This altered

the availability and quality of fodder supplies, the main animal feed for the vast majority of dairy farmers. Dairy processors lowered dairy procurement prices as SMP stocks began to rise. In **China**, recent milk output expansion was supported by stable herd sizes, firm milk prices and a rise in milk yields of large-scale dairy farms. China imposed an additional tariff of 25 percent on alfalfa and soybean imports from the United States, a main supplier to China. As alfalfa and soybean account for roughly one-third of feed costs in China, the tariffs are likely to increase costs, which could, in turn, hasten the process of downscaling farm operations that was already underway among smallholder dairy farmers, especially in the southern province. This process was triggered by the process of industrial restructuring and the imposition of strict environmental regulations. In **Japan**, milk production bounced back sharply in October following setbacks experienced in the aftermath of the Hokkaido earthquake, resulting in higher production in 2018.

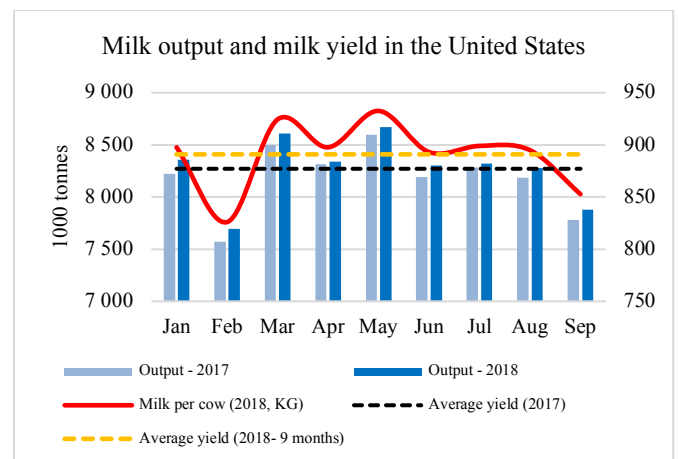
In *Europe*, milk output continued to rise, despite earlier worries over the impact of drought in some parts of Europe. In the **EU**, January – September milk deliveries were higher than the corresponding period last year, with production rising by an additional cumulative total of 1.5 million tonnes. Higher yield, which resulted from recent replacement of unproductive dairy animals, was mainly behind this increase. Since July, however, output growth has slowed down.



In the **Russian Federation**, January – September milk output was higher than the corresponding period in 2017, and, reflecting the elevated supply, farm-gate prices declined. Increased output is a result of better performance of large-scale dairy farms and their higher yields, adequate to counter reduced output of small-scale farms. In **Belarus**, in the early part of this year, milk production rose, but the trend reversed since June. The current low production is considered to be a result of the import ban imposed by the Russian Federation on dairy raw materials and those in consumer packs exceeding 2.5 litres. The decline in exports has contributed to a stock build up and a

decline in farmgate prices. Opening up of Asian markets, especially China, has provided some relief. In **Ukraine**, milk production throughout this year has been below that of 2016 and 2017. Dairy farmers are facing high input costs and low farmgate prices, reducing producer margins. Reduced farmgate prices are seen as a result of discounted retail prices, but retailers are reported to be reluctant to increase milk prices fearing that it might further reduce sales.

Milk outputs in the three main milk producing countries in *North and Central America* – Canada, Mexico and the United States - have increased in 2018. In **Mexico**, milk output increased, especially since July, supported by demand from the food processing industry. The market is awaiting to learn the likely impacts of the newly negotiated Canada-Mexico-US agreement and the European-Mexico Free Trade Agreement. In the **United States**, latest USDA production data indicated an increase of milk output by 1.1 percent during the first 10 months in 2018. Dairy cow culling in the United States elevated slightly but compensated by higher yields. During the same period, farmgate milk prices were on average 8 percent below the same period last year. If ratified, the United States will be able to access to 3.6 percent of the Canadian domestic dairy market, while also increasing sales to Mexico. The United States is also expected to benefit from the scrapping of the milk class-7 by Canada under the agreement.



In *South America*, weaker currencies affected several key dairy producing countries, which raised input costs for producers, while the inflationary pressure squeezed purchasing power of consumers. In **Argentina**, Mar-Oct milk output has been on average 6 percent higher than the corresponding period last year. Meanwhile, farmgate prices increased by about 20 percent, mainly due to strong import demand for Argentinian dairy products. The depreciation of Argentine peso increased input costs, especially of animal feed and transport. Nevertheless, the dairy industry appears to be relatively

unscathed so far thanks to greater production efficiency and industry consolidation. **Brazil** began importing more milk products, especially WMP and SMP, most likely due to a shortfall in milk output.

In Oceania, milk output in the 2018/19 production cycle that began in June is on the rise, primarily driven by improved output in New Zealand. In **New Zealand**, pasture conditions were positive at the beginning of the 2018/19 dairy cycle with mild temperatures and good soil moisture. Supported by the better production environment, milk output is expected to recover in the 2018/19 cycle that will continue till end of May next year. A larger herd and higher farm gate prices are expected to help the recovery. In **Australia**, milk output in the 2018/19 has so far been 4 percent lower than in the previous two years. While Australia received much expected rainfall in October, especially eastern and western Australia, water deficiencies continued in other regions. The Australian weather bureau has predicted that the period till January 2019 will be drier and warmer, prompting concerns over possible rises in hay and water prices. Notwithstanding, a reduction in cow culling has been noted in recent months, suggesting improvement in farmer expectations.

In *Africa*, milk output expansions are anticipated in **Kenya**, **Algeria** and **Tunisia**, supported by favourable weather conditions and improved fodder availability. In some other dairy producing regions, dry conditions prevail (e.g., Somalia) while South Sudan continues to be affected by the ongoing conflict.

Dairy products

The section below provides a brief review of trends in **production and trade** of four dairy commodities, butter, cheese, Skim Milk Powder (SMP) and Whole Milk Powder (WMP).

Butter

Global supplies improved in recent months, aided by high production in some regions

Butter production has increased in some major producing regions. It increased by 1.6 percent (Jan-Sep) in the EU and 2.7 percent (Jan-Oct) in the United States. In Oceania, the 2018/19 production season is well underway, and increased butter production is expected.

Global butter trade trends appeared to be mixed this year. Jan-Oct 2018 butter exports increased in New Zealand (+10.7 percent), the United States (2.4 percent), **Belarus** (+4.9 percent), but declined in the EU (-11 percent) and Australia (-3 percent).

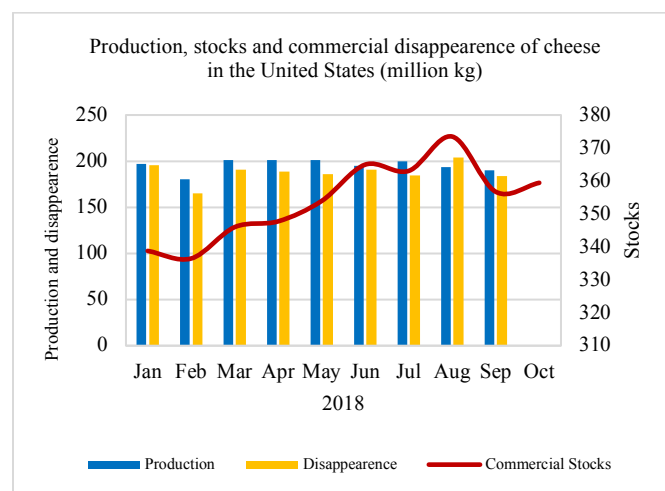
During January to September, **China** has imported more butter from **New Zealand** (+31 percent) but declined from the **EU** (-26 percent) and **Australia** (-3 percent). Several other countries have also reduced their imports including the **Russian Federation** (-31 percent), **Mexico** (-43 percent), **Iran** (-2.4 percent) and the **Philippines** (-3 percent).

Cheese

Trade picked up, but growth is contained

In Europe, Jan-Sep cheese production was largely stable (+0.46 percent), reflecting reduced import demand from some of its main trading partners. For example, EU cheese exports to the **United States** declined by 6 percent and to **Saudi Arabia** by 16 percent. These declines were partially compensated by higher imports by **Japan** (+14.8 percent) and the **Republic of Korea** (+2.3 percent). In the **United States**, Jan–Oct cheese production was 2.5 percent higher than the corresponding period last year, contributing to stock build up among commercial establishments. But, stocks declined somewhat in September, supported by strong imports from **Mexico**, **Republic of Korea** and **Japan**. US cheese imports picked up in September and October, following the usual patterns of rising imports targeting the holiday season. In Oceania, **New Zealand's** cheese production in the 2018/19 season is underway, and production is anticipated to rise.

Jan–Oct cheese imports increased in a number of countries including **Japan** (+6.6 percent), the **Russian Federation** (+11.8 percent), **Mexico** (+0.66 percent Jan – Sep), but declined in the **United States** (-4.5 percent), **Australia** (-13.8 percent) and **El Salvador** (-19.6 percent). While recent import figures are not available on **China**, data gathered from its trading partners indicate a decline.



Skim Milk Powder

Trade expanded on competitive prices

SMP production activities generally progressed this year along the lines expected earlier. In the **EU**, as per Eurostat, Jan–Sep production declined by 1.5 percent compared with the same period last year. Exports have increased by 1 percent, boosted by import orders from Algeria and China, among others. Competitive prices and strong demand are seen as key factors for the current export expansion. Adhering to the decision taken by the EU to abandon its obligatory purchasing requirement when export prices fall below the intervention price, the EU did not purchase SMP into the stock even when prices fell below the intervention price. EU SMP prices averaged USD 1 770, compared with the intervention price of over USD 2 000 (Euro 1 698). In the meantime, the EU has been able to bring down the stock to 252 573 tonnes by end of November, a third of the level in January 2018.

In the **United States**, Jan–Oct SMP production increased by 6 percent. Production expansion and high stocks, along with active demand from major buyers (Mexico, the Philippines, Indonesia, Malaysia, Pakistan and Viet Nam), SMP exports have increased by 25 percent. However, exports to China -the third largest export destination in 2017- have declined by 34 percent.

Contrary to the forecast made in October, **Canada's** SMP exports have declined by 6 percent in the first 10 months, mainly owing to significant drops in exports to Mexico, Bangladesh and Chile. SMP export potential may suffer further, if the ingredient class-7 is to be scrapped under the new Canada-Mexico-US trade agreement.

Jan–Oct SMP exports by **New Zealand** were 13.4 percent lower than the same period last year, mainly reflecting weak milk output in the 2017/18 production cycle. In recent months, SMP production has increased in line with the availability of more milk, and if the trend continues, New Zealand's SMP exports could recover. In contrast, **Australia** may produce less SMP, as milk supplies in the 2018/19 cycle are expected to be below last year.

In South America, SMP production has received less priority, and limited to meeting contractual obligations, while current requirements are being met by the existing SMP stocks. Jan–Oct SMP imports by **Brazil** declined by 10 percent compared to the same period last year, with significant drop in orders from the United States and Uruguay.

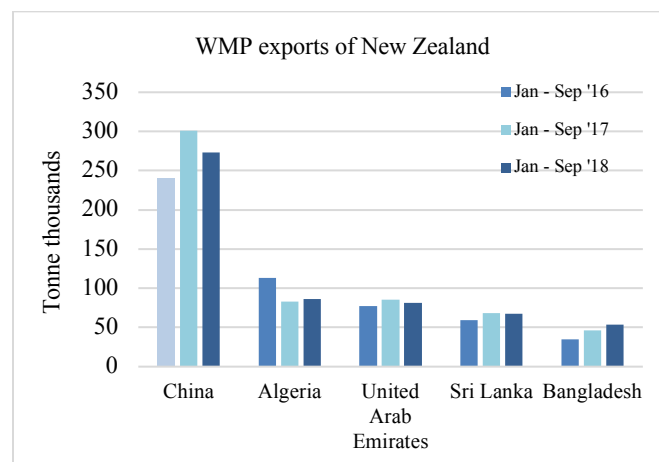
Much of global trade in SMP this year has been fuelled by higher imports by **Mexico**, **Algeria** and the **Philippines**. During the same period, **China** has reduced its imports by 28 percent from the United States and New Zealand (-18 percent) but has imported more from the EU (+9.4 percent). SMP imports by the **Russian Federation** have declined by 53 percent, with reductions noted from all key suppliers (Belarus, Turkey, Iran, Switzerland and Argentina), except New Zealand that has reported a rise (+ 6 percent).

Whole Milk Powder

Ample supplies and competitive prices help New Zealand to expand exports

In the **EU**, Jan–Sep WMP production declined by 2.3 percent. In **New Zealand**, with more milk available in the 2018/19 cycle, WMP production is expected to increase. As shown above, with the widening of prices between the EU and Oceania, New Zealand WMP prices have become highly competitive, providing it with an advantage for expanding its market outreach.

Asia continued to lead WMP imports, followed by Africa. From January to September, WMP imports also increased in **Sri Lanka** (+5 percent), **Thailand** (+12 percent) and **Malaysia** (+24 percent), but declined in **Brazil** (-31 percent), **Singapore** (-13.8 percent) and the **Russian Federation** (-65 percent). In contrast, **Chinese** WMP imports appear to have declined so far this year. Data monitored from Chinese trading partners reveal that WMP imports by China have declined by 10.8 percent, the country supplied over 90 percent of its imports in 2017. Compensating this decline partially, however, imports from Australia and the EU increased.



Statistical Appendix
FAO Dairy Price Index

Period	International prices (USD per tonne)				FAO Dairy Price Index (5) (2000 - 2004 = 100)
	Butter(1)	Cheddar cheese (2)	Skim Milk Powder (3)	Whole Milk Powder (4)	
Annual (January - December)					
2010	4270	4010	3081	3514	207
2011	4876	4310	3556	4018	229
2012	3547	3821	3119	3358	194
2013	4484	4402	4293	4745	243
2014	4010	4456	3647	3868	224
2015	3212	3340	2113	2509	160
2016	3350	3094	1983	2457	154
2017	5573	3848	2025	3179	202
2018 (monthly)					
January	4843	3413	1740	2977	180
February	5129	3644	1864	3127	191
March	5588	3700	1784	3228	197
April	5961	3788	1813	3301	204
May	6245	4094	1941	3289	215
June	6271	3981	2018	3290	213
July	5777	3700	1949	3130	199
August	5463	3713	1937	3102	196
September	5156	3619	2023	3048	191
October	4702	3513	1935	2910	182
November	4507	3375	1960	2834	176

Notes:

- (1) Butter: 82 percent butterfat, FOB Oceania and EU indicative average trading price
(2) Cheddar cheese: 39 percent maximum moisture, FOB Oceania indicative trading price
(3) Skim Milk Powder: 1.25 percent butterfat, FOB Oceania and EU average indicative trading prices
(4) Whole Milk Powder: 26 percent butterfat, FOB Oceania and EU indicative trading prices
(5) FAO Dairy Price Index represents the trade-weighted average of international prices of the four dairy products shown above

Source: FAO for indices and the Dairy Market News of USDA for international dairy price quotations

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Previous reports are available at: <http://www.fao.org/economic/est/est-commodities/dairy/milk-and-milk-products/en>

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