International Farm Comparative Report, 2025

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February 2026

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1. Background to the IFCN

The 26th International Farm Comparison Network (IFCN) conference was held in Leeuwarden, Netherlands, in 2025 and was attended by the Project Manager as part of the Milk SA project *Economies and Markets*. The primary objective of participating in the conference was to assess how the South African primary dairy industry compares with that of other participating countries.

The IFCN is a knowledge-driven organisation that generates insights through a global network of dairy researchers from more than 100 countries. Data collected through this network are managed and analysed by the IFCN Dairy Research Centre, based in Kiel, Germany. The use of standardised economic models ensures comparability across countries and provides a comprehensive global overview of the dairy sector. More than 130 dairy companies and organisations worldwide support and utilise IFCN data and analysis.

The core values of the IFCN are trust, independence, and truth. Trust within the IFCN network is essential to enable effective information sharing and collaboration. The organisation operates independently and is committed to objective, fact-based analysis.

According to the 2025 IFCN Dairy Report, a total of 174 farms across 66 dairy regions in 55 countries participated in the study. These countries collectively represent approximately 91% of total global dairy production.

2. Methodology of participation and research

The IFCN applies the Typical Farm Approach (TFA) as a base for standardised global data collection. This approach represents the most common farm type, which, at the same time, also produces a large portion of the total milk in the region. This makes it possible to obtain a comprehensive overview to generate information at the farm level. Most of the analyses are based on the information of 128 typical farms, one average-sized and one large typical farm, for every region/country.

Most of the monetary results are presented in USD to be able to compare farm information. Therefore, the average exchange rate of each country was used. It is important to note that the exchange rate and inflation rate affect the information provided.

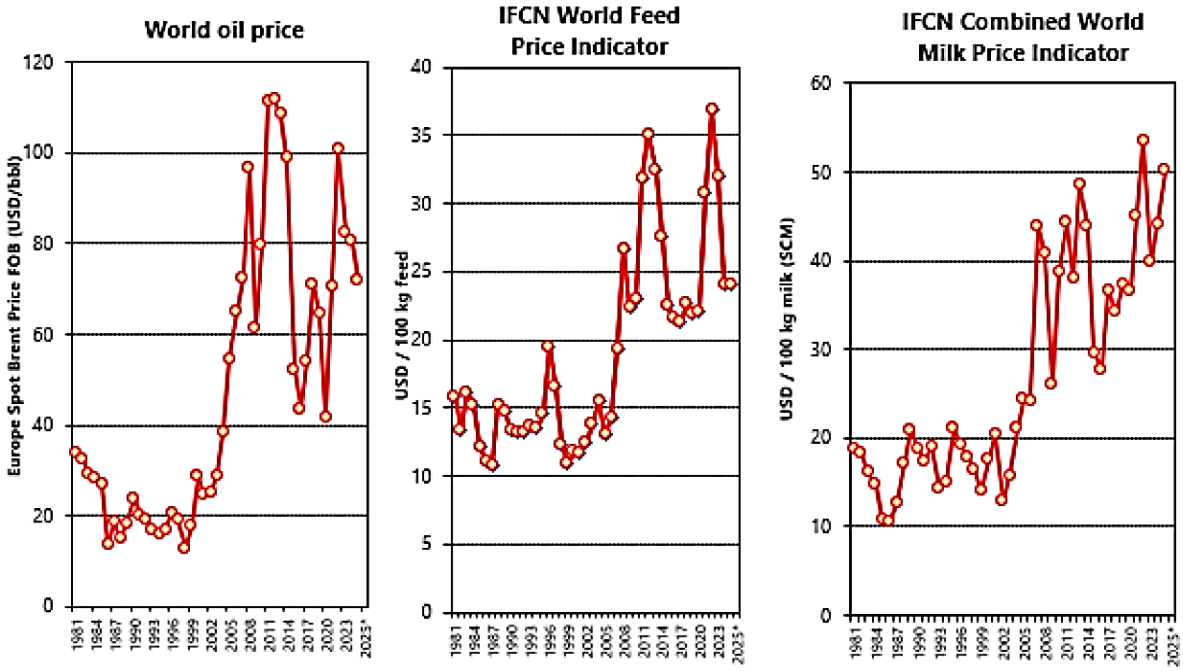
All unprocessed milk is converted into solid corrected milk (SCM). Unprocessed milk output with 4.0% fat and 3.3% true protein is generated. The factor used to express the density of unprocessed milk is 1.033 per litre.

3. Unprocessed milk prices and drivers

The IFCN world unprocessed milk price reached a record level of 63.3 USD/100 kg SCM in 2022, driven by several factors, including substantially higher input and energy costs, the war in Ukraine, and a persistent increase in milk production costs. Thereafter, in 2023, the average price declined and reached 36.5 USD/100 kg SCM, mainly as a result of higher commodity availability and a strong recovery in global unprocessed milk production.

In 2024, unprocessed milk prices fluctuated between 42.0 and 44.0 USD/100 kg SCM. At the beginning of 2025, prices continued to increase, reaching 52.2 USD/100 kg SCM. These increases resulted in a new average price level of approximately 46.0 USD/100 kg SCM.

Global trends in oil, feed and milk prices: 1981 - 2025



Source: IFCN, Dairy Report 2025

The **trend in the world's unprocessed milk price** from 2006 to April 2025 is reflected in the graph below. The volatility in the period from 1996 to the middle of 2016 is noticeably higher than the period thereafter, inclusive of the first six months of 2021. The latter part of 2021, through 2022 and 2023, saw increased volatility, which continued in 2024.

Cycles in the unprocessed milk price are simplified into the following timeframes:

1. ***1st Rollercoaster: 2007–2009***
   This cycle spanned three years and was characterised by a price fluctuation of approximately 50%, indicating a significant market imbalance. The onset of the cycle was driven by increased demand, while supply responded only slowly. Simultaneously, oil and feed prices rose to unprecedented levels, contributing to a peak unprocessed milk price of **53.3 USD/100 kg SCM** in November 2007.

2. ***1st Zigzag: 2010/2011***
   This phase lasted approximately 12 months and was characterised by a price fluctuation of around 10%, indicating a relatively balanced market. The period of stability was largely driven by high dairy stock levels carried over from the end of 2009.

3. ***1st Dynamic Wave: 2011–2012***
   This phase lasted two years and was characterised by a price fluctuation of approximately 20%, indicating a relatively balanced market. During this period, milk supply and demand expanded at similar rates. However, adverse weather events, including severe drought conditions in North America, led to sharp increases in feed prices that outpaced milk price growth. This resulted in weak farm economics, which ultimately reduced milk supply toward the end of 2012 and triggered a new rollercoaster phase at the beginning of 2013.

4. ***2nd Rollercoaster: 2013–2016***
   This phase extended over four years and was marked by a price fluctuation of approximately 50%, indicating a pronounced market imbalance. During this period, the unprocessed milk price peaked at 55.8 USD/100 kg SCM before falling sharply to a low of 27.1 USD/100 kg SCM. The high level of price volatility was primarily driven by elevated prices at the start of the phase, which stimulated production, the abolition of the European milk quota system, and the ban on European dairy exports to Russia.

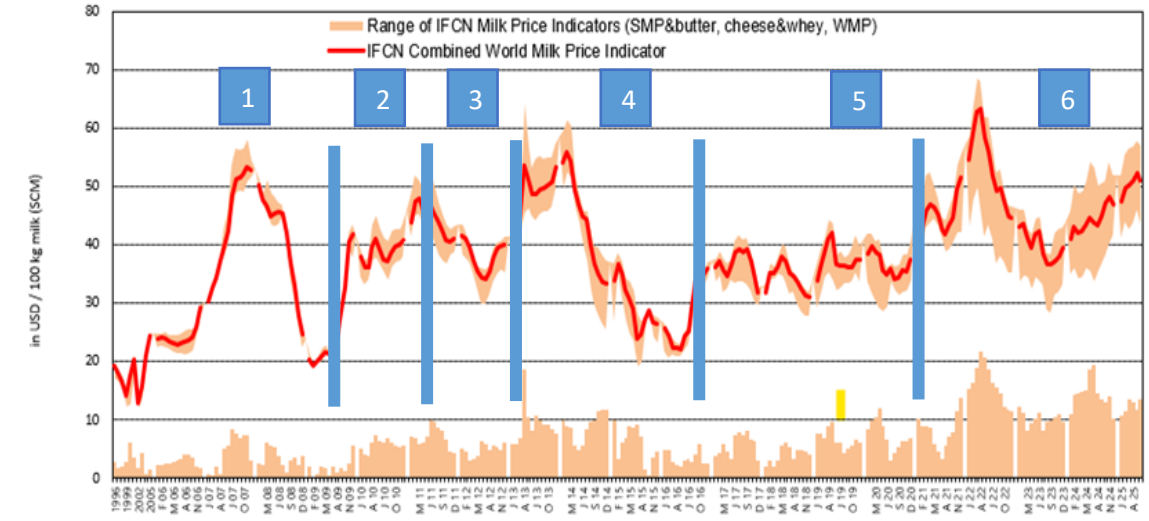
5. **1st Extended Zigzag: 2017–2020**
   This phase spanned the period from 2017 to 2020 and was characterised by a price fluctuation of approximately 10%, indicating a relatively balanced market. From 2017 onwards, a new market scenario emerged that can be classified as an extended Zig-Zag phase.

6. **3rd Rollercoaster: 2021–2024**
   Considering the period from 2021 to 2024, a clear rollercoaster phase emerged in the global dairy market. Prices increased steadily through 2021 and peaked at a record 63.3 USD/100 kg SCM in 2022, before reversing sharply and declining to 36.5 USD/100 kg SCM in 2023. In 2024, the market stabilised, and prices recovered, averaging around 44.2 USD/100 kg SCM, confirming continued volatility over the period.

The upward trend persisted into the first months of 2025, with prices reaching 52.15 USD/100 kg SCM in May 2025. As a result, the average price for the period from 2021 to June 2025 increased to 46 USD/100 kg SCM.

These cycles are demonstrated in the graph below:

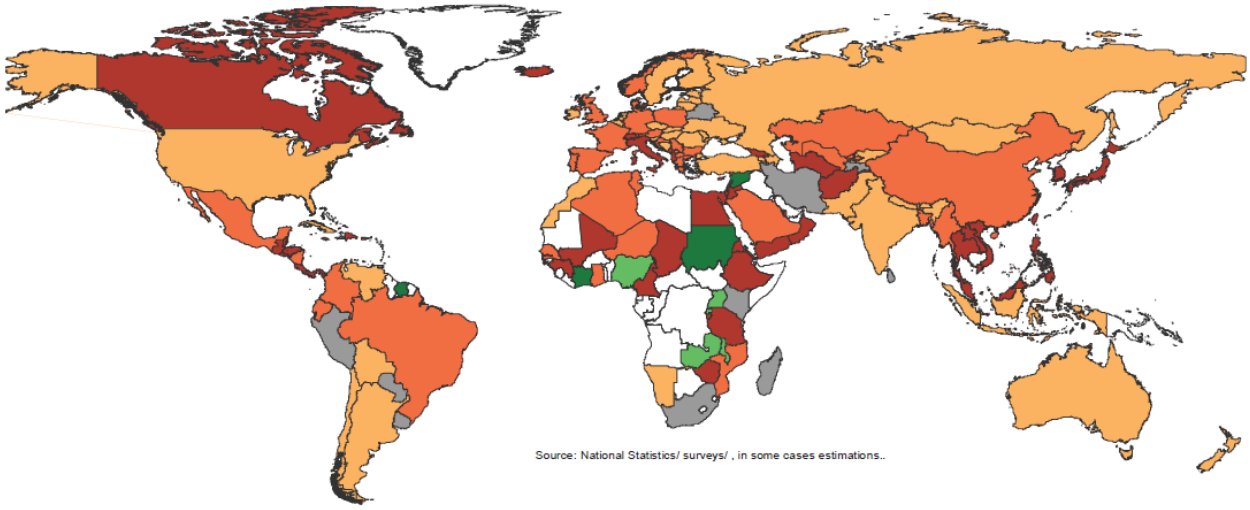
IFCN Combined World Milk Price Indicator



IFCN Combined World Milk Price Indicator: weighted average of 3 IFCN World Milk Price Indicators: 1. SMP & butter (~31%), 2. Cheese & whey (~53%), 3. WMP (~16%)

Source: IFCN, Dairy Report 2025

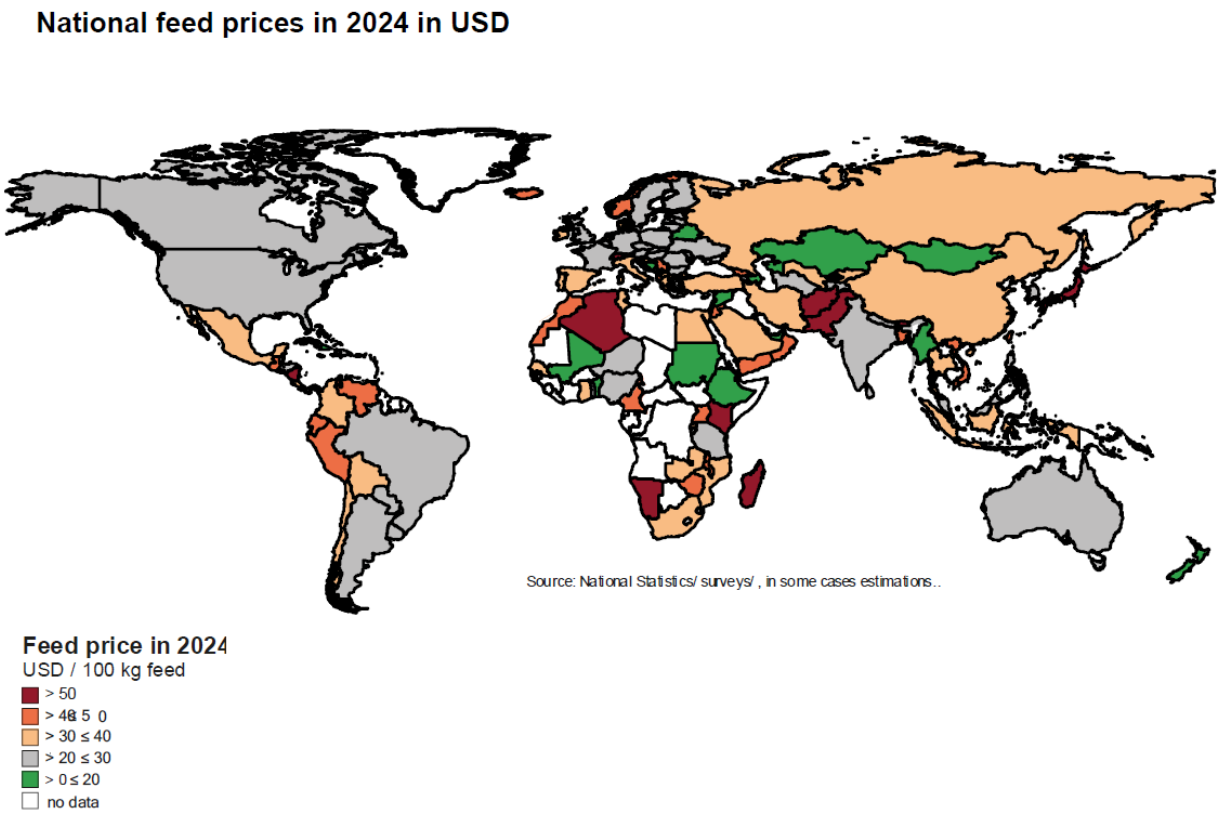
National milk prices in 2024 in USD



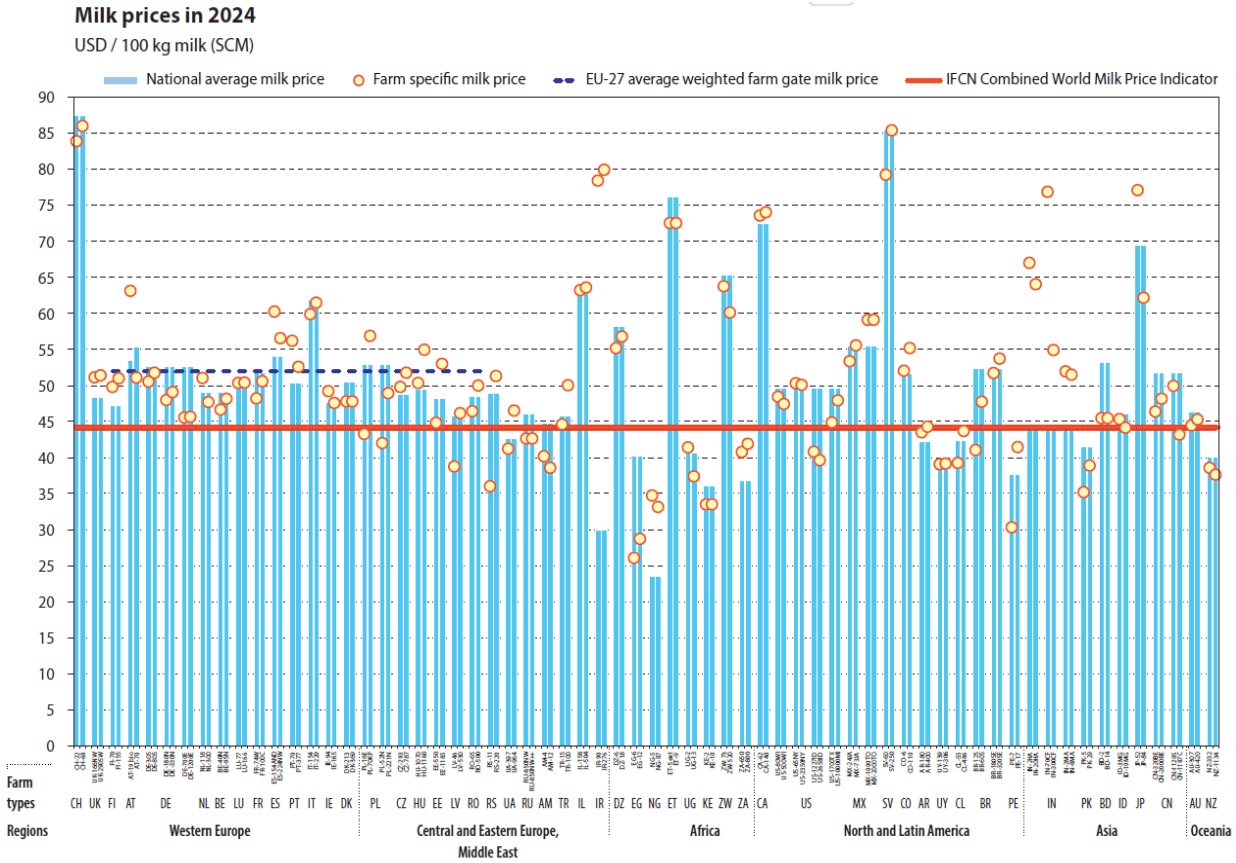
Milk price in 2024
USD / 100 kg milk (SCM)

- > 60
- > 50 ≤ 60
- > 40 ≤ 50
- > 30 ≤ 40
- > 20 ≤ 30
- > 0 ≤ 20
- no data

Source: IFCN Dairy Report 2025



Source: IFCN Dairy Report 2025

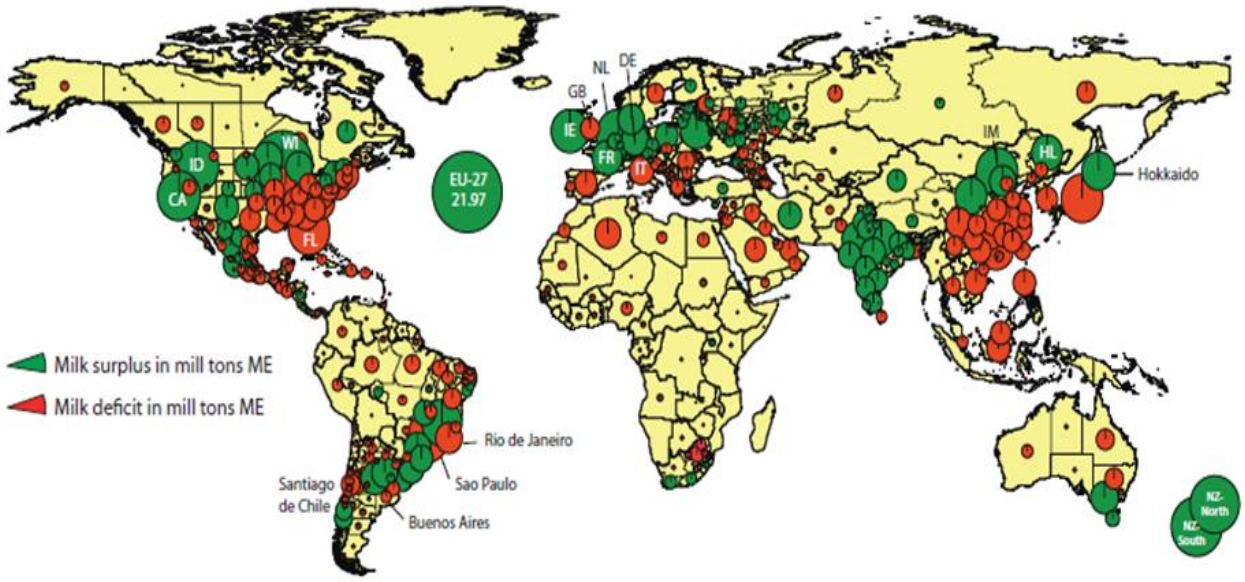


Source: IFCN, Dairy Report 2025

4. World unprocessed milk production in 2024 is illustrated in the map below, and surplus and deficit situations in the next map

The map below reflects the absolute levels of unprocessed milk production in the world during 2024, and the share of milk delivered.

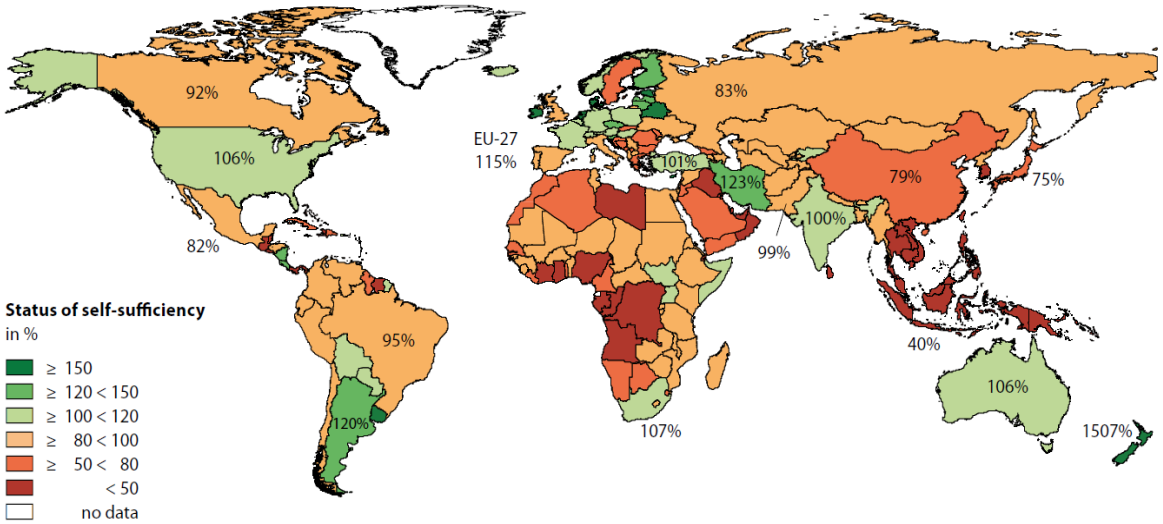
Milk surplus and deficit world-wide 2024



Source: IFCN, Dairy Report 2025

The concentration of surplus versus deficit production of unprocessed milk is visible in different parts of the world and even more evident in certain countries.

Status of self-sufficiency in 2023



Source: National statistics, AMI, FAO, GTT, estimates for some countries.
Calculation: Self-sufficiency in milk = All milk production (cow, buffalo, goat, sheep, camel) divided by national milk demand.
Remarks: The EU-27 data is only considering trade with countries outside the European Union.

Source: IFCN, Dairy Report 2023
New graph to be released later this year

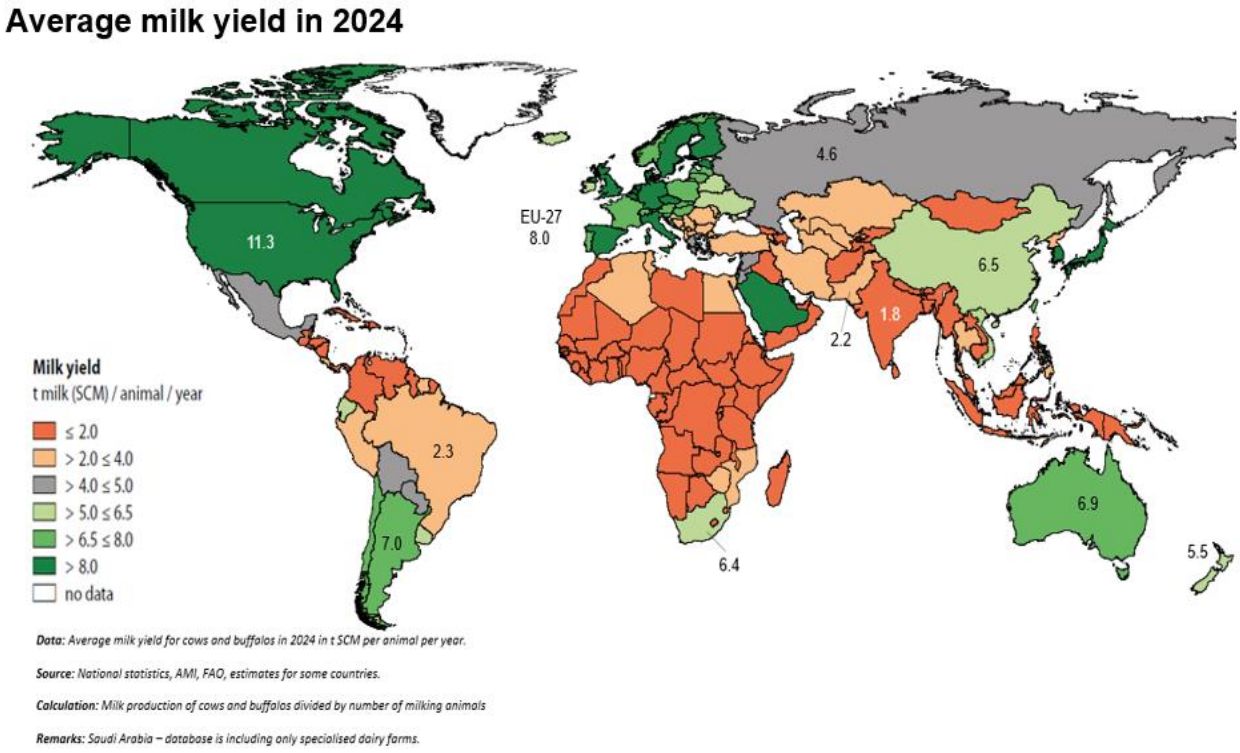
In the graph above, self-sufficiency is defined as:

$$\text{Self-sufficiency} = \frac{\text{Unprocessed milk production}}{\text{Consumption}}$$

where consumption is calculated as:

$$\text{Consumption} = \text{Production} - \text{Exports} + \text{Imports} \pm \text{Changes in stocks}$$

According to the graph, New Zealand has the highest level of self-sufficiency, followed by Argentina, whereas China and Japan are the most dependent on imports.



Source: IFCN, Dairy Report 2025

5. Country comparison: The average size of dairy herds

Globally, the average dairy farmer owns 2 to 3 cows. Larger herds are found in countries such as Saudi Arabia, South Africa, New Zealand, and the United States, among others. South Africa's average dairy herd size ranks among the largest in the world. Table 1 presents the average herd size for a selection of countries, showing that the relative ranking has remained unchanged from the previous year.

Table 1: Average number of cows in the dairy herd, selected countries; 2024

Country	Average number of cows in herd
Saudi Arabia	8 158
South Africa	601
New Zealand	448
USA	377
Australia	342
Czech Republic	282
Denmark	251
Israel	223
United Kingdom	175
Argentina	153
Uruguay	142
Netherland	111
Ireland	98
France	72
Poland	13
India (cows and buffalos)	2

Source: IFCN, Dairy Report 2025

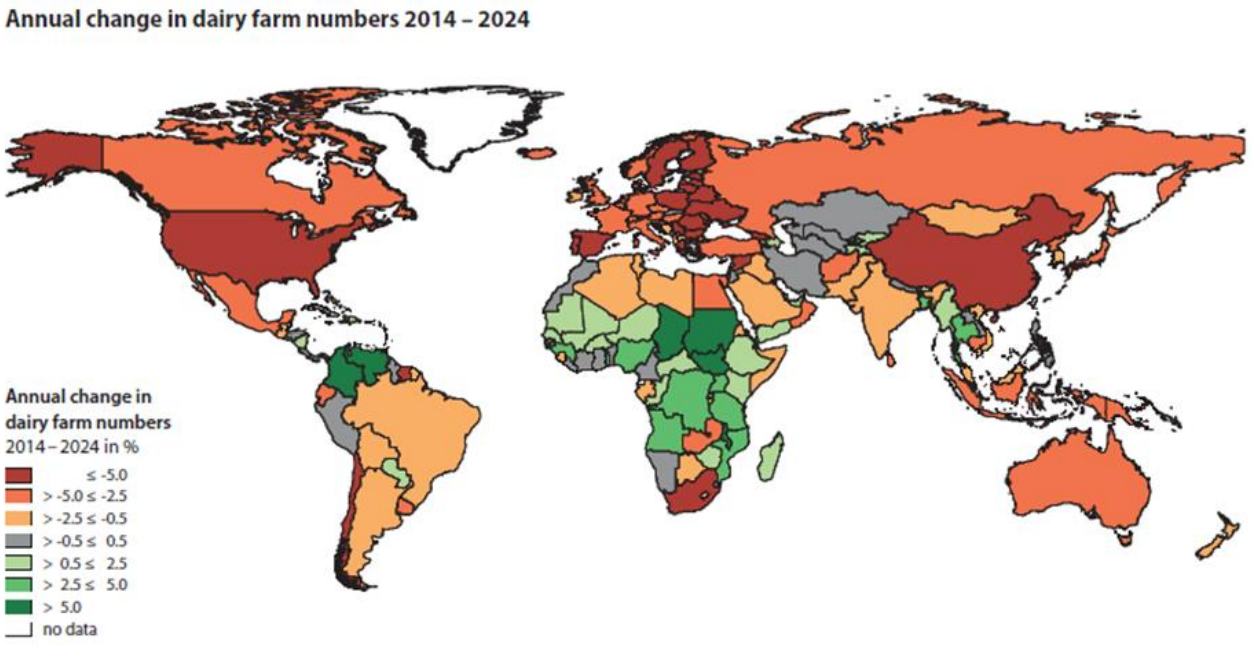
6. Country comparison: Number of dairy farms

The number of dairy farms differs hugely between countries. There is some correlation between the average number of cows per herd and the number of farms. The smaller cow numbers per herd tend to be associated with large farm numbers. Table 2 reflects the number of farms for a few selected countries.

Table 2: Average number of dairy farms for selected countries, 2024

Country	The average number of farms
Saudi Arabia	26
South Africa	1 040
New Zealand	10 490
USA	24 810
Australia	3 890
Czech Republic	1 287
Denmark	2 160
Israel	620
United Kingdom	10 476
Argentina	9 735
Uruguay	2 830
Netherland	13 900
Ireland	16 630
France	42 470
Poland	166 000
India (cows and buffaloes)	66 666 000

Source: IFCN, Dairy Report 2025



Source: IFCN, Dairy Report 2025

In the map above, most countries show a decline in the number of dairy farms, indicating a widespread reduction in farm units over the period shown. The countries that experienced the largest decreases in dairy farm numbers include Alaska, the United States, Poland, most European Union countries, China, and South Africa. On the other end of the spectrum, the countries with the greatest increases in dairy farm numbers were Colombia, Venezuela, Chad, and both North and South Sudan.

7. Farm comparison: Cost of unprocessed milk production

The cost of the production of unprocessed milk is a key indicator of the competitiveness of unprocessed milk production in a region/country compared to that of other regions/countries. Furthermore, comparing production costs with the farmgate price of unprocessed milk provides insight into the profitability of milk production at the farm level.

- The analysis of unprocessed milk production costs shows that 12% of farms recorded production costs of ≤ USD 30 per 100 kg SCM. These farms are predominantly located in Africa and Serbia, with a small number of individual farms in the Americas and Oceania. This share has declined markedly over time, decreasing from 20% in 2020 to 15% in 2021 and further to 7% in 2022, before recovering to 11% in 2023 and increasing slightly by a further 1% in 2024.

- Middle-cost producers: This group represents 71% of farms, with unprocessed milk production costs ranging between 30 and 60 USD/100 kg SCM, and includes farms in Europe, the Americas, and Asia. The share of farms in this cost bracket decreased from 72% in 2020 to 68% in 2021, rose to 73% in 2022, and then stabilised at 71% in both 2023 and 2024.

- High-cost producers, defined as farms with production costs of ≥ USD 60 per 100 kg SCM, accounted for 17% of the total sample. These farms are primarily located in the Alpine region, Canada, Israel, Iran, and selected parts of Asia. The proportion of high-cost producers increased from 8% in 2020 to 17% in 2021 and peaked at 20% in 2022, before declining to 18% in 2023 and decreasing by a further 1% to 17% in 2024.

The shift away from low-cost producers observed in 2021 and 2022 can largely be attributed to the sharp increase in farm input costs during this period. In 2023, this trend reversed, with a greater share of farms returning to the low-cost category, supported by more moderate input cost conditions. This recovery continued into 2024, reinforcing the shift back toward lower-cost production systems.

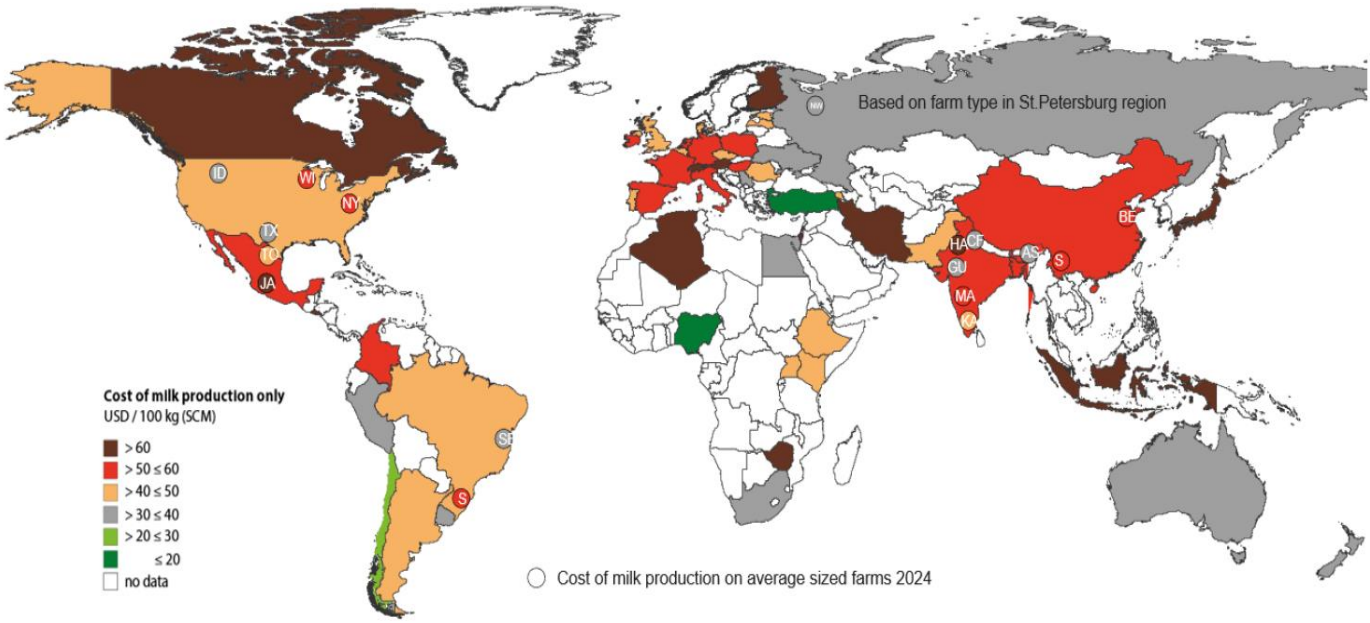
Extremely low-cost producers are typically located in countries where feed costs are close to zero, the opportunity cost of owner labour is low, and only a small proportion of unprocessed milk production is marketed.

In the IFCN typical farm comparison analysis, South Africa included three farms. A small farm with 230 cows on grazing plus concentrate, an average farm with 650 cows (ZA-650) on grazing and an 800 cows (ZA-800) farm on intensive total mixed rations were included.

Production costs were grouped into seven categories: variable feed costs; total labour; land and capital costs; depreciation of machinery and buildings; veterinary costs; medicine and insemination costs; and other costs.

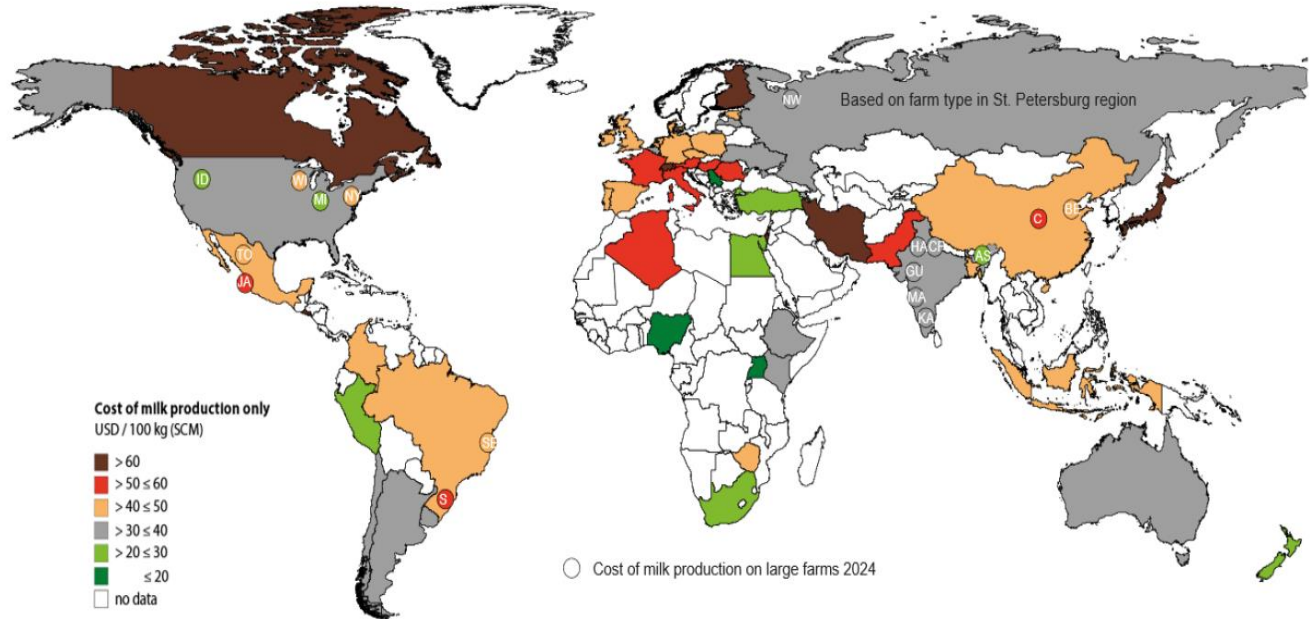
The first map below illustrates the cost of unprocessed milk production on average-sized dairy farms for 2024, while the second map presents the corresponding costs for large farms in 2024 (USD per 100 kg SCM). When assessed on large farms, South Africa ranks among the lowest-cost milk producers globally (>20 to ≤30 USD per 100 kg SCM). However, on average-sized farms, production costs shift into a higher bracket, namely >30 to ≤40 USD per 100 kg SCM. This difference reflects variations in operating systems (e.g. pasture-based vs. more intensive systems), between farm sizes.

Cost of milk production only on average typical farms 2024



Source: IFCN, Dairy Report 2025

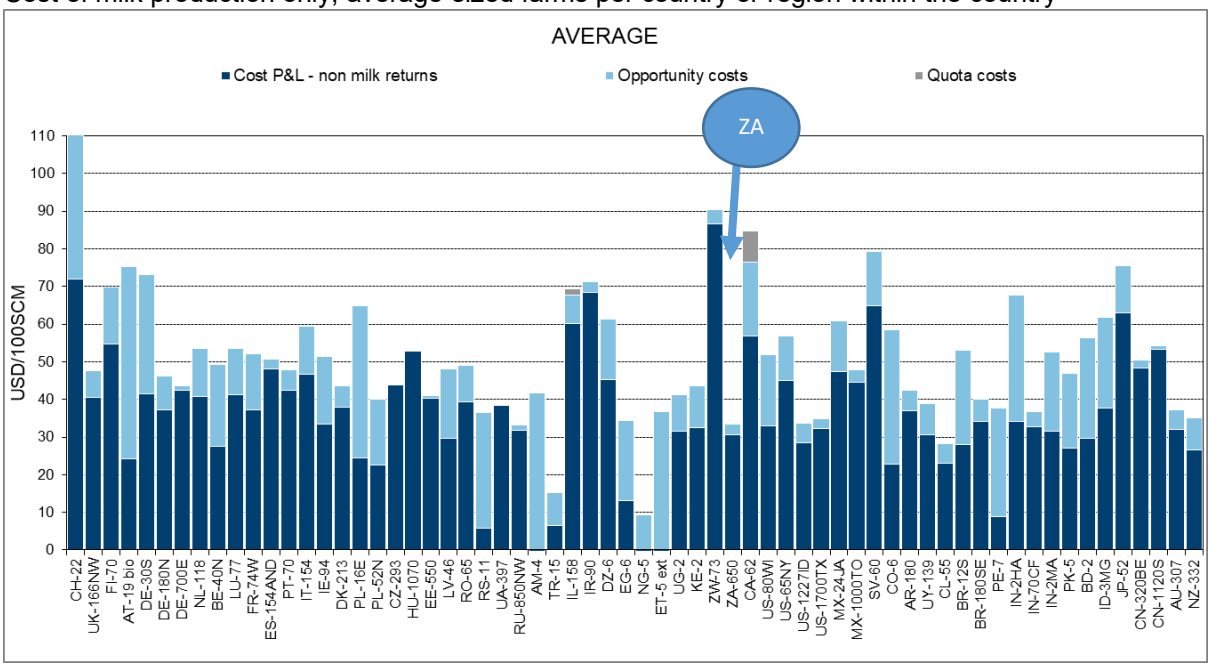
Cost of milk production only on large typical farms 2024



Source: IFCN, Dairy Report 2025

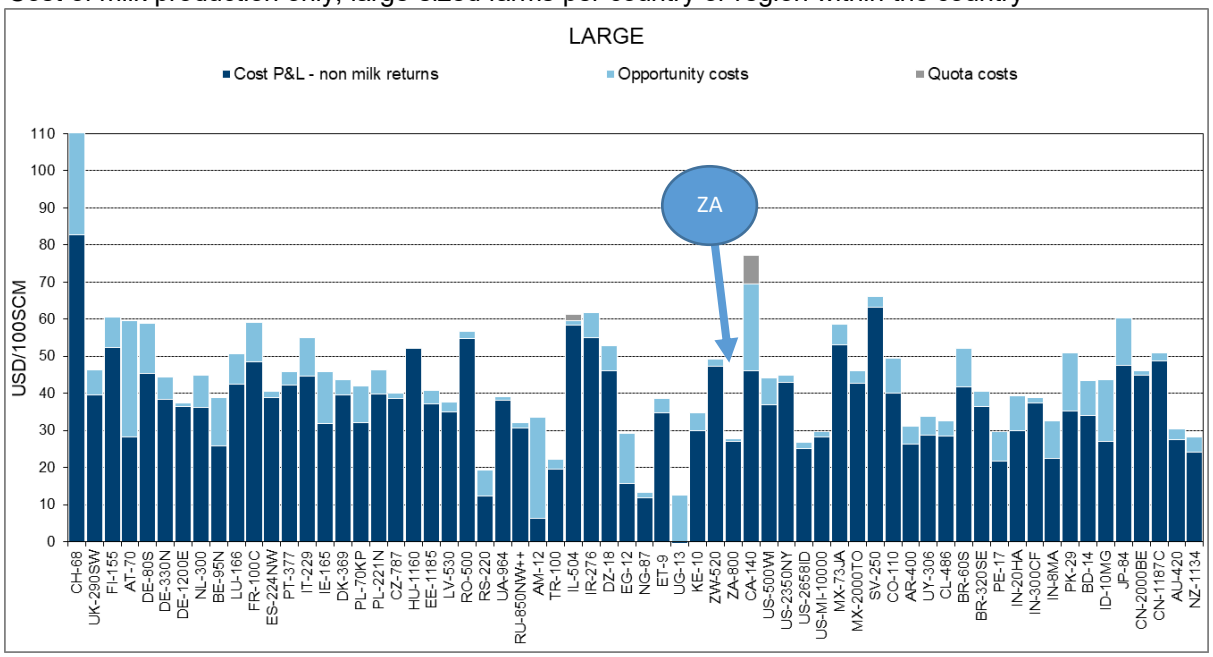
The graphs below show the cost of unprocessed milk production on average and large-sized farms between different countries.

Cost of milk production only; average-sized farms per country or region within the country



Source: IFCN, Dairy Report 2025

Cost of milk production only; large-sized farms per country or region within the country



Source: IFCN, Dairy Report 2025

For the average-sized farm (ZA 650), South Africa ranks 4th among the lowest-cost producers out of 66 farms, compared with 3rd last year and 2nd the year before. For the larger-sized farm (ZA 800), South Africa ranks 6th, having placed 4th for the previous two consecutive years.

It should be noted that, in the average-sized category, the seven lowest-cost farms report costs below 35 USD/100kg SCM. In the large-sized category, the threshold extends to the top seventeen farms.

Cost component of feed: Feed typically constitutes the largest share of total unprocessed milk production costs, accounting for between 38% and 91% of total costs. The lowest feed costs were observed in Armenia and, to a lesser extent, Ethiopia, while the highest feed costs were recorded in Egypt, largely due to the country's reliance on imported feed to meet most of its requirements.

Cost Component of labour: Labour typically represents the second-largest share of total unprocessed milk production costs, ranging from 5% to 52%. The lowest labour costs were observed in South Africa, while the highest were recorded in Peru. On average, labour accounts for 19% of the total cost of unprocessed milk production.

The following wage levels were observed:

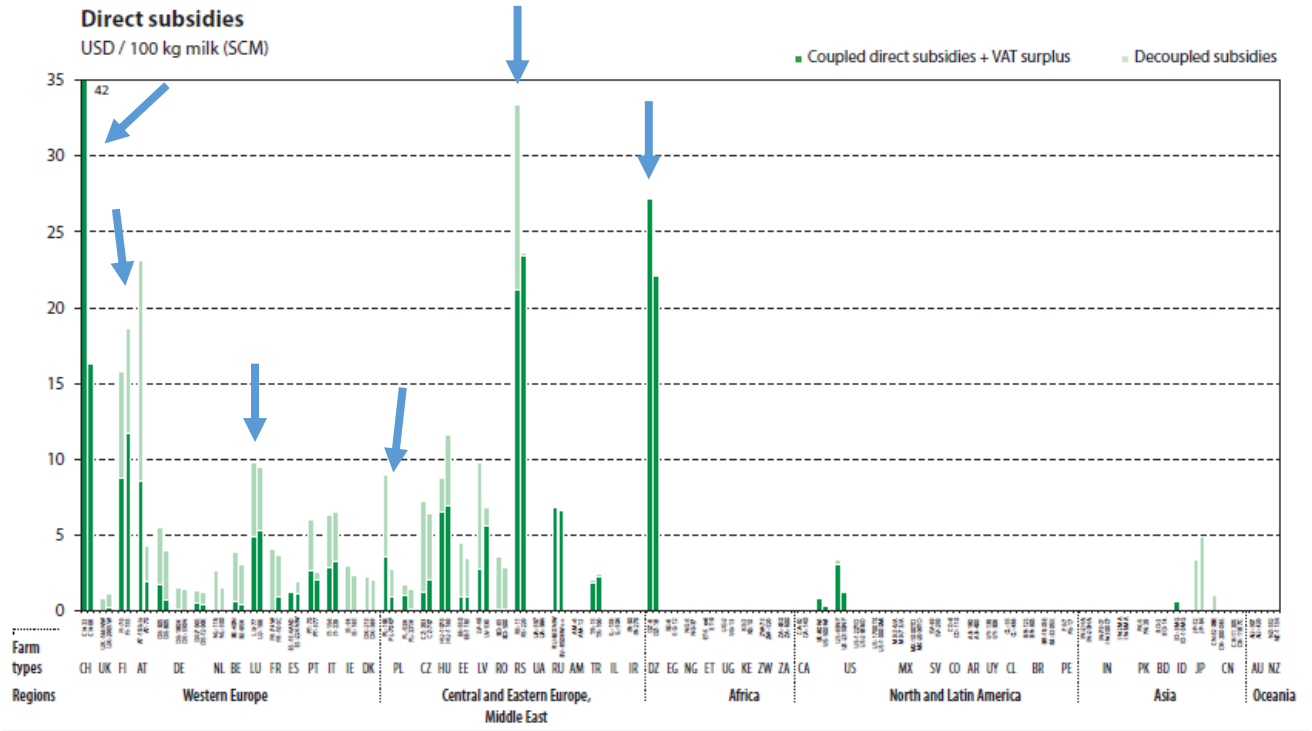
- High (> 12 USD/h) mostly in Western Europe, Israel, North America, and Oceania.
- Moderate (3-12 USD/h) mostly in Central and Eastern Europe, China, Japan and Latin America.
- Low (< 3 USD/h) mostly in Turkey, Armenia, Africa, Peru and South and Southeast Asia.

8. Direct subsidies and policies (USD/100kg SCM)

Cash income for dairy farmers in the EU and several other regions is strongly influenced by various forms of subsidies and support payments. Subsidy policies and their implementation differ widely across countries and regions and are often complex in nature. Subsidies that are directly linked to the production of milk are classified as *coupled subsidies*. In contrast, *decoupled subsidies* are provided as direct financial support to farmers and are generally based on factors such as land area farmed rather than production output.

Decoupled subsidies are commonly associated with organic farming practices, farming in less-favoured areas, production reduction measures, and the provision of public goods such as biodiversity conservation and improved animal welfare. These subsidies are prevalent in the EU, the United Kingdom, and Japan, and to a lesser extent in Serbia, the United States, and China.

In the graph below, the blue arrows (from left to right) represent Switzerland, Finland, Luxembourg, Poland, Serbia, and Algeria. Some country codes on the X-axis may be unclear; should further clarification be required, the project manager can be contacted at 083 300 3667. Subsidy information incorporated in this report was obtained voluntarily.



Source: IFCN, Dairy Report 2025

9. Conclusion

In 2024, unprocessed milk prices fluctuated between 42.0 and 44.0 USD/100 kg SCM, reflecting a period of relative stability following previous declines. At the start of 2025, prices continued to rise, reaching 52.2 USD/100 kg SCM by April, resulting in an average price level of around 46.0 USD/100 kg SCM. This upward trend was driven by a combination of factors, including a tight supply of milk fat, strong consumer demand, rising environmental pressures, limited availability of land and labour, and water scarcity. Compared with the record high of 63.3 USD/100 kg SCM in April 2022 and the subsequent decline to 36.5 USD/100 kg SCM in September 2023, the 2024 - 2025 period represents a moderate recovery in global milk prices, balancing production constraints with market demand.

In terms of dairy production and consumption, New Zealand exceeds self-sufficiency the most, followed by Argentina, while China and Japan are the most dairy-dependent countries in terms of self-sufficiency.

The 2024 analysis of unprocessed milk production costs shows that low-cost producers (≤ 30 USD/100 kg SCM) accounted for 12% of farms, mainly located in Africa and Serbia, with a few individual farms in the Americas and Oceania. The majority of farms (71%) fall within the middle-cost category (30–60 USD/100 kg SCM), which includes Europe, the Americas, and Asia. High-cost producers (≥ 60 USD/100 kg SCM) represented 17% of the sample, primarily situated in the Alpine region, Canada, Israel, Iran, and parts of Asia.

South Africa ranks among the world's lowest-cost producers, with costs in the >20 to ≤30 USD/100 kg SCM range.

Cost component of feed: Feed costs typically make up the largest share of milk production, ranging from 38% to 91% of total costs. The lowest feed cost was found in Armenia and Ethiopia, and the highest in Egypt.

Cost Component of labour: Labour typically represents the second-largest share of total unprocessed milk production costs, ranging from 5% to 52%. The lowest labour costs were observed in South Africa, while the highest were recorded in Peru. On average, labour accounts for 19% of the total cost of unprocessed milk production.

The cash income of dairy farmers in the EU and other regions is heavily influenced by various subsidies and support payments. Subsidy policies and their implementation differ widely across countries, making the system complex. Among the countries receiving some of the highest levels of support worldwide are Switzerland, Finland, Luxembourg, Poland, Serbia, and Algeria.

--------End of Report--------