The presentation to SASDT on 24 March 2022 titled:

"OVERVIEW OF THE SOUTH AFRICAN DAIRY INDUSTRY"

By the CEO of SAMPRO, based on the research reports compiled by the Office of SAMPRO

CONTENT
1. The Key characteristics of the South African Primary and Secondary Dairy Industries
2. The Performance of the International Dairy Industry
3. The Performance of South African Primary Dairy Industry
4. The Performance of the South African Secondary Dairy Industry
5. The Challenges for the South African Dairy Industry

1. The key characteristics of the South African primary and secondary dairy industries are:

- Market-orientated and not production-orientated;
- Structure, driven by competition (more competitive enterprises grow at the expense of the less competitive enterprises);
- Dynamic (new technologies, knowledge and changing needs of consumers);
- Complex (different scientific fields of knowledge);
- Demanding (24 hours, 365 days per year and knowledge intensive);
- Critical daily dependence on service delivery by public sector at national, provincial and local authority levels (roads, electricity, water, security, inspection services, prevention and control of animal diseases);
- Producers of unprocessed milk not a homogeneous group (pasture-based or total-mixed-rations, dry land or irrigated pastures and crops for silage and hay, geographical location, climate region, management and monitoring of individual animals, different breeds, breeding, soil, water, seasonality of production, composition of unprocessed milk, involvement in complementary production);

- **Processors (producers of processed milk and the manufacturers of the other dairy products) not a homogeneous group (product range, reputation of brand name, technology, exposure to foreign competition, geographical location);**
- **Different dairy products perform differently in markets;**
- **SA dairy products not entitled to enjoy a share in consumer spending and competes with imported dairy products, plant-based products and unrelated products and services;**
- **Environmentally sensitive;**
- **Animal welfare sensitive;**
- **Socially responsible; and**
- **Issues of collective interest, are dealt with through the organised dairy industry.**

- **Oversimplified and distorted views about the SA dairy industry exist and it originates from:**

- **Production-orientated approach;**
- **Selective use of information;**
- **Lack of knowledge; and**
- **Ideologically informed points of departure.**

❖ Oversimplified and distorted views result in unfounded conclusions;

- One unfounded conclusion is that the reduction in the number of producers of unprocessed milk, is an unique SA phenomena. Table 1 shows that it is not.

Table 1

REDUCTION OF THE NUMBER OF DAIRY FARMS IN PARTICULAR COUNTRIES[1)]

Country	Ranking[2)]	Percentage of production processed	Number of farms ('000)		Percentage reduction of number of dairy farms 1996 to 2018	Percentage increase in production 1996 to 2018
			1996	2018		
USA	2	100	131.0	39.0	70.23	47.55
EU	2	93	4 836.0	1 139.0	76.45	12.27
Brazil	4	72	1 819.0	962.0	46.85	93.06
Germany	5	96	1 860.0	62.8	66.24	12.21
New Zealand	7	100	14.7	12.0	18.37	111.86
France	8	98	141.0	56.0	60.28	-0.88
UK	11	98	34.6	12.8	63.01	7.33
Netherlands	12	99	39.0	17.0	56.41	25.40
Italy	14	90	109.0	31.0	71.56	28.35
Mexico	15	75	119.0	92.0	22.69	58.23
Argentina	17	90	20.0	11.0	45.00	24.26
Canada	18	97	23.8	10.6	55.46	33.19
Australia	19	97	13.9	5.7	58.99	2.10
Ireland	24	95	23.2[3)]	16.2	30.17	65.19
Japan	26	99	41.6	15.7	62.26	-13.83
Belarus	27	87	684.0	50.0	92.69	57.38
Spain	28	99	124.0	14.0	88.71	21.31
Denmark	30	95	14.8	2.8	81.08	25.46
Belgium	36	99	20.7	11.4	44.93	35.35
Switzerland	37	90	30.0	20.0	33.33	4.99
South Africa	39	95	8.0	1.4	82.50	80.86
Sweden	42	92	15.9	3.5	77.99	-15.88
Finland	47	98	30.0	6.5	78.33	1.61
Uruguay	50	94	5.86	3.28	44.03	81.58
Portugal	57	97	48.0	4.6	90.42	8.93

1. *Table prepared by the Office of SAMPRO, based on information contained in the IFCN Dairy Reports of 2019 and 2020. Countries selected are countries in which the bulk of the unprocessed milk produced, is used for the production of processed milk and the manufacture of the other dairy products.*
2. *Ranking in terms of size of production of unprocessed milk relative to other countries.*
3. *Ireland: Information available from 2002 only and the figure of 23.2 shown in the1996 column, is the figure of 2002.*

- Second example of a unfounded conclusion, is the view that the SA Secondary Dairy Industry, is too concentrated which is as shown in Table 2, not the case

Table 2

SHARE OF THE LARGEST MILK PROCESSORS (PRODUCERS OF PROCESSED MILK AND MANUFACTURERS OF THE OTHER DAIRY PRODUCTS) IN THE PURCHASING OF UNPROCESSED MILK IN PARTICULAR COUNTRIES[4)]

COUNTRY	SHARE OF THE THREE LARGEST MILK PROCESSORS (percent)	SHARE OF THE SEVEN LARGEST MILK PROCESSORS (percent)
Argentina	31	45
Austria	59	82
Belarus	28	46
Brazil	13	24
Chili	24	40
Colombia	48	67
Denmark	95	100
Finland	83	90
France	50	68
Germany	39	57
India	45	60
Israel	95	100
Japan	41	59
Madagascar	100	100
Morocco	76	94
New Zealand	94	100
Norway	100	100
Paraguay	70	83
Peru	93	97
Rwanda	30	39
South Africa	37.5	63
Sweden	92	100
Switzerland	50	68
Tunisia	25	39
Uganda	51	67
United Kingdom	47	59
Uruguay	88	100
Average	59	72

4) Table prepared by the Office of SAMPRO, based on:

- *Information obtained from the 2020 annual report of the International Farm Comparison Network (IFCN), and*
- *The information in respect of South Africa obtained from the report of the Competition Commission titled "Measuring Concentration and participation in the South African Economy: Levels and Trends, Main Report, November 2021"*

- **Third example is the view that the gap between the price of unprocessed milk and the prices of dairy products, is increasing, which is, as will be shown later, not the case; and**

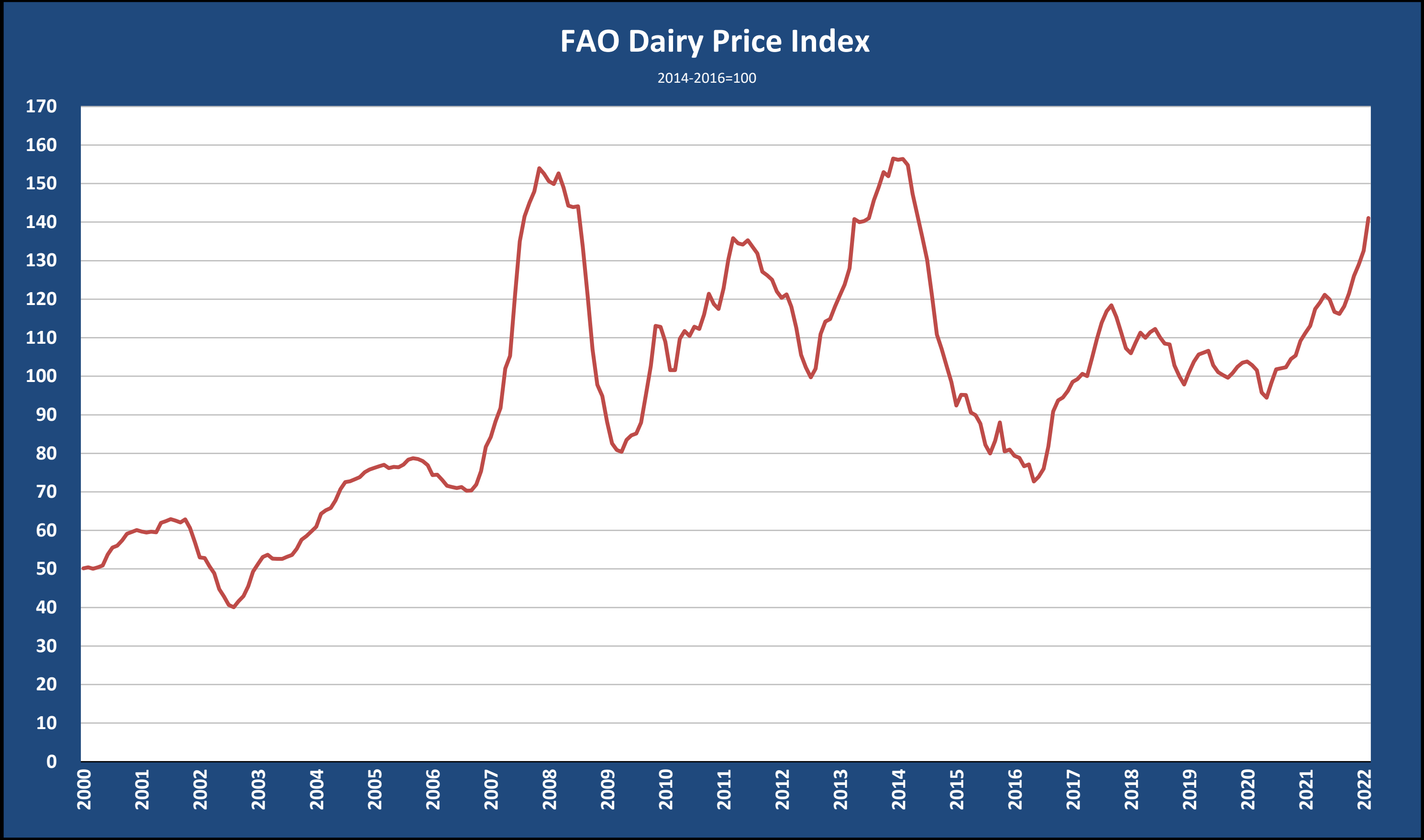
- **A fourth example is that the movements of the price of fresh milk, which is one of the different types of dairy products, is used to make conclusions about the whole dairy industry. Obviously, such position is not rational as more unprocessed milk is used for the production of the other dairy products than for the production of fresh milk.**

2. THE PERFORMANCE OF THE INTERNATIONAL DAIRY INDUSTRY

- Up to before the Russian invasion of Ukraine at the end of February 2022, the prices of dairy products in the international market and the prices of unprocessed milk in major dairy countries, were moving upward as shown in Graph 1, Graph 2 and Graph 3.

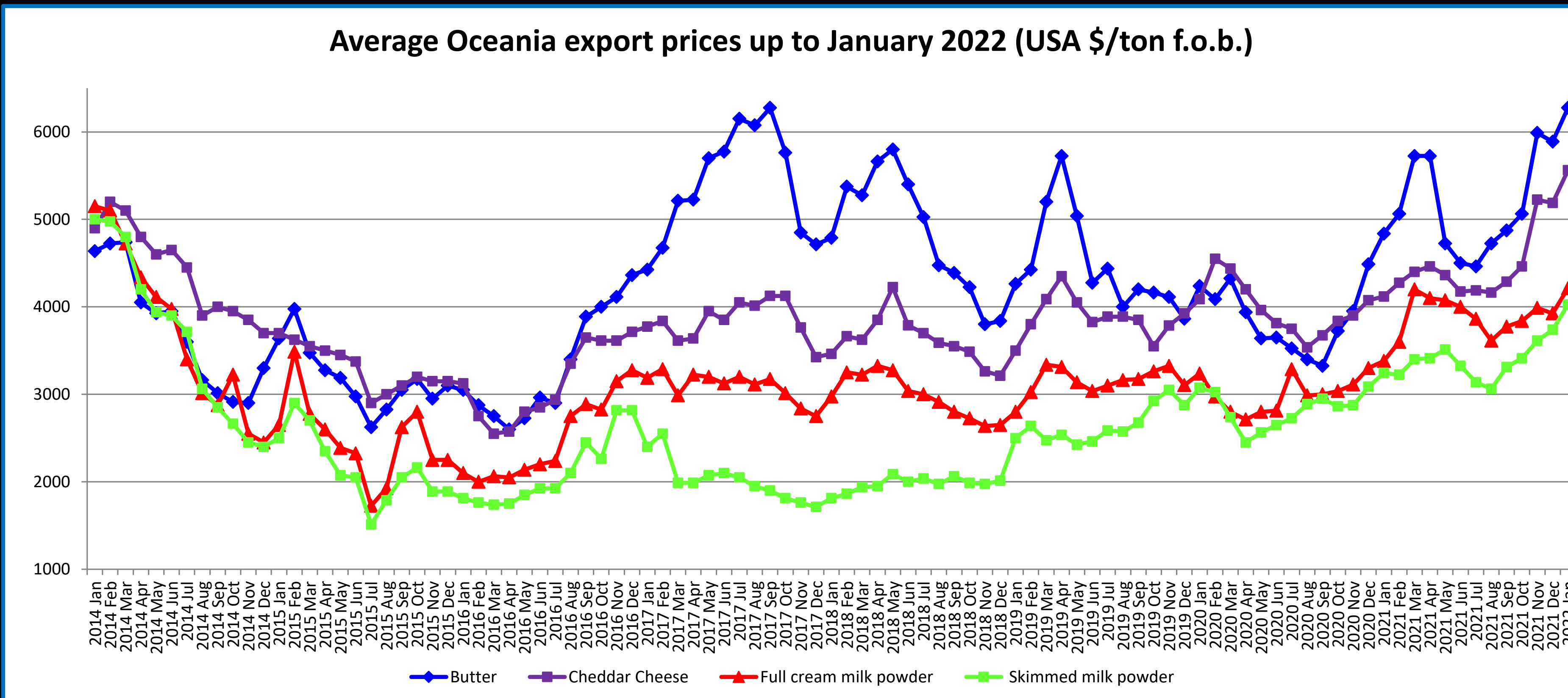
Graph 1[5)]

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



5) *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.

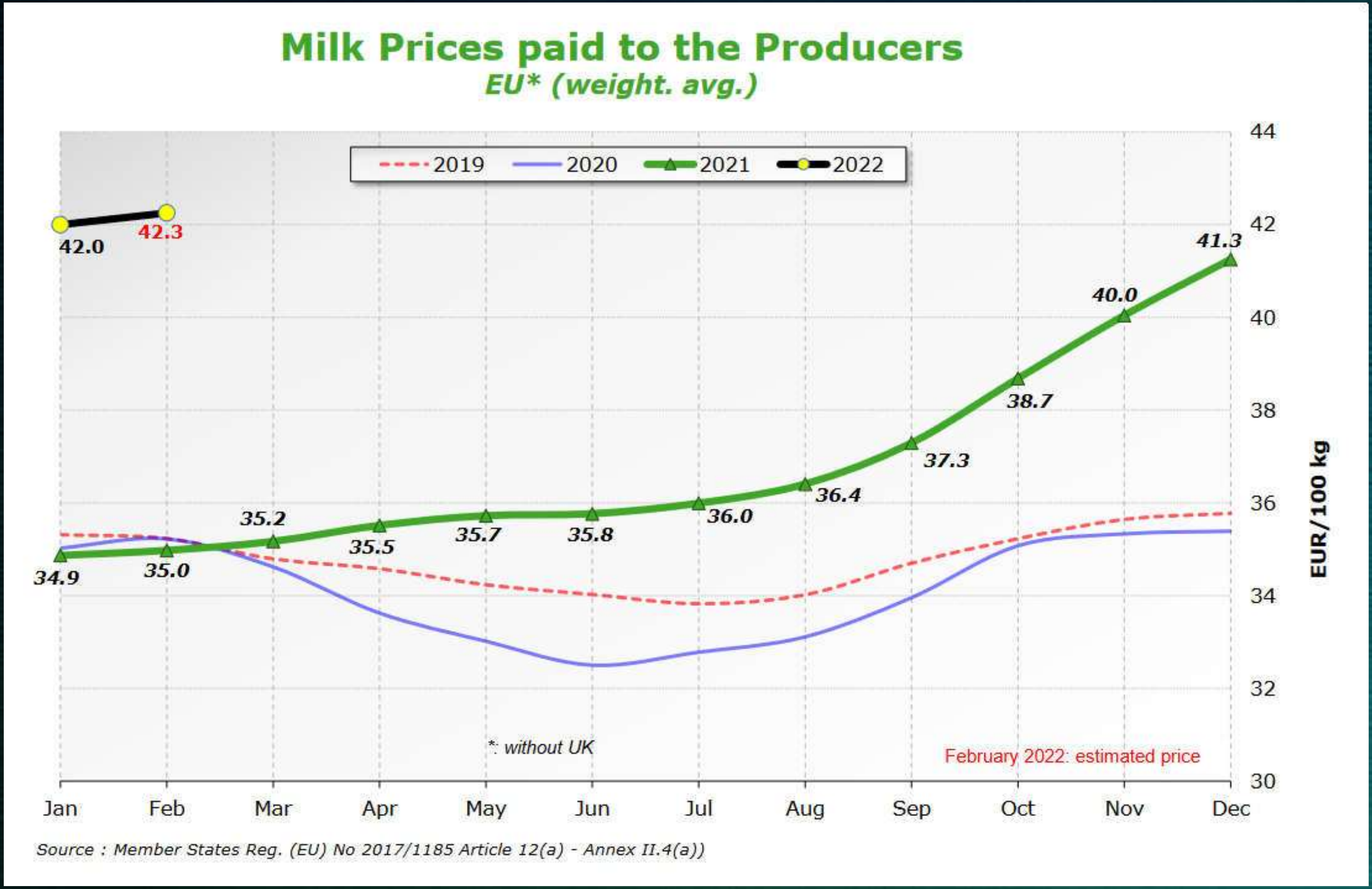
Graph 2[6)]



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

Graph 3[7]

AVERAGE PRICE OF UNPROCESSED MILK IN THE EUROPEAN UNION



7) Graph as published by CLAL.it.

- **The Russian invasion of Ukraine and the sanctions implemented by major countries in response to the invasion:**

- **Destroyed reasonable expectations based on information available before invasion at end of February 2022;**

- **Undermines economic growth in the world;**

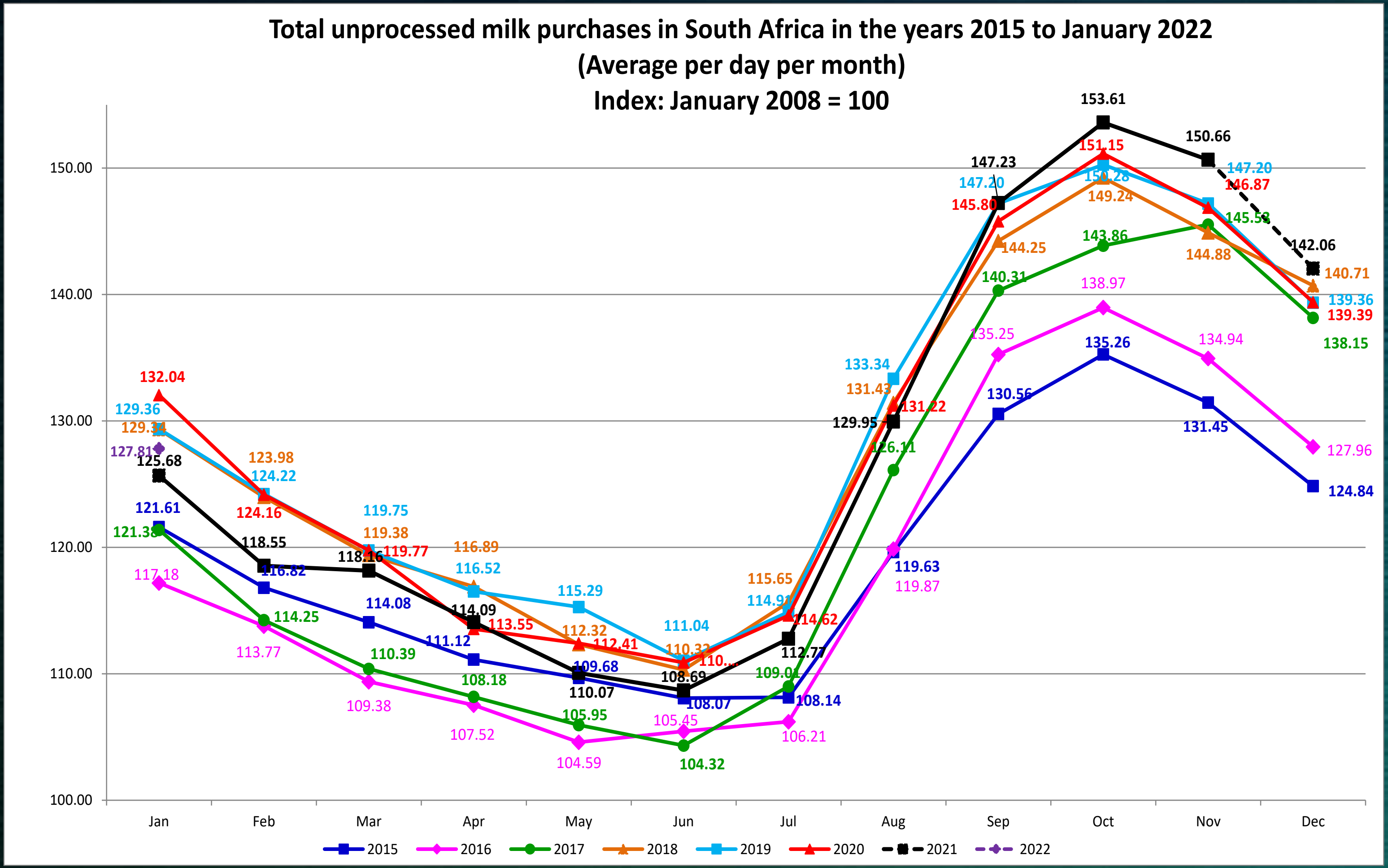
- **Add to the upward pressure on prices of commodities like crude oil, chemicals, wheat and maize; and**

- **Add dramatically to uncertainty about future prices and availability of a wide range of products.**

The production of unprocessed milk in South Africa is seasonal.

Graph 4[12)]

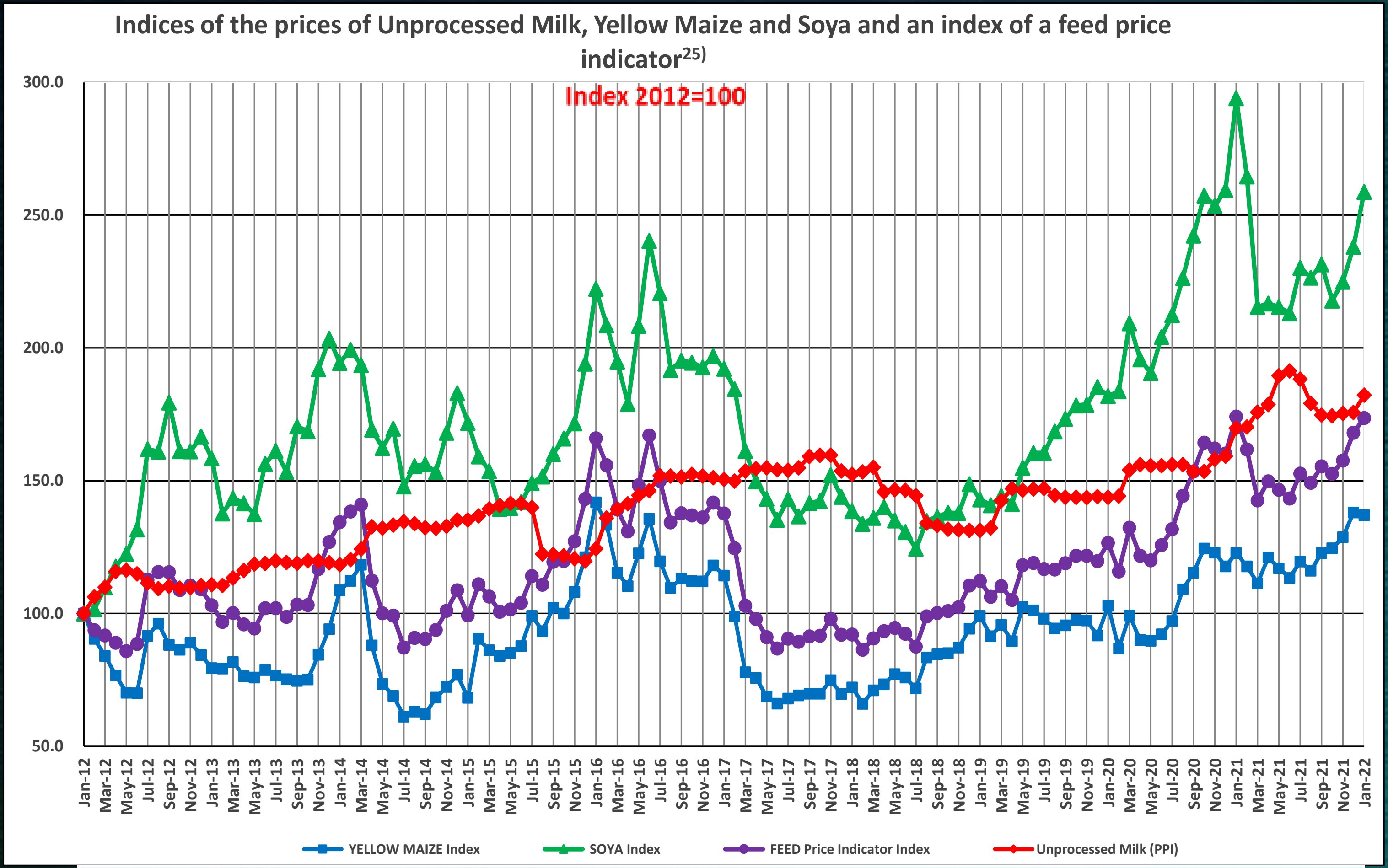
AVERAGE UNPROCESSED MILK PURCHASES PER DAY PER MONTH IN SOUTH AFRICA IN THE YEARS 2015 TO JANUARY 2022



12) *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 1652 of the Marketing of Agricultural Products Act and previous similar regulations. The figures for December 2021 and January 2022, are estimated figures.*

Graph 6[14)]

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 INDICATOR[15)] IN THE PERIOD JANUARY 2012 TO JANUARY 2022

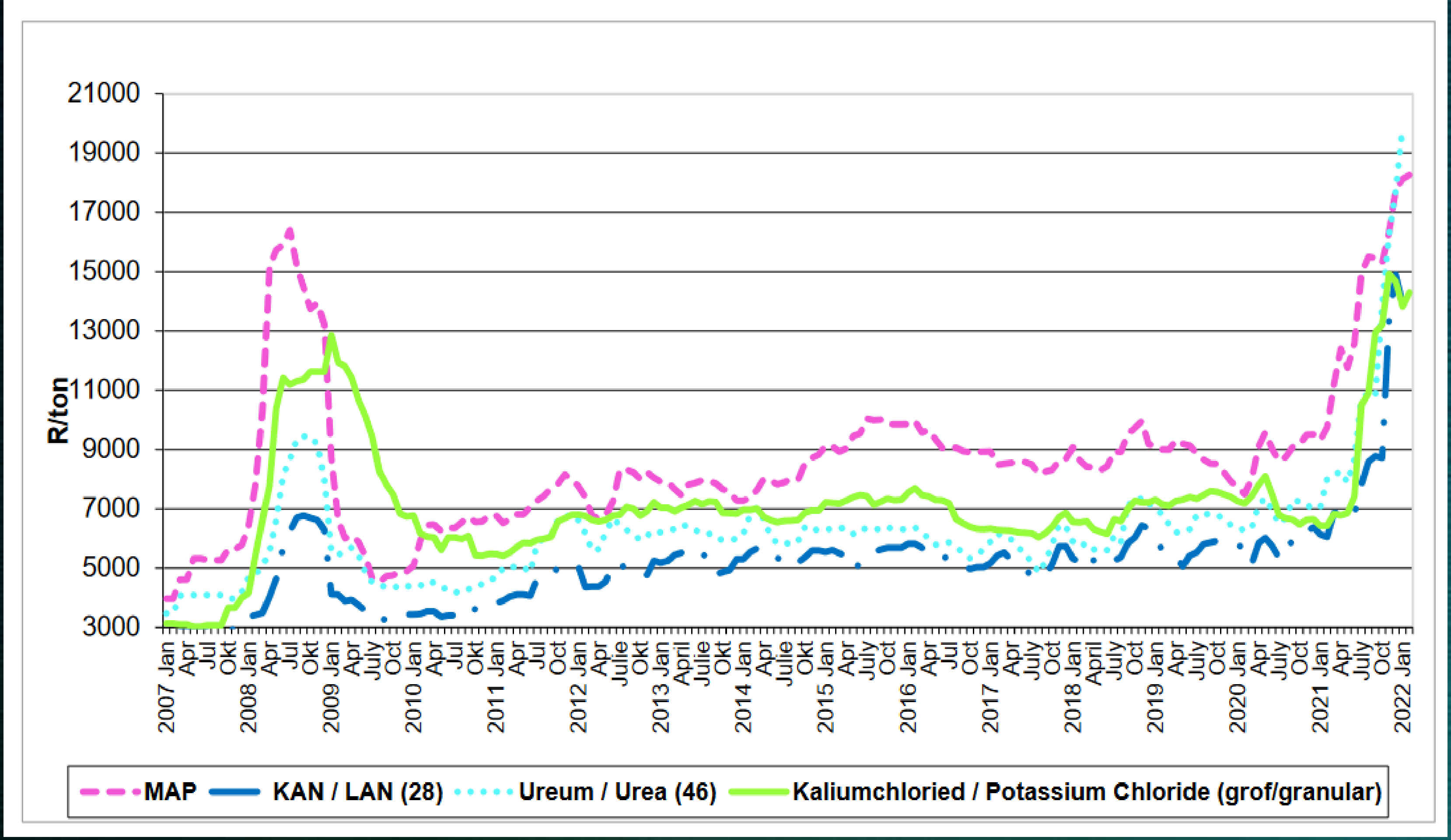


INCREASE IN UNPROCESSED MILK PURCHASES RELATIVE TO PREVIOUS YEAR (PERCENT)[16)]									
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
4.5	2.22	2.65	6.32	-0.45	3.02	4.82	0.65	-0.16	-0.92

14) *Graph prepared by the Office of SAMPRO based on information obtained from Statistics SA and SAFEX middle of the month prices.*
15) *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.*
16) *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 7[17)]

FERTILIZER PRICES IN SOUTH AFRICA FROM JANUARY 2007 TO FEBRUARY 2022



17) *Graph published by Grain SA*

Table 6[20)]

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) PERCENT	CHANGE IN RETAIL PRICES 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

20) *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 7[21)]

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

21) *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 8[22)]

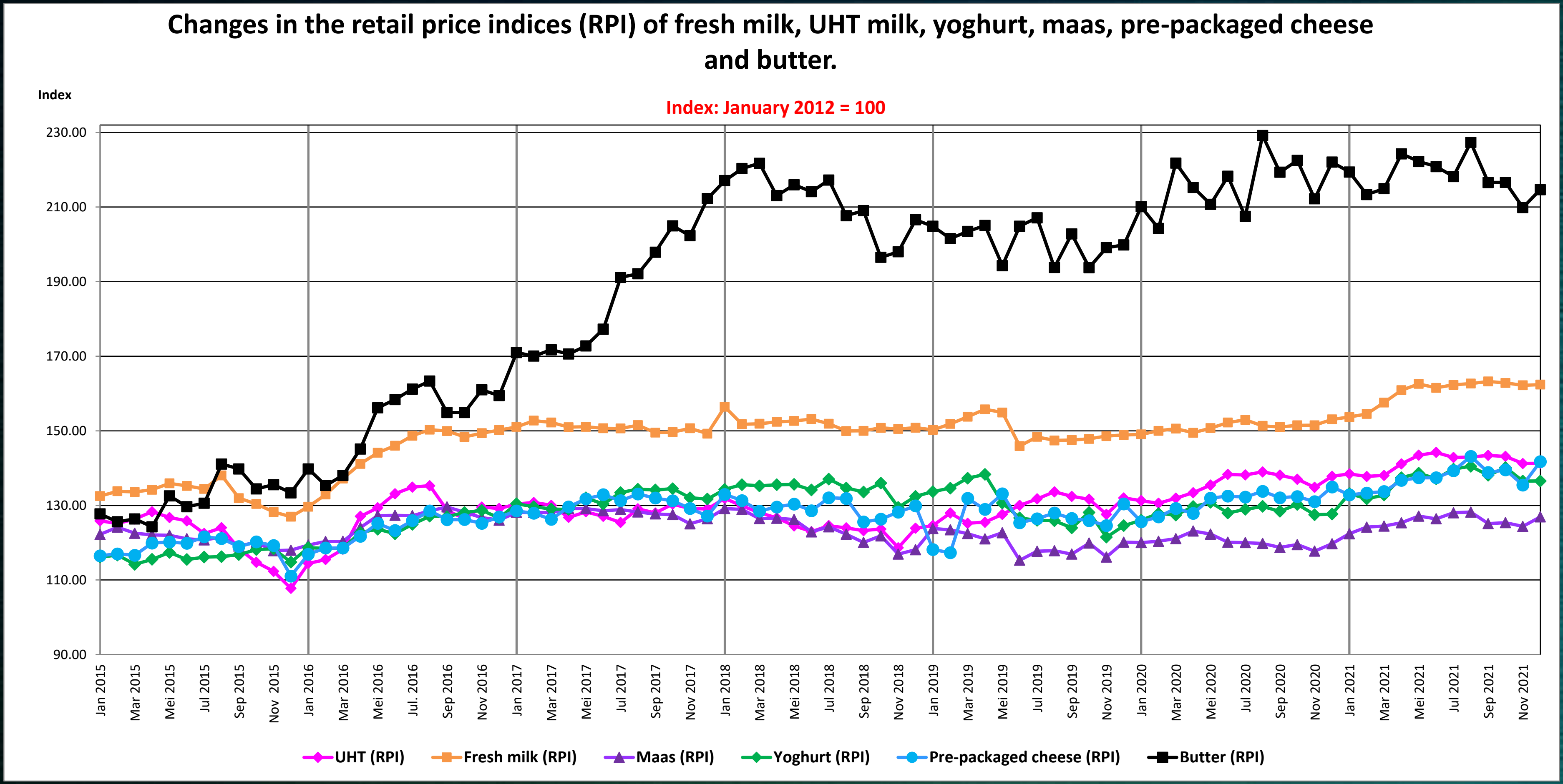
THE AVERAGE RETAIL PRICES OF SPECIFIC DAIRY PRODUCTS IN DECEMBER 2021, COMPARED TO THE AVERAGE RETAIL PRICES OF THE PRODUCTS CONCERNED IN SPECIFIC PREVIOUS MONTHS OF 2019 AND 2021

PRODUCT	December 2021 versus November 2021 (1 month ago)	December 2021 versus September 2021 (3 months ago)	December 2021 versus June 2021 (6 months ago)	December 2021 versus March 2021 (9 months ago)	December 2021 versus December 2020 (12 months ago)	December 2021 versus June 2020 (18 months ago)	December 2021 versus December 2019 (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

22) *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 10[23)]

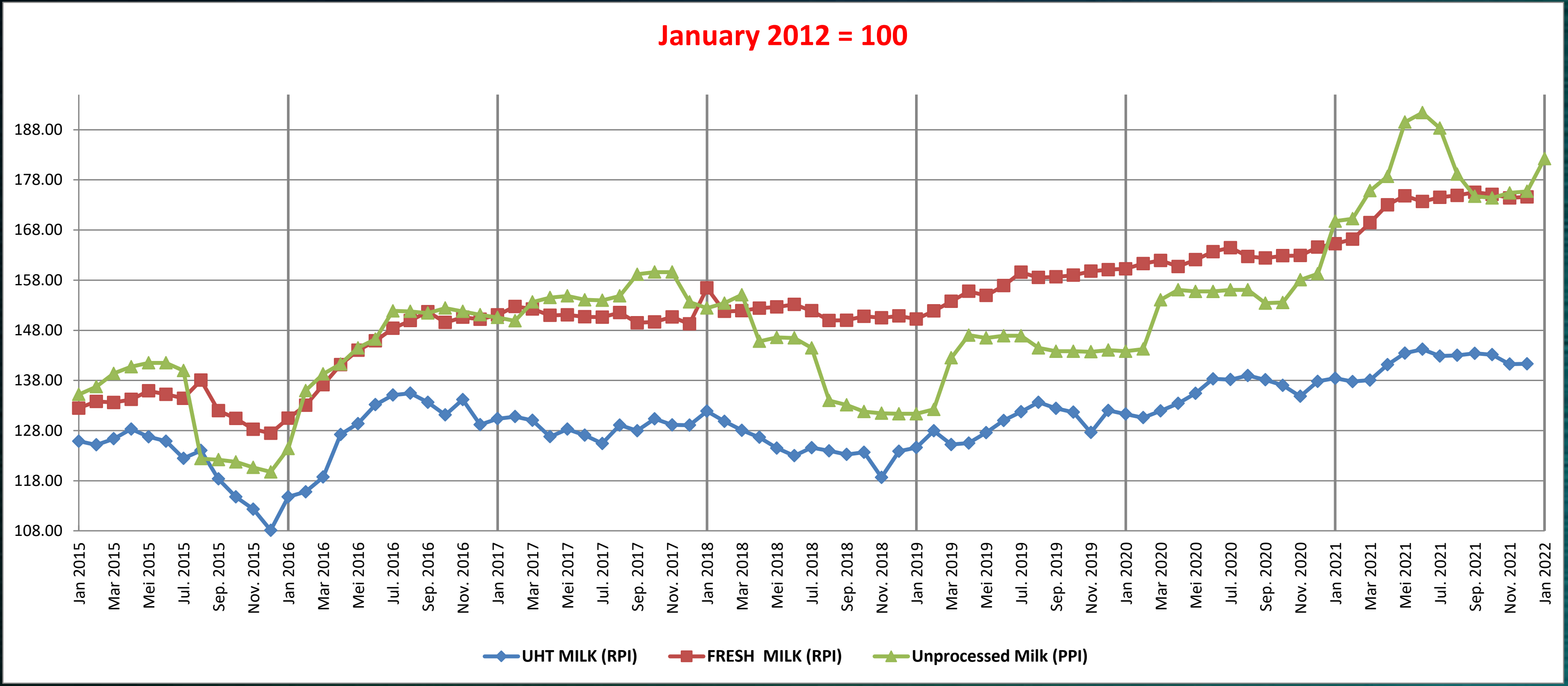
THE RETAIL PRICE INDICES (RPI) OF SPECIFIC DAIRY PRODUCTS, FROM JANUARY 2015 TO DECEMBER 2021



23) *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 11[24)]

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

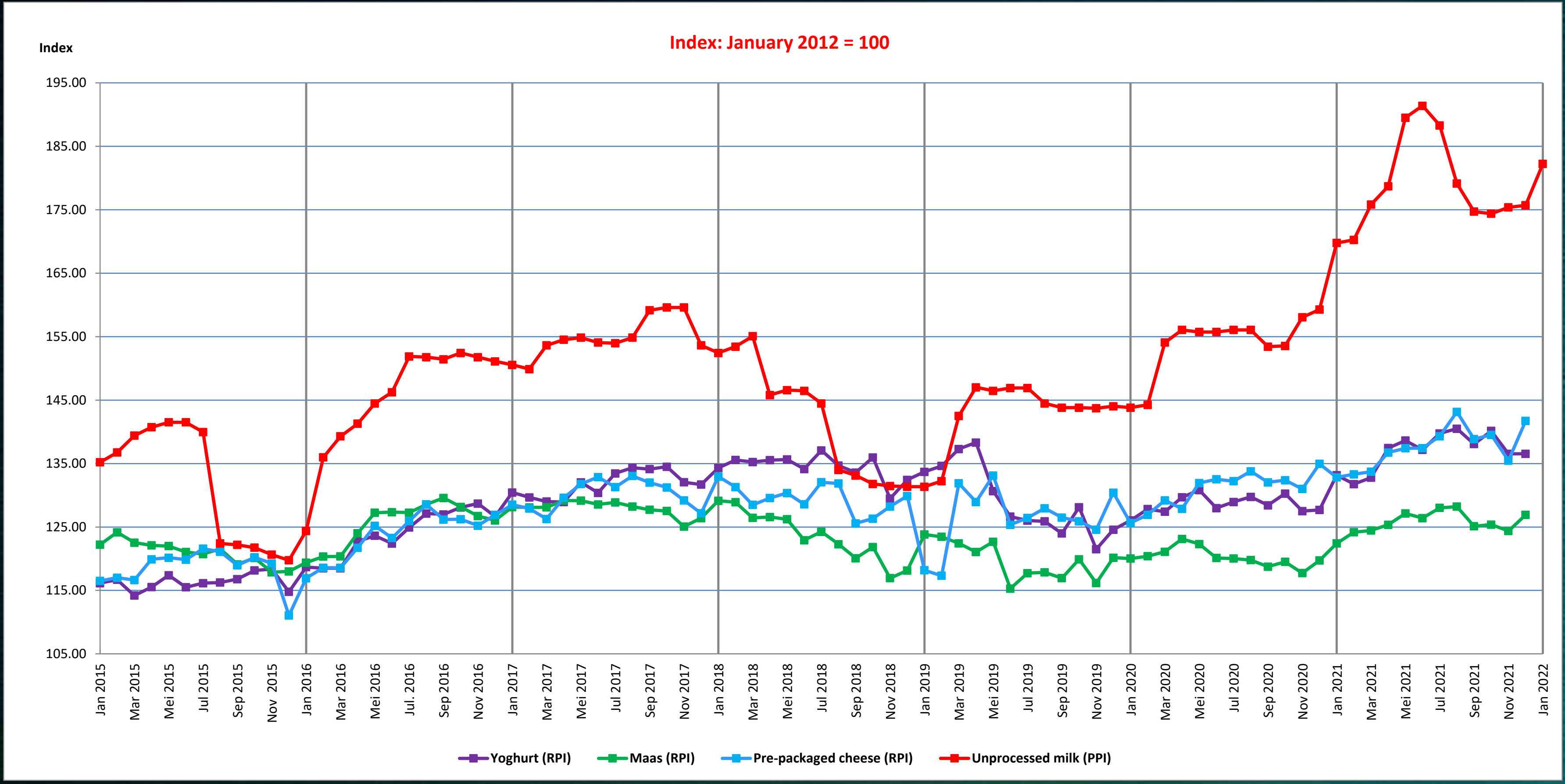


INCREASE IN UNPROCESSED MILK PURCHASES RELATIVE TO PREVIOUS YEAR (PERCENT)[25)]						
2015	2016	2017	2018	2019	2020	2021
6.32	-0.45	3.02	4.82	0.65	-0.16	-0.92

24) Graph prepared by the Office of SAMPRO based on information obtained from NielsenIQ and Statistics South Africa.
25) 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 12[26)]

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



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6.32	-0.45	3.02	4.82	0.65	-0.16	-0.92

24) Graph prepared by the Office of SAMPRO based on information obtained from NielsenIQ and Statistics South Africa.
25) 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 9[28)]

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

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

5. THE CHALLENGES FOR THE SOUTH AFRICAN DAIRY INDUSTRY

- **The South African dairy industry, like many other South African industries, is 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 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 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).**

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.**

In addition, the industry should continue with its collective efforts through the organised dairy industry in respect of, for example:

- **The promotion of the quality of dairy products (The work of Dairy Standard Agency);**
- **The maintenance and development of functional compositional, food safety and metrology standards;**
- **Transformation;**
- **Consumer Education;**
- **Foreign Trade Dispensation;**
- **Protection of the integrity of dairy products;**
- **Protection of the environment;**
- **The promotion of animal welfare, including animal health; and**
- **Functional research.**