



**SUMMARY OF KEY MARKET SIGNALS FOR THE
DAIRY INDUSTRY,
FEBRUARY 2022 EDITION**

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SYNOPSIS

The low levels of volatility of the dairy price index (the difference between the highest and lowest price index in a year) of the Food and Agricultural Organization (FAO), in 2018, 2019, 2020, and in 2021, relative to most previous years, are indicative that in the last four years, the supply of, and demand for, dairy products in the international market remained to a high extent, in balance amidst changing circumstances.

The FAO dairy price index in February 2022, is 24.7 percent higher than in February 2021 and 37.1 percent higher than in February 2020. The FAO dairy price index in February 2022, is the highest recorded since May 2014. The fundamental reason for this increase, is the fact that the demand for dairy products in the world, is higher than the supply.

The future prices recorded at the Global Dairy Auction on 15 February 2022, for delivery in March 2022 to July 2022, showed the following:

- The price of whole milk powder moves sideways from March 2022 to July 2022 and the price in July 2022, is 0.2 percent lower than in March 2022;*
- The price of skimmed milk powder moves sideways from March 2022 to July 2022, and the price in July 2022, is 0.2 percent lower than in March 2022;*
- The price of cheddar cheese moves sideways from March 2022 to June 2022 and the price in June 2022, is 0.1 percent lower than in March 2022; and*
- The price of butter moved sideways from March 2022 to July 2022, and the price in July 2022, is 0.1 percent lower than in March 2022. (See Table 2 of Annexure A).*

The situation in the world changed dramatically at the end of February 2022, due to the invasion of the Ukraine by Russia and the reactions of countries to the invasion. The reactions of other countries, include comprehensive trade sanctions, which will impact significantly on economic growth in the world and the prices and availability of important products, including products which are inputs of the primary and secondary dairy industries. The duration and outcome of the conflict created by the invasion is unknown, but it is reasonable to accept that the conflict largely destroyed the validity of expectations about international trade and commodity prices based on the information, which was available up to the third week of February 2022.

In 2020, in the situation created by COVID-19 and the lockdown measures of the Government, the performance (in terms of sales quantity and retail price), in the South African retail market of specific dairy products namely, UHT (long life) milk, yoghurt, pre-packaged cheese, cream cheese, butter and cream was higher than in 2019, while the opposite was true in respect of fresh and flavoured milk.

SYNOPSIS (Continued)

In the February 2021 edition of the “Summary of Key Market Signals for the Dairy Industry”, it was stated that it should not be assumed that the good performance of most dairy products as achieved in 2020, will continue as, amongst other, “the lower level in South Africa of economic activity resulting from COVID-19, and of which the full extent will only be known later”, can impact negatively “on the demand for food products including dairy products”.

The good performance of dairy products in the South African retail market in 2020, did not continue in 2021. Although the retail sales prices of eight of the nine dairy products increased in the year which ended in December 2021, the retail sales quantities of eight of the nine dairy products were lower than in the previous year. From September 2021 to December 2021, the retail sales prices of five of the nine dairy products decreased.

In 2020, in South Africa, the producer price index of dairy products increased in six months and decreased in six months. The net result of these changes was that the index in December 2020, was 1.6 percent higher than in December 2019. From December 2020 to December 2021, the producer price index of dairy products increased with 10.7 percent, to a level which is 12.4 percent higher than in December 2019.

According to Milk SA, the production of unprocessed milk (unprocessed milk purchases) in South Africa in 2020, was 0.16 percent lower than in 2019, 0.49 percent higher than in 2018 and 5.33 percent higher than in 2017. The decrease from 2019 to 2020, was the result of lower production in eight of the twelve months of 2020.

The lower production of unprocessed milk in 2020 in South Africa, relative to the production in 2019, should be seen against the background of especially the following:

- The uncertainty about the impact of COVID-19 on the economy, as well as on the demand for dairy products and thus the demand for unprocessed milk, which existed in 2020. Essentially, this position discouraged at any point in time during 2020, optimistic views about the future demand for dairy products and the future demand for unprocessed milk, and thus the justification for stimulation of production of unprocessed milk through price increases; and
- The unexpected sharp increases of the prices of maize and soya in the second half of 2020, which are the basis of important ingredients of feed for dairy cattle and which eroded the positive impact of the increase of the prices of unprocessed milk which took place.

The estimated production in South Africa of unprocessed milk 2021, was 0.92 percent lower than in 2020, due to lower estimated production in seven of the first eight months of 2021. The estimated production in the last four months of 2021, were respectively 1.0 percent, 1.6 percent, 2.6 percent and 1.9 percent higher than in the same months of 2020.

SYNOPSIS (Continued)

The lower estimated production in South Africa of unprocessed milk in 2021, relative to the production 2020, should be considered taking into account:

- The retail sales quantities in 2021, of important dairy products, were lower than in 2020 and thus the demand for unprocessed milk for the production of these dairy products, was also lower (See Table 18 of Annexure A); and*
- The sharp rise in the prices of feed for dairy cattle in the second half of 2020 (See Table 9 of Annexure A), of which the impact was limited by the increase in the price of unprocessed milk in the last quarter of 2020 and in the first half of 2021 (See Graph 9 and Graph 12 of Annexure A).*

The latest available information about the production of unprocessed milk in South Africa, indicates that the estimated production in January 2022, was 1.7 percent higher than in January 2021.

The production of unprocessed milk in South Africa and in other countries, is seasonal. In South Africa, the highest production per day occurs in October or November and the lowest in April, May or June. The average difference between the highest and lowest production per day in the thirteen years from 2008 to 2021, was 33.8 percent.

The extent of the seasonal decrease of the production of unprocessed milk in South Africa from October 2020 to June 2021, namely 28.1 percent, is higher than the average decrease of 23.1 percent in the years 2008/2009 to 2019/2021, and also higher than the previous highest decrease of 26.6 percent, which was recorded in the period October 2019 to June 2020.

The extent of the seasonal increase in production of unprocessed milk in South Africa, from July 2021 to October 2021, of 36.2 percent, is higher than the average increase of 28.7 percent in the previous thirteen years and it is also higher than the previous record high increase of 34.3 percent, which was recorded in 2017.

In 2020, the producer price index of unprocessed milk decreased in three months, remained the same in two months and increased in seven months. The net result was that the price index in December 2020, was 10.6 percent higher than in December 2019.

From December 2020 to June 2021, the producer price index of unprocessed milk increased with 20.1 percent and from June 2021 to October 2021, it decreased with 8.8 percent to a level which is 13.5 percent higher than in October 2020, and 21.4 percent higher than in October 2019. From October 2021 to December 2021, the index increased with 0.75 percent to a level 10.3 percent higher than in December 2020 and 21.9 percent higher than in December 2019. From December 2021 to January 2022, the producer price index of unprocessed milk increased with 3.7 percent, to a level 7.3 percent higher than in January 2021 and 26.7 percent higher than in January 2020 (See Table 11 and Graph 8 of Annexure A).

SYNOPSIS (Continued)

In the last three months of 2020 and in January 2021, the producer price index of unprocessed milk was lower than the index of the feed price indicator, as the last mentioned increased much more in the second half of 2020 than the producer price index of unprocessed milk. From February 2021 to January 2022, the producer price index of unprocessed milk was higher than the index of the feed price indicator. The extent to which the producer price index of unprocessed milk was higher than the index of the feed price indicator, increased from February 2021 to July 2021, but decreased from July 2021 to December 2021, to the extent that the gap between the two indices almost disappeared.

In light of the future prices of maize and soya, achieved in South Africa on 1 March 2022, significant lower feed prices should not be expected in the coming months. The relative high prices of maize and soya in South Africa, are the result of conditions in the international grain market. The invasion of Ukraine by Russia and the comprehensive sanctions imposed on Russia due to the invasion, will most likely result in further price increases.

In 2018, 2019, and 2020, the producer price index of unprocessed milk was at lower levels than the producer price index of dairy products, from January 2021 to August 2021 and in November 2021, it was on higher levels, but in September 2021, October 2021 and December 2021, it was lower. In January 2022, the producer price index of unprocessed milk was again higher than the producer price index of dairy products.

The producer price index of unprocessed milk (January 2012 basis) was, in the seven years from January 2015 to December 2021:

- *With the exception of one month in 2015, higher than the retail price index of UHT milk;*
- *Moved in 2015, 2016 and 2017, close to the retail price index of fresh milk, in nine months of 2018, in 2019 and in 2020 it was lower, in the first eight months of 2021 it was higher, and in September 2021 to December 2021, it was more or less on the same level as the retail price index of fresh milk;*
- *Higher than the retail price indices of pre-packaged cheese and maas; and*
- *With the exception of the period August 2018 to September 2018 and in the period November 2018 to February 2019, higher than the retail price index of yoghurt.*

The South African primary and secondary dairy industries, like many other industries, were recently confronted by sudden and unexpected increases of the prices of important inputs like, fertilizer, chemicals, packaging materials, electricity, fuel and capital equipment. The effect of these price increases will also impact negatively on the ability of the consumer to purchase goods and services. Some of these price increases are the result of developments in the international market, while others are linked to events in South Africa, like the damages caused by the riots in July 2021, and poor service delivery by the public sector in respect of, for example, electricity, water and security.

SYNOPSIS (Continued)

In the August 2021 edition of “Summary of Key Market Signals for the Dairy Industry”, it was stated in respect of South Africa, that:

- **“The performance in the first half of 2021 of most dairy products does not support optimistic views regarding the demand in the coming months; and**
- **Higher retail sales require greater consumer preference for dairy products, due to:**
 - **Lower prices; and/or**
 - **Factors other than price; and/or**
 - **Higher consumer income.**
- **Lower prices are unlikely, greater preference due to factors other than price, played out in 2020, and consumer income will not reach pre-Covid-levels.”**

The information available in February 2022, indicates that the position, as described in the previous paragraph, is still valid.

In conclusion, the South African primary and secondary dairy industries, like many other South African industries, are confronted by the formidable challenge created by:

- *The largely unexpected and high increases in the recent past of the prices of a wide range of important inputs;*
- *Likely further increases in South Africa of the prices of inputs like fuel and electricity;*
- *Likely increases in the prices of inputs and possible disruptions in respect of the supply of inputs, linked to the Russian invasion of Ukraine and the comprehensive sanctions in respect of Russia, implemented by major countries as a result of the invasion; and*
- *Consumer purchasing power, weakened by especially increases of administered and other prices, as well as poor economic conditions in South Africa (It will take time to reach the level of economic activities achieved in the pre-Covid time).*

Simply said:

- *In the immediate future, higher input cost and weak demand, will be the position in which the South African dairy industry will have to operate; and*
- *It is reasonable to accept that the validity of expectations regarding international trade and commodity prices, based on the information available up to the third week of February 2022, was largely destroyed by the invasion of Ukraine by Russia at the end of February 2022.*

Introduction

1. This report is a quarterly publication of SAMPRO and is prepared by the Office of SAMPRO, independently from the commercial interests of role players in the dairy industry.
2. The purpose of this report is, like the other regular reports of SAMPRO, to make market signals available to all interested parties, in order to promote the effective working of the markets for unprocessed milk and the different dairy products, as envisaged by the Competition Act and which is in the interest of the consumer, the dairy industry and optimum use of national resources.
3. This report is of a macro nature and the position in South Africa of individual unprocessed milk producers, individual producers of processed milk and individual manufacturers of the other dairy products, can differ from the macro position due to a variety of factors. In the primary dairy industry (the producers of unprocessed milk), differences are the result of factors like production regime (pasture based or total mixed ration), sophistication in respect of the management (in respect of issues such as monitoring of individual animals, feeding, animal health, soil health and pastures), weather conditions, geographical location and the extent to which the producer is involved in the production of other agricultural products, which are complementary to the production of unprocessed milk (like the production of maize and lucerne). In the secondary dairy industry (the producers of processed milk and the manufacturers of the other dairy products), differences are the result of factors like product range, reputation of brand name, productivity in respect of the collection of unprocessed milk, processing, manufacturing and marketing, exposure to foreign competition and geographical location.
4. As a result of, as described in the previous paragraph, the diverse nature of the South African primary dairy industry and the diverse nature of the South African secondary dairy industry, the reaction of the different members of each of the industries to the same set of market signals, can differ.
5. This report presents a summary of information regarding market signals for the South African dairy industry and more comprehensive information is available from the Office of SAMPRO. The information contained in this report, is mostly the information available up to the third week of February 2022 and the situation in the world, changed dramatically at the end of February 2022, due to the invasion of Ukraine by Russia and the reactions of different countries to the invasion. The duration and the outcome of the conflict is unknown, but it is reasonable to accept that it largely destroyed the validity of expectations based on the information which was available up to the third week of February 2022.

The International Markets for Dairy Products and Unprocessed Milk Markets in Major Dairy Countries

6. The FAO¹⁾ price index for dairy products traded internationally (See Graph 1 of Annexure A) is an important indicator of the macro conditions in the international markets for dairy products. This index measures the changes of the prices achieved in the international market in respect of a basket of dairy products consisting of butter, cheese, skimmed milk powder and full cream milk powder. The other dairy products like UHT milk, yoghurt and maas, are not included in the basket as the international trade of these products is relatively limited.

7. The movement of the FAO Price Index for dairy products in the last three years and in the first two months of 2022, can be summarised as follows:
 - In 2019, the highest monthly index figure of 106.6, exceeded the lowest index figure of 99.6 with 7.0 percent. The index figure in December 2019 of 103.5, was 2.6 percent higher than the index figure of 100.9 in January 2019;
 - In 2020, the highest monthly index figure of 109.2, exceeded the lowest index figure of 94.4 with 15.6 percent. The index figure in December 2020 of 109.2, was 5.2 percent higher than the index figure of 103.8 in January 2020;
 - In 2021, the highest monthly index figure of 129.0 exceeded the lowest index figure of 111.2 with 16.0 percent. The highest index figure was recorded in December 2021, while the lowest was recorded in January 2021; and
 - From December 2021 to January 2022, the monthly price index increased with 2.7 percent from 129.0 to 132.6 and from January 2022 to February 2022 (the latest available information is in respect of February 2022), the index increased with 6.4 percent, from 132.6 to 141.1.

8. The FAO Price Index for dairy products in February 2022 of 141.1, is:
 - 24.7 percent higher than in February 2021;
 - 37.1 percent higher than in February 2020;
 - 35.9 percent higher than in February 2019; and
 - The highest recorded since May 2014, when the index was 141.8.

1) *Food and Agricultural Organization of the United Nations.*

9. The views of the FAO regarding the increase in the price index for dairy products, are as follows:

*“The **FAO Dairy Price Index** averaged 141.1 points in February, up 8.5 points (6.4 percent) from January, marking the sixth successive monthly increase and placing the index 28.0 points (24.8 percent) above its value in the corresponding month last year. In February, international quotations for all dairy products represented in the index firmed, underpinned by the continued tightening of global markets on the back of lower than expected milk supplies in Western Europe and Oceania. Besides tight global supplies, persistent import demand, especially from North Asia and the Middle East, led to steep increases in whole milk powder and cheese price quotations. International skim milk powder prices rose significantly as well, reflecting a lower volume of milk deliveries for drying plants in Western Europe, while butter prices received a boost from high demand for spot supplies.”*

10. As shown in the previous two paragraphs, the level of the price index for dairy products of the FAO, frequently changed.
11. In the last twenty-two years (2000 to 2021) the extent to which the highest monthly FAO dairy price index in a year, exceeded the lowest, varied from 3.4 percent in 2005, to 82.8 percent in 2007, and the average difference in the twenty-one years from 2000 to 2020, was 26.5 percent. (See Table 1 of Annexure A).
12. In the last ten years (2012 to 2021) the extent to which the highest monthly FAO dairy price index in a year, exceeded the lowest, varied from 7.0 percent in 2019, to 58.8 percent in 2014. The low levels of volatility in 2018 of 14.7 percent, in 2019 of 7.0 percent, 15.7 percent in 2020, and 16.0 percent in 2021, are indicative that in the recent years, the supply of and the demand for dairy products in the international market, remained to a high extent, in balance. In other words, in the last four years, the supply of dairy products followed, to a meaningful extent, the demand for dairy products.
13. The FAO price index for dairy products reflects the changes in the prices of a basket of dairy products traded internationally and thus not the movements of the prices in the international trade of individual types of dairy products. Due to different supply and demand situations in respect of the different dairy products, the price movements of the different dairy products, often differ.
14. In January 2022, the price per ton in the international market of butter was the highest, followed by the prices of cheddar cheese, whole milk powder and skimmed milk powder. Following decreases of the prices which commenced in respect of butter and cheddar cheese in May 2021, whole milk powder in April 2021 and skimmed milk powder in June 2021, the price of butter increased from July 2021 to January 2022, while the prices of the other three products increased from August 2021 to January 2022. (See Graph 2 of Annexure A).

15. The changes of the prices of the dairy products achieved at the Global Dairy Trade Auction on 15 February 2022, for delivery in March 2022 to July 2022, are as follows:
- The price of whole milk powder moves sideways from March 2022 to July 2022 and the price in July 2022, is 0.2 percent lower than in March 2022;
 - The price of skimmed milk powder moves sideways from March 2022 to July 2022, and the price in July 2022, is 0.2 percent lower than in March 2022;
 - The price of cheddar cheese moves sideways from March 2022 to June 2022 and the price in June 2022, is 0.1 percent lower than in March 2022; and
 - The price of butter moved sideways from March 2022 to July 2022, and the price in July 2022, is 0.1 percent lower than in March 2022. (See Table 2 of Annexure A).
16. The expectation of the Department of Agriculture of the USA regarding future prices of dairy products in the USA, published on 15 February 2022, indicates in respect of cheddar cheese, butter and skimmed milk powder, downwards movements from the first quarter of 2022, to the last quarter of 2022. (See Graph 3 of Annexure A).
17. The future prices of dairy products as referred to in the previous two paragraphs, do not reflect the immediate and future impact of:
- The invasion of Ukraine by Russia, at the end of February 2022;
 - The comprehensive trade sanctions which different countries imposed on Russia;
 - The disruption of the flow of products (which include grains and agricultural inputs such as fertiliser) in and out of Russia and Ukraine due to the invasion; and
 - The invasion and related events on international trade, prices of international traded commodities and trade relationships between countries.
18. The level of uncertainty in respect of future international trade, including the future international trade in dairy products, created by the Russian invasion and the reaction of other countries to it, is the highest since the Second World War and it adds, to a dramatic extent, to the uncertainty regarding the future developments in respect of Covid-19 and future weather conditions. On the date of this report, firm predictions are not possible about the duration and outcome of the invasion, its impact on the future prices of many products, including dairy products, as well as its impact on the future prices and availability of important inputs of the dairy industry and other industries.
19. Unprocessed milk production in the world is seasonal, as production in the winter is lower than the production in the summer. The peak production season of the Northern hemisphere coincides with the low production season of the Southern hemisphere. The extent to which unprocessed milk production in different countries is seasonal, differs and, for example, the production in New Zealand is much more seasonal than in the member countries of the EU. (See Graph 4 of Annexure A).

20. The prices of unprocessed milk in different member states of the European Union (EU), differ. In 2020, the average price of unprocessed milk in the EU was from March 2020, lower than in not only the same months of 2019, but from July 2020, also lower than the average price in 2018. In the first two months of 2021, the price of unprocessed milk was lower than in the same months of 2020, but from March 2021, it moved to higher levels than in 2018, 2019 and 2020. The average estimated price in the EU in February 2022 (the latest available information is in respect of February 2022), was 20.8 percent higher than in February 2021. (See Graph 5 of Annexure A). The movements of the price of unprocessed milk in the United States of America, in 2020, was very volatile and the highest price exceeded the lowest, with approximately 52.0 percent. The price in January 2022, was higher than in any of the months of the years 2015 to 2021. (See Graph 6 of Annexure A).

The South African Markets for Dairy Products and Unprocessed Milk

21. In respect of 2020, information obtained from SARS, regarding the import and export of dairy products by South Africa, shows the following:
- The mass of exports in 2020, was 3.6 percent higher than exports in 2019, due to the higher exports of four of the six types of dairy products, namely milk and cream (0401), whey (0404), butter (0405) and cheese (0406). The products of which the exports were lower, are concentrated milk (0402), and buttermilk and yoghurt (0403);
 - The average f.o.b. export prices in 2020, of five of the six types of dairy products, were higher than in 2019. The products of which the export prices increased are milk and cream (0401), concentrated milk (0402), whey (0404), butter (0405) and cheese (0406), while the average export price of buttermilk and yoghurt (0403) in 2020, was lower than in 2019;
 - The mass of imports in 2020, was 19.9 percent lower than the imports in 2019 due to the lower imports of three of the six types of dairy products, namely milk and cream (0401), whey (0404) and cheese (0406). The products of which the mass of imports were higher, are concentrated milk (0402), buttermilk and yoghurt (0403) and butter (0405);
 - The average f.o.b. import prices in 2020, of five of the six types of dairy products, namely milk and cream (0401), concentrated milk (0402), buttermilk and yoghurt (0403), whey (0404) and cheese (0406), were higher than in 2019, while the import price of butter (0405) was lower; and
 - In terms of mass, South Africa was in 2020, a net exporter of milk and cream (0401) and buttermilk and yoghurt (0403), and a net importer of concentrated milk (0402), whey (0404), butter (0405) and cheese (0406). (See Table 3 and Table 4 of Annexure A).

22. Information regarding imports and exports in 2021, was recently made available by SARS and according thereto:

- The mass of exports in 2021, was 9.2 percent higher than in 2020, and 13.2 percent higher than in 2019. The increase from 2020 to 2021, is the result of the increase in the mass of exports of four of the six types of dairy products namely, milk and cream (04.01), buttermilk and yoghurt (04.03), whey (04.04) and cheese (04.06);
- The average f.o.b. export price in 2021, of one of the six types of dairy products namely, butter (04.05) was lower than the average price in 2020, while the average f.o.b. export prices of milk and cream (04.01), concentrated milk (04.02), whey (04.04), buttermilk and yoghurt (04.03) and cheese (04.06), were higher;
- The mass of imports in 2021, was 24.8 percent higher than in 2020, and 0.03 percent higher than in 2019. This increase is the result of the increase in the mass of imports of two of the six types of dairy products namely, milk and cream (04.01) and cheese (04.06). The imports in 2021, of concentrated milk (04.02), buttermilk and yoghurt (04.03), whey (04.04) and butter (04.05), were lower than the imports in 2020;
- The average f.o.b. import prices of 2021, of one of the six types of dairy products, namely concentrated milk (04.02) was higher than in 2020, while the average f.o.b. import prices of the other five types of dairy products, were lower; and
- In 2021, South Africa was a net exporter of milk and cream (04.01) and buttermilk and yoghurt (04.03), and a net importer of the other four types of dairy products. (See Table 3 and Table 4 of Annexure A).

23. The production of unprocessed milk in South Africa is seasonal just like in other countries, with high production in summer and low production in winter. In South Africa, in the fourteen years, 2008 to 2021:

- The highest production per day per month was in October (twelve years), or November (two years);
- The lowest production per day per month was in April (three years), May (three years), or June (eight years); and
- The highest production per day per month was on average 33.8 percent higher than the lowest. The highest difference of 41.3 percent was recorded in 2021, the second highest of 39.5 percent was recorded in 2017, whilst the lowest of 25.2 percent, was recorded in 2015 and the second lowest of 29.0 percent, was recorded in 2012. Note that the figure in respect of 2021, is an estimated figure (See Graph 7 of Annexure A).

24. The mass of the production of unprocessed milk in South Africa, which is indicative of the production of dairy products in South Africa, increased with an average annual growth rate of:
- 1.20 percent in the three years from 2008 to 2011;
 - 3.12 percent in the three years from 2011 to 2014;
 - 2.94 percent in the three years from 2014 to 2017;
 - 1.75 percent in the three years, 2017 to 2020;
 - 2.26 percent in the twelve years from 2008 to 2020; and
 - 2.00 percent in the thirteen years from 2008 to 2021. Note that the figure in respect of 2021, is an estimated figure. (See Table 5 of Annexure A).
25. From 2008 to 2021, the total unprocessed milk purchases per annum in South Africa increased with 29.39 percent, but the pattern of production of unprocessed milk during each of the last twelve years, as measured by the distribution of the total annual unprocessed milk production per quarter and per half year of each year, did not change in any particular direction, as is evident from Table 6 and Table 7 of Annexure A.
26. The production of unprocessed milk in South Africa in 2018, was 4.82 percent higher than in 2017, and it was the result of the higher production in eleven of the twelve months of 2018. The increase of 4.82 percent from 2017 to 2018, was the second highest year-on-year increase recorded in the eleven years 2008 to 2018. The highest increase of 6.37 percent was recorded in 2015, the third highest of 4.81 percent was recorded in 2010 and the fourth highest of 4.50 percent, was recorded in 2012. (See Table 5 of Annexure A).
27. The production of unprocessed milk in South Africa in 2019, was 0.65 percent higher than the previous record high production that was recorded in 2018, and 5.5 percent higher than in 2017 (See Table 5 of Annexure A). The lower growth rate of production in 2019, is the result of lower production in five months, namely January, February, April, July and December. (See Table 8 of Annexure A).
28. The production of unprocessed milk in South Africa in 2020, was 0.16 percent lower than in 2019, 0.49 percent higher than in 2018 and 5.3 percent higher than in 2017. The decrease from 2019 to 2020, is the result of lower production in eight of the twelve months of 2020, but the production in October 2020 was higher than the production in October of the previous ten years. (See Graph 7 of Annexure A).

29. The lower production of unprocessed milk in 2020, relative to the production in 2019, should be seen against the background of, especially, the following:
- The uncertainty about the impact of COVID-19 on the demand for dairy products and thus the demand for unprocessed milk, which existed in 2020. Essentially, this position, at any point in time in 2020, discouraged optimistic views about the future demand for dairy products and the demand for unprocessed milk, and thus the justification for stimulation of production of unprocessed milk through price increases; and
 - The unexpected sharp increases of the prices of maize and soya in the second half of 2020, which are the basis of important ingredients²⁾ of feed for dairy cattle and which eroded the positive impact of the increase of the prices of unprocessed milk which occurred.
30. The estimated production in South Africa of unprocessed milk in 2021, was 0.92 percent lower than in 2020, due to lower estimated production in seven of the first eight months of 2021. The estimated production in the last four months of 2021, were respectively 1.0 percent, 1.6 percent, 2.6 percent and 1.9 percent higher than in the same months of 2020.
31. The lower estimated production in South Africa of unprocessed milk in 2021, relative to the production in 2020, should be considered taking into account:
- The retail sales quantities in 2021, of important dairy products, were lower than in 2020 as a result of which the demand for unprocessed milk for the production of these dairy products, was also lower (See Table 18 of Annexure A); and
 - The sharp rise in the price of feed for dairy cattle in the second half of 2020 (See Table 9 of Annexure A), of which the impact was limited by the increase in the price of unprocessed milk in the last quarter of 2020 and in the first half of 2021 (See Graph 9 and Graph 12 of Annexure A).
32. The latest available information about the production of unprocessed milk in South Africa, is the estimated production in January 2022 and this estimate, is 1.7 percent higher than in January 2021 (See Table 8 of Annexure A).

2) *Hominy chop and meal originating from maize seed and soya oil cake meal. Other products, originating from grains other than maize meal and soya, are also used and can, to some extent, replace the products originating from maize and soya.*

33. In the last three months (November 2021, December 2021 and January 2022) the estimated production of unprocessed milk in South Africa, was 2.08 percent higher than in the same months of 2020/21, 0.44 percent higher than in the same months of 2019/2020 and 1.31 percent higher than in the same months of 2018/2019
34. The seasonal decrease in the production of unprocessed milk in South Africa from October 2020 to June 2021, was 28.1 percent, which is higher than the average decrease of 23.1 percent recorded in the years from 2008/2009 to 2019/2020, and also higher than the previous record high decrease of 26.2 percent, which was recorded in 2019/2020. In this regard, it should be kept in mind, as stated in paragraph 28, that the production in October 2020, was on a record high level relative to the production in October of the previous ten years and that the production in June 2021, was lower than in June 2020, 2019 and 2018, but higher than in June of the previous eight years. (See Table 9 of Annexure A).
35. The seasonal decrease in the production of unprocessed milk in South Africa from October 2021 to December 2021, was 7.5 percent, according to the estimated figures, which is:
- Higher than the average decrease of 5.9 percent in the same periods of the previous 14 years; and
 - The highest in the thirteen years from 2008/2009 to 2020/2021 (See Table 9 of Annexure A). Note that the estimated production in October 2021, was higher than in October of the previous years (See Graph 7 of Annexure A).
36. Regarding the seasonal increase in the production of unprocessed milk in South Africa, the following:
- The increase from July 2020 to October 2020, of 31.9 percent, was higher than the average increase of 28.7 percent during the same periods in the thirteen years, 2008 to 2020, and it is the third highest increase recorded in the thirteen years, from 2008 to 2020; and
 - The increase from July 2021 to October 2021, was according to the estimated figures, 36.2 percent, which is the highest increase recorded during the same periods in the fourteen years, from 2008 to 2021. (See Table 10 of Annexure A).
37. In 2019, the producer price index of unprocessed milk did not change in January, July and October, but increased in February, March, April, June and December and decreased in May, August, September and November. The net result of the changes is that the producer price index of unprocessed milk in December 2019, was 9.7 percent higher than in December 2018. This increase was from a low level and the index figure in December 2019, is lower than the index figures of the first seven months of 2018, and 6.3 percent lower than in December 2017. (See Graph 8 and Table 11 of Annexure A).

38. In 2020, the producer price index of unprocessed milk, increased in nine months and decreases were recorded in three months. The net result of these price movements is that the price index of unprocessed milk in December 2020, was 10.5 percent higher than in December 2019. (See Table 11 and Graph 8 of Annexure A).
39. From December 2020 to June 2021, the producer price index of unprocessed milk increased with 20.1 percent and from June 2021 to October 2021, it decreased with 8.8 percent to a level which is 13.5 percent higher than in October 2020, and 21.4 percent higher than in October 2019. From October 2021 to December 2021, the index increased with 0.75 percent to a level 10.3 percent higher than in December 2020 and 21.9 percent higher than in December 2019. From December 2021 to January 2022, the producer price index of unprocessed milk increased with 3.7 percent, to a level 7.3 percent higher than in January 2021 and 26.7 percent higher than in January 2020 (See Table 11 and Graph 8 of Annexure A).
40. In each month of 2020, the producer price index of unprocessed milk was at lower levels than the producer price index of dairy products. In 2021, the producer price index of unprocessed milk was, with the exception of in September, October and December, higher than that of dairy products. In January 2022, the producer price of unprocessed milk (the latest available information is in respect of January 2022), was higher than that of dairy products. (See Graph 12 of Annexure A).
41. In most months of 2020 and in the first three months of 2021, as well as in the last five months of 2021, the producer price index of unprocessed milk was below the producer price index of “cereals and other crops”. (See Graph 8 of Annexure A). On a macro level, the comparison between these two indices is one of the indicators of the level of encouragement to produce unprocessed milk. More specific and relevant comparisons are the comparisons of the producer price index of unprocessed milk with the indices of the prices of yellow maize and soya and it shows the following:
- In 2019, and due to the price movements of unprocessed milk, yellow maize and soya, the level of encouragement for the production of unprocessed milk, was generally lower than in 2018. The favourable downward movement of the price of maize in 2019, was offset by the increase in the price of soya, resulting in an increase in the index of the feed price indicator, and the feed price indicator is calculated as the sum of 70 percent of the maize price and 30 percent of the soya price;
 - From the second quarter of 2020, the prices of maize and soya increased sharply. As a result, the index of the feed price indicator increased in the last quarter of 2020 to a level higher than the producer price index of unprocessed milk, which previously happened in 2016, when the production of unprocessed milk was 0.45 percent lower than in the previous year. (See Graph 9 of Annexure A); and

- In February 2021, the producer price index of unprocessed milk increased to a level higher than the index of the feed price indicator. Due to further increases of the producer price index of unprocessed milk and decrease of the index of the feed price indicator, the extent to which the producer price index of unprocessed milk exceeded the index of the feed price indicator, increased from February 2021 to July 2021. Due to the decrease of the producer price index of unprocessed milk in July 2021, August 2021 and September 2021 and increases in the prices of maize and soya, the extent to which the producer price index of unprocessed milk exceeded the index of the feed price indicator, decreased sharply from July 2021 to January 2022. (See Graph 9 of Annexure A).

42. Regarding the future price movements of yellow maize and soya, the following:

- The prices of yellow maize achieved on Safex on 1 March 2022, for delivery in May 2022 to July 2022, are from 12.9 percent to 13.3 percent higher than the prices achieved on 25 October 2021;
- The prices of yellow maize achieved on Safex on 1 March 2022, increased from May 2022 to December 2022 with 3.0 percent. (See Table 12 of Annexure A);
- The prices of soya achieved on Safex on 1 March 2022, for delivery in May 2022 to July 2022 are from 10.9 percent to 11.3 percent higher than the prices achieved on 25 October 2021; and
- The prices of soya achieved on Safex on 1 March 2022, for delivery in May 2022 to December 2022, increased with 2.7 percent; (See Table 13 of Annexure A).

43. From the previous paragraph, it is clear that the increased prices for feed for dairy animals should be expected and this position was established before the invasion by Russia in Ukraine, which will result in further price increases of, amongst other, maize and soya.

44. It should be noted that the relative high prices of maize and soya are not the result of low production in South Africa of these products, as it is the result of the prices in the international market.

45. The primary agricultural industry, including the primary dairy industry is confronted by unexpected and very big increase in the prices of inputs like fuel, electricity, chemicals and fertilizers which took place in the immediate past. As an example, the magnitude of the increases of the prices of fertilizers are indicated in Table 14, Table 15 and Graph 10 of Annexure A. These price increases in respect of inputs of the primary dairy industry, can discourage the production of unprocessed milk and other particular field crops, including maize for silage and pastures for dairy cattle. As indicated in paragraph 50, the agro-processing industry, including the secondary dairy industry and other industries, are also confronted by sharp increases in the prices of inputs. The invasion of Ukraine by Russia and the sanctions in respect of Russia announced by other countries, will create further increases in the prices of, amongst other, inputs of the agricultural and agro-processing industries.

46. Regarding the producer price index of dairy products, it should be noted that it measures the changes in the prices of a basket of dairy products consisting of milk, yoghurt, cheddar cheese and ice cream and the basket does not include the other dairy products like milk powder, maas, flavoured milk, butter and cheese, other than cheddar cheese.
47. In 2019, the producer price index of dairy products moved within a band of index figures of which the highest, which was recorded in September 2019, was 3.2 percent higher than the lowest, which was recorded in April 2019. The producer price index of dairy products in December 2019, was 0.98 percent higher than in December 2018, and 0.35 percent higher than in December 2017. (See Graph 11 of Annexure A).
48. In 2020, the producer price index of dairy products:
- Decreased in five months and increased in seven months; and
 - The highest index was recorded in May 2020 and it was 4.8 percent higher than the lowest, which was recorded in February 2020;
- The net result of the abovementioned movements of the producer price index of dairy products is that the producer price index in December 2020, was 1.6 percent higher than a year ago, namely December 2019.
49. From December 2020 to December 2021, the producer price index of dairy products increased with 10.3 percent, to a level 12.4 percent higher than in December 2019 (See Graph 11 of Annexure A).
50. The agro-processing industry, including the secondary dairy industry and other industries, are confronted by unexpected and big increases of the prices of important inputs like fuel, electricity, packaging materials, chemicals and capital equipment. (See Table 15 and Table 16 of Annexure A). As is the case with the primary dairy industry, some of these price increases are the result of developments in the international market, while others are linked to events in South Africa, like the damages caused by the riots in July 2021 and poor service delivery by the public sector in respect of, for example, electricity, water and security. The sharp rise in the prices will also weaken the ability of consumers to purchase goods and services. The Russian invasion of Ukraine will result in additional price increases in respect of a wide range of products which will impact negatively on industries and the consumer.
51. The performance (quantity sold and price) of the different dairy products in the South African retail market differs, and often changes within a short period.
52. The key characteristics of the markets for the different dairy products differ. Changes in the prices of the different types of dairy products and the level of economic growth of South Africa and other factors, influence the quantities sold.

53. In 2020, in the situation created by COVID-19 and the lockdown measures of the Government, the performance (in terms of sales quantity and retail price), in the South African retail market of specific dairy products namely, UHT (long life) milk, yoghurt, pre-packaged cheese, cream cheese, butter and cream were higher than in 2019, while the opposite was true in respect of fresh and flavoured milk.
54. In the February 2021 edition of the “Summary of Key Market Signals for the Dairy Industry”, it was stated that it should not be assumed that good performance of most dairy products as achieved in 2020, will continue as, amongst other, “the lower level in South Africa of economic activity resulting from COVID-19, and of which the full extent will only be known later”, can impact negatively “on the demand for food products including dairy products”.
55. Key observations in respect of the performance in the South African retail market of nine dairy products in the year which ended in December 2021, and which is shown in Table 18, Table 19, and Table 20 of Annexure A, are as follows:
- a) In the year which ended in December 2021, the retail sales quantities of eight of the nine dairy products were lower than in the previous year, while the opposite is true in respect of one dairy product. The changes in the retail sales quantities of the nine dairy products, were as follows:
- Fresh milk **-6.7** percent;
 - UHT milk **-4.0** percent;
 - Favoured milk 1.1 percent;
 - Yoghurt **-6.0** percent;
 - Maas **-4.5** percent;
 - Pre-packaged cheese **-1.2** percent;
 - Cream cheese **-5.6** percent;
 - Butter **-1.1** percent; and
 - Cream **-4.0** percent.
- b) In the six months which ended in December 2021, relative to the same six months of 2020, the retail sales quantities of six of the nine dairy products, were lower. The changes in the retail sales quantities of the nine dairy products, were as follows:
- Fresh milk **-7.1** percent;
 - UHT milk 3.2 percent;
 - Favoured milk **-1.1** percent;
 - Yoghurt **-7.9** percent;
 - Maas **-3.6** percent;
 - Pre-packaged cheese 1.4 percent;
 - Cream cheese **-4.1** percent;
 - Butter 3.2 percent; and
 - Cream **-5.4** percent.

c) In the quarter which ended in December 2021, relative to the quarter which ended in December 2020, the retail sales quantities of five of the nine dairy products, were lower. The changes in the retail sales quantities of the nine dairy products, were as follows:

- Fresh milk -6.5 percent;
- UHT milk 6.2 percent;
- Flavoured milk -3.6 percent;
- Yoghurt -4.8 percent;
- Maas 0.5 percent;
- Pre-packaged cheese 4.2 percent;
- Cream cheese -3.1 percent;
- Butter 8.7 percent; and
- Cream -5.1 percent.

d) The retail sales quantities in December 2021 of five of the nine dairy products, were lower than in December 2020, while the retail sales quantities of the other four dairy products were higher. The changes of the retail sales quantities were as follows:

- Fresh milk -4.7 percent;
- UHT milk 12.2 percent;
- Flavoured milk -1.8 percent;
- Yoghurt -0.5 percent;
- Maas 1.8 percent;
- Pre-packaged cheese 2.0 percent;
- Cream cheese -6.7 percent;
- Butter 13.2 percent; and
- Cream -8.8 percent.

e) In the year which ended in December 2021, the retail sales prices of eight of the nine dairy products increased, while the retail sales price of one dairy product decreased. The changes of the retail sales prices, were as follows:

- Fresh milk 6.1 percent;
- UHT milk 2.5 percent;
- Flavoured milk 6.2 percent;
- Yoghurt 6.9 percent;
- Maas 6.0 percent;
- Pre-packaged cheese 5.0 percent;
- Cream cheese 6.0 percent;
- Butter -3.3 percent; and
- Cream 3.8 percent.

- f) In the six months which ended in December 2021, the retail sales prices of four of the nine dairy products decreased, while the retail sales prices of five of the nine dairy product increased. The changes of the retail sales prices, were as follows:
- Fresh milk 0.5 percent;
 - UHT milk -2.0 percent;
 - Flavoured milk -1.2 percent;
 - Yoghurt -2.6 percent;
 - Maas 0.4 percent;
 - Pre-packaged cheese 3.1 percent;
 - Cream cheese 0.5 percent;
 - Butter -2.8 percent; and
 - Cream 2.7 percent.
- g) In the quarter which ended in December 2021, the retail sales prices of five of the nine dairy products decreased, while the retail sales prices of four dairy products increased. The changes in the retail sales prices of the nine dairy products concerned, were as follows:
- Fresh milk -0.5 percent;
 - UHT milk -1.5 percent;
 - Flavoured milk -2.2 percent;
 - Yoghurt -1.1 percent;
 - Maas 1.4 percent;
 - Pre-packaged cheese 2.1 percent;
 - Cream cheese 1.0 percent;
 - Butter -0.9 percent; and
 - Cream 2.2 percent.
- h) From November 2021 to December 2021, the retail sales prices of eight of the nine dairy products increased. The changes in the retail sales prices were as follows:
- Fresh milk 0.1 percent;
 - UHT milk 0.1 percent;
 - Flavoured milk 6.2 percent;
 - Yoghurt -0.01 percent;
 - Maas 2.1 percent;
 - Pre-packaged cheese 4.6 percent;
 - Cream cheese 1.7 percent;
 - Butter 2.3 percent; and
 - Cream 4.1 percent.

- i) In the years 2012 to 2016, the average annual retail price of UHT milk exceeded that of fresh milk, with from 3.9 percent to 11.4 percent. In 2017 and 2018, the average annual retail price of UHT milk was respectively 0.2 percent and 3.7 percent lower than that of fresh milk, while in 2019 and 2020, the average annual retail price of UHT milk was respectively 0.2 percent and 2.3 percent higher than that of fresh milk. In 2021, the average annual retail price of UHT milk was 3.1 percent lower than that of fresh milk. (See Table 21 of Annexure A).
56. In general, the performance of dairy products described in the previous paragraph, shows that in the year which ended in December 2021, the drop in the retail sales quantities relative to the previous year, coincided with increases of the retail sales prices, but that in the quarter which ended in December 2021, the retail sales prices of five of the nine dairy products decreased.
57. The relative movements of the retail prices of particular dairy products in the seven years from 2015 to 2021, are shown in Graph 13 of Annexure A. This graph shows, amongst other, that:
- The retail price index of butter is, since the middle of 2016, much higher than the retail price indices of the other dairy products. The reason for this increase of the price of butter, is the increased demand for butter fuelled by increased consumer preference for butter, supported by evidence regarding the nutritional and health value of butter; which pushed the previous negative views aside, as well as by the superior taste of butter;
 - The retail price index of fresh milk is, since the middle of 2016, lower than that of butter, but higher than the retail price indices of the other dairy products;
 - In 2019, 2020 and in 2021, the retail price index of maas was notably lower than that of the other dairy products; and
 - The retail price index of UHT milk fluctuated from time to time, more up and down during meaningful periods, than that of the other dairy products, excluding butter.
58. Regarding the relative movements of the price of unprocessed milk and the prices of the different dairy products³⁾, it should be taken into account that:
- The production (supply) of unprocessed milk is much more seasonal than is the case with the demand for major dairy products; and
 - The production of unprocessed milk is not only influenced by economic variables and decisions of the producers of unprocessed milk, but also by weather conditions and other factors like animal health issues, which can result in production that is higher or lower than the planned production, as determined by the expectation regarding the demand for unprocessed milk.

3) *Inputs other than unprocessed milk, are also required for the manufacture of dairy products and for the presentation of the dairy products in the retail. The total cost of the other inputs, like packaging, electricity, fuel, water, capital and labour, is higher than the cost of the unprocessed milk delivered at dairy factories.*

59. The relative movements of the retail price of fresh milk, the retail price of UHT milk and the producer price of unprocessed milk, in the seven years, 2015 to 2021, against the background of the increase in unprocessed milk purchases per annum, are shown in Graph 14 of Annexure A. This graph shows that:

- The prices concerned typically moved in the same direction but that the magnitude of the changes of the prices concerned, differ;
- The retail price index of fresh milk is less volatile than the retail price index of UHT milk and the producer price index of unprocessed milk;
- From the second quarter of 2018 to December 2020, the retail price index of fresh milk was higher than the producer price index of unprocessed milk, from January 2021 to August 2021, the retail price index of fresh milk was lower than the producer price index of unprocessed milk and in September 2021 to December 2021, it was more or less on the same level;
- In the 84 months period from January 2015 to December 2021, the retail price index of UHT milk was, with the exception of one month in 2015, lower than the producer price index of unprocessed milk; and
- The movements of the prices concerned are influenced by the total unprocessed milk purchases. The impact in the years concerned, of the higher and lower production of unprocessed milk on the prices of unprocessed milk and UHT milk, is more pronounced, than the case in respect of fresh milk. Obviously, the supply of a product (including the supply of unprocessed milk), does not determine the price of the product, as prices are the result of the interaction between supply and demand. Typically, change in production (supply), that is not in pace with the change in the demand, results in price movements.

60. The relative movements of the retail prices of yoghurt, maas and pre-packaged cheese, as well as the price of unprocessed milk, against the background of the increase in the quantity of unprocessed milk purchased per annum, are shown in Graph 15 of Annexure A. This Graph shows that:

- The price of unprocessed milk is much more subject to change than the retail prices of the three dairy products concerned;
- The relationship between the movements of the retail prices of the three dairy products concerned and the movements of the price of unprocessed milk, is weaker than is the case in respect of the retail price of UHT milk and the price of unprocessed milk, as shown in Graph 14. In this regard, it should be noted that the contributions of the price of unprocessed milk to the price of maas, is much higher than the contribution of the price of unprocessed milk to the retail prices of yoghurt and pre-packaged cheese, due to considerably higher value-adding required by the manufacturing of the last mentioned two products. It should also be taken into account that recombined and reconstituted milk⁴⁾ instead of unprocessed milk, can be used to manufacture maas and yoghurt; and
- In the 84 months from January 2015 to December 2021, the price index of unprocessed milk was on higher levels as the retail price indices of the three dairy products, with the exception of the period August 2018 to September 2018 and in the period November 2018 to February 2019, when the producer price index of unprocessed milk was lower than the retail price index of one of the three dairy products, namely yoghurt.

61. In August 2021 edition of “Key Market Signals for the Dairy Industry”, it was stated in respect of South Africa, that:

- *“The performance in the first half of 2021 of most dairy products does not support optimistic views regarding the demand in the coming months; and*
- *Higher retail sales require greater consumer preference for dairy products, due to:*
 - *Lower prices, and/or*
 - *Factors other than price, and/or*
 - *Higher consumer income.*
- *Lower prices are unlikely, greater preference due to factors other than price, played out in 2020, and consumer income will not reach pre-Covid-levels.”*

4) *The definitions of recombined milk and reconstituted milk, as stated in Regulation 1510, are as follows:*

- *“Recombined milk product” means milk or a milk product resulting from the combination of milk fat and milk-solids-non-fat in their preserved forms with or without the addition of water to achieve the appropriate milk product composition”; and*
- *“Reconstituted milk product” means milk or a milk product resulting from the addition of water to the dried or concentrated form of the product in the amount necessary to re-establish the appropriate water to solid ratio”.*

62. The information available in February 2022, indicates that the position in South Africa, as described under paragraph 61, is still valid and that, in addition, the dairy industry (primary and secondary), like many other industries, are confronted by unexpected high increases in the prices of important inputs and the unfolding impact of the invasion of Ukraine by Russia.

63. **In conclusion**, the South African primary and secondary dairy industries, like many other South African industries, are confronted by the formidable challenge created by:

- The largely unexpected and high increases of the prices of a wide range of important inputs in the recent past;
- Likely further increases in South Africa of prices inputs like fuel and electricity;
- Likely increases in the prices of inputs and possible disruptions in respect of the supply of inputs, linked to the Russian invasion of Ukraine and the comprehensive sanctions in respect of Russia, implemented by major countries as a result of the invasion; and
- Consumer purchasing power, weakened by especially increases of administrated and other prices, as well as poor economic conditions in South Africa (It will take time to reach the level of economic activities achieved in the pre-Covid era).

64. **Simply said:**

- In the immediate future, higher input cost and weak demand will be the position in which the South African dairy industry will have to operate; and
- It is reasonable to accept that the validity of expectations regarding international trade, based on the information available up to the third week of February 2022, was largely destroyed by the invasion of Ukraine by Russia at the end of February 2022.

Alwyn P Kraamwinkel (M.Com)

CEO: SAMPRO

8 March 2022

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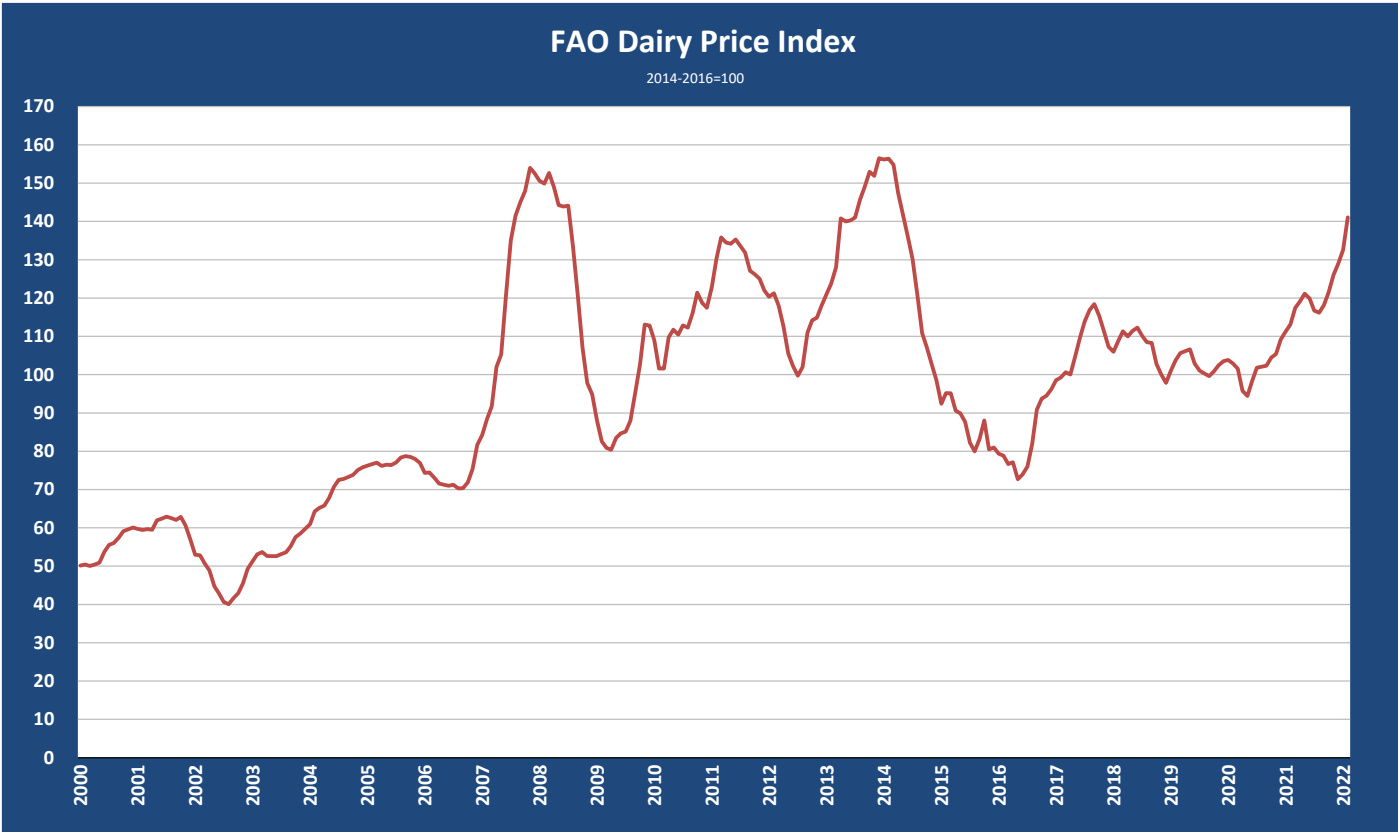
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Graph 1¹⁾

PRICE INDEX OF DAIRY PRODUCTS IN THE INTERNATIONAL MARKET UP TO FEBRUARY 2022, AS PUBLISHED BY THE FAO



1) Information as published by the Food and Agricultural Organization (FAO) of the United Nations. Graph prepared by the Office of SAMPRO based on information published by the FAO.

Table 1²⁾

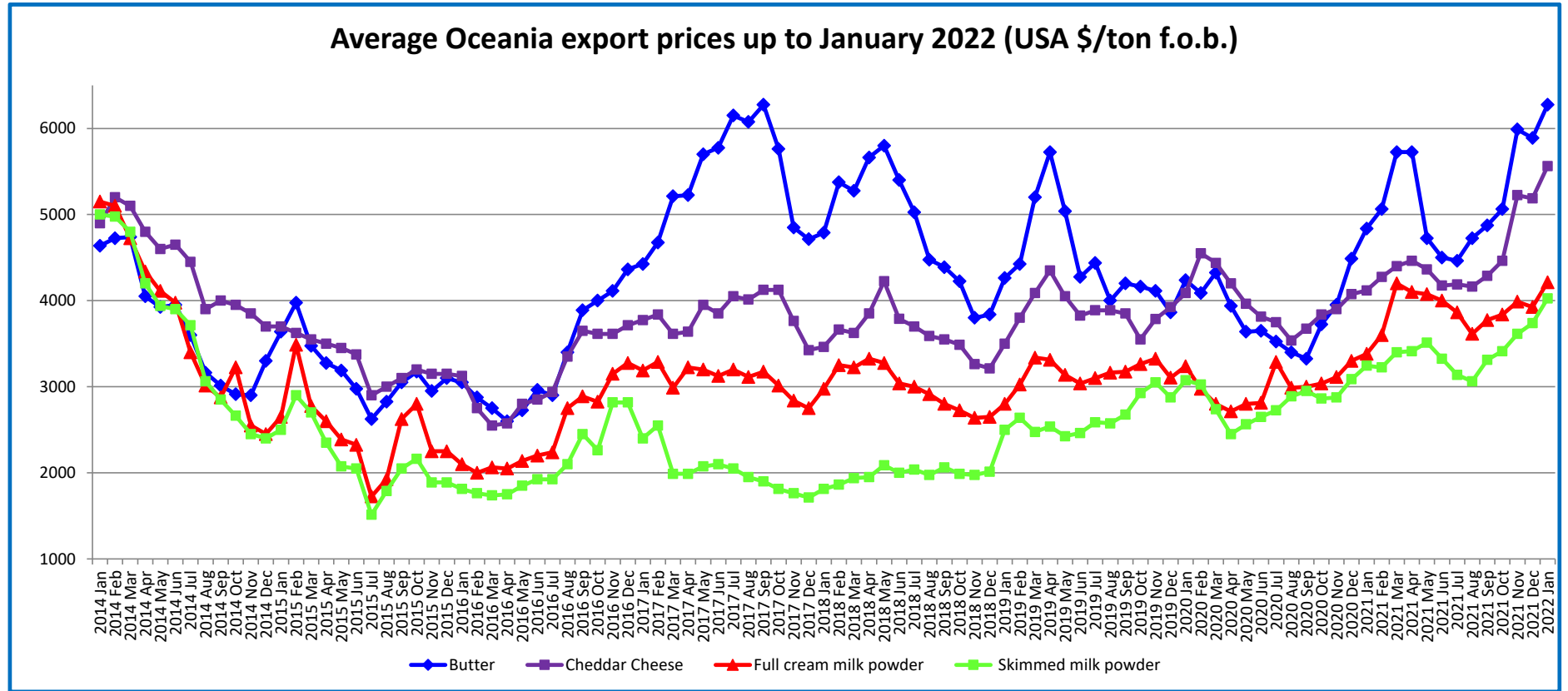
VOLATILITY PER YEAR OF THE PRICE INDEX OF THE FAO OF DAIRY PRODUCTS IN THE INTERNATIONAL MARKET

Index: 2014-2016=100

YEAR	A Highest Monthly Index	B Lowest Monthly Index	A Higher than B Percent
2000	60.1	50.1	20.0
2001	62.9	56.9	10.6
2002	53.0	40.1	32.2
2003	59.7	51.3	16.5
2004	75.8	60.9	24.4
2005	78.7	76.2	3.4
2006	81.7	70.3	16.2
2007	154.0	84.2	82.8
2008	152.6	94.9	60.9
2009	113.1	80.4	40.7
2010	121.4	101.6	19.5
2011	135.8	122.0	11.3
2012	121.2	99.7	21.6
2013	156.5	121.0	29.3
2014	156.4	98.5	58.8
2015	95.2	79.9	19.0
2016	96.2	72.7	32.3
2017	118.4	98.6	20.1
2018	112.3	97.8	14.7
2019	106.6	99.6	7.0
2020	109.2	94.4	15.7
Average	105.8	83.4	26.5
2021	129.0	111.2	16.0

2) Table prepared by the Office of SAMPRO based on information published by the FAO.

Graph 2³⁾



3. Graph prepared by the Office of SAMPRO based on information published by the USDA on 23 February 2022.

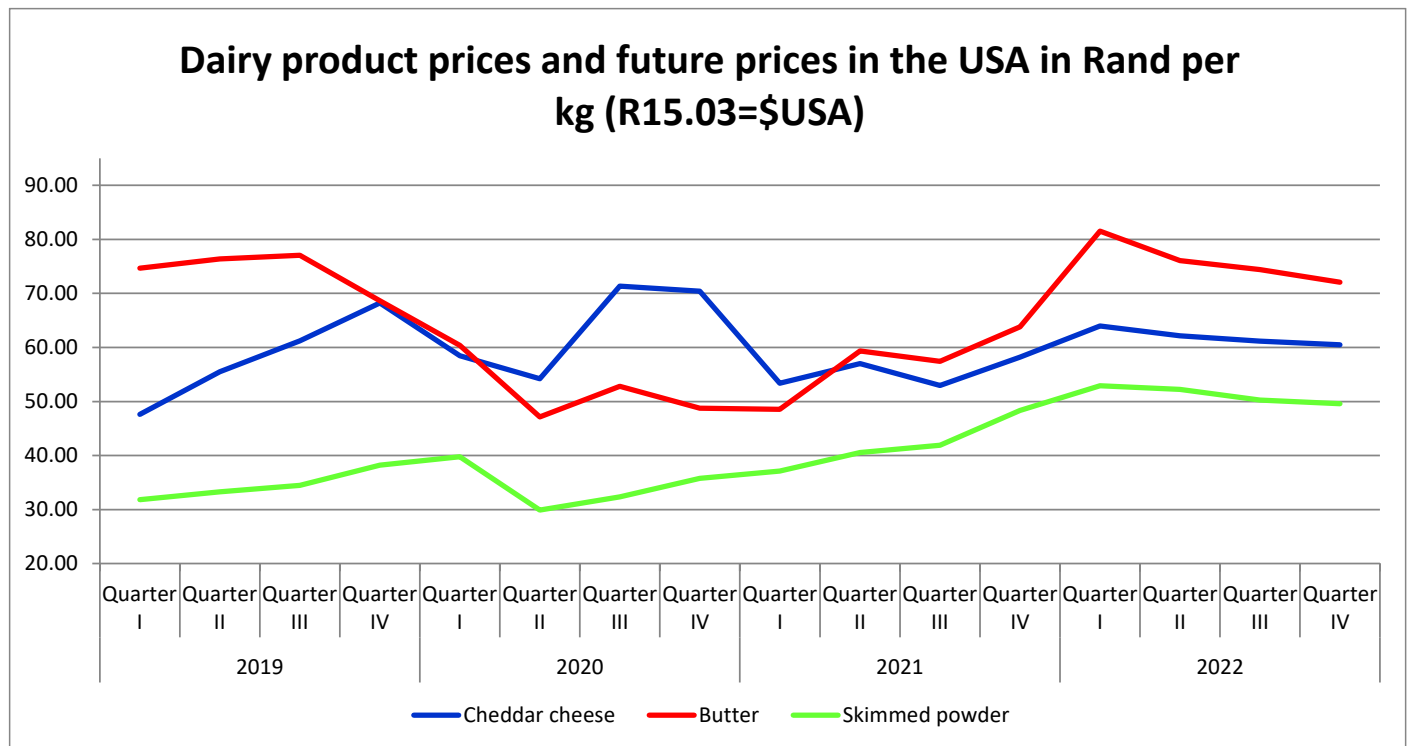
Table 2⁴⁾

FUTURE PRICES IN US\$ AND RAND (\$=R15.03) PER TON ACHIEVED AT GLOBAL DAIRY TRADE AUCTION ON 15 FEBRUARY 2022, FOR DELIVERY IN MARCH 2022 TO JULY 2022

	Mar	Apr	May	Jun	Jul
Whole Milk Powder					
PRICE: \$	4 543	4 491	4 494	4 506	4 534
PRICE: R	68 281	67 500	67 545	67 725	68 146
Index	100.0	98.9	98.9	99.2	99.8
Skimmed Milk Powder					
PRICE: \$	4 349	4 281	4 291	4 301	4 340
PRICE: R	65 365	64 343	64 494	64 644	65 230
Index	100.0	98.4	98.7	98.9	99.8
Cheddar					
PRICE: \$	5 917	5 838	5 895	5 909	n.a
PRICE: R	88 933	87 745	88 602	88 812	n.a
Index	100.0	98.7	99.6	99.9	n.a
Butter					
PRICE: \$	6 715	6 675	6 670	6 700	6 710
PRICE: R	100 926	100 325	100 250	100 701	100 851
Index	100.0	99.4	99.3	99.8	99.9

4) Table prepared by the Office of SAMPRO based on the prices as published by "Global Dairy Trade" on 15 February 2022.

Graph 3⁵⁾



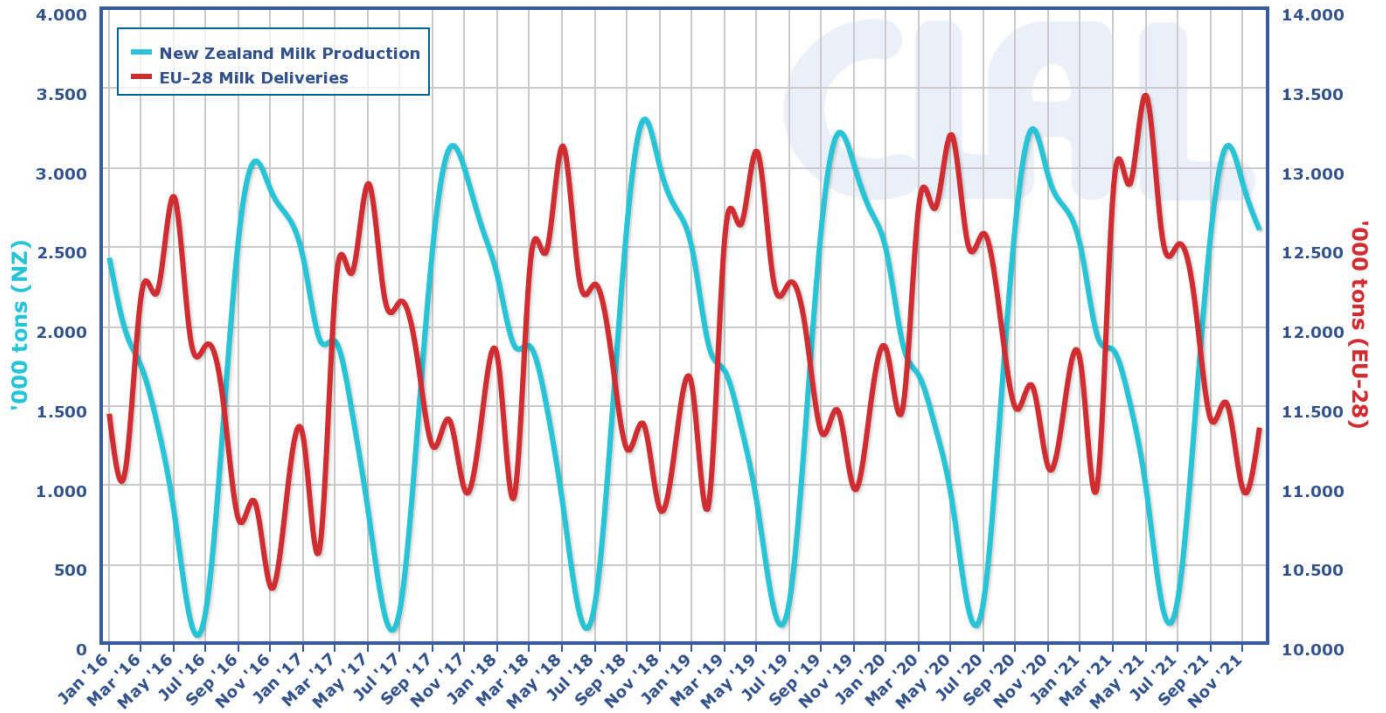
5) *Graph prepared by the Office of SAMPRO based on information contained in the United States Department of Agriculture, Livestock, Dairy, and Poultry Outlook, 15 February 2022.*

Graph 4⁶⁾

SEASONALITY OF UNPROCESSED MILK PRODUCTION IN THE NORTHERN AND SOUTHERN HEMISPHERES

Production season overview in Europe and in New Zealand

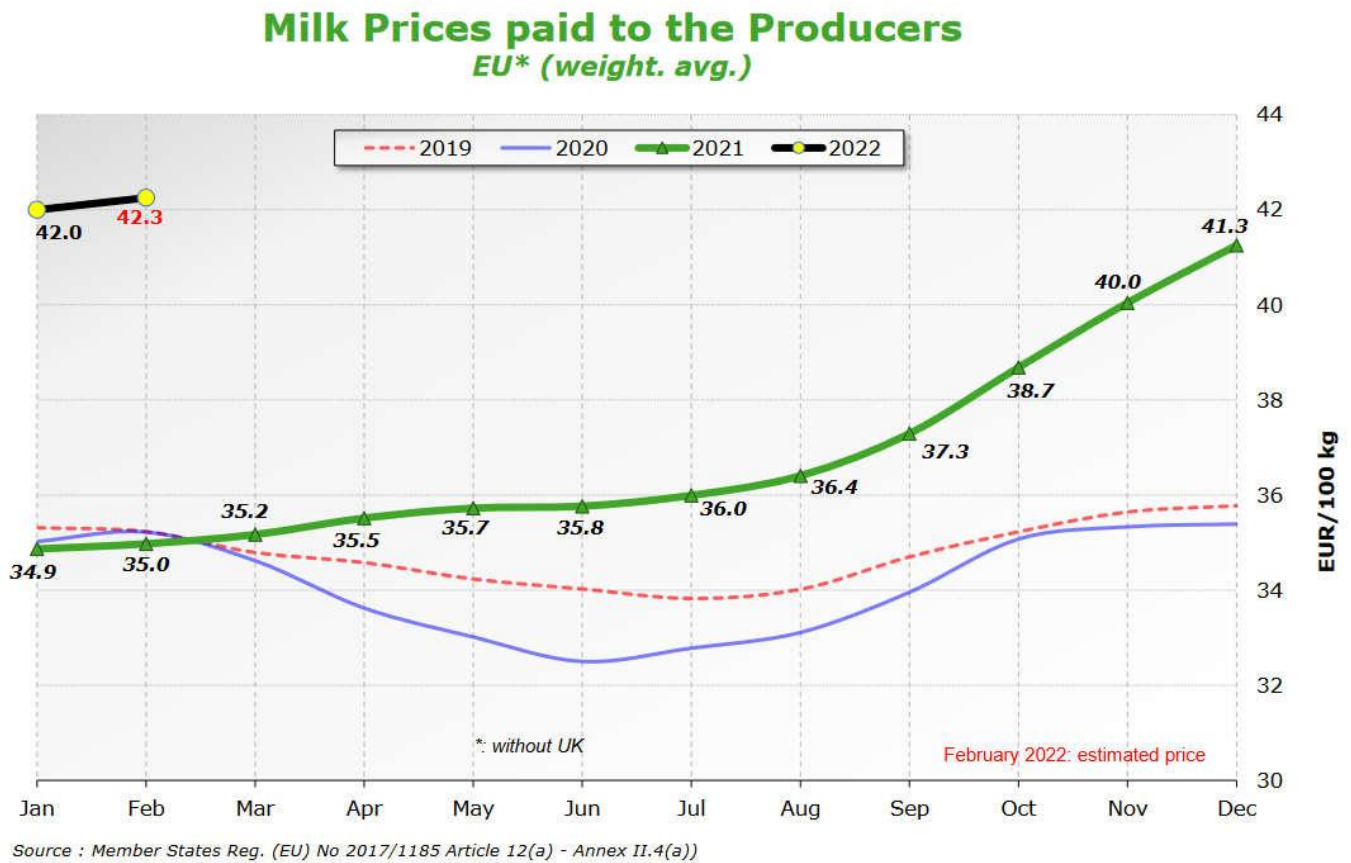
Processed by CLAL on data sourced Eurostat and Dcanz



6) Graph as published by CLAL.it.

Graph 5⁷⁾

AVERAGE PRICE OF UNPROCESSED MILK IN THE EUROPEAN UNION



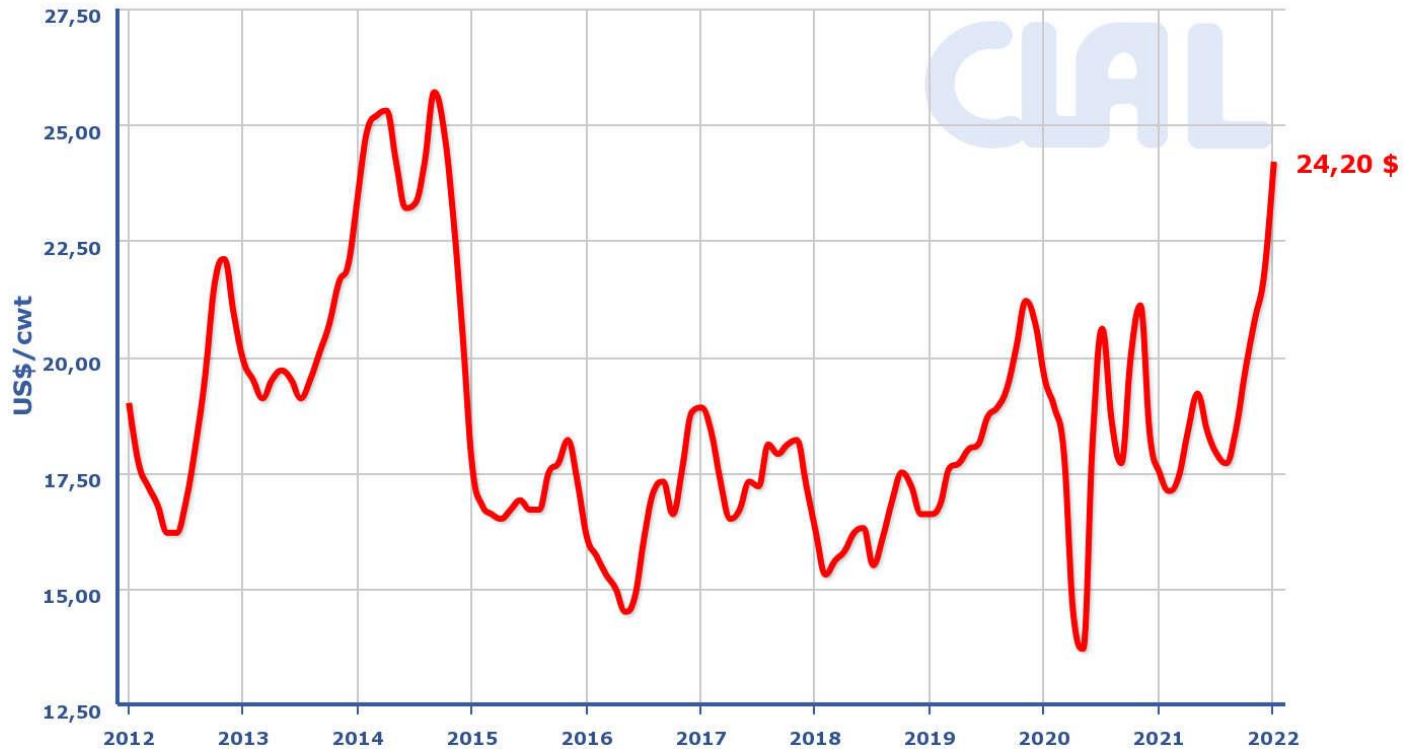
7) Graph as published by CLAL.it.

Graph 6⁸⁾

UNPROCESSED MILK PRICES IN THE USA

US - Farm-gate All Milk prices

Last Update: 01-03-2022
Source: AMS USDA Dairy Markets News



8) Graph as published by CLAL.it.

Table 3⁹⁾

TOTAL IMPORTS AND EXPORTS OF DAIRY PRODUCTS BY SOUTH AFRICA AND THE EXPOSURE OF THE SOUTH AFRICAN DAIRY INDUSTRY TO INTERNATIONAL COMPETITION (*THE SUM OF THE MASS OF IMPORTS AND EXPORTS*), IN THE YEARS 2002 TO 2021

Index: 2002 = 100)

YEAR	IMPORT		EXPORT		IMPORT PLUS EXPORT	
	TON	INDEX	TON	INDEX	TON	INDEX
2002	24 617.40	100.0	34 328.20	100.0	58 945.60	100.0
2003	24 458.80	99.4	22 905.20	66.7	47 364.00	80.4
2004	18 289.50	74.3	23 508.10	68.5	41 797.60	70.9
2005	30 771.40	125.0	17 216.00	50.2	47 987.40	81.4
2006	30 878.60	125.4	26 543.30	77.3	57 421.90	97.4
2007	44 313.00	180.0	18 516.50	53.9	62 829.50	106.6
2008	34 009.40	138.2	42 781.00	124.6	76 790.40	130.3
2009	32 373.40	131.5	41 770.70	121.7	74 144.10	125.8
2010	35 061.20	142.4	33 950.60	98.9	69 011.80	117.1
2011	37 714.40	153.2	41 817.10	121.8	79 531.50	134.9
2012	59 012.55	239.7	52 500.96	152.9	111 513.49	189.2
2013	35 673.76	144.9	70 481.90	205.3	106 155.66	180.1
2014	40 199.03	163.3	71 098.95	207.1	111 297.98	188.8
2015	69 353.98	281.7	61 296.87	178.6	130 650.85	221.6
2016	58 000.35	235.6	50 247.54	146.4	108 247.89	183.6
2017	83 504.44	339.2	48 626.69	141.7	132 131.13	224.2
2018	68 652.58	278.9	45 257.49	131.8	113 910.08	193.2
2019	75 596.08	307,1	45 051.75	131.2	120 647.83	204.7
2020	60 579.33	246.1	46 695.39	136.0	107 274.72	182.0
2021	75 618.94	307.2	50 990.95	148.5	126 609.89	214.8

9) Table prepared by the Office of SAMPRO on the basis of information obtained from SARS.

Table 4¹⁰⁾**MASS OF IMPORTS AS PERCENTAGE OF THE MASS OF EXPORTS OF DAIRY PRODUCTS
BY SOUTH AFRICA**

Heading	Description	2013	2014	2015	2016	2017	2018	2019	2020	2021
04.01	Milk and cream, unsweetened	14.7	21.4	92.5	84.3	217.1	103.7	90.2	26.4	95.2
04.02	Milk, concentrated	46.5	117.3	197.7	196.3	146.4	159.5	227.9	252.8	257.6
04.03	Buttermilk powder, yoghurt	8.2	9.2	16.5	19.7	28.4	27.9	31.7	40.3	32.6
04.04	Whey, whey powder, etc	452.7	507.4	221.3	185.9	192.9	1 741.3	2 917.9	1 257.6	888.3
04.05	Butter, butter spreads and butter oil	266.7	111.4	344.1	396.7	491.2	735.1	355.5	540.6	340.4
04.06	Cheese and curd	286.6	281.2	314.2	330.3	338.7	272.5	252.7	141.7	144.6
TOTAL		112.6	50.6	56.5	115.4	171.7	151.7	167.8	129.7	148.3

10) Table prepared by the Office of SAMPRO on the basis of information obtained from SARS.

Table 5¹¹⁾

TOTAL QUANTITY OF UNPROCESSED MILK PURCHASED IN SOUTH AFRICA DURING THE YEARS 2008 TO 2021¹¹⁾

YEAR	UNPROCESSED MILK KILOGRAM	PERCENTAGE CHANGE FROM PREVIOUS YEAR	INDEX 2008 = 100
2008	2 624 511 678	2.50	100.00
2009	2 586 868 067	-1.43	98.57
2010	2 711 236 032	4.81	103.30
2011	2 720 402 147	0.34	103.65
2012	2 842 810 159	4.50	108.32
2013	2 905 811 947	2.22	110.72
2014	2 982 734 569	2.65	113.65
2015	3 172 655 770	6.37	120.89
2016	3 158 466 390	-0.45	120.34
2017	3 253 682 081	3.02	123.97
2018	3 410 535 904	4.82	129.95
2019	3 432 802 396	0.65	130.80
2020	3 427 335 378	-0.16	130.59
2021 Est ¹²⁾	3395 841 448	-0.92	129.39

11) *Table prepared by the Office of SAMPRO based on information obtained from Milk SA.*

12) *The total purchases of unprocessed milk in 2021, is an estimated figure and it will be revised in March 2022.*

Table 6¹³⁾UNPROCESSED MILK PURCHASES PER QUARTER OF EACH OF THE YEARS 2009 to 2021 ¹⁴⁾

Year	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Total	
	Kg	%	Kg	%	Kg	%	Kg	%	Kg	%
2009	620 043 005	23.969	560 531 455	21.668	658 577 140	25.458	747 716 467	28.904	2 586 868 067	100
2010	640 933 409	23.640	595 998 091	21.983	699 002 502	25.782	775 302 030	28.596	2 711 236 032	100
2011	654 701 438	24.066	597 343 799	21.958	694 671 935	25.536	773 684 975	28.440	2 720 402 147	100
2012	676 129 726	23.784	638 011 059	22.443	725 458 007	25.519	803 211 367	28.254	2 842 810 159	100
2013	683 707 219	23.529	646 811 485	22.259	746 796 407	25.700	828 496 836	28.512	2 905 811 947	100
Total (2009-2013)	3 275 514 797	23.792	3 038 695 889	22.072	3 524 505 991	25.601	3 928 411 675	28.535	13 767 128 352	100

Year	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Total	
	Kg	%	Kg	%	Kg	%	Kg	%	Kg	%
2014	683 060 914	22.900	650 998 523	21.826	766 083 031	25.684	882 592 129	29.590	2 982 734 597	100
2015	770 769 019	24.294	726 975 249	22.914	799 968 233	25.214	874 943 269	27.578	3 172 655 770	100
2016	752 226 598	23.816	701 859 008	22.222	806 386 965	25.531	897 973 819	28.431	3 158 446 390	100
2017	756 689 792	23.256	703 893 532	21.634	837 867 145	25.751	955 231 612	29.358	3 253 682 081	100
2018	814 831 903	23.892	750 437 490	22.004	873 519 325	25.612	971 747 186	28.493	3 410 535 904	100
2019	816 208 186	23.777	757 906 127	22.078	882 584 853	25.710	976 103 230	28.435	3 432 802 396	100
Total (2014-2019)	4 593 786 412	23.666	4 292 069 929	22.112	4 966 409 552	25.586	5 558 591 245	28.637	19 410 857 138	100

Total (2009-2019)	7 869 301 209	23.718	7 330 765 818	22.095	8 490 915 543	25.592	9 487 002 920	28.594	33 177 985 490	100
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Year	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Total	
	Kg	%	Kg	%	Kg	%	Kg	%	Kg	%
2020	831 232 775	24.253	744 621 901	21.726	874 078 494	25.503	977 402 208	28.518	3 427 335 378	100
2021 ¹³⁾	792 708 521	23.344	735 670 779	21.664	870 170 850	25.624	997 291 298	29.368	3 395 841 448	100

13) Table prepared by the Office of SAMPRO based on information obtained from Milk SA. Quarters of which the percentage contribution to the total unprocessed milk purchases in the specific year were the highest relative to the contributions of the same quarters of the other years, are printed in red and the quarters with the lowest contributions, are printed in green.

14) The figure in respect of the fourth quarter of 2021, is an estimated figure.

Table 7¹⁵⁾

UNPROCESSED MILK PURCHASES PER HALF YEAR IN EACH OF THE YEARS 2009 TO 2021

Year	First Half		Second Half		Total	
	Kg	%	Kg	%	Kg	%
2009	1 180 574 460	45.637	1 406 293 607	54.363	2 586 868 067	100.00
2010	1 236 931 500	45.622	1 474 304 532	54.378	2 711 236 032	100.00
2011	1 252 045 237	46.024	1 468 356 910	53.976	2 720 402 147	100.00
2012	1 314 140 785	46.227	1 528 669 374	53.773	2 842 810 159	100.00
2013	1 330 518 704	45.788	1 575 293 243	54.212	2 905 811 947	100.00
Total (2009-2013)	6 314 210 686	45.864	7 452 917 666	54.136	13 767 128 352	100.00

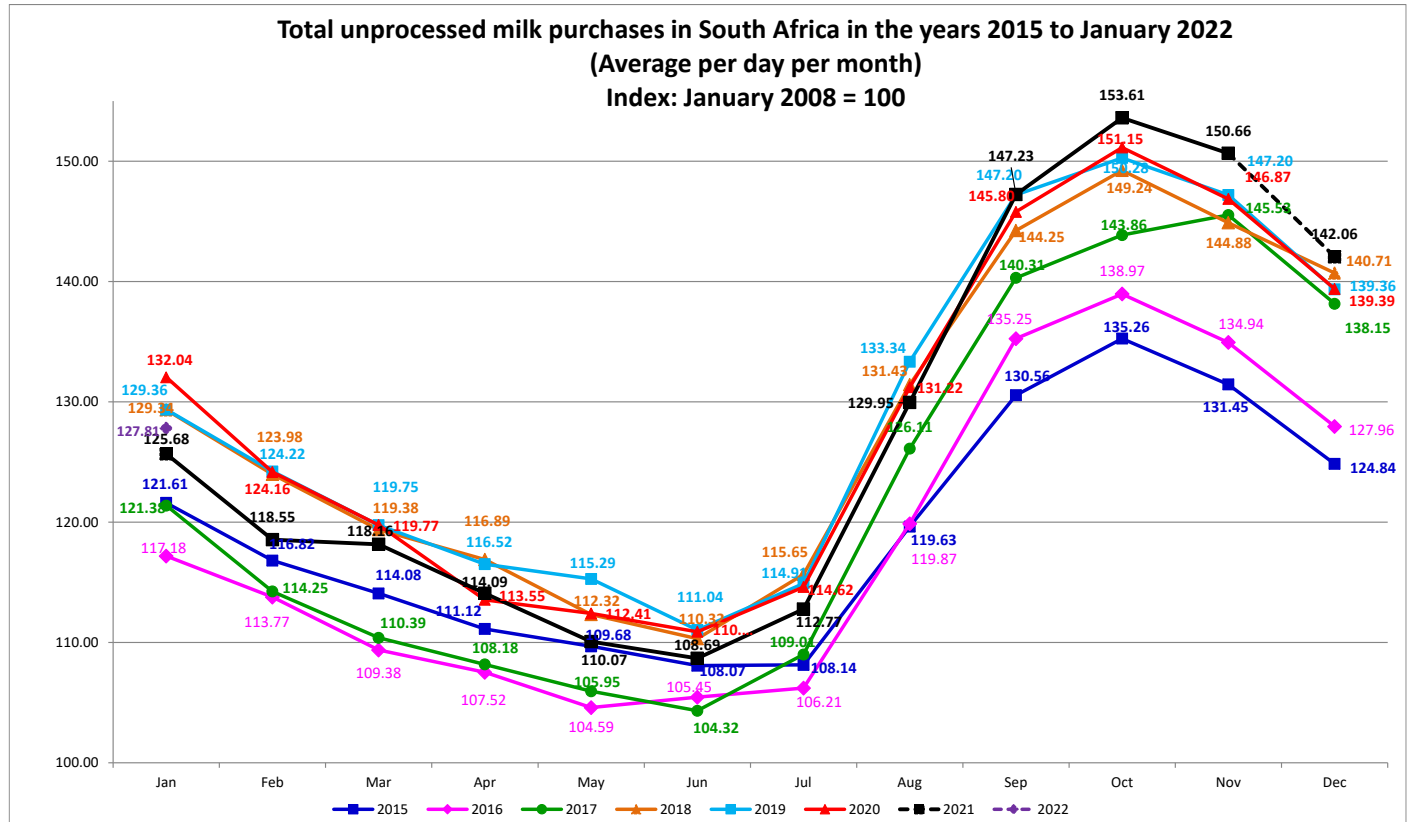
Year	First Half		Second Half		Total	
	Kg	%	Kg	%	Kg	%
2014	1 334 059 437	44.726	1 648 675 160	55.274	2 982 734 597	100.00
2015	1 497 744 268	47.208	1 674 911 502	52.792	3 172 655 770	100.00
2016	1 454 085 606	46.038	1 704 360 784	53.962	3 158 446 390	100.00
2017	1 460 583 324	44.890	1 793 098 757	55.110	3 253 682 081	100.00
2018	1 565 269 393	45.895	1 845 266 511	54.105	3 410 535 904	100.00
2019	1 574 114 313	45.855	1 858 688 083	54.145	3 432 802 396	100.00
Total (2014-2019)	8 885 856 341	45.778	10 525 000 797	54.222	19 410 857 138	100.00
Total (2009-2019)	13 625 952 714	45.809	16 119 230 380	54.191	29 745 183 094	100.00
2020	1 575 854 676	45.979	1 851 480 702	54.021	3 427 335 378	100.00
2021 (Est) ¹⁶⁾	1 528 379 300	45.007	1 867 462 148	54.993	3 395 841 448	100.00

15) Table prepared by the Office of SAMPRO based on information obtained from Milk SA. Half years of which the percentage contribution to the total unprocessed milk purchases in the specific year, were the highest relative to the contributions of the same half years of the other years, are printed in red and the half years, with the lowest contributions, are printed in green.

16) The figure in respect of the second half of 2021, is an estimated figure.

Graph 7¹⁷⁾

AVERAGE UNPROCESSED MILK PURCHASES PER DAY PER MONTH IN SOUTH AFRICA IN THE YEARS 2015 TO JANUARY 2022



17) Table 4 and Graph 7 prepared by the Office of SAMPRO on the basis of information obtained from MILK SA. The information in respect of 2012 to January 2022, is in respect of the total unprocessed milk purchased by all registered milk buyers declared in terms of Regulation 1396 of the Marketing of Agricultural Products Act and previous similar regulations. The figures for December 2021 and January 2022, are estimated figures.

Table 8¹⁸⁾

MASS OF UNPROCESSED MILK PURCHASES IN PARTICULAR MONTHS, RELATIVE TO THE PURCHASES IN THE SAME MONTHS OF PARTICULAR PREVIOUS YEARS

	Percentage increase
October 2018 relative to October 2017	3.7
November 2018 relative to November 2017	-0.4
December 2018 relative to December 2017	1.9
January 2019 relative to January 2018	-0.1
February 2019 relative to February 2018	-2.2
March 2019 relative to March 2018	0.1
April 2019 relative to April 2018	-0.8
May 2019 relative to May 2018	2.3
June 2019 relative to June 2018	0.5
July 2019 relative to Jul 2018	-0.8
August 2019 relative to August 2018	1.2
September 2019 relative to September 2018	1.8
October 2019 relative to October 2018	0.5
November 2019 relative to November 2018	1.6
December 2019 relative to December 2018	-1.0
January 2020 relative to January 2019	2.1
February 2020 relative to February 2019	-0.05
March 2020 relative to March 2019	0.01
April 2020 relative to April 2019	-2.5
May 2020 relative to May 2019	-2.5
June 2020 relative to June 2019	-0.1
July 2020 relative to July 2019	-0.3
August 2020 relative to August 2019	-1.6
September 2020 relative to September 2019	-1.0
October 2020 relative to October 2019	0.6
November 2020 relative to November 2019	-0.2
December 2020 relative to December 2019	0.02
January 2021 relative to January 2020	-4.8
February 2021 relative to February 2020	-4.5
March 2021 relative to March 2020	-1.3
April 2021 relative to April 2020	0.5
May 2021 relative to May 2020	-2.1
June 2021 relative to June 2020	-2.0
July 2021 relative to July 2020	-1.6
August 2021 relative to August 2020	-1.0
September 2021 relative to September 2020	1.0
October 2021 relative to October 2020	1.6
November 2021 relative to November 2020	2.6
December 2021 relative to December 2020(est)	1.9
January 2022 relative to January 2021(est)	1.7

18) Table prepared by the Office of SAMPRO based on information obtained from Milk SA.

Table 9¹⁹⁾Table 9¹⁹⁾

DECREASE IN THE MASS OF MONTHLY UNPROCESSED MILK PURCHASES IN SOUTH AFRICA, FROM OCTOBER TO DECEMBER, OCTOBER TO FEBRUARY, OCTOBER TO APRIL AND OCTOBER TO JUNE, IN THE YEARS 2008 TO 2021

Year	October to December percent	October to February percent	October to April percent	October to June percent
2008/9	3.9	16.9	24.4	25.4
2009/10	5.0	14.6	20.4	21.2
2010/11	5.6	15.6	23.4	23.7
2011/12	6.6	14.5	19.5	18.2
2012/13	5.3	14.9	20.9	20.5
2013/14	4.2	18.0	22.9	21.8
2014/15	7.7	12.9	17.1	19.4
2015/16	7.9	15.9	20.5	22.0
2016/17	4.0	17.8	22.2	24.9
2017/18	5.7	13.8	18.7	23.3
2018/2019	7.3	16.8	21.9	25.6
2019/2020	7.8	17.4	24.4	26.2
2020/2021 ²⁰⁾	7.5	21.5	24.5	28.1
Average 2008/9 to 2020/2021²⁰⁾	6.0	16.2	21.6	23.1
2021/2022 ²⁰⁾	7.5			

19) Table prepared by the Office of SAMPRO based on information obtained from MILK SA.

20) The figures in respect of 2021 and 2022, are estimated figures.

Table 10²¹⁾

INCREASE IN THE MASS OF MONTHLY UNPROCESSED MILK PURCHASES IN SOUTH AFRICA, FROM JULY TO AUGUST, JULY TO SEPTEMBER AND JULY TO OCTOBER IN EACH OF THE YEARS 2008 TO 2021

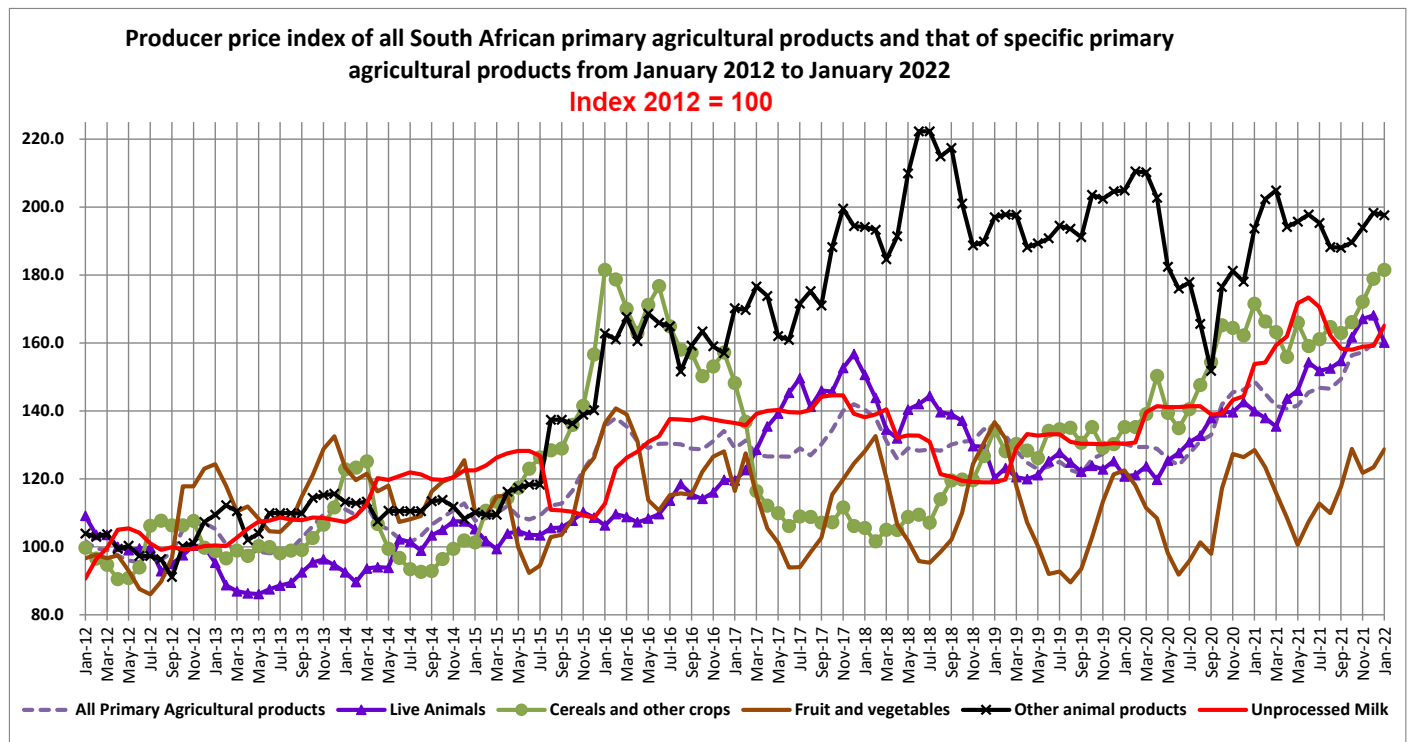
Year	July to August Percent	July to September Percent	July to October Percent
2008	10.7	22.2	24.6
2009	12.4	24.5	29.3
2010	9.7	19.8	24.2
2011	10.6	26.3	28.2
2012	10.3	21.8	25.6
2013	11.4	23.0	26.3
2014	13.0	27.2	32.9
2015	10.6	20.7	25.1
2016	12.7	27.2	30.7
2017	15.9	31.7	34.3
2018	13.7	24.7	29.0
2019	16.0	28.1	30.8
2020	14.5	27.2	31.9
Average 2008 to 2020	12.4	25.0	28.7
2021 ²²⁾	15.2	30.6	36.2

21) *Table prepared by the Office of SAMPRO on the basis of information obtained from MILK SA. The information in respect of 2008 to 2020 is in respect of the total unprocessed milk purchased by all registered milk buyers declared in terms of Regulation 1396 of the Marketing of Agricultural Products Act and previous similar regulations.*

22) *The 2021 figures are estimated figures.*

Graph 8²³⁾

PRODUCER PRICE INDICES OF PRIMARY AGRICULTURAL PRODUCTS IN SOUTH AFRICA FROM JANUARY 2012 TO JANUARY 2022



23) Graph prepared by the Office of SAMPRO based on information published by Statistics SA.

Table 11²⁴⁾

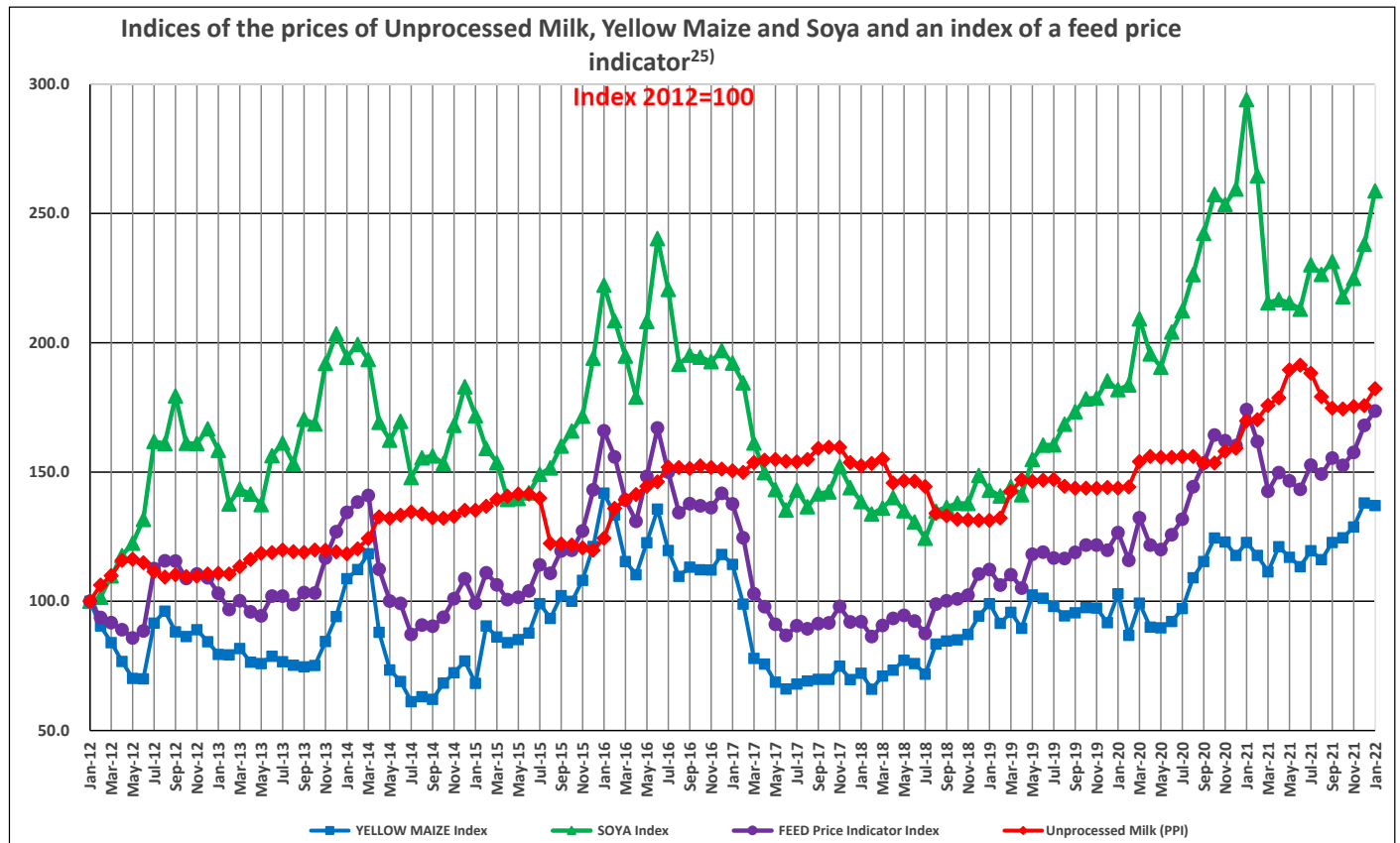
MONTHLY INCREASE IN THE PRODUCER PRICE INDEX OF UNPROCESSED MILK

	Percentage increase
October 2018 relative to September 2018	-0.99
November 2018 relative to October 2018	-0.25
December 2018 relative to November 2018	-0.07
January 2019 relative to December 2018	0.00
February 2019 relative to January 2019	0.66
March 2019 relative to February 2019	7.78
April 2019 relative to March 2019	3.16
May 2019 relative to April 2019	-0.38
June 2019 relative to May 2019	0.29
July 2019 relative to June 2019	0.00
August 2019 relative to July 2019	-1.64
September 2019 relative to August 2019	-0.46
October 2019 relative to September 2019	0.00
November 2019 relative to October 2019	-0.08
December 2019 relative to November 2019	0.24
January 2020 relative to December 2019	-0.16
February 2020 relative to January 2020	0.31
March 2020 relative to February 2020	6.81
April 2020 relative to March 2020	1.29
May 2020 relative to April 2020	-0.21
June 2020 relative to May 2020	0.00
July 2020 relative to June 2020	0.21
August 2020 relative to July 2020	0.00
September 2020 relative to August 2020	-1.70
October 2020 relative to September 2020	0.08
November 2020 relative to October 2020	2.93
December 2020 relative to November 2020	0.78
January 2021 relative to December 2020	6.58
February 2021 relative to January 2021	0.25
March 2021 relative to February 2021	3.33
April 2021 relative to March 2021	1.61
May 2021 relative to April 2021	6.07
June 2021 relative to May 2021	0.98
July 2021 relative to June 2021	-1.60
August 2021 relative to July 2021	-4.85
September 2021 relative to August 2021	-2.48
October 2021 relative to September 2021	-0.21
November 2021 relative to October 2021	0.59
December 2021 relative to November 2021	0.19
January 2022 relative to December 2021	3.70

24) Table prepared by the Office of SAMPRO based on information published by Statistics SA. The figure for January 2022, is an estimated figure.

Graph 9²⁵⁾

INDICES OF THE PRICES OF UNPROCESSED MILK IN THE PERIOD JANUARY 2012 TO JANUARY 2022 AND THAT OF, YELLOW MAIZE AND SOYA AND AN INDEX OF A FEED PRICE INDICATOR²⁶⁾ IN THE PERIOD JANUARY 2012 TO JANUARY 2022



INCREASE IN UNPROCESSED MILK PURCHASES RELATIVE TO PREVIOUS YEAR (PERCENT)²⁷⁾

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
4.5	2.22	2.65	6.32	-0.45	3.02	4.82	0.65	-0.16	-0.92

25) Graph prepared by the Office of SAMPRO based on information obtained from Statistics SA and SAFEX middle of the month prices.

26) The Feed price indicator index is an index of prices equal to 70 percent of the maize price, plus 30 percent of the soya price.

27) Table prepared by the Office of SAMPRO based on information obtained from Milk SA.

Table 12²⁸⁾

FUTURE PRICES OF YELLOW MAIZE IN SOUTH AFRICA (R/TON) ON 25 OCTOBER 2021 AND 1 MARCH 2022 ACCORDING TO SAFEX

	A CLOSING BID 25 October 2021 R/Ton	B CLOSING BID 1 March 2022 R/Ton	C Percentage increase from A to B
May 2022	3 320	3 763	13.3
July 2022	3 337	3 768	12.9
September 2022		3 812	
December 2022		3 876	

Table 13²⁸⁾

FUTURE PRICES OF SOYA BEANS IN SOUTH AFRICA (R/TON) ON 25 OCTOBER 2021 AND 1 MARCH 2022 ACCORDING TO SAFEX

	A CLOSING BID 25 October 2021 R/Ton	B CLOSING BID 1 March 2022 R/Ton	C Percentage increase from A to B
May 2022	7 503	8 318	10.9
July 2022	7 569	8 421	11.3
September 2022		8 490	
December 2022		8 545	

28) Table prepared by the Office of SAMPRO based on information as obtained from the SAFEX website on 1 March 2022.

Table 14²⁹⁾

FERTILIZER PRICES IN SOUTH AFRICA FROM FEBRUARY 2021 TO FEBRUARY 2022

Fertilizer	February 2021 Rand / Ton	February 2022 Rand / Ton	Percentage change from Feb 2021 to Feb 2022
LAN (28)	6 051	12 774	111.1
Urea (46)	8 012	15 640	95.2
MAP	9 753	18 254	87.2
KCL	6 429	14 289	122.3

Table 15²⁹⁾

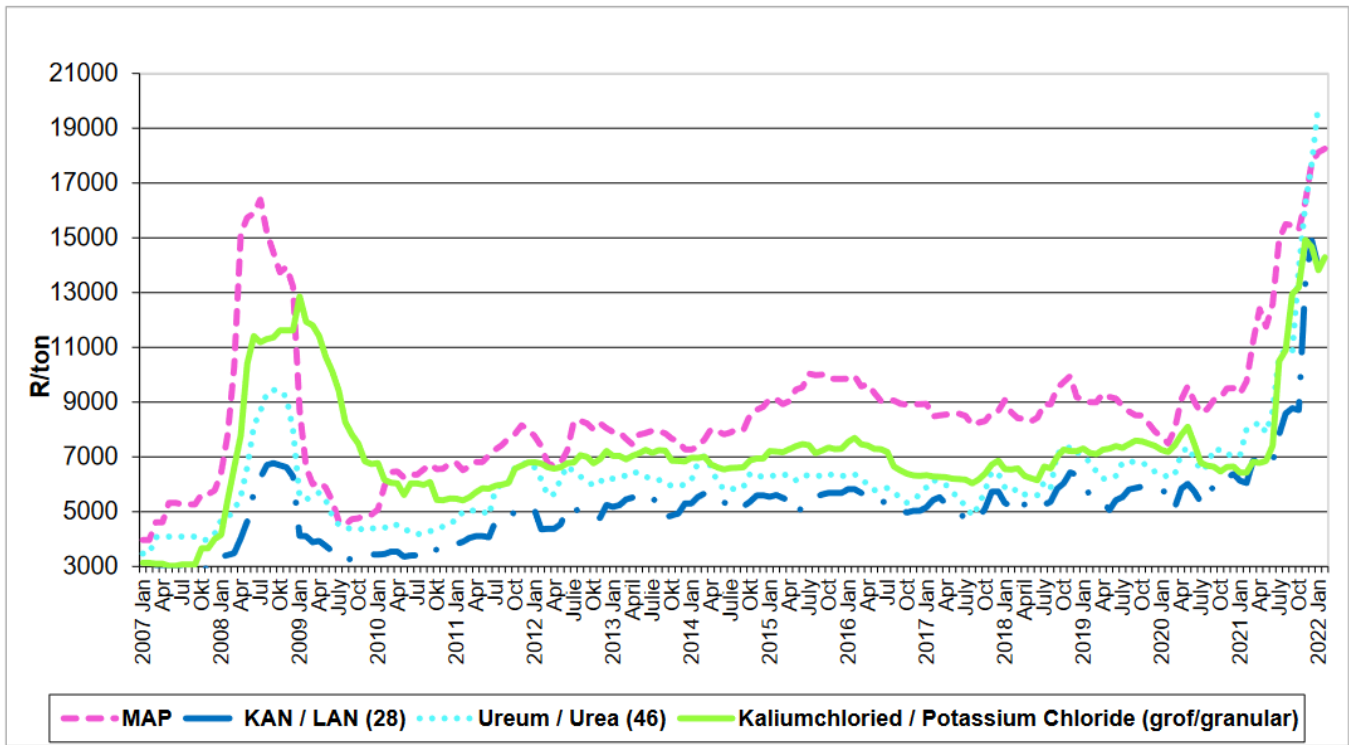
FERTILIZER PRICES IN SOUTH AFRICA FROM JANUARY 2022 TO FEBRUARY 2022

Fertilizer	January 2022 Rand / Ton	February 2022 Rand / Ton	Percentage change from Jan-Feb 2022
LAN (28)	13 933	12 774	-8.3
Urea (46)	19 876	15 640	-21.3
MAP	18 123	18 240	0.6
KCL	13 816	14 289	3.4

29) Table prepared by the Office of SAMPRO based on information published by Grain SA.

Graph 10³⁰⁾

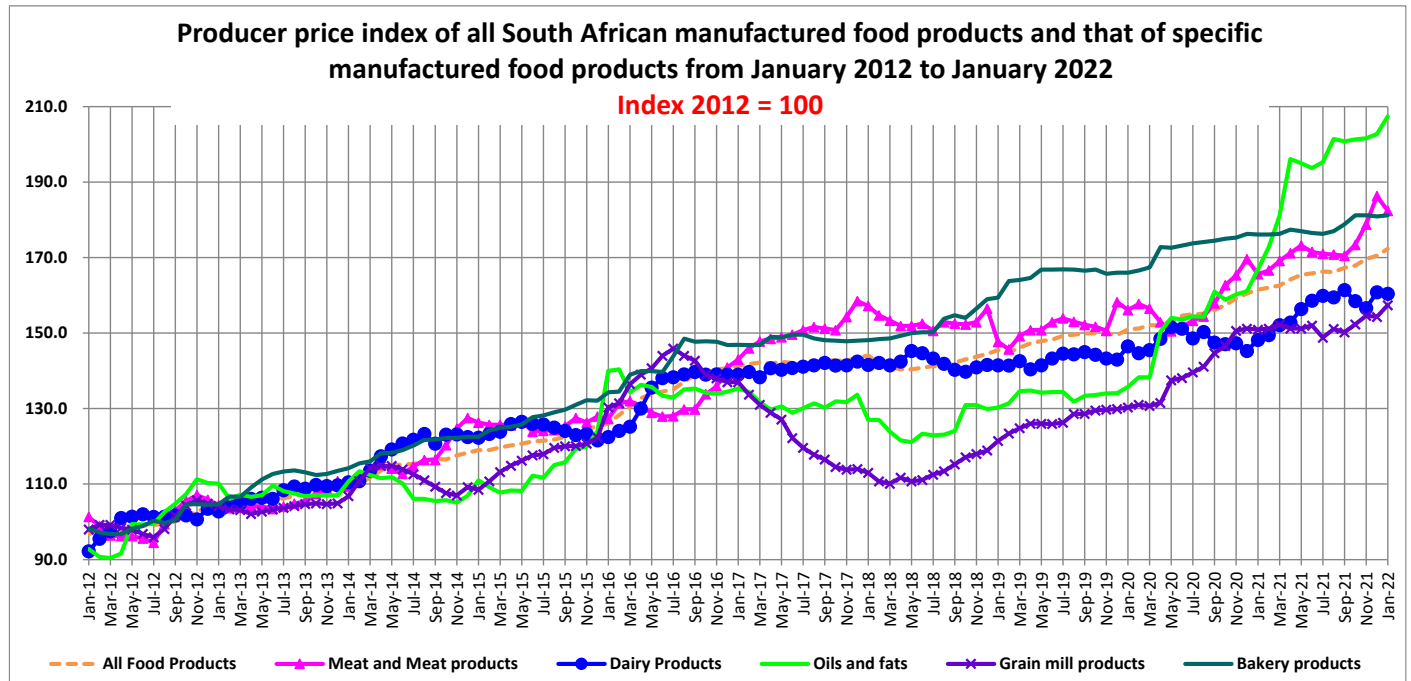
FERTILIZER PRICES IN SOUTH AFRICA FROM JANUARY 2007 TO FEBRUARY 2022



30) Graph published by Grain SA.

Graph 11³¹⁾

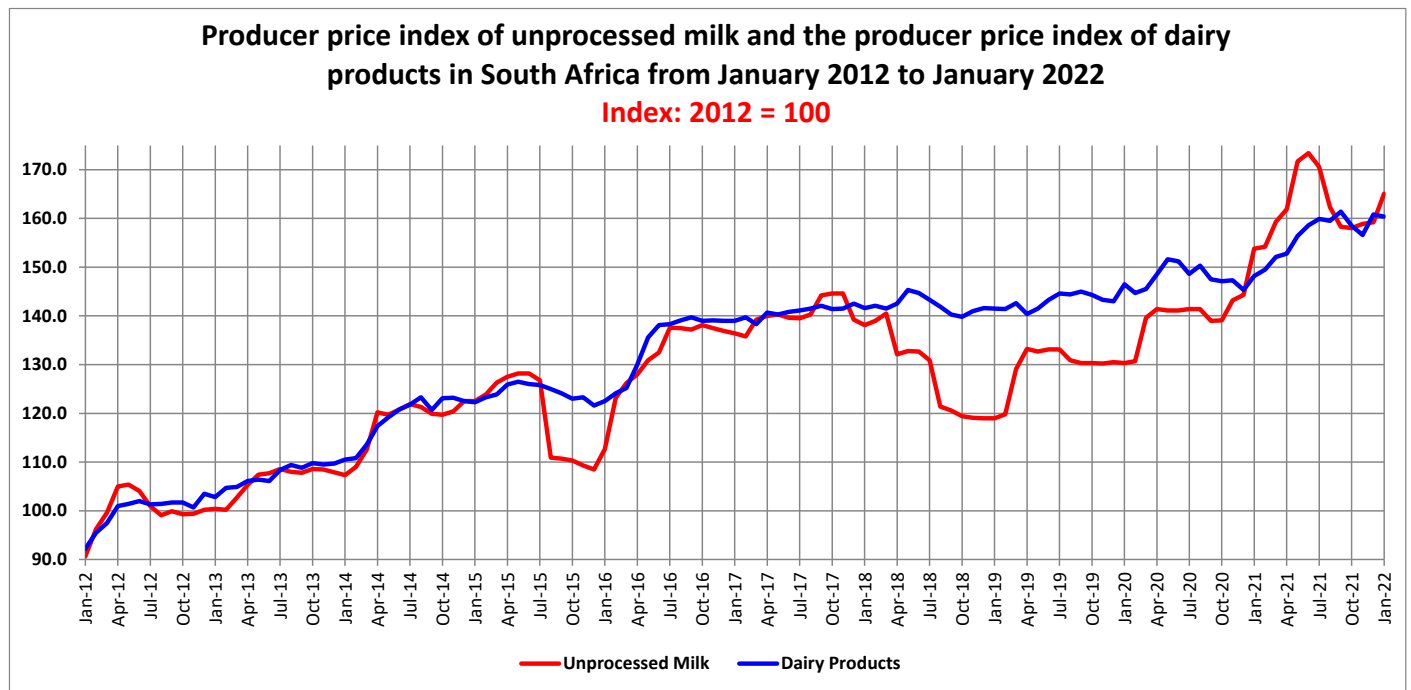
PRODUCER PRICE INDICES OF MANUFACTURED FOOD PRODUCTS IN SOUTH AFRICA FROM JANUARY 2012 TO JANUARY 2022



31) *Graph prepared by the Office of SAMPRO based on information obtained from Statistics SA. Note that the producer price index of dairy products measures the changes of the prices of a basket of dairy products consisting of fresh milk, UHT milk, yoghurt and cheddar cheese and products like cheese other than cheddar, maas, butter and milk powder are not included.*

Graph 12³²⁾

PRODUCER PRICE INDEX OF UNPROCESSED MILK AND THE PRODUCER PRICE INDEX OF DAIRY PRODUCTS IN SOUTH AFRICA, FROM JANUARY 2012 TO JANUARY 2022



32. Graph prepared by the Office of SAMPRO based on information obtained from Statistics SA. Note that the producer price index of dairy products measures the changes of the prices of a basket of dairy products consisting of fresh milk, UHT milk, yoghurt and cheddar cheese and products like cheese other than cheddar, maas, butter and milk powder are not included.

Table 16³³⁾

INCREASE IN PRODUCER PRICE INDICES OF PARTICULAR CATEGORIES OF PRODUCTS WHICH INCLUDE INPUTS OF THE DAIRY INDUSTRY, IN THE YEAR WHICH ENDED IN JANUARY 2022

GROUP OF PRODUCTS	PERCENTAGE INCREASE
Textiles, clothing and footwear	5.0
Textiles	3.5
Clothing	5.5
Footwear	3.9
Paper and printed products	5.3
Coke, petroleum, chemical, rubber and plastic products	21.5
Coal and petroleum products	34.1
Petrol	36.9
Diesel	33.8
Other	31.5
Chemical products	10.0
Rubber and plastic products	13.6
Metals, machinery, equipment and computing equipment	12.1
Structural and fabricated metal products	14.6
General and special purpose machinery	9.8
Household appliances and office machinery	11.2
Electrical machinery and communication and metering equipment	4.8
Electricity and water	16.1
Electricity	17.7
Water	5.2

33) Table prepared by the Office of SAMPRO based on information published by Statistics SA.

Table 17³⁴⁾

**INCREASE IN PRODUCER PRICE INDICES OF PARTICULAR INTERMEDIATE
MANUFACTURED PRODUCTS, IN THE YEAR WHICH ENDED IN JANUARY 2022**

GROUP OF PRODUCTS	PERCENTAGE INCREASE
Intermediate manufactured goods	21.0
Textiles and leather goods	9.4
Sawmilling and wood	11.7
Chemicals, rubber and plastic products	32.0
Basic and other chemical	45.8
Plastic products	21.7
Rubber products	22.4
Glass and glass products	8.7
Basic and fabricated metals	21.8
Basic iron and steel	38.3
Basic precious and non-ferrous metals and castings	1.5
Recycling and manufacturing n.e.c.	4.8

34. Table prepared by the Office of SAMPRO based on information published by Statistics SA.

Table 18³⁵⁾

CHANGES IN THE RETAIL SALES QUANTITIES FROM THE YEAR JANUARY 2020 TO DECEMBER 2020, TO THE YEAR JANUARY 2021 TO DECEMBER 2021, AND CHANGES IN THE RETAIL PRICES FROM DECEMBER 2020 TO DECEMBER 2021, OF SPECIFIC DAIRY PRODUCTS

PRODUCT	CHANGE IN DEMAND (QUANTITY)	CHANGE IN RETAIL PRICES
	PERCENT	PERCENT
FRESH MILK	-6.7	6.1
LONG LIFE MILK (UHT MILK)	-4.0	2.5
FLAVOURED MILK	1.1	6.2
YOGHURT	-6.0	6.9
MAAS	-4.5	6.0
PRE-PACKAGED CHEESE	-1.2	5.0
CREAM CHEESE	-5.6	6.0
BUTTER	-1.1	-3.3
CREAM	-4.0	3.8

35) *Table prepared by the Office of SAMPRO based on the results of surveys by “NielsenIQ”. Non-retail sales such as sales to industrial buyers are not part of the surveys.*

Table 19³⁶⁾

CHANGES IN THE QUANTITIES OF RETAIL SALES OF SPECIFIC DAIRY PRODUCTS IN 2020 AND 2021 IN SOUTH AFRICA

PRODUCT	Sales in the month of December 2021 versus the sales in the month of December 2020	Sales in the 3 months from October 2021 to December 2021 versus the sales in the 3 months from October 2020 to December 2020	Sales in the 6 months from July 2021 to December 2021 versus the sales in the 6 months from July 2020 to December 2020	Sales in the 9 months from April 2021 to December 2021 versus the sales in the 9 months from April 2020 to December 2020	Sales in the 12 months from January 2021 to December 2021 versus the sales in the 12 months from January 2020 to December 2020
	percent		percent		percent
Fresh Milk	-4.7	-6.5	-7.1	-6.1	-6.7
UHT milk	12.2	6.2	3.2	-3.3	-4.0
Flavoured milk	-1.8	-3.6	-1.1	1.2	1.1
Yoghurt	-0.5	-4.8	-7.9	-7.9	-6.0
Maas	1.8	0.5	-3.6	-4.8	-4.5
Pre-packaged cheese	2.0	4.2	1.4	-1.3	-1.2
Cream cheese	-6.7	-3.1	-4.1	-7.2	-5.6
Butter	13.2	8.7	3.2	-3.9	-1.1
Cream	-8.8	-5.1	-5.4	-8.2	-4.0

36) Table prepared by the Office of SAMPRO based on the results of surveys by "NielsenIQ". Non-retail sales such as sales to industrial buyers, are not part of the surveys.

Table 20³⁷⁾

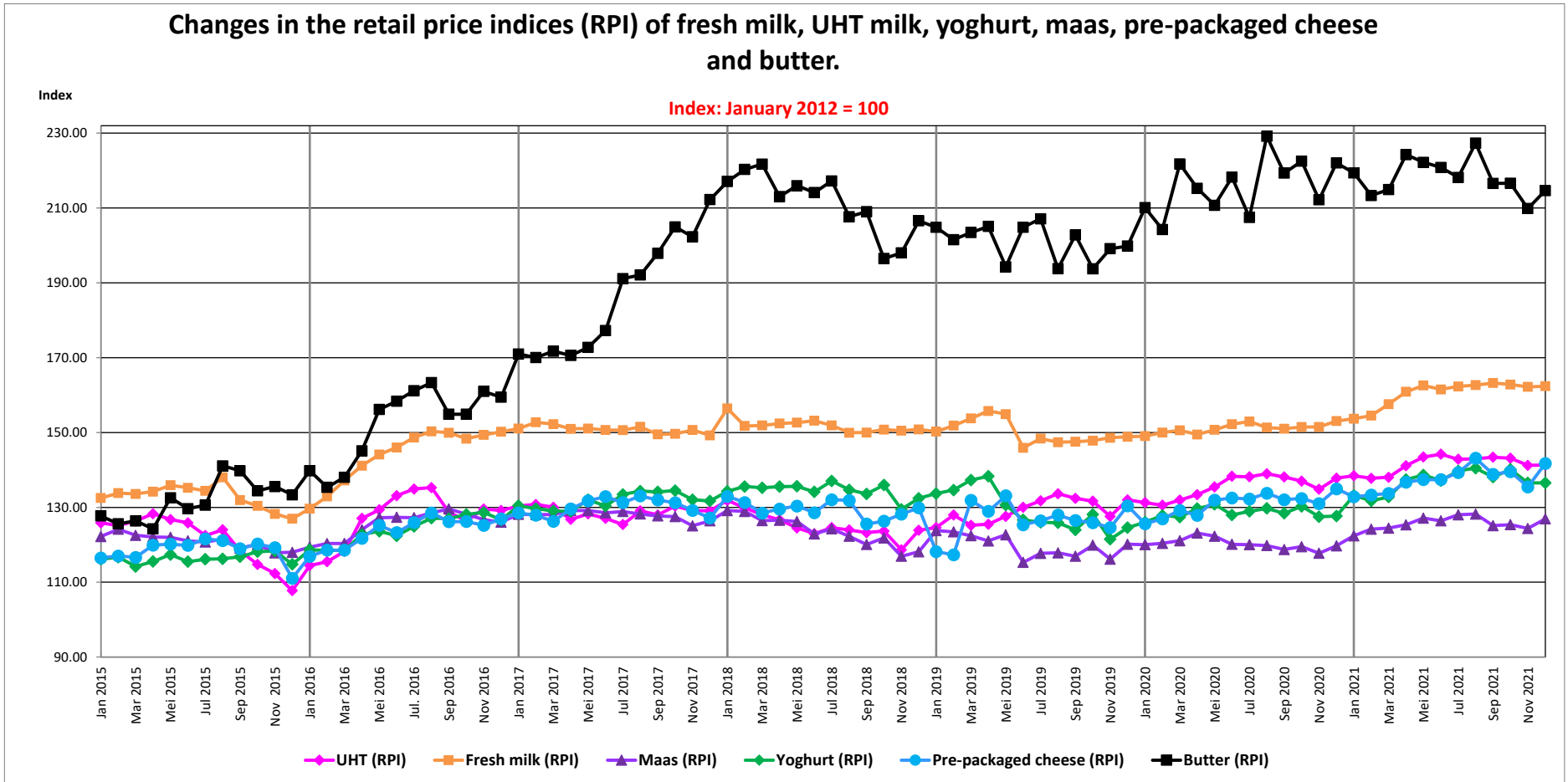
THE AVERAGE RETAIL PRICES OF SPECIFIC DAIRY PRODUCTS IN DECEMBER 2021, COMPARED TO THE AVERAGE RETAIL PRICES OF THE PRODUCTS CONCERNED IN SPECIFIC PREVIOUS MONTHS OF 2019 AND 2021

PRODUCT	December 2021 versus November 2021	December 2021 versus September 2021	December 2021 versus June 2021	December 2021 versus March 2021	December 2021 versus December 2020	December 2021 versus June 2020	December 2021 versus December 2019
	(1 month ago)	(3 months ago)	(6 months ago)	(9 months ago)	(12 months ago)	(18 months ago)	(24 months ago)
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
FRESH MILK	0.1	-0.5	0.5	3.1	6.1	6.7	9.0
UHT MILK	0.1	-1.5	-2.0	2.4	2.5	2.2	7.0
FLAVOURED MILK	6.2	-2.2	-1.2	8.2	6.2	5.7	11.0
YOGHURT	-0.01	-1.1	-2.6	2.8	6.9	6.7	9.6
MAAS	2.1	1.4	0.4	2.0	6.0	5.7	5.7
PRE-PACKAGED CHEESE	4.6	2.1	3.1	6.0	5.0	6.9	8.7
CREAM CHEESE	1.7	1.0	0.5	2.2	6.0	9.9	16.1
BUTTER	2.3	-0.9	-2.8	-0.1	-3.3	-1.6	7.4
CREAM	4.1	2.2	2.7	5.5	3.8	6.6	6.0

37) Table prepared by the Office of SAMPRO based on the results of surveys by "NielsenIQ". Non-retail sales such as sales to industrial buyers, are not part of the surveys.

Graph 13³⁸⁾

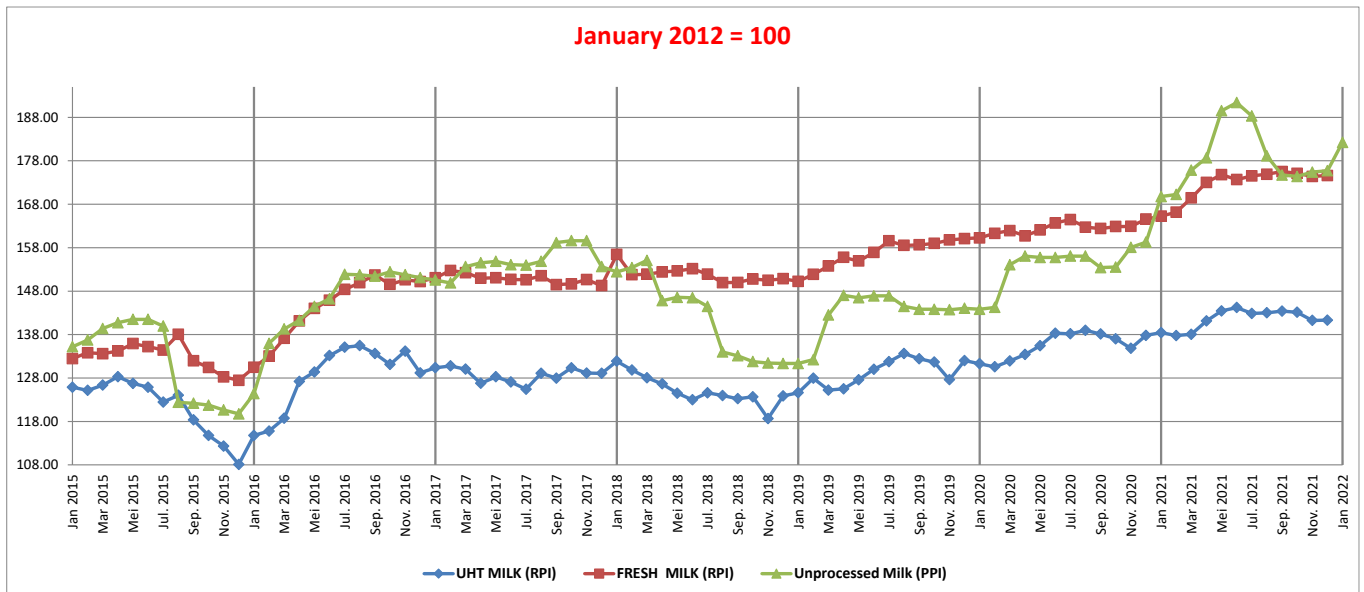
THE RETAIL PRICE INDICES (RPI) OF SPECIFIC DAIRY PRODUCTS, FROM JANUARY 2015 TO DECEMBER 2021



38) Graph prepared by the Office of SAMPRO based on the results of surveys by "NielsenIQ". Non-retail sales such as sales to industrial buyers, are not part of the surveys.

Graph 14³⁹⁾

THE PRODUCER PRICE INDEX (PPI) OF UNPROCESSED MILK, FROM JANUARY 2015 TO JANUARY 2022 AND THE RETAIL PRICE INDICES (RPI) OF FRESH MILK AND UHT MILK, FROM JANUARY 2015 TO DECEMBER 2021



INCREASE IN THE QUANTITY OF UNPROCESSED MILK PURCHASES RELATIVE TO PREVIOUS YEAR (PERCENT)⁴⁰⁾

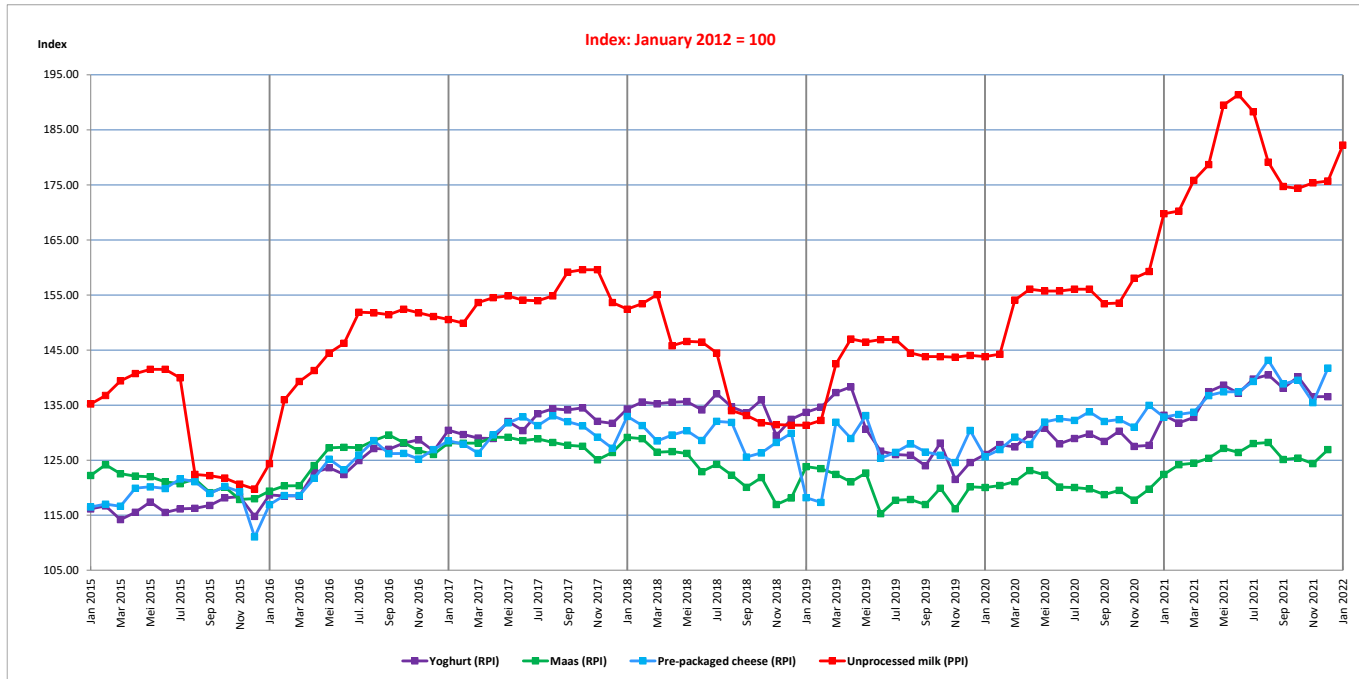
2015	2016	2017	2018	2019	2020	2021
6.37	-0.45	3.02	4.82	0.65	-0.16	-0.92

39) Graph prepared by the Office of SAMPRO based on information obtained from NielsenIQ and Statistics South Africa.

40) Table prepared by the Office of SAMPRO based on information obtained from Milk SA and the figure in respect of 2021, is an estimated figure.

Graph 15⁴¹⁾

THE PRODUCER PRICE INDEX (PPI) OF UNPROCESSED MILK, FROM JANUARY 2015 TO JANUARY 2022 AND THE RETAIL PRICE INDICES (RPI) OF YOGHURT, MAAS AND PRE-PACKAGED CHEESE, FROM JANUARY 2015 TO DECEMBER 2021



INCREASE IN THE QUANTITY OF UNPROCESSED MILK PURCHASES RELATIVE TO PREVIOUS YEAR (PERCENT)⁴²⁾

2015	2016	2017	2018	2019	2020	2021
6.37	-0.45	3.02	4.82	0.65	-0.16	-0.92

41) Graph prepared by the Office of SAMPRO based on information obtained from NielsenIQ and Statistics South Africa.

42) Table prepared by the Office of SAMPRO based on information obtained from Milk SA and the figure in respect of 2021, is an estimated figure.

Table 21⁴³⁾

THE HIGHEST AND LOWEST DIFFERENCES RECORDED BETWEEN THE AVERAGE MONTHLY RETAIL PRICES OF UHT MILK AND FRESH MILK AND THE DIFFERENCES BETWEEN THE AVERAGE ANNUAL RETAIL PRICES OF UHT MILK AND FRESH MILK, IN THE YEARS 2012 TO 2021

YEAR	Percentage difference ⁴⁴⁾		
	Highest monthly	Lowest monthly	Average annual
2012	17.1	0.7	11.4
2013	8.9	2.8	6.1
2014	12.5	5.8	10.0
2015	11.9	-0.7	7.0
2016	6.9	0.7	3.9
2017	1.8	-2.6	-0.2
2018	0.0	-7.9	-3.7
2019	3.8	-3.8	0.2
2020	4.3	0.4	2.3
2021	-3.8	-2.4	-3.1
Average	5.1	-0.9	2.5

43) Table prepared by the Office of SAMPRO based on the results of surveys by NielsenIQ. Non-retail sales such as sales to industrial buyers are not part of the surveys.

44) The percentages indicated are the percentages which the average retail prices of UHT milk were higher than that of fresh milk.