



## **Key Market Signals in the Egg Industry**

**For the  
fourth quarter of 2016**

**4Q 2016**

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## 1. EXECUTIVE SUMMARY

### *Pullets and laying hens*

A total of 6 208 709 day-old pullets was produced during the fourth quarter of 2016 (4Q 2016). This was 4.5 % more than 3Q 2016 but 1.8 % less than 4Q 2015.

The average number of laying hens during 4Q 2016 was 24 440 393. This was a decrease of 1.2 % compared to 3Q 2016 and a decrease of 1.9 % compared to 4Q 2015.

### *Egg production*

Total egg production during 4Q 2016 was 5 266 387 cases. This was a 1.5 % decrease compared to 3Q 2016 and a 2.2 % decrease compared to 4Q 2015. The average production per week for 4Q 2016 was 400 690 cases.

### *Egg imports*

During 4Q 2016, 99.6 % of egg imports into South Africa were dried egg products (on three tariff lines). The dried egg products comprised 46 350 kg dried egg albumin, 29 600 kg dried egg product (not including yolk) and 1 250 kg dried egg yolks. Liquid egg products totalled 221 kg on three tariff lines. Shell egg imports (chicken) amounted to 26 kg in 4Q 2016. Total egg imports in the 4Q 2016 reached 77 547 kg; at a rand value of R8.14 million.

In the 4Q 2016, imports from Italy accounted for 57.4 % of total imports; whilst 41.4 % came from France and 1.2 % came from Germany, Denmark, Japan, and Taiwan.

Through 2016, egg imports into South Africa totalled 216.5 t; down 37 % on 2015 levels (342.7 t). Egg imports were valued at R26.89 million (FOB) in 2016. Dried egg products (including albumins) accounted for 99.6 % of egg imports into South Africa in 2016.

### *Egg exports*

During 4Q 2016, a total of 4 183 tonnes of eggs and egg products left South Africa, at a declared FOB value of R88.9 million. This tonnage increased by 18.7 % compared to the 3Q 2016 (+ 659 tonnes).

Of these total egg exports, fertile chicken eggs accounted for 1 854 t. This is 240 t (- 11.5 %) less than in the previous quarter and 553 t (- 23 %) less than the same quarter in the previous year (Q4 2015). The FOB value of fertile chicken egg exports in the 4Q 2016 was R51 million. In addition to fertile chicken eggs, SARS reports that 311 t of fertile eggs from ducks, geese or guinea fowl were exported, at an FOB value of R1.9 m. SAPA has queried this record.

Besides fertile eggs, a total of 2 016.6 t of egg products (shell eggs, liquid and dried egg products included) were exported from South Africa in the 4Q 2016, at a declared FOB value of R 36 million. This is 634 tonnes more than in 3Q 2016 (45.9 % increase); but 861 t less than in 4Q 2015 (29.9 % decrease). Egg product exports during the 4Q 2016 comprised: 9.2 % dried egg product; 4.1 % liquid egg product; 84.5 % shell eggs from chicken (0407.2110; 2190;

9020; 9090); and 2.2 % shell eggs from other sources excluding ostrich (0407.2990). The total tonnage and value of egg products above excludes 1 543 kg of ostrich eggs exported under tariff code 0407.9010 at an FOB value of R43 576.

The main countries of destination for South African exports of eggs and egg products during 4Q 2016 were Mozambique (71.6 % of exports), Lesotho (8.5 %), Swaziland (8.1 %), Zimbabwe (4.6 %), Angola (1.5 %), Philippines (1.5 %), Namibia (1.2 %), Cote d'Ivoire (0.7 %); French Polynesia (0.7 %); Botswana (0.4 %) and others (1.3 %).

### ***Egg prices: producer***

The monthly average egg producer price for December 2016 was R13.81 per dozen. Compared to November 2016, the egg price increased by 8.0 % and, on a year-on-year basis, it increased 2.0 %. The quarterly average egg producer price for 4Q 2016 was R13.01 per dozen; a decrease of 2.6 % over 3<sup>rd</sup> quarter 2016 prices and a decrease of 0.2 % compared to the 4Q 2015.

During December 2016, the average egg price for *graded* eggs (excluding barn eggs and free range eggs) was R14.60 per dozen, an increase of 6.5 % in comparison with November 2016 and an increase of 1.6 % when compared to the same month in the previous year. The quarterly average egg producer price for *graded* eggs in 4Q 2016 was R13.78 per dozen; a decrease of 4.0 % over 3Q 2016 prices.

The average egg price for *ungraded* eggs was R12.05 per dozen in December 2016, a 10.4 % increase when compared to November 2016 and an increase of 6.6 % on December 2015 prices. The quarterly average egg producer price for *ungraded* eggs in 4Q 2016 was R11.29 per dozen; a decrease of 1.5 % over 3<sup>rd</sup> quarter 2016 prices.

The average egg price for 2016 was R12.84 per dozen; an increase of 6.4 % over the average price for 2015 (R12.07). Graded eggs have averaged R13.61 per dozen and ungraded eggs have sold at R11.16 per dozen. During 2016, 70 % of eggs were sold graded and 30 % ungraded.

### ***Cull price***

The average price for cull laying hens was R25.00 in December 2016, a 5.8 % decrease when compared to November 2016 and a decrease of 16.7 % on December 2015 prices. The average price for cull laying hens in the 4Q 2016 was R26.53 and for 2016 was R27.84; an increase of 0.22 % over the average price for 2015 (R27.78).

### ***Egg prices: retail***

During December 2016, the average retail price for eggs, size large, was R24.24 per dozen and the average producer price was R15.53 (Stats SA). The mark-up between producer and retailer was 56.1 %. The retail price decreased by 1.6 % on a year-on-year basis, while the producer price increased by 1.7 %.

On a quarterly basis, the average retail price for eggs, size large, was R24.40 per dozen and the average producer price was R14.85 (Stats SA). The retail mark-up on producer prices was 64.3 %. The retail and producer price decreased by 1.6 % and increased by 1.3 % on a quarterly basis, respectively.

On an annual basis, the average retail price for eggs, size large, was R23.10 per dozen in 2015 and the average producer price was R14.03 (Stats SA). In 2016, the average retail price was R24.60 and the average producer price was R14.59. The retail mark-up on producer prices was 64.6 % in 2015 and is 68.7 % in 2016. In 2016, the retail and producer price increased by 6.5 % and 4.0 % over 2015 prices, respectively.

### ***Egg prices in comparison with chicken, beef and pork***

Eggs and poultry meat remain the most affordable of all protein sources. In 2016, the average egg price was R18.29 per kg, the average beef producer price at the abattoir (A2/A3 carcass price; excluding the fifth quarter) was R37.79 per kg; the average producer price of class C2/C3 beef was R31.11/kg and the average pork price (all classes) was R24.36/kg. The average producer price for broilers (total realisation) for 2016 was R18.92 per kg.

In 4Q 2016, the average egg producer price was R18.51 per kg; the average beef producer price at the abattoir (A2/A3 carcass price, excluding the fifth quarter) was R37.62 per kg; the average producer price of class C2/C3 beef was R33.69/kg and the average pork price (all classes) was R26.11/kg. The average producer price for broilers (total realisation) for 4Q 2016 2015 was R20.69 per kg.

### ***Feed prices***

The monthly average feed price indicator for December 2016 was R4 077 per tonne. It decreased by 2.3 % on a monthly basis but increased by 13.9 % on a year-on-year basis.

The average layer feed price indicator for 4Q 2016 was R4 116 per tonne; a decrease of 1.3 % in comparison with the previous quarter but an increase of 16 % in comparison with the same quarter in the previous year.

The average feed price for 2016 was R4 069; an increase of 18.9 % over 2015. The average feed price for 2015 was R3 422; an increase of just 0.5 % over 2014.

### ***International economic outlook for the egg industry***

Avian influenza and hen welfare have been filling column inches in the global egg industry press in the first quarter of 2017.

After a gradual recovery from the effects of the 2015 avian influenza outbreaks, the poultry industry worldwide faces another year of trade disruptions and challenges after HPAI once again spread across the wintery northern hemisphere. The French suffered repeated outbreaks of highly pathogenic avian influenza through 2016 and did not export to South Africa for much of the year. The French were due to regain HPAI-free status in December 2016 but, since 25 November, they have had to report a further 347 outbreaks of H5N8 HPAI, which have resulted

in the culling of over 1.24 million birds in the districts of Landes, Hautes-Pyrenees, Gers, Pyrenees-Atlantique, Lot-et-Garonne, Aveyron and Tarn (OIE). France is certainly bearing the brunt of the latest HPAI epidemic. The most recent update to the Dutch HPAI report was on 1 February 2016, and totalled 48 outbreaks (298 cases). A second event has increased to nine farms, totalling 3 658 cases in Flevoland, Friesland, Overijssel, Gelderland and Zuid-Holland. Over 210 000 birds have been culled. Since 7 December 2016, Germany has notified the OIE of a 141 outbreaks of H5N8 HPAI in wild birds and commercial poultry. Over 340 000 birds have been destroyed as part of control measures. Germany has also reported three outbreaks of H5N5 HPAI in breeding and fattening turkeys in the Schleswig-Holstein district, beginning on 22 January 2017.

Since 1 December 2016, Hungary has reported 280 outbreaks (169 685 cases) of H5N8 HPAI in poultry operations housing fattening turkeys, geese and ducks. Almost 1.7 m birds have been culled. In total, the UK has reported 27 outbreaks, consisting of 5880 cases in commercial birds and 178 in wild birds. The Department for the Environment, Farming and Rural Affairs (DEFRA) has announced that all poultry must be housed until 16 March 2017, or prevented from coming into contact with wild birds. Since November 8, Danish veterinary authorities have reported 36 outbreaks of H5N8 HPAI in wild birds and in one small backyard poultry flock. Denmark reclaimed its HPAI-free status on 22 February 2017. On 18 February, highly pathogenic H5N8 was found on a commercial duck farm in the Spanish province of Catalonia. A pre-emptive cull of 17 077 birds followed the death of 723 ducks. Poland have now reported a total of 117 outbreaks of HPAI (54 565 cases) in wild birds, backyard flocks and commercial poultry. Almost 980 000 birds have been culled in response to the outbreak, which is on-going.

In 2017 to date, there have also been reported cases of highly pathogenic avian influenza (H5N8) in Bulgaria, Bosnia and Herzegovina, Cameroon, China, Chinese Taipei, Croatia, Czech Republic, Egypt, , Greece, India, Iran, Israel, Italy, Kazakhstan, Kuwait, Lithuania, Macedonia, Nepal, Nigeria, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Switzerland, Sweden, Uganda and the Ukraine. In addition, the following countries have reported the H5N1 strain: Bangladesh, Cameroon, Cambodia, Côte d'Ivoire, India, Nepal, Niger, Nigeria and Vietnam. China has also reported H5N6, H5N2 and H7N9. Chinese Taipei lays claim to H5N6, along with Japan and Myanmar. The H5N5 strain has been reported in Italy, Serbia and the Czech Republic in 2017. It looks certain that avian influenza will once again play a huge role in world poultry markets through much of this year.

In the 4Q 2016, welfare issues making the global egg industry news included disposal of male laying-type chicks, the on-going cage-free revolution and changes to welfare codes of practices at global (OIE) and national level (Australia).

In late February, the Guardian ran an article entitled "*Don't be fooled by the pretty box: find out the horror behind your eggs*". The article deals with an activist report on egg production practices, which brings the public's attention to the culling of 40 million chicks per year in the UK alone. It is estimated that almost 220 million day old male chicks have to be culled every year in the US and 12 million in Australia. "Big Egg" in Australia is currently under pressure to end the practice, even though the practice is endorsed by the RSPCA there (Sydney Morning Herald).

Globally, the number of chicks culled is several billion a year ([www.poultrysite.com](http://www.poultrysite.com)). It is in everyone's best interest to remedy this problem as soon as possible. The technology to allow sexing of chicks *in ovo* is perhaps only months from being commercially viable.

The cage-free revolution has now reached New Zealand, with supermarket chain Countdown pledging to sell only eggs from cage-free hens in its North Island stores by 2024, and in the South Island stores by 2025. In the kind of relationship which is necessary for cage-free pledges to work, the retailer has been working with suppliers for two years to plan the transition. An Egg Producer Programme started by Countdown guarantees farms a market for their produce if they make the leap to cage-free production ([businesscoop.co.nz](http://businesscoop.co.nz)).

Australia is in the process of revising its Animal Welfare Standards and Guidelines for Poultry, which should lead to consistent legislation across territories. Draft guidelines are with the Animal Welfare Task Group (AWTG) and are expected to be published for public consultation in 2017. The review is supposed to develop standards which reflect the latest science, recommended industry practices and consumer expectations. The RSPCA has recently threatened to withdraw from the process as they see the guidelines as being heavily influenced by industrial egg producers who are opposed to the phasing out of battery cages ([ABC.net.au](http://ABC.net.au)).

The World Animal Health Organisation (OIE) is drawing up guidelines on International Laying Hen Housing Systems, as part of its complete Code for Terrestrial Animals. The International Egg Commission (IEC) is working with the OIE in the drafting of this new code. The IEC's position and response is being co-ordinated by the Animal Welfare Working Group which includes Kevin Lovell, the SAPA CEO, along with representatives from Canada, the US, the UK, Colombia, the Netherlands and India. A first draft is currently under discussion and is expected to be presented at the IEC Business Conference in Monte Carlo in early April 2017, where the code's impact on the global egg industry will be explored.

The forecast for US table egg production in 2016 has increased slightly to 8.565 billion dozen (USDA WASDE). Production for the year is likely to be 6.4 % higher than in 2015 (8.053 billion dozen). Predicted annual egg prices for 2016 and 2017 remain subdued at 85.7 and 88 – 93 c/dozen, respectively (Grade A, New York). First quarter US prices (85.7 c/dozen) are around 34 % lower than 1Q 2016 prices and 55.7 % lower than the 2015 average price.

Egg exports from the US dropped from 313.6 million dozen in 2015 to 279.2 million dozen in 2016 (WASDE projection), but are expected to increase to 305 million dozen in 2017 (still 19 % below 2014 levels). Imports of 122.1 million eggs are estimated for 2016 but are expected to drop steeply in 2017 to 60 million dozen. US consumption of eggs is predicted to recover from 256 eggs per person per year in 2015 to 274.7 eggs in 2016 (USDA).

Egg consumption in the UK is soaring. The British ate 9 % more eggs in the year to October 2016. Egg consumption in the UK is at the highest level since the late 1980's, with per capita consumption estimated at 192 eggs per person per year in 2016 ([egginfo.co.uk](http://egginfo.co.uk)). In November and December 2016, UK egg prices finally began to climb again, after a long-term collapse from about £1.48 in 2010 to 85 p a dozen in 2016 ([theguardian.com](http://theguardian.com)). In the 4Q 2016, the farm gate price increased to 71.4 p/dozen (still 12 % lower than 4Q 2015).



In the EU, egg production (for consumption) in 2016 totalled 6.75 billion dozen (EC CIRCABC); 1.2 % higher than in 2015. Production is forecast to reach 6.79 billion dozen in 2017 (+ 0.58 %). The average EU Class A egg price increased from €101/100 kg in early August to €129/100 kg in December. Despite this steady climb in prices in 2H 2016, packing stations prices for Class A eggs were 8.3 % lower in December 2016 than the 2011 – 2015 long-term average. In the 1Q 2017, EU egg prices have averaged €124/100 kg; 4.9 % up on 4Q 2016 prices but still below 2014/2015 prices, and solidly below the rebased 2012 - 2016 average. The recent climb in prices since mid-2016 reflects strong demand and some disruption in supply because of HPAI outbreaks.

Imports of shell eggs into the European Union were up 42 % in 2015, to 19 304 tonnes (egg equivalent) but dropped by 11 % in 2016 to 17 137 tonnes (ec.europa.eu). The EU is a net exporter of eggs, with a trade balance of 246 947 tonnes of exports to 17 137 tonnes of imports in 2016 (egg equivalent; EU Commission). In 2016, EU egg exports to third parties decreased by 12 %.

The outbreak of avian influenza in South Korea has necessitated a cull of some 33 % of the country's laying flock (thepoultrysite.com). New Zealand, Australia and the US all took advantage of the shortage of brown eggs as South Korea celebrated its lunar New Year. The US was well-placed to quickly supply eggs to the Koreans, because of domestic over-production in 2016, but outbreaks of HPAI in Tennessee have now closed this export opportunity. New Zealand exports to South Korea will be limited to about 10 000 dozen a week, but the Australians hope to send AUD 20 million worth of eggs to the Asian country in 2017 (thepoultrysite.com).

One of the consequences the most recent outbreaks of HPAI are having on European producers is the loss of their legal right to label their produce as free range if birds have been housed for longer than 12 weeks. Because of EU legislation regarding the definition of free range and national directives to house hens in order to keep them away from wild birds, free range producers have to put stickers on their packaging to explain that the eggs may come from "barn-reared birds" during this period. Whether they can continue to earn the premium payable on free-range products depends on the market, with Irish producers calling for state support if the premium is lost while they obey compulsory housing orders (agriland.ie).

### ***South African economy***

As a whole, South Africa has limped into 2017. The encouraging economic growth seen in the second quarter 2016 has, as predicted, reduced in the third and fourth quarters and growth looks set to remain stagnant through 2017, with predictable consequences for the unemployment rate. The rand rallied against the dollar in the first two months of 2017 but South Africa woke up on March 31 to find that the Finance Minister and his deputy had been replaced in a cabinet reshuffle. The rand and markets are now in free-fall and a credit rating downgrade sooner than mid-year seems likely. The year 2016 may go down in local poultry history as the worst in living memory; especially for broiler producers. Maize prices hit record highs following the devastating drought caused by the El Niño weather system and local producers struggled to

remain profitable in the face of weakened consumer demand and escalating feed costs. In comparison with the broiler industry, local egg producers are perhaps in a stronger position but still face challenges as 2017 continues, including:

#### *High feed costs as a hangover of one of the severest droughts on record*

The total rainfall in the period January to December 2015 was the lowest recorded since records began in 1904 (403 mm, compared to a long term average of 608 mm). Poultry feed price inflation is now driven by the exchange rate as the country seeks to import almost 17 % (3.5 million tonnes) of its requirements for maize through the 2016/2017 season. By the end of February, 668 504 t of white maize had been imported in the current season, along with 1.31 million t of yellow maize and maize futures for May delivery of white and yellow maize had crashed to R1 996/t and R2 074/t, respectively. Soybean futures, for May delivery, reached R6 280 in December 2016, before moderating to R5 300/t at the end of February.

#### *Hen welfare*

With McDonald South Africa's announcement that it will follow its parent company's lead and "uncage the Egg McMuffin" in this country by 2025, the cage-free revolution and disposal of male chicks are no longer "horizon issues" for South African producers. The revolution has arrived on our shores and could have profound consequences for producers if they do not recognise, evaluate and respond to it effectively and in good time. The OIE's drafting of a code of practice for the keeping of laying hens is also likely to impact local producers.

#### *Reduced consumer spending in a recessionary environment*

Headline inflation averaged 6.4 % in 2016. Inflation peaked at 6.8 % in the 4Q 2016 and the breach of the target range is forecast to continue until 4Q 2017 (SARB). Food price inflation rose from 5.9 % in December 2015 (SARB) to 11.7 % in October, 11.6 % in November and 11.7 % in December 2016. In January 2017, food price inflation had moderated a little to 11.4 % (NAMC). The unemployment rate in the 4Q 2016 decreased to 26.5 % from 27.1 % in the previous quarter. The expanded unemployment rate, which includes discouraged work-seekers, decreased to 35.6 %. In January, the International Monetary Fund revised its growth forecast for the South African economy to 0.3 % in 2016 and held its growth forecast for 2017 at 0.8 %. Policy uncertainty and education and training concerns underlie the IMF predictions, offset by improvements in power supply and indications that the drought is easing. After a 1.2 % contraction in growth in the 1Q 2016, the economy bounced back to grow by 3.3 % in the 2Q 2016. As predicted, this promising level of growth could not be maintained in the 3Q 2016 (0.2 % q-on-q) and the economy contracted by 0.3 % in 4Q 2016. Agriculture contracted, for the eighth consecutive quarter, by 0.1 %.

#### *A volatile South African rand*

The rand's performance through 2016 was a series of peaks and troughs, the severity of which reduced as the year progressed. Between January 1 and December 15 2016, the rand appreciated by 9 % from post-Nenegate levels of over R16 to the dollar. However, the

rand's value at the end of 2016 was still 22 % below its value on 1 January 2015. Through the first two months of 2017, the rand had strengthened by almost 6 % over the December 31 2016 level; breaking the R13-level in mid-February and closing at R12.92 to the dollar on 23 February. Following Jacob Zuma's decision to axe the Finance Minister and his deputy at the end of March, the rand depreciated by almost 9 % between April 27 and 30 March. The road ahead looks rocky for the currency, the inflation rate, credit ratings and consumer spending.

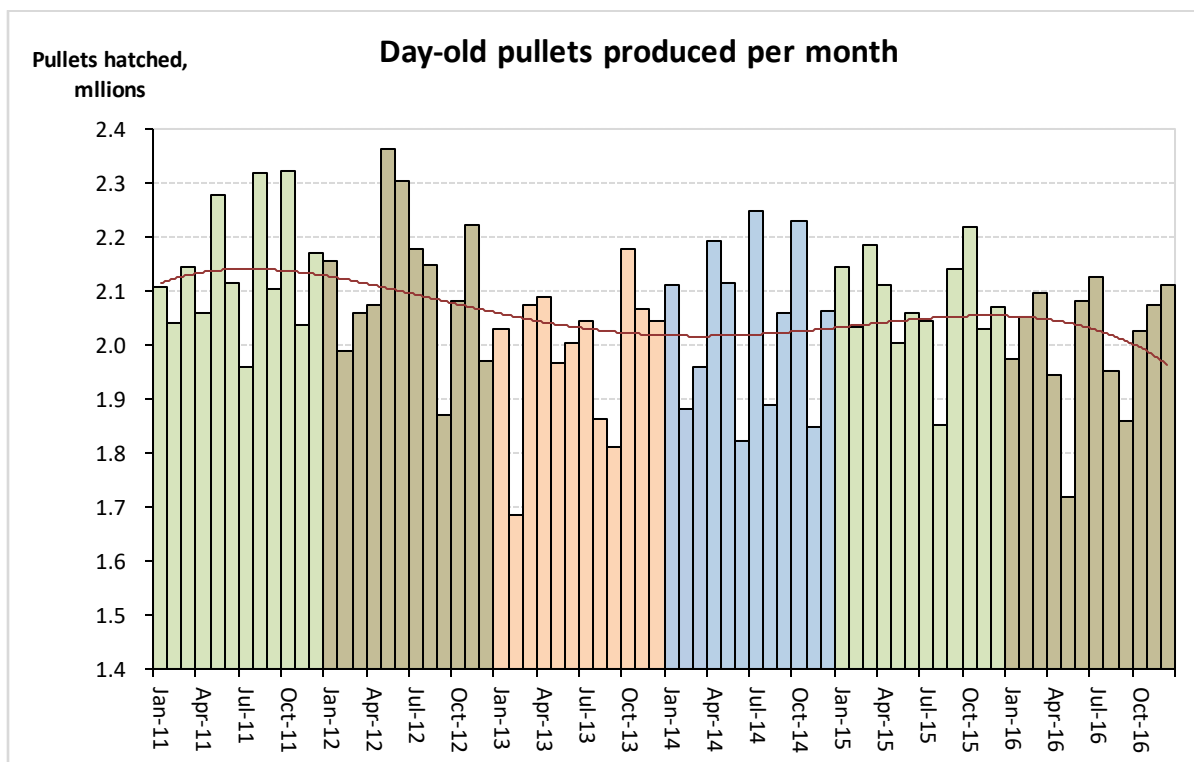
## 2. EGG SUPPLY AND DEMAND 4Q 2016

### 2.1 Egg production

#### ***Day-old pullet production:***

A total of 6 208 709 day-old pullets was produced during the fourth quarter of 2016 (4Q 2016). This was 4.5 % more than 3Q 2016 but 1.8 % less than 4Q 2015.

The weekly average number of day-old pullets hatched for 4Q 2016 was 477 662; 5.9 % more than 3Q 2016 but 0.3 % less than 4Q 2015 (monthly figures given in *Figure 1*).



**Figure 1:** The number of day-old pullets produced per month.

#### ***Projected laying flock:***

The average number of laying hens during 4Q 2016 was 24 440 393. This was a decrease of 1.2 % compared to 3Q 2016 and a decrease of 1.9 % compared to 4Q 2015.

The projected laying flock for April 2017 is 24 184 258 hens; a 3.3 % year-on-year decrease (*Figure 2*).

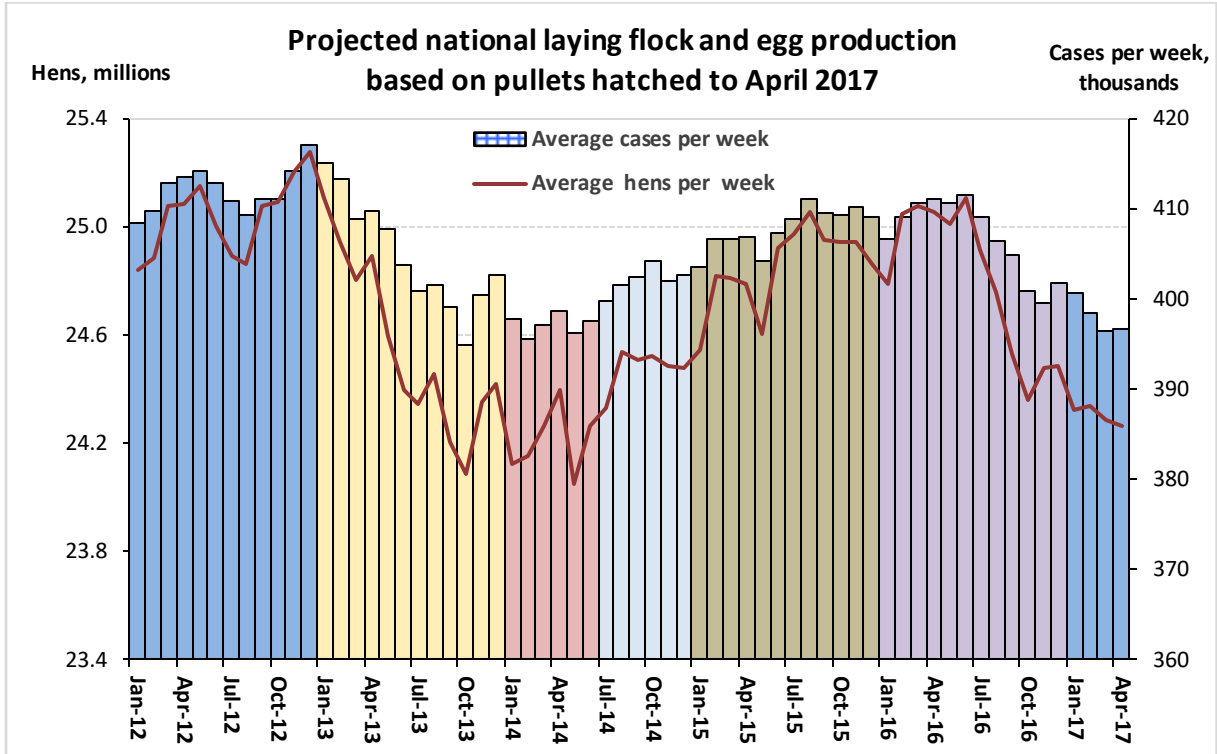


Figure 2: Projected national laying flock and egg production

**Forecasted egg production:**

Total egg production during 4Q 2016 was 5 266 387 cases. This was a 1.5 % decrease compared to 3Q 2016 and a 2.2 % decrease compared to 4Q 2015.

The average production per week for 4Q 2016 was 400 690 cases. Compared to the 3Q 2016, there was a 1.5 % decrease and compared to 4Q 2015 there was a 2.2 % decrease.

**Table 1: Egg industry: key results (December 2016)****(Projections are based on day-old pullets placed per week to December 2016)**

	Hatch days	Calendar Days	Day-old Pullets placed		Laying hens	Eggs Produced (Cases)	
Month on Month	/Month	/Month	/Month	/Week	Average	/Month	/Week
December 2016	22	31	2,110,273	479,607	24,481,273	1,779,267	401,770
November 2016	22	30	2,073,290	471,202	24,479,299	1,711,931	399,451
Change			36,982	8,405	1,974	67,336	2,319
% Change			1.78%	1.78%	0.01%	3.93%	0.58%
Year on Year	/Month	/Month	/Month	/Week	Average	/Month	/Week
December 2016	22	31	2,110,273	479,607	24,481,273	1,779,267	401,770
December 2015	23	31	2,070,460	450,100	24,859,512	1,811,642	409,081
Change			39,813	29,507	(378,239)	(32,375)	(7,311)
% Change			1.92%	6.56%	-1.52%	-1.79%	-1.79%
Year to date	/Period	/Period	/Period	/Week	Average	/Period	/Week
	January>December	January>December	January>December	Jan>Dec	Jan>Dec	Jan>Dec	
2016	261	366	24,021,063	460,740	24,799,834	21,267,831	406,762
2015	261	365	24,901,078	477,385	24,850,899	21,262,344	407,771
Change			(880,015)	(16,645)	(51,065)	5,487	(1,009)
% Change			-3.53%	-3.49%	-0.21%	0.03%	-0.25%
Full year forecasts	/Period	/Period	/Period	/Week	Average	/Period	/Week
Jan>Dec 2015	261	365	24,901,078	477,385	24,850,899	21,262,344	407,771
Jan>Dec 2014	261	365	24,432,190	467,785	24,341,303	20,836,953	399,613
Change			468,888	9,600	509,596	425,391	8,158
% Change			1.92%	2.05%	2.09%	2.04%	2.04%

**NOTE:**

Month or Period: Refers to a calendar month or period

Week: Refers to an average 7 day week of which all 7 days fall within the specified month or period

**ASSUMPTIONS**

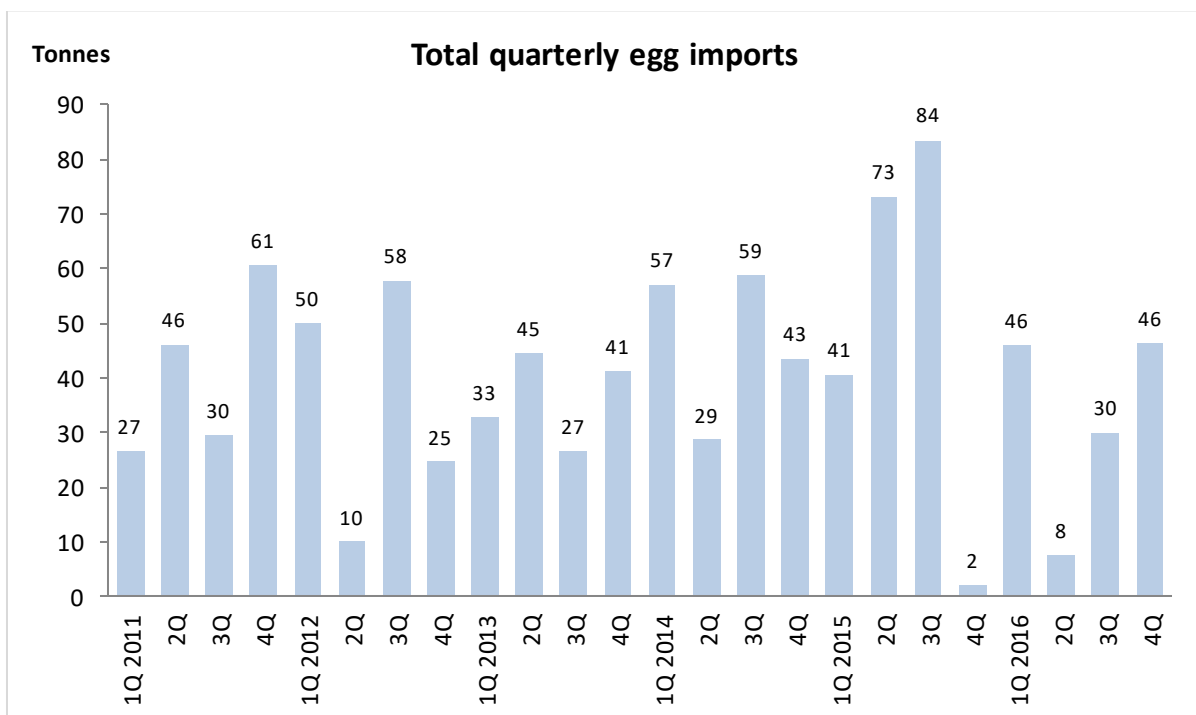
- 1: All surviving day-old pullets placed will be transferred to the laying flock at 18 weeks of age.
- 2: Depopulation age: Feb. 2006 to April 2009 - 69 weeks, April to Aug. 2009 - 70 weeks, Aug. to Nov. 2009 - 71 weeks, Nov. 2009 - 72 weeks and Nov 2013 - 74 weeks
- 3: No deviation from the accepted production standards and procedures, due to disease, changes in production planning, etc. is expected.

## 2.2 Egg imports

During 4Q 2016, 99.6 % of egg imports into South Africa were dried egg products (on three tariff lines). Imports were recorded on the following tariff lines:

46 350 kg	dried egg albumin	(tariff line 3502.1100)
29 600 kg	dried egg product (not including yolk;	tariff line 0408.9100)
1 250 kg	dried egg yolks	(tariff line 0408.1100)
26 kg	fresh chicken eggs ( <i>Gallus domesticus</i> ,	not fertilised)
	tariff line 0407.2190	(value >150 c)
180 kg	raw egg pulp, not chicken	tariff line 0408.9990
134 kg	raw chicken egg pulp	tariff line 0408.9910
7 kg	raw egg pulp, not chicken	tariff line 0408.1900

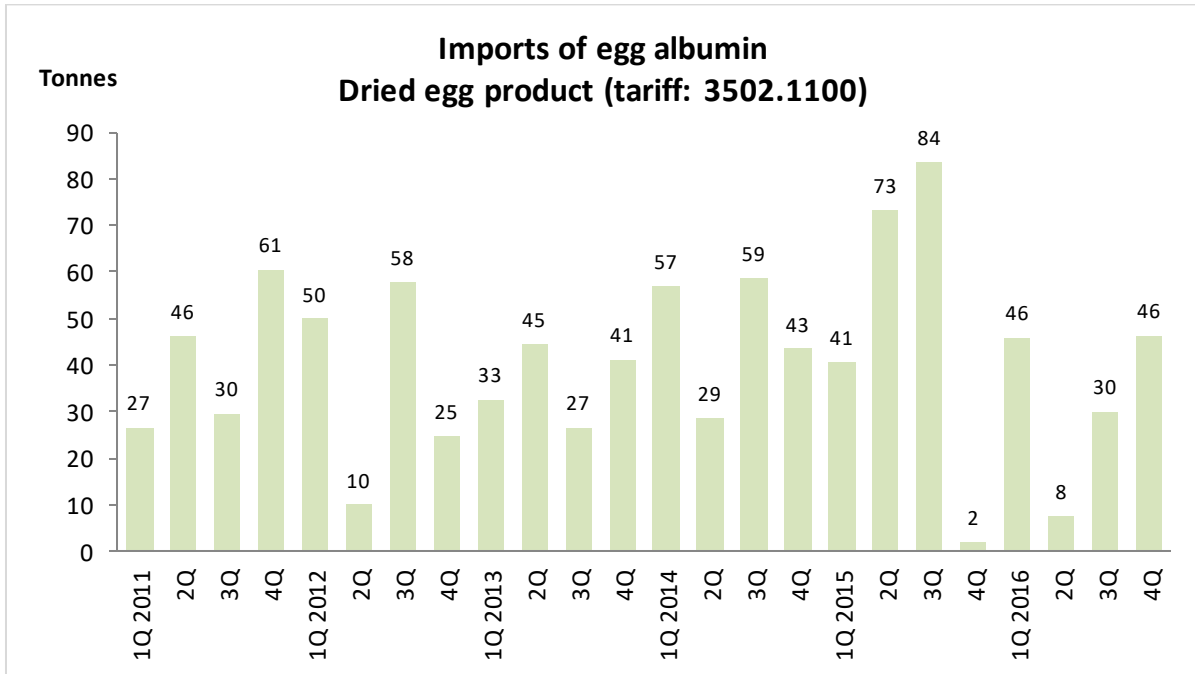
Total egg imports in the 4Q 2016 amounted to 77 547 kg; at a rand value of R8.14 million. Quarterly volumes of total egg imports since 1Q 2011 are given in *Figure 3*. The quarterly imports of dried egg albumin are given in *Figure 4*.



**Figure 3:** Total quarterly egg imports from 1Q 2011

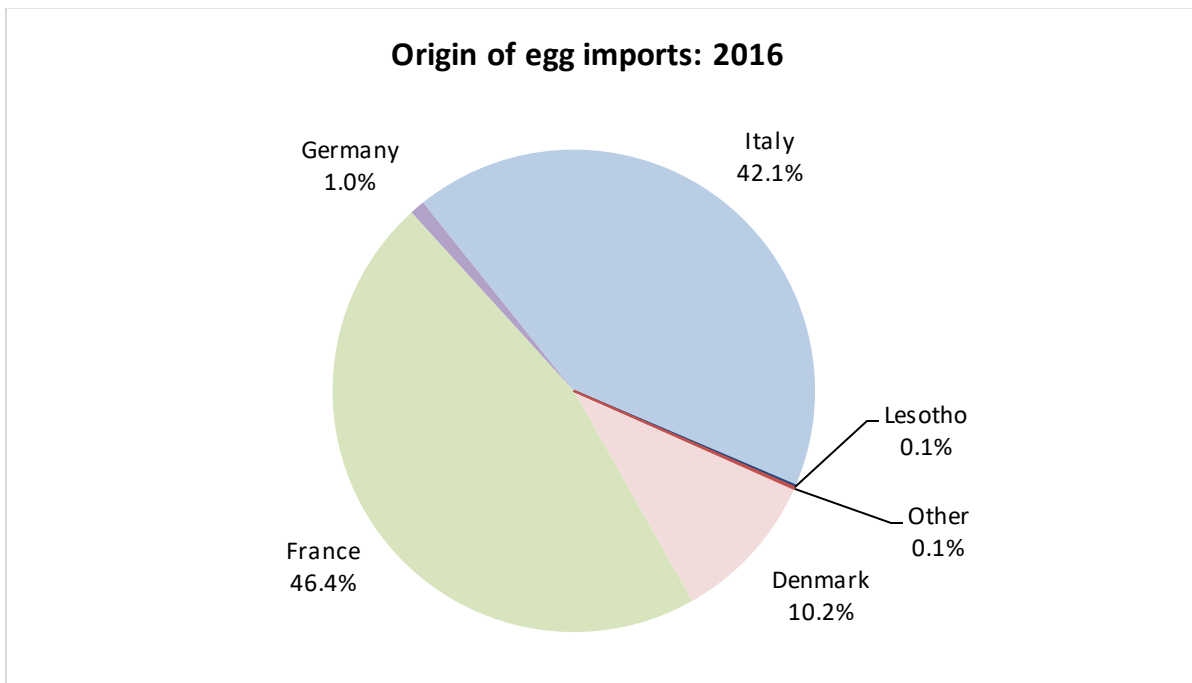
In the 4Q 2016, imports from Italy accounted for 57.4 % of total imports; whilst 41.4 % came from France and 1.2 % came from Germany, Denmark, Japan, and Taiwan.

Through 2016, egg imports into South Africa totalled 216.5 t; down 37 % on 2015 levels (342.7 t). Egg imports were valued at R26.89 million (FOB) in 2016. Dried egg products (including albumins) accounted for 99.6 % of egg imports into South Africa in 2016.



**Figure 4:** Quarterly imports of egg albumin from 1Q 2011

The percentage contribution by the major egg importers to total egg imports for 2016 is shown in Figure 5.



**Figure 5:** The main countries of origin for egg imports (2016; source: SARS).

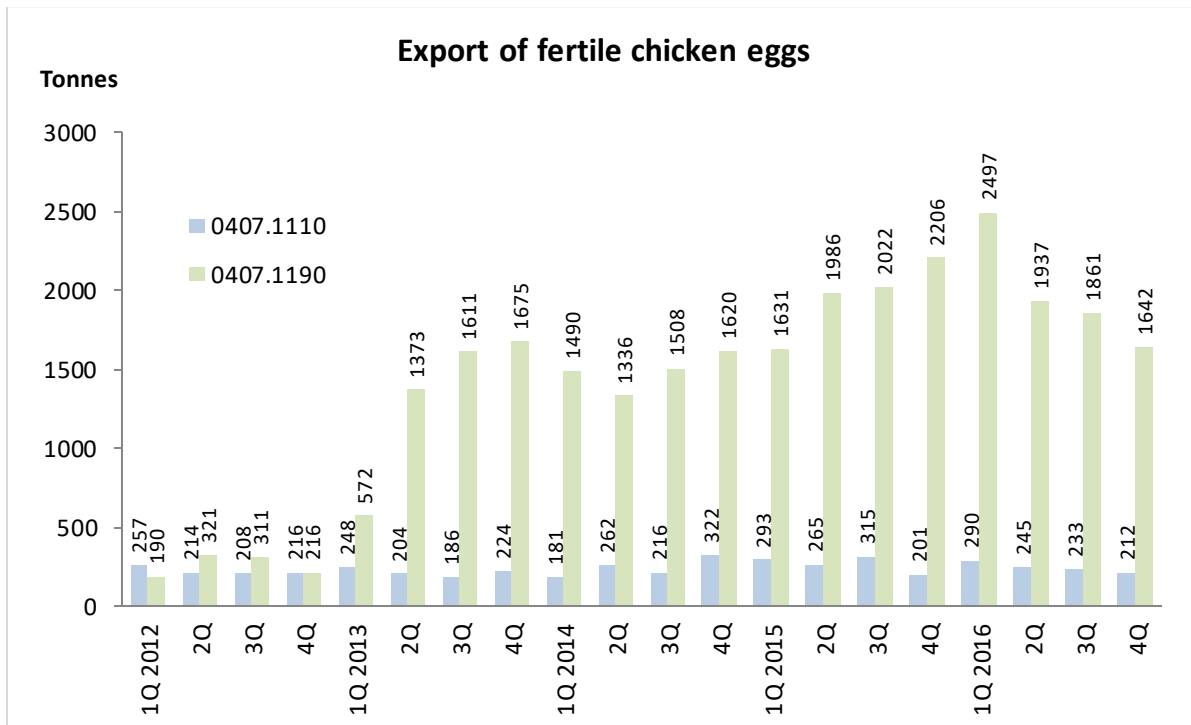


### 2.3 Egg exports

During 4Q 2016, a total of 4 183 tonnes of eggs and egg products left South Africa, at a declared FOB value of R88.9 million. This tonnage increased by 18.7 % compared to the 3Q 2016 (+ 659 tonnes).

Of these total egg exports, fertile chicken eggs accounted for 1 854 t; 44.3 % of the total export tonnage. This is 240 t (+ 11.5 %) less than in the previous quarter and 553 t (- 23 %) less than the same quarter in the previous year (Q4 2015). Fertile chicken eggs were exported under two tariff codes: 212 t and 1 642 t were exported under codes 0407.1110 and 0407.1190, respectively. The FOB value of fertile chicken egg exports in the 4Q 2016 was R51 million. In addition to fertile chicken eggs, SARS reports that 311 t of fertile eggs from ducks, geese or guinea fowl were exported, at an FOB value of R1.9 m. SAPA has queried this record.

The quarterly exports of fertile eggs under these two tariff codes since 1Q 2012 are shown in *Figure 6*.



**Figure 6:** Quarterly export of fertile eggs

The amount of egg products exported during the 4Q 2016 under each of the most regularly used tariff codes (including fertile eggs and shell eggs (fresh, cooked or preserved)) is given in *Table 2*, along with the amounts exported in the previous quarter and in the 4Q 2015.

Besides fertile eggs, a total of 2 016.6 t of egg products (shell eggs, liquid and dried egg products included; *Figure 7*) were exported from South Africa in the 4Q 2016, at a declared FOB value of R 36 million. This is 634 tonnes more than in 3Q 2016 (45.9 % increase); but 861 t less

than in 4Q 2015 (29.9 % decrease). Egg product exports during the 4Q 2016 comprised: 9.2 % dried egg product; 4.1 % liquid egg product; 84.5 % shell eggs from chicken (0407.2110; 2190; 9020; 9090); and 2.2 % shell eggs from other sources excluding ostrich (0.407.2990). The total tonnage and value of egg products above excludes 1 543 kg of ostrich eggs exported under tariff code 0407.9010 at an FOB value of R43 576.

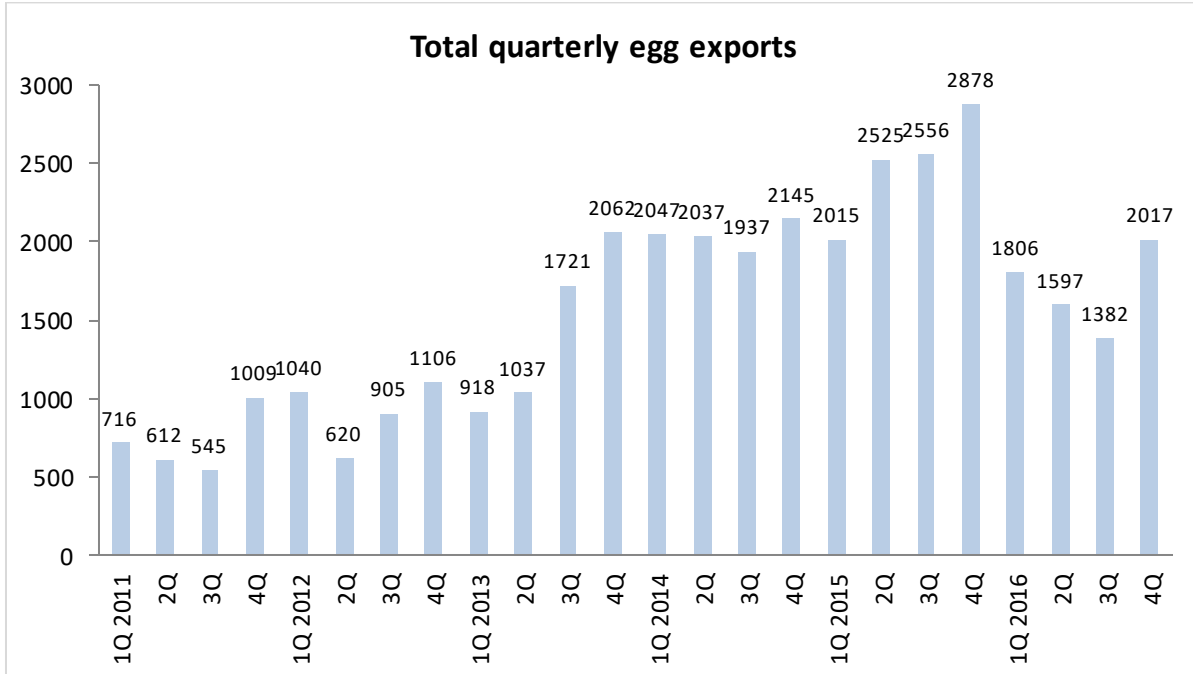
**Table 2.** Quarterly exports of eggs and egg products from South Africa

	Tariff code	units	4Q 2015	3Q 2016	4Q 2016
Fertile eggs	0407.1110/1190	T	2 408	2 094	<b>1 854</b>
Fertile eggs (ostriches)	0407.1910	kg	0	0	<b>0</b>
Fertilised eggs (other: not chicken/ ostrich)	0407.1990	t	28.1	46.0	<b>311</b>
Shell eggs chicken (< 150 c)	0407.2110	t	144.2	8.5	<b>6.1</b>
Shell eggs chicken (>150 c)	0407.2190	t	461.0	199.5	<b>311.0</b>
Shell eggs (ostrich)	0407.2910	kg	0	0	<b>0</b>
Shell eggs (not chicken/ostrich)	0407.2990	t	281	79	<b>45</b>
Ostrich eggs	0407.9010	t	12.0	1.80	<b>1.54</b>
Shell eggs: chicken (fresh, preserved cooked)	0407.9020	t	1 327	632	<b>999</b>
Shell eggs: other (fresh preserved, cooked)	0407.9090	t	387	109	<b>388</b>
Dried egg yolks	0408.1100	kg	134	255	<b>12 939</b>
Liquid egg yolks	0408.1900	t	16.6	22.9	<b>77.3</b>
Dried egg product (not yolks)	0408.9100	t	253	327	<b>171</b>
Raw yolks/whites (chicken)	0408.9910	kg	3 725	400	<b>3 086</b>
Raw yolks/white (not chicken)	0408.9990	t	3.7	3.7	<b>3.2</b>
Dried egg albumin	3502.1100	kg	70	359	<b>970</b>
Liquid egg albumin	3502.1910	kg	0	0	<b>0</b>
Egg albumin, not dried but not liquid	3502.1990	kg	15	35	<b>0</b>

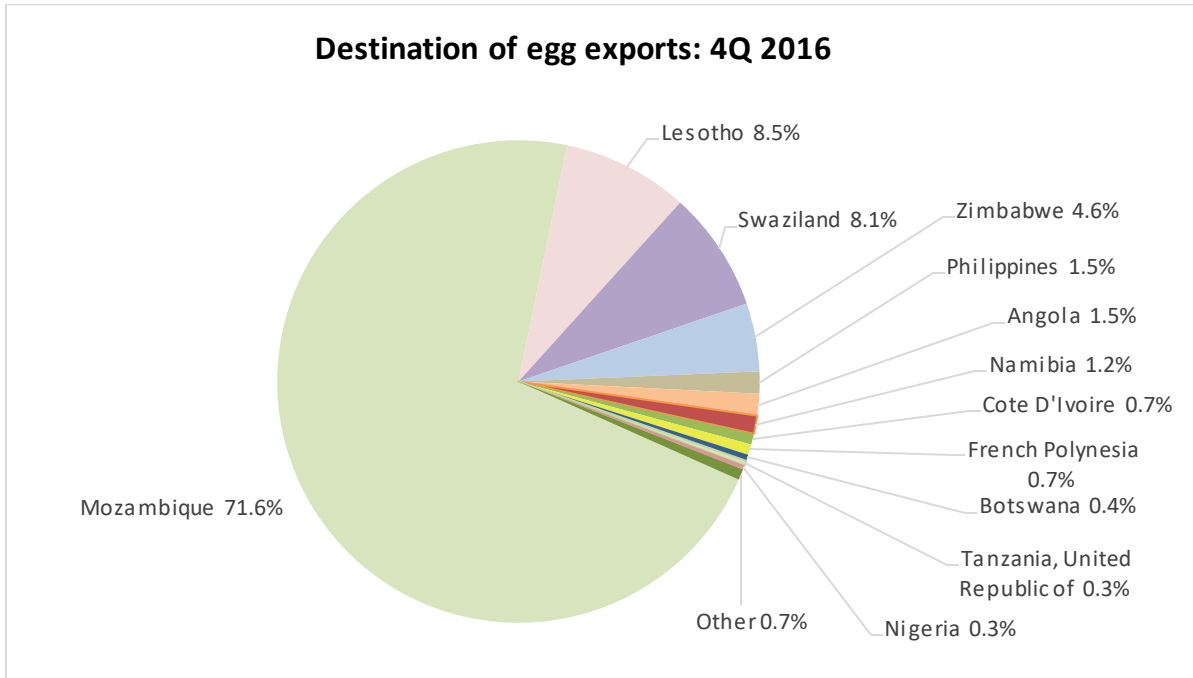
In summary, total egg exports comprised 1 854 t of fertile chicken eggs, 311 t of fertile eggs (not chickens or ostriches), and 2 017 tonnes of egg products (including shell eggs and preserved ostrich eggs). In addition, 1 543 kg of ostrich eggs were exported in the 4Q 2016 under tariff code 0407.9010.

The main countries of destination for South African exports of eggs and egg products during 4Q 2016 were Mozambique (71.6 % of exports), Lesotho (8.5 %), Swaziland (8.1 %), Zimbabwe (4.6 %), Angola (1.5 %), Philippines (1.5 %), Namibia (1.2 %), Côte d'Ivoire (0.7 %); French Polynesia (0.7 %); Botswana (0.4 %) and others (1.3 %) (*Figure 8*).

The main countries of destination during 2016 as a whole were Mozambique (68.3 % of exports), Swaziland (8.7 %), Zimbabwe (7.9 %), Lesotho (7.0 %), Côte d'Ivoire (2.2 %), Namibia (1.8 %) and Angola (1.3 %). In 2016, South Africa exported 8 941 t of fertile chicken eggs; 432 t of fertile eggs from other species; 1 409 t of fresh chicken eggs; 3 958 t of preserved/cooked chicken eggs; 931 t of dried egg products and 123 t of liquid egg products. Total egg exports (excluding ostriches) for 2016 amounted to 16 176 t, valued at R421 million. South Africa also exported 4 613 kg of ostrich eggs in 2016, which were exported under 0407.9010. Ostrich egg exports were valued at R0.264 million.



**Figure 7:** Quarterly total exports of shell eggs and egg product excluding fertile eggs and ostrich eggs (source: SARS)



**Figure 8:** The main countries of destination for egg exports 4Q 2016

## EGG PRICE TRENDS

### 3.1 Producer prices

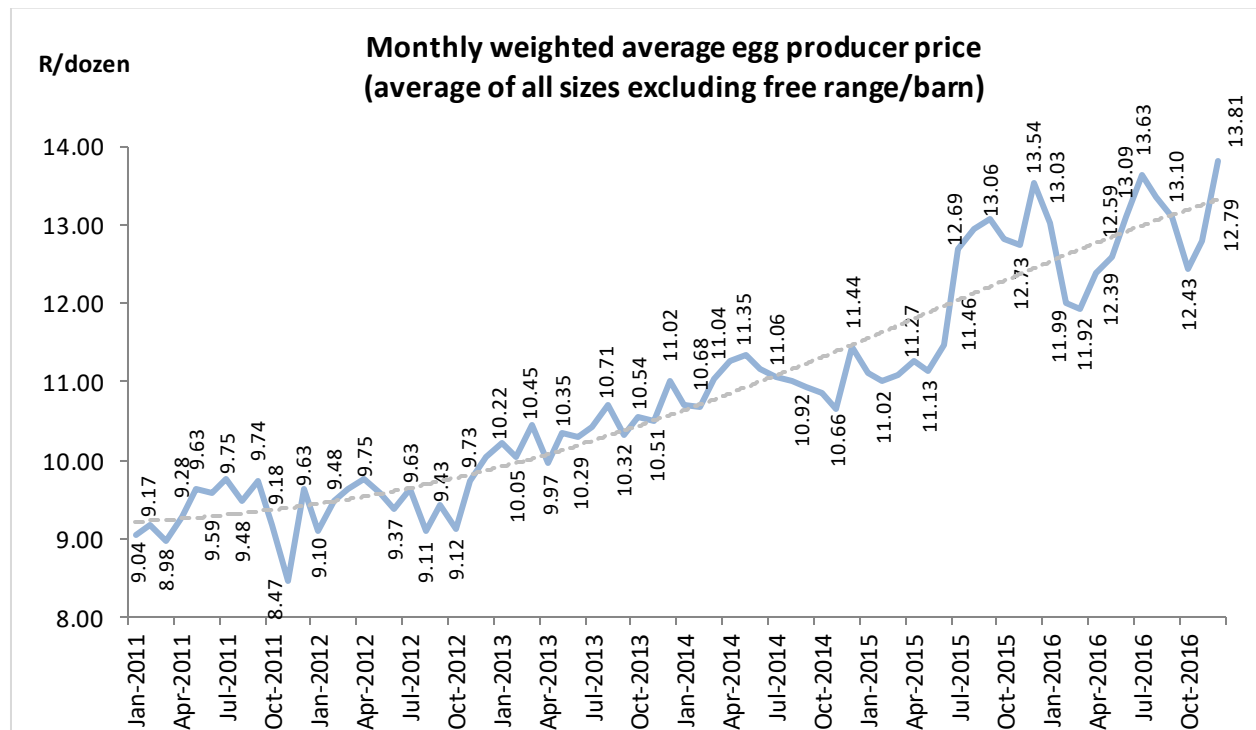
The monthly average egg producer price for December 2016 was R13.81 per dozen (*Figure 9*; source: SAPA). Compared to November 2016, the egg price increased by 8.0 % and, on a year-on-year basis, it increased 2.0 %. The quarterly average egg producer price for 4Q 2016 was R13.01 per dozen; a decrease of 2.6 % over 3<sup>rd</sup> quarter 2016 prices and a decrease of 0.2 % compared to the 4Q 2015.

- Graded egg prices

During December 2016, the average egg price for *graded* eggs (excluding barn eggs and free range eggs) was R14.60 per dozen, an increase of 6.5 % in comparison with November 2016 and an increase of 1.6 % when compared to the same month in the previous year. The quarterly average egg producer price for *graded* eggs in 4Q 2016 was R13.78 per dozen; a decrease of 4.0 % over 3<sup>rd</sup> quarter 2016 prices.

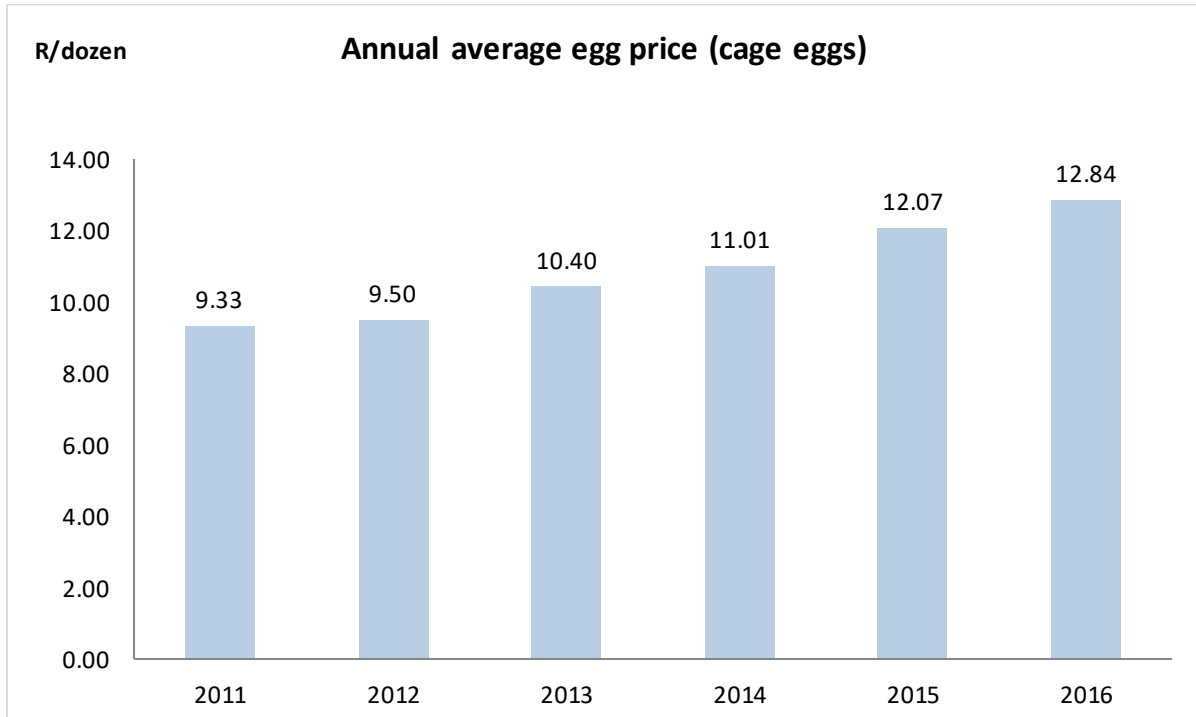
- Ungraded egg prices

The average egg price for *ungraded* eggs was R12.05 per dozen in December 2016, a 10.4 % increase when compared to November 2016 and an increase of 6.6 % on December 2015 prices. The quarterly average egg producer price for *ungraded* eggs in 4Q 2016 was R11.29 per dozen; a decrease of 1.5 % over 3<sup>rd</sup> quarter 2016 prices.



**Figure 9:** Monthly egg price from January 2011 to the end of the 4Q 2016

The average egg price (weighted) for 2016 was R12.84 per dozen; an increase of 6.4 % over the average price for 2015 (R12.07); *Figure 10*. Graded eggs have averaged R13.61 per dozen and ungraded eggs have sold at R11.16 per dozen. During 2016, 70 % of eggs were sold graded and 30 % ungraded.



**Figure 10:** Average annual weighted egg producer price

### **Cull price**

The average price for cull laying hens was R25.00 in December 2016, a 5.8 % decrease when compared to November 2016 and a decrease of 16.7 % on December 2015 prices.

The average price for cull laying hens in the 4Q 2016 was R26.53 (*Figure 11*). This is a decrease of 12.5 % over 3Q 2016 prices (- R3.78 per hen).

The average cull price for 2016 was R27.84; an increase of 0.22 % over the average price for 2015 (R27.78).

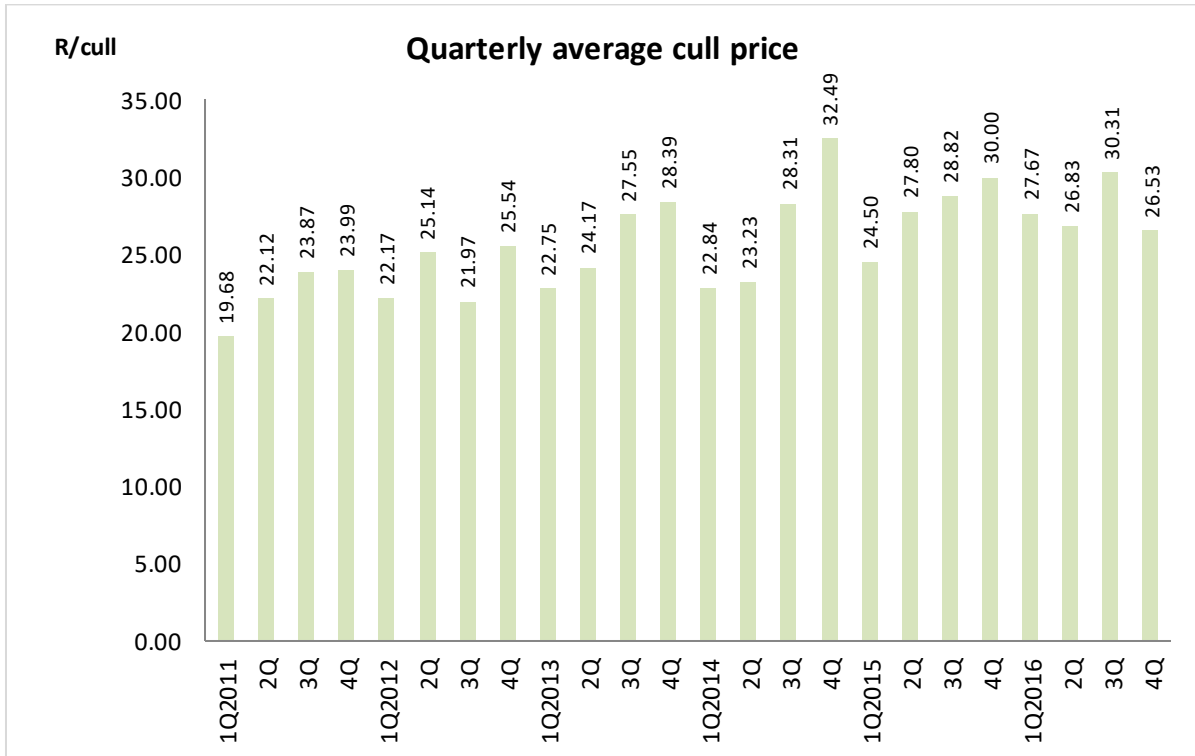


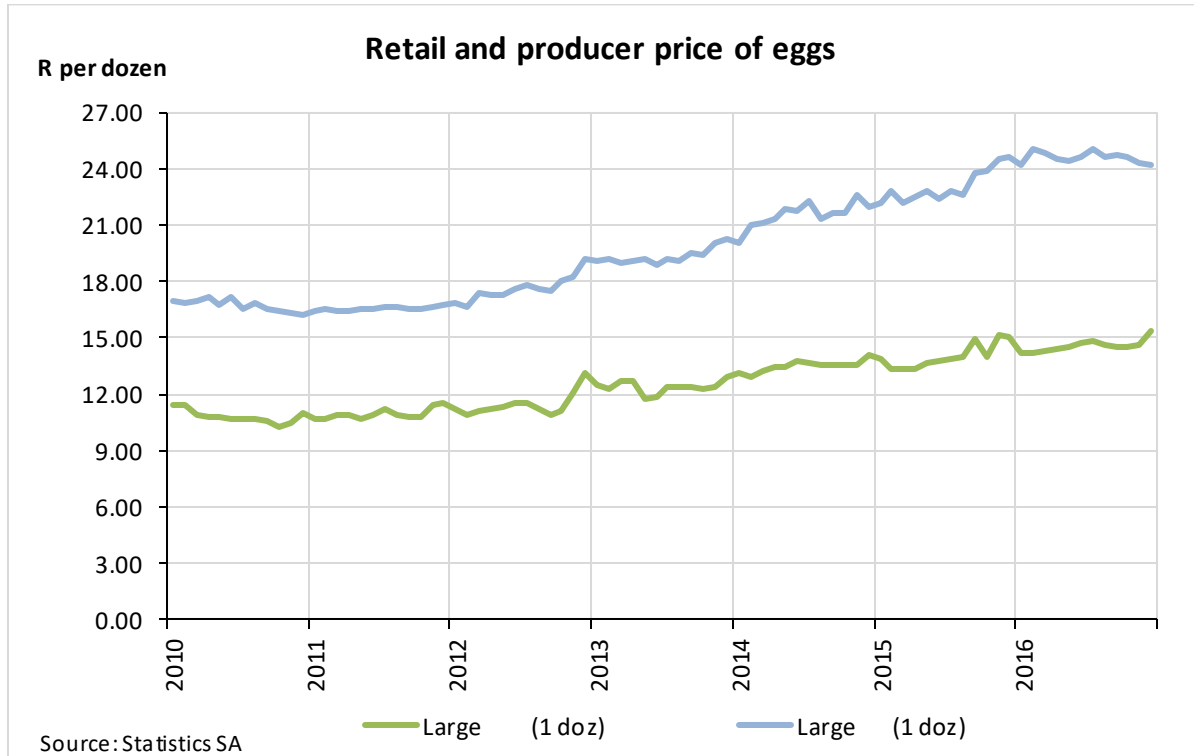
Figure 11: Average quarterly cull prices

### 3.2 Retail prices

During December 2016, the average retail price for eggs, size large, was R24.24 per dozen and the average producer price was R15.53 (*Figure 12*; Stats SA). The mark-up between producer and retailer was 56.1 %. The retail price decreased by 1.6 % on a year-on-year basis, while the producer price increased by 1.7 %.

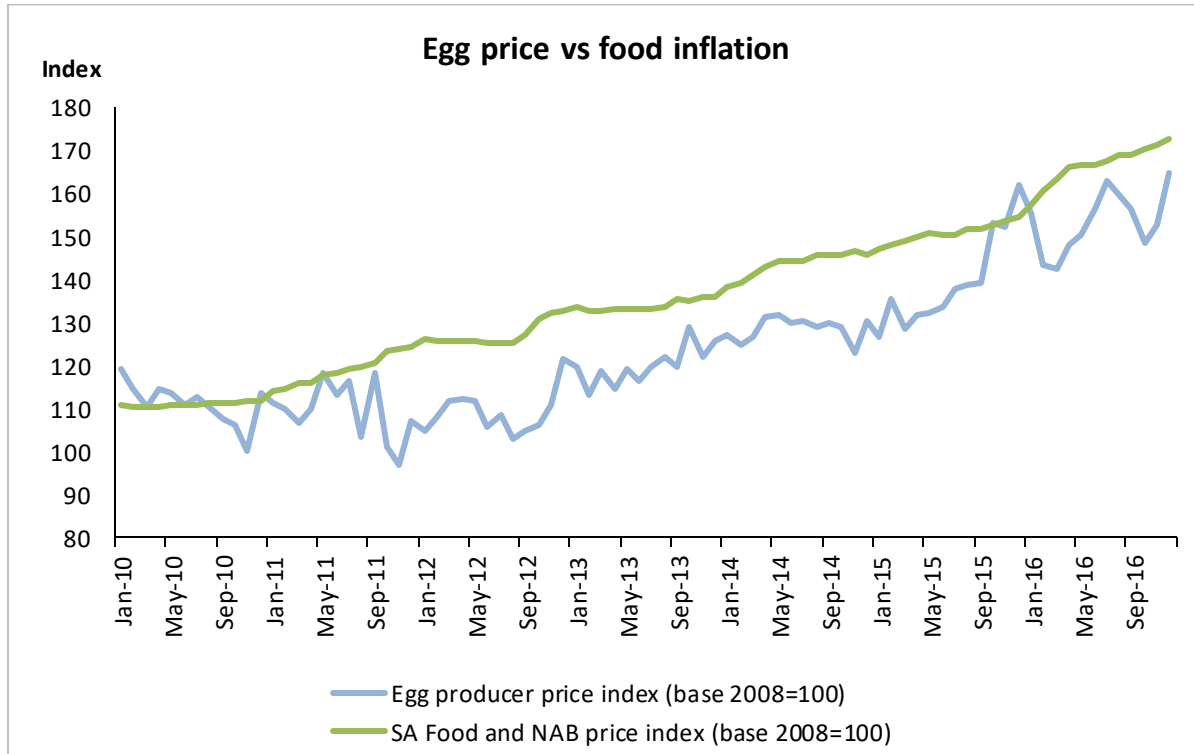
On a quarterly basis, the average retail price for eggs, size large, was R24.40 per dozen and the average producer price was R14.85 (Stats SA). The retail mark-up on producer prices was 64.3 %. The retail and producer price decreased by 1.6 % and increased by 1.3 % on a quarterly basis, respectively.

On an annual basis, the average retail price for eggs, size large, was R23.10 per dozen in 2015 and the average producer price was R14.03 (Stats SA). In 2016, the average retail price was R24.60 and the average producer price was R14.59. The retail mark-up on producer prices was 64.6 % in 2015 and is 68.7 % in 2016. In 2016, the retail and producer price increased by 6.5 % and 4.0 % over 2015 prices, respectively.



**Figure 12:** Production price and retail price of eggs (size: large)

The egg producer price index presented in *Figure 13* uses the average egg producer price in 2008 as the index base (= 100). The egg producer price index is compared to the SA food and non-alcoholic beverages (NAB) price index (base 2008 = 100; Statistics SA). Using 2008 as the base year, egg prices increased in line with inflation from 3Q 2013 to the end of 2Q 2014. If we were to take 2012 as the base year, the *broiler* price index would be greater than the food price index for almost every month through 2013, 2014 and 2015. However, where broiler producers benefited from lower input costs and price increases in excess of food inflation in 2015 (with a return to profitability), egg producers saw their prices slide in relation to overall food inflation in 1H 2015. In the 3Q 2015, a level of recovery began so that egg price inflation began to exceed the food inflation rate. This recovery continued in 4Q 2015, with the inflation rate for eggs strongly exceeding the inflation rate for food and non-alcoholic beverages. This improvement in price inflation deteriorated dramatically in the 1Q 2016, with a sharp deflation in egg prices in contrast to the increase in general food price inflation. From March to July 2016, there was an equally sharp inflation in egg prices, steeper than the increase in the food and NAB index, but this trend reversed again in August, September and October. During these three months, producer prices deflated, whereas food inflation continued to rise. Since November 2016, egg price inflation has again accelerated above that of general food price inflation.



**Figure 13:** Production egg price index and food price inflation (base 2008 = 100)

### 3.3 Egg prices in comparison with chicken, beef and pork

#### *In comparison with pork, beef and chicken: 2016*

Eggs and poultry meat remain the most affordable of all protein sources described in the graph below (*Figure 14*). Please note that the mean egg weight used to calculate egg prices per kilogramme has been increased in SAPA models from 55 g to 58.2 g for 2014; 58.3 g for 2015 and 58.5 g for 2016, so average egg producer prices for 2014 have changed since the 3Q 2015 report.

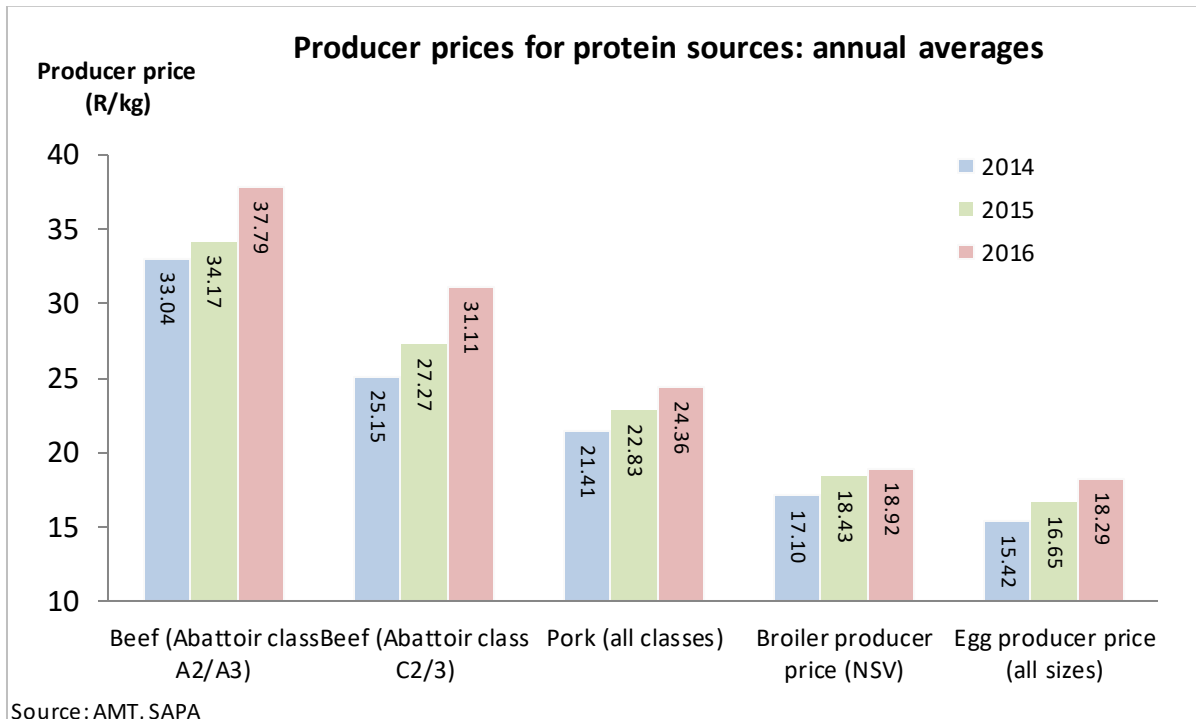
The average egg producer price for 2016 was R18.29 per kg (R12.84 per dozen (SAPA; all sizes). In 2015, it was R16.65 per kg (y-on-y increase: 9.8 %). In December 2016, the egg producer price was R19.67 per kg (R13.81/dozen); an increase of 1.9 % on a yearly- and kilogramme-basis (*Figure 15*).

The average beef producer price at the abattoir (A2/A3 carcass price, excluding the fifth quarter) for 2015 was R34.17 per kg and for 2016 was R37.79/kg (+10.6 %). In December 2016, beef classes A2/A3 fetched R38.84 per kg; a year-on-year increase of 10.0 %. The average producer price of class C2/C3 beef was R27.27 per kg in 2015 and R31.11/kg in 2016 (+14.1 %). In December 2016, C2/C3 beef fetched R34.64 per kg; a year-on-year increase of 22.5 %. (*Figure 15*; Source: Stats SA; SAPA).



The average pork price (all classes) was at R22.83 kg in 2015. In 2016, it rose to R24.36 per kg (+ 6.7 %) and, in December 2016, pork fetched R27.25 per kg, a year-on-year increase of 17.5 %.

The average producer price for broilers (total realisation) for 2015 was R18.43 per kg and for 2016 was R18.92 per kg (+ 2.7 %). During December 2016, the broiler producer price was R21.92 per kg. The December producer price has increased by 16.2 % in comparison with the same month in the previous year (*Figure 15*).



**Figure 14:** Comparison of annual producer prices of protein sources: 2014/2015/2016

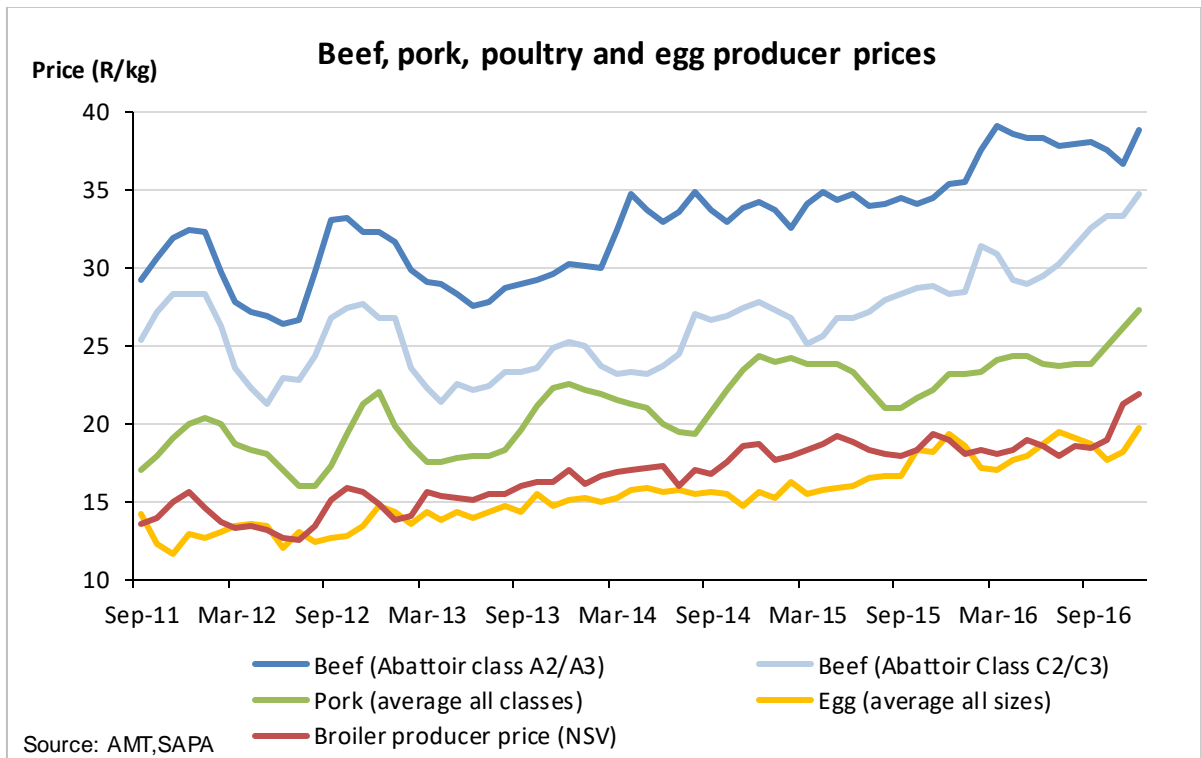
#### ***In comparison with pork, beef and chicken during the 4Q 2016***

The average egg producer price for 4Q 2016 was R18.51 per kg; a quarterly decrease of 2.7 %, and a decrease of 0.5 % on a year-on-year and kilogramme basis (SAPA; average all sizes).

In comparison, the average beef producer price at the abattoir (class A2/A3 carcass price excluding the fifth quarter) for 4Q 2016 was 37.62 per kg; a 0.7 % decrease on a quarterly basis but an 8.7 % increase on a year-on-year basis. The average producer price of class C2/C3 beef was R33.69 per kg for 4Q 2016; a 7.5 % increase on a quarterly basis and a 17.8 % increase on a year-on-year basis (SA Stats; SAPA).

The average price of pork (all classes) was R26.11 per kg in the 4<sup>th</sup> quarter of 2016; a quarterly increase of 10.0 %, and a year-on-year increase of 17 %.

The average producer price for broilers (total realisation) for 4Q 2016 was R20.69 per kg; an increase of 13.2 % on a quarterly basis and a 10.0 % increase on a year-on-year basis.



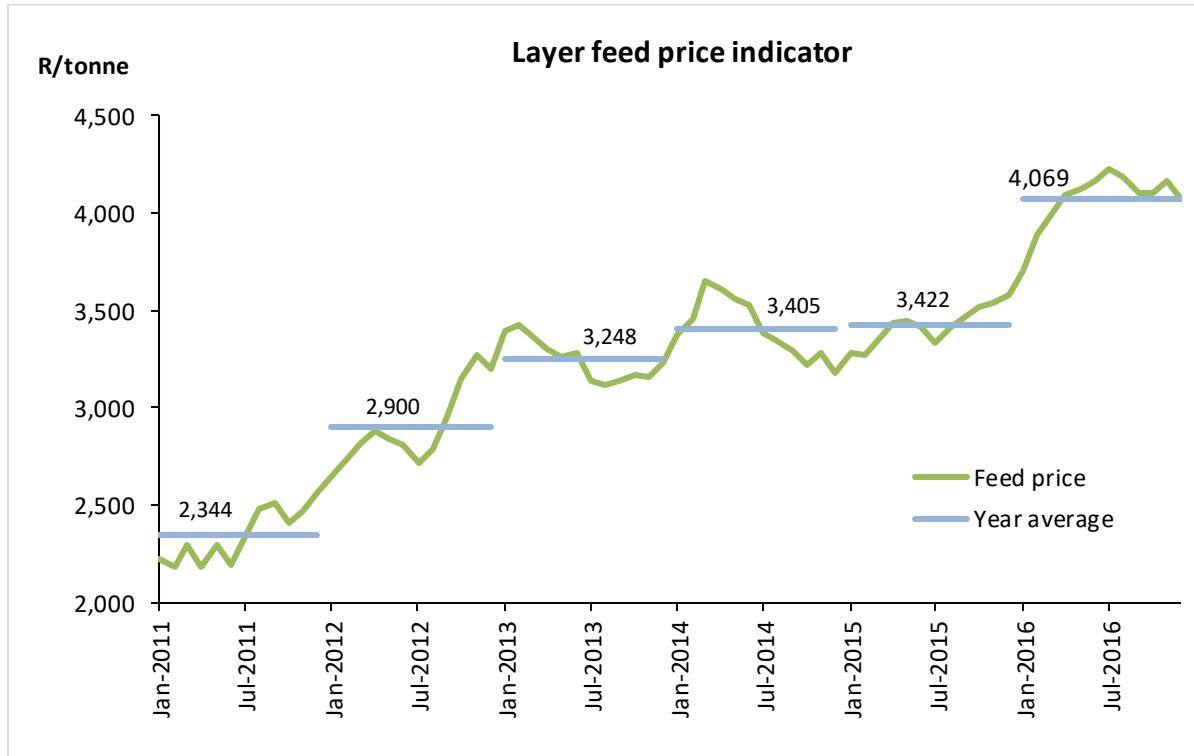
**Figure 15:** Monthly producer prices of protein sources

### 3.4 Feed price indicator

The weighted average feed price includes distribution, excludes medication & additives and excludes VAT. Therefore, it should be treated as an indicator. The monthly average feed price for December 2016 was R4 077 per tonne (*Figure 16*). It decreased by 2.3 % on a monthly basis but increased by 13.9 % on a year-on-year basis.

The average layer feed price indicator for 4Q 2016 was R4 116 per tonne; a decrease of 1.3 % in comparison with the previous quarter but an increase of 16 % in comparison with the same quarter in the previous year.

The average feed price for 2016 was R4 069; an increase of 18.9 %. The average feed price for 2015 was R3 422; an increase of just 0.5 % over 2014 (*Figure 16*).



**Figure 16:** Monthly and yearly feed price indicator

## 4 ECONOMIC OVERVIEW

### 4.1 International economic outlook for the egg industry

Avian influenza and hen welfare have been filling column inches in the global egg industry press in the first quarter of 2017. After a gradual recovery from the effects of the 2015 avian influenza outbreaks, the poultry industry worldwide faces another year of trade disruptions and challenges after HPAI once again spread across the wintery northern hemisphere. The egg industry in the US is moving quickly to end the practice of destroying millions of male day-old chicks; the Australians are rewriting their poultry welfare codes; and the World Animal Health Organisation (OIE) is drawing up guidelines on International Laying Hen Housing Systems, as part of its complete Code for Terrestrial Animals.

The French suffered repeated outbreaks of highly pathogenic avian influenza through 2016 and did not export to South Africa for much of the year. The French were due to regain HPAI-free status on 3 December 2016. On 17 November 2016, a fourth HPAI event was reported to the OIE, in which 25 cases of H5N8 HPAI were recorded in wild call-ducks in the region of Pas de Calais. This event has now been expanded to 6 outbreaks in all four corners of the country, with 34 deaths in wild birds. Since 25 November, the French have had to report a further 347 outbreaks of H5N8 HPAI, totalling 14 892 cases, which have resulted in the culling of over 1.24

million birds in the districts of Landes, Hautes-Pyrenees, Gers, Pyrenees-Atlantique, Lote-et-Garonne, Aveyron and Tarn (OIE). On 4 January 2017, the Government announced that 800 thousand ducks and geese would be culled between 5 and 20 January, in the worst affected departments of Gers, Landes and Hautes-Pyrenees. The pre-emptive cull was recently expanded to include a further 600 000 surviving ducks in the department of Landes, where a quarter of the French pâté de foie gras is produced. The last case report under Event 5 was dated 24 February 2016 but this event is continuing and France is certainly bearing the brunt of the latest HPAI epidemic.

On November 8 2016, the Netherlands reported H5N8 HPAI in wild birds in Noord- and Zuid-Holland, Flevoland, Overijssel and Noord-Brabant. The latest update to this report was on 1 February 2016, and totalled 48 outbreaks (298 cases). On November 28, a second report confirmed H5N8 HPAI in fattening ducks in Flevoland. This outbreak increased to nine farms, totalling 3 658 cases, in Flevoland, Friesland, Overijssel, Gelderland and Zuid-Holland. Over 210 000 birds were culled.

Since 7 December 2016, Germany has notified the OIE of a 141 outbreaks of H5N8 HPAI in wild birds and commercial poultry. The outbreaks have occurred over much of Germany and over 340 000 birds have been destroyed as part of control measures. The affected commercial poultry include breeding chickens, geese and ducks; fattening turkeys and ducks; and backyard mixed flocks. Germany has also reported three outbreaks of H5N5 HPAI in breeding and fattening turkeys in the Schleswig-Holstein district, beginning on 22 January 2017. Over 1 950 birds died and a further 30 750 were destroyed.

Since 1 December 2016, Hungary has reported 280 outbreaks (169 685 cases) of H5N8 HPAI in poultry operations housing fattening turkeys, geese and ducks. Only 126 of the cases have been in wild birds. There have been 82 298 deaths amongst the birds and almost 1.7 m have been culled. The latest case reported to the OIE was dated 18 February. The event is on-going.

On December 11 2016, an outbreak of H5N8 HPAI was reported in housed turkeys in Lincolnshire. In Wales, the disease has been confirmed in a dead wild Eurasian wigeon (14 December, Llanelli) and, on the 30 December 2017, in a backyard flock of chickens and ducks (Carmarthenshire). Throughout the UK, wild birds have tested positive for HPAI in natural parks in Exminster (Devon), Dumfries and Galloway, Abbotsbury (Dorset), Gloucestershire, Merseyside, Lincolnshire, Tyne and Wear, Lancashire, Conwy (Wales), Norfolk, Londonderry, and North Yorks. On December 28 2016, there was an outbreak in a backyard flock near Settle, North Yorkshire, followed by three January outbreaks, totalling 77 000 birds, in breeding pheasants and mixed game birds, in the Wyre area (Lancashire). On 15 January, there was an outbreak in fattening turkeys in Louth (Lincolnshire) in which 400 birds died and 6240 were culled. On 25 January, 19 500 rearing turkeys died or were culled in Boston, Lincolnshire. On 12 February, 20 276 broiler breeder hens were culled in Redgrave, Suffolk after 2 941 birds died on the same farm. On 17 February, H5N8 was reported in a backyard chicken flock in Northumberland. The Department for the Environment, Farming and Rural Affairs (DEFRA) has announced that all poultry must be housed until 16 March 2017, or prevented from coming into contact with wild birds. All poultry owners have to take steps to improve biosecurity on their

properties. In total, the UK has reported 27 outbreaks, consisting of 5880 cases in commercial birds and 178 in wild birds.

On 28 December 2016, a wild wigeon suffering from HPAI was found in County Wexford, in the Republic of Ireland. Eight further cases in wild birds had been reported under this event by 21 February, in Galway, Tipperary, Roscommon, Leitrim and Cork. No commercial outbreaks have been reported to date.

Since November 8, Danish veterinary authorities have reported 36 outbreaks of H5N8 HPAI in wild birds (including tufted ducks, gulls, swans and goshawks) and in one small backyard poultry flock (58 birds destroyed). The 3 km protection zone around the affected farm was lifted on December 13 and Denmark reclaimed its HPAI-free status on 22 February 2017.

On 3 January 2017, Spain reported a single case of H5N8 HPAI in a wild greylag goose to the OIE; found in the central north of the country. On 18 February, highly pathogenic H5N8 was found on a commercial duck farm in the province of Catalonia. A pre-emptive cull of 17 077 birds followed the death of 723 ducks.

On 7 December 2016, Polish veterinary authorities notified the OIE of H5N8 HPAI in wild birds (24 cases). Poland have now reported a total of 117 outbreaks of HPAI (54 565 cases) in wild birds, backyard flocks and commercial poultry. Almost 980 000 birds have been culled in response to the outbreak, which is on-going. The species of domestic bird affected in the outbreaks is not specified in the OIE report. On 27 January, Poland added 2 cases of H5N5 in wild swans, reported from the west of the country.

In 2017 to date, there have also been reported cases of highly pathogenic avian influenza (H5N8) in Bulgaria, Bosnia and Herzegovina, Cameroon, China, Chinese Taipei, Croatia, Czech Republic, Egypt, , Greece, India, Iran, Israel, Italy, Kazakhstan, Kuwait, Lithuania, Macedonia, Nepal, Nigeria, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Switzerland, Sweden, Uganda and the Ukraine. In addition, the following countries have reported the H5N1 strain: Bangladesh, Cameroon, Cambodia, Côte d'Ivoire, India, Nepal, Niger, Nigeria and Vietnam. China has also reported H5N6, H5N2 and H7N9. Chinese Taipei lays claim to H5N6, along with Japan and Myanmar. The H5N5 strain has been reported in Italy, Serbia and the Czech Republic in 2017. It looks certain that avian influenza will once again play a huge role in world poultry markets through much of this year.

One of the consequences these most recent outbreaks are having on European egg producers is the loss of their legal right to label their produce as free range if birds have been housed for longer than 12 weeks. Because of EU legislation regarding the definition of free range and national directives to house hens in order to keep them away from wild birds, free range producers have to put stickers on their packaging to explain that the eggs may come from “barn-reared birds” during this period. Whether they can continue to earn the premium payable on free-range products depends on the market, with Irish producers calling for State support if the premium is lost while they obey compulsory housing orders ([agriland.ie](http://agriland.ie)).

### ***Disposal of male chicks in the egg industry***

In 2015, animal rights activists in Israel occupied a hatchery and switched off the macerator used to dispose of unwanted chicks. When police were called, one of the activists challenged a policeman, as a human being, to switch the machine back on. At the time, the video was viewed over 2 million times on Facebook and was reported on by media houses as far away as Australia. The United Egg Producers in the US, which represents over 90 % of egg farmers in the States, is this year working pro-actively with welfare groups in its handling of the contentious issue of the disposal male egg-type day-old chicks. It has announced the discontinuation of this practice in the US from 2020. Whilst the German courts have recently defended the industry's right to continue with the disposal of male chicks, it should be noted that the German government allowed producers to continue with the practice but insisted on (and funded) research into solving the problem as soon as possible. In late 2015, the German agricultural minister promised that all German producers would be using *in ovo* methods of sexing eggs by the end of 2016, but it is not clear whether this promise has been kept.

Of course, a solution to this particular welfare issue is of benefit to the farmer as disposing of the chicks is an expensive, time-consuming and wasteful process, and the maceration or asphyxiation of day old chicks is a ticking time-bomb from a welfare point of view. In late February, the Guardian ran an article entitled "*Don't be fooled by the pretty box: find out the horror behind your eggs*". The article deals with an activist report on egg production in the UK, which included undercover work and brings the public's attention to the culling of 40 million chicks per year in the UK alone. It is estimated that almost 220 million day old male chicks have to be culled every year in the US and 12 million in Australia. "Big Egg" in Australia is currently under pressure to end the practice, even though the practice remains endorsed by the RSPCA there (Sydney Morning Herald). Globally, the number of chicks culled is several billion a year ([www.poultrysite.com](http://www.poultrysite.com)). It is in everyone's best interest to remedy this problem as soon as possible. The technology to allow sexing of chicks *in ovo* is perhaps only months from being commercially viable.

### ***The cage-free revolution***

The cage-free revolution has now reached New Zealand, with supermarket chain Countdown pledging to sell only eggs from cage-free hens in its North Island stores by 2024, and in the South Island stores by 2025. In the kind of relationship which is necessary for cage-free pledges to work, the retailer has been working with suppliers for two years to plan the transition. Customer demand for free range and barn eggs has increased by 50 % in the last two years. An Egg Producer Programme started by Countdown guarantees farmers a market for their produce if they make the leap to cage-free production ([businesscoop.co.nz](http://businesscoop.co.nz)).

There seems to have been less forethought and co-operation in the US, where up to 70 % of the country's egg purchasers have now signed up to make the transition to cage-free production, without interim purchasing agreements in place with their suppliers. After the 2015 avian influenza outbreaks, egg facilities are now restocked and a glut in production has crashed prices by over 60 %, year on year. When prices are this low, producers are not keen to make big investments in capital equipment and infrastructure and the egg industry finds itself in a

state of paralysis. Changes need to be made in order to increase the US cage-free flock by over 900 % by 2030 (United Egg Producers) – but many producers seem reluctant to finance their part of the estimated \$5.6 billion investment needed (USDA). There are lessons to be learned here for Australian, South American and South African producers, who are all coming under the same pressure to transition away from caged-production but will have greater opportunities to strike up win-win deals with customers if they act timeously.

In Australia, the RSCPA have joined the chorus of condemnation aimed at the Australian Egg Corporation (AECL) and Egg Farmers of Australia who published and sponsored a Facebook post of a caged-egg farmer claiming that “If the hens aren’t happy, they won’t produce eggs – it’s as simple as that”. The contentious comment formed part of the “Your Eggs, Your Choice” campaign, and has demonstrated the dangers of careless use of social media. The RSPCA countered to point out that hens can survive day-to-day conditions which negatively affect their welfare, but which do not affect egg-laying ability (Sydney Morning Herald). Dr Jean-Loup Rault, of the University of Melbourne, argued that science shows that poor production is a clear indication of bad welfare, but good production does not necessarily mean high welfare standards.

Australia is in the process of revising its Animal Welfare Standards and Guidelines for Poultry, which should lead to consistent legislation across territories. Draft guidelines are currently with the Animal Welfare Task Group (AWTG) and are expected to be published for public consultation in 2017. The process has not been without controversy. Three animal welfare scientists have written to the advisory group claiming that their research is being distorted to support the continued use of conventional cages. Dr Rault, along with Professor Tina Widowski (University of Guelph) and Professor Paul Hemsworth (University of Melbourne) bemoaned the selective reproduction of peer reviewed papers, which they felt omitted findings unfavourable to conventional caged systems. The review is supposed to develop standards which reflect the latest science, recommended industry practices and consumer expectations ([animalwelfarestandards.net.au](http://animalwelfarestandards.net.au)). The RSPCA has recently threatened to withdraw from the process as they see the guidelines as being heavily influenced by industrial egg producers who are opposed to the phasing out of battery cages ([ABC.net.au](http://ABC.net.au)). The RSPCA argues that any document which does not include a legislated phase-out period for battery cages (as has happened in the EU, Canada and New Zealand) cannot be said to be based on community expectations (Sydney Morning Herald). Rault, Widowski and Hemsworth have been involved in a rewriting process with the AWTG and are quoted as being satisfied with the revisions. The RSPCA seem less convinced.

The World Animal Health Organisation (OIE) is presently drawing up guidelines on International Laying Hen Housing Systems, as part of its complete Code for Terrestrial Animals. Laying hens are currently the only sector not covered by the OIE welfare codes of practice. The International Egg Commission (IEC) is working with the OIE in the drafting of this new code. The IEC’s position and response is being co-ordinated by the Animal Welfare Working Group which includes Kevin Lovell, the SAPA CEO, along with representatives from Canada, the US, the UK, Colombia, the Netherlands and India. A first draft is under discussion and is expected to be

presented at the IEC Business Conference in Monte Carlo in early April 2017, where the code's impact on the global egg industry will be explored.

### **Global production**

The forecast for US table egg production in 2016 has increased slightly to 8.565 billion dozen (USDA WASDE). Production for the year is likely to be 6.4 % higher than in 2015 (8.053 billion dozen) but still 0.2 % below 2014 levels (8.43 billion dozen). Production for 2017 is forecast at 8.78 billion dozen. Predicted annual egg prices for 2016 and 2017 remain subdued at 85.7 and 88 – 93 c/dozen, respectively (Grade A, New York); in comparison with 2015 prices (181.8 c/dozen average; USDA WASDE). First quarter prices (85.7 c/dozen) are around 34 % lower than 1Q 2016 prices, and 55.7 % lower than the 2015 average price. In 3Q 2015, egg prices were at a 30-year high because of AI-related shortages, but lower institutional demand, reduced exports and aggressive discounting by retailers took prices to an average 68 c, 72 c and 82 c a dozen in 2Q, 3Q and 4Q 2016, respectively. Urner Barry's prices for Midwest eggs average 91.3 c/dozen for 2016. This is the first time the annual average has been below the \$1 mark since 2006. Low feed prices and over-successful repopulation are helping to sustain the price drop and the strong dollar and lost markets are reducing exports.

Egg exports from the US dropped from 313.6 million dozen in 2015 to 279.2 million dozen in 2016 (WASDE projection), but are expected to increase to 305 million dozen in 2017 (still 19 % below 2014 levels and a 6 % decrease on the 2017 forecast made in February). Imports of eggs into the US reached 123.5 million dozen in 2015, up from the 34.7 million dozen imported in 2014 (USDA WASDE). Imports of 122.1 million eggs are estimated for 2016 as contracts are honoured, and are expected to drop steeply in 2017 to 60 million dozen. US consumption of eggs is predicted to recover from 256 eggs per person per year in 2015 to 274.7 eggs in 2016 (USDA) and to reach 275.8 in 2017 (WASDE). Before the AI outbreaks, per capita egg consumption was 267 (in 2014).

Egg consumption in the UK is soaring. The British ate 9 % more eggs in the year to October 2016. Egg consumption in the UK is at the highest level since the late 1980's, with per capita consumption estimated at 192 eggs per person per year in 2016 (egginfo.co.uk). In November and December 2016, UK egg prices finally began to climb again, after a long-term collapse from about £1.48 in 2010 to 85 p a dozen in 2016 (theguardian.com). DEFRA reported farm gate prices at 69.9 p per dozen in both the 2Q and 3Q 2016 (down from 72.7 p in 1Q 2016). In the 4Q 2016, the farm gate price increased to 71.4 p/dozen (still 12 % lower than 4Q 2015). The UK packed 7.2 million cases of eggs in 4Q 2016; unchanged on 3Q 2016 production but up 0.9 % on 4Q 2015 levels. The UK is facing possible disruption to its supply of free-range eggs because, although housing orders in low-risk areas have been lifted, in high-risk areas birds must remain housed. This means that, under EU law, the eggs can no longer be sold as free range if the incarceration exceeds 12 weeks. With 50 % of the UK market demanding free-range eggs, there is expected to be a short-fall in this category, and downward pressure on pricing in the colony/barn egg category as "free range" eggs are relabelled. Layer farmers forced to house their birds have also had to deal with an uptick in red mite infestations in their flocks (faarminguk.com).



In the EU, egg production (for consumption) in 2016 totalled 6.75 billion dozen (EC CIRCABC); 1.2 % higher than in 2015 (weight basis). Production is forecast to reach 6.79 billion dozen in 2017 (+ 0.58 %).

The average EU Class A egg price increased from €101/100 kg in early August to €129/100 kg in December. Despite this steady climb in prices in 2H 2016, packing stations prices for Class A eggs were 8.3 % lower in December 2016 than the 2011 – 2015 December long-term average. In the 1Q 2017, EU egg prices have averaged €124/100 kg; 4.9 % up on 4Q 2016 prices but still below 2014/2015 prices, and solidly below the rebased 2012 - 2016 average. The recent climb in prices since mid-2016 reflects strong demand and some disruption in supply because of HPAI outbreaks; and is in contrast to the weakening of prices in the US. Quarter 1 egg prices have climbed 17 % year-on-year in Spain; 9.5 % in France; 22 % in Hungary; 7.9 % in Belgium; and 2.6 % in the Netherlands.

Imports of shell eggs into the European Union were up 42 % in 2015, to 19 304 tonnes (egg equivalent) but dropped by 11 % in 2016 to 17 137 tonnes (ec.europa.eu). Imports from the US into the EU increased by 26 % in 2016, but imports from Argentina and India were down by 42 and 87 %, respectively. Imports from the Ukraine increased dramatically from 3 665 t egg equivalent in 2015 to 8 043 t in 2016, to account for 46.9 % of total EU egg imports (+ 119 %). Ukrainian producers benefit from lower feed prices, less regulation and lower costs in terms of hen welfare than their EU counterparts, making them competitive even with trade tariffs in place ([www.fwi.co.uk](http://www.fwi.co.uk)). The Ukrainian egg industry is struggling with continuing outbreaks of HPAI. In January 2017, EU imports from the US and India have increased dramatically, year-on-year, whilst imports from the Ukraine have dropped by 84 %.

The EU is a net exporter of eggs, with a trade balance of 246 947 tonnes of exports to 17 137 tonnes of imports in 2016 (egg equivalent; EU Commission). Exports of shell eggs from the EU increased by 21.4 % in 2015 to 282 688 t, despite a halving in exports to Russia (embargo) and to Angola (oil price crash limiting purchasing power). In 2016, EU egg exports to third parties decreased by 12 %. Reduced exports to Japan (- 37 %) and the US (- 62 %) exceeded improved export levels to the Middle East, Asia and Israel. In 2015, the EU exported 49 557 t of eggs to the US (from an almost zero base in 2014) because of the effect of AI on local egg production, but these exports shrank to 18 923 t in 2016.

The Europeans are not the only ones reducing production and running into egg supply problems because of avian influenza. The outbreak in South Korea, where per capita consumption is around 250 eggs/year, has necessitated a cull of some 33 % of the country's laying flock ([thepoultrysite.com](http://thepoultrysite.com)). US egg producers were rubbing their hands in glee at the prospect of a new export market but, in response to the Tennessee HPAI outbreaks, South Korea imposed an embargo on all fresh US poultry products from March 6, including uncooked eggs. The US had been well-placed to supply eggs to the Koreans, because of domestic over-production in 2016, and 1.6 million eggs might have reached Korean shores from US producers if it hadn't been for the Tennessee AI event. So severe has been the shortage that the South Koreans have removed import duties and subsidised transport costs of eggs imported by sea. In the first two months of the year, almost 1 100 tonnes of eggs and egg products had been imported, almost

all from the US (straitstimes.com). The Australian and New Zealand egg industries, to-date HPAI-free, will both benefit from the culls in Asian flocks but shortages are likely to continue because neither of these markets has surplus eggs on the scale of US stocks. Australian producers look set to send AUD 20 million worth of eggs and egg product to South Korea in 2017, with no import tariffs in place until at least the end of June (thepoultrysite.com).

## 4.2 The South African economic outlook and egg market

As a whole, South Africa has limped into 2017. The encouraging economic growth seen in the second quarter 2016 has, as predicted, reduced in the third and fourth quarters and growth looks to remain stagnant through 2017, with predictable consequences for the unemployment rate. The rand rallied against the dollar in the first two months of 2017 and there seemed some cause for optimism if the ruling party could refrain from upsetting the apple cart with cabinet reshuffles, changes in land policy or acrimonious leadership battles. That hope vanished on 31 March, when South Africa woke up to find that the hugely respected Finance Minister, Pravin Gordhan, and his deputy, Jonas Mcebisi had been replaced in a cabinet reshuffle. The rand and markets are now in free-fall and a credit rating downgrade sooner than mid-year seems likely. Although there are signs that the drought is easing in many parts of the country, the South African egg industry continues to face challenges presented by high feed prices and low levels of consumer spending. The broiler industry is in even deeper trouble in 2017, as ever-increasing levels of cheap EU, Brazilian and US imports disrupt the ordered supply of broiler meat in the country. In comparison with the broiler industry, local egg producers are perhaps, for the first time in many years, in a stronger position than their fellow poultry farmers to rise above the challenges faced.

In January 2016, South Africa's credit rating sat one notch above "junk status" (BBB-; below-investment grade) after a December 2015 downgrade by the rating agencies Standard & Poor's and Fitch Ratings. A third agency, Moody's, put South Africa, albeit precariously, one notch above the other two agencies. In May and June 2016, South Africa narrowly avoided downgrades by all three agencies, although the attached negative outlooks effectively put South Africa on warning. In September, Moody's moved to put five state-owned entities on review for a downgrade; citing political infighting, weak growth and mounting debt levels as issues of concern over South Africa's parastatals. All three agencies held off downgrading South Africa to below-investment grade in late November/early December 2016 but Fitch Ratings dropped their outlook from stable to negative and Moody's counselled that South Africa would likely be downgraded in mid-2017 in the absence of significant structural reforms to support economic growth. Standard and Poor's retained its negative outlook on the BBB- rating but warned again, in late March 2017, that political tensions, policy issues and weak growth could hamper economic reform and undermine investor confidence. This credit rating agency is not constrained to six-monthly reviews and the threat of a downgrade within weeks, following Gordhan's axing, looms large.

The rand's performance through 2016 was a series of peaks and troughs (caused by internal and external political events), the severity of which reduced as the year progressed. Between

January 1 and December 15 2016, the rand appreciated by 9 % from post-Nenegate levels of over R16 to the dollar. However, the rand's value at the end of 2016 was still 22 % below its value on 1 January 2015 (R11.56 to the dollar). Through the first two months of 2017, the rand has strengthened by almost 6 % over the December 31 2016 level; breaking the R13-level in mid-February and closing at R12.92 to the dollar on 23 February. As this report is being finalised, the rand is once again under severe pressure, following Jacob Zuma's unilateral decision to axe the Finance Minister. The rand depreciated by almost 9 % between April 27 (R12.41 : \$1) and 30 March (R13.52 : \$1). The road ahead looks rocky for the currency, economic growth, the inflation rate, credit ratings and consumer spending.

On 15 December, the US Federal Reserve raised interest rates for only the second time in ten years. The 0.5 % increase was seen as a reflection of confidence in the performance of the US economy and was to be expected, in light of strong gains in jobs and rising US inflation. January's consumer inflation data from the US were sharply higher. In December, the Reserve Bank Governor signalled three further hikes ahead in 2017 and the expectation that the US interest rate would be hiked on March 15 was realised, with the announcement that the base rate will rise from 0.75 to 1.0 %. Although emerging markets with high dollar-delimited debt now face increased costs in servicing this borrowing, the rand rallied defiantly to R12.80 : \$1 after the Federal Reserve announcement since the hike was not unexpected and the markets were also relieved that the pace of hikes has not been accelerated beyond that announced in December. But all that was before the March 31 reshuffle. A fortnight is a long time in economic history.

In January, the International Monetary Fund revised its growth estimate for the South African economy to 0.3 % for 2016 and held its growth forecast for 2017 from at 0.8 %. The Treasury has been more optimistic in its forecast for 2017, at 1.3 %, but most analysts are siding with the IMF. In January, the South African Reserve Bank held its own growth forecast for 2016 at 0.4 %, but revised its forecast for 2017 downwards to 1.1 %. The growth rate realised in 2016 is the slowest since the recession in 2009. Growth in 2018 is expected to be 1.8 % (SARB). As predicted, the promising level of growth seen in the 2Q 2016 (3.3. %) could not be maintained in the 3Q 2016 and the South African economy grew by only 0.2 % q-on-q, between July and September 2016. In the 4Q 2016, the economy contracted by 0.3 %. After good growth in the 2Q and 3Q 2016, the mining sector shrank by 11.5 % in the 4Q. Agriculture contracted yet again, by 0.1 % (eighth consecutive quarter). In the secondary sector, manufacturing contracted by 3.1 % but construction grew by 0.4 %. In the tertiary sector, finance grew by 1.6 %, transport by 2.6 % and personal services by 1.0 %. The trade sector grew by 2.1 % in the 4Q, especially in wholesale and retail trade. The IMF has adjusted its 2016 estimate for weighted average growth in sub-Saharan countries to 1.6 %, down from 5 % in 2014 and 3.4 % in 2015. Growth in sub-Saharan Africa is forecast to average 2.8 % in 2017 and 3.7 % in 2018 (IMF). The Fund paints a picture of multispeed growth in the region, with some non-commodity economies forecast to continue growing at rates in excess of 6 % (e.g. Tanzania, Kenya, Côte d'Ivoire, Ethiopia and Senegal). Commodity-exporting nations, such as Angola, Nigeria and South Africa, have been hard-hit by the global slump in commodity prices. Many sub-Saharan African countries have been slow or indecisive in adapting fiscal policy to cope with lower prices for exported resources. The IMF has advised the bloc that improved growth can be achieved with

careful changes to monetary policy. Globally, the IMF forecasts growth of 3.4 % for 2017 and 3.6 % for 2018.

After hitting an historic 23-year low in December 2015 (79.6 index points), the South African Chamber of Commerce and Industry (SACCI) Business Confidence Index increased gingerly from January through April to 82.5, before collapsing back in May 2016. The index was rebased in mid-year 2016, taking the May value from 79.3 to 91.8. After good increases in June and July, the index slipped back to 92.9 in August and, 90.3 in September. The index has shown steady recovery since October (93.0), reaching 93.9 in November and 93.8 in December. Confidence jumped further to 97.7 in January but slipped back to 95.5 in February 2017. February's value is still 2.8 points above that registered in February 2016. February was the third successive month in which confidence was higher than a year ago. Business confidence has climbed in response to a stronger rand, higher gold and platinum prices and signs of prudent and responsible fiscal policy. Confidence remains weighed down by the poor growth outlook and continued political uncertainty and rhetoric. For business confidence to translate into investor confidence, more work needs to be done by Government, industry and labour.

The Merchantec CEO Confidence Index, which had climbed steadily to the 50-index point neutral level through the 2Q and 3Q 2016, declined again in the 4Q to 47.9 points. This is 4.2 % lower than the 3Q score. All six sectors measured shared this negative sentiment, with CEO's not expecting recent gains in the currency to be maintained and with political infighting and policy concerns still weighing on forward-looking confidence levels. The out-going Public Protector's "The State of Capture" report, rising unemployment, the threatened nuclear power deal and the warnings issued by the credit rating agencies have all contributed to a belief that the business climate is deteriorating.

The FNB/BER Consumer Confidence Index dropped back to -10 in 4Q 2016, from -3 in the 3Q; pounded by soaring food prices and constrained consumer spending. Confidence remains below the long term average of +4. The Nielsen Consumer Confidence index also recorded a big downswing in confidence in the 4Q 2016, decreasing from 87 to 77 index points. Globally, consumer confidence increased by 2 index points between 3Q and 4Q 2016 and, at 101, is now above the optimistic baseline of 100 (Nielsen CCI Report). Five of the top ten world economies posted optimistic scores, exceeding 100: the US, Germany, the UK, China and India. Other markets reaching or exceeding the optimistic benchmark of 100 basis points in the 4Q 2016 are the Philippines, Ireland, New Zealand, Indonesia, Denmark, Thailand, Czechoslovakia, Pakistan, Switzerland, Vietnam and the United Arab Emirates. Going into 2017, all regions except for Africa/Middle East were reporting a general upswing in consumer confidence.

The unemployment rate in the 4Q 2016 decreased from 27.1 % in the previous quarter to 26.5 %. The 3Q rate was the highest since 2003. The expanded unemployment rate, which includes discouraged work-seekers, was slightly lower, q-on-q, at 35.6 %. The unemployment rate has not dropped below 21.5 % in the last 15 years.

Inflation averaged 4.6 % in 2015 and 6.4 % in 2016 (Stats SA). Inflation is expected to average 6.2 % in 2017 and 5.5 % in 2018 (SARB). South Africa's headline inflation breached the upper

end of the Reserve Bank's target range (6 %) in January 2016 and did not return to the target range until August (5.9 %). This return was short-lived, with the inflation rate increasing to 6.8 % in December, from 6.4 % in October and 6.6 % in November. Inflation is now expected to remain around December's peak level (6.8 %) through much of the 1Q 2017, and only to return to the target range by 4Q 2017 (SARB). This upward revision is due to firming in the world oil price and sustained higher food prices domestically.

Food price inflation rose from 5.9 % in December 2015 (SARB) to 11.7 % in October, 11.6 % in November and 11.7 % in December 2016. In January 2017, food price inflation had moderated a little to 11.4 % (NAMC). In December, year-on-year price inflation for bread was 14 %; maize meal 40 %; fats and oils 8.2 %; fruit 27 %; milk 11 % and rice 8 %. Inflation in the price of vegetables moderated to -7.5 % in December. Only eggs and apples were less than 6 % more expensive in December 2016 than in December 2015 (BFAP/Stats SA). Price inflation in animal protein (as measured in the NAMC basket of frozen and fresh chicken portions, beef chuck and tinned fish) was at 6.7 % in December.

Global food prices increased steadily through 2016. The FAO Food Price Index began the year at 149.3 and closed at 170.3 (+ 14.1%); with an annual average of 161.5. This is 1.5 % lower than the 164 recorded in 2015. The Index rose again to 174.6 in January and 175.5 in February 2017. The meat price index rose from 145.2 in January 2016 to 157.1 in December 2016 (+ 8.2 %); averaging 156.2, compared to 168.1 in 2015. Cereal prices averaged 4.6 % lower than the previous year's level in December and are 9.5 % lower in 2016 than in 2015. The FAO forecasts broadly stable food prices through the next decade.

With both the food inflation and exchange rate outlooks deteriorating badly in early 2016, the Reserve Bank increased the repurchase rate by 50 basis points in January 2016, to 6.75 %, and by a further 0.25 % to 7.0 % in March 2016. The Reserve Bank steered away from increasing interest rates through the rest of 2016 and in January and March 2017, because the domestic growth outlook is constrained and consumers are under pressure. At the Monetary Policy Committee meetings in January 2017, the Committee reaffirmed that the current hiking cycle may be coming to an end, providing the upside risks to inflation do not materialise. At the March meeting, SARB governor Lesetja Kganyago warned that domestic political developments are affecting exchange rate uncertainty and, in turn, increasing risks to the inflation outlook. Interest rate cuts may be taken off the table if the political turmoil continues.

In a November 2016 deal, OPEC and non-OPEC producing nations pledged to reduce output by 1.2 million barrels per day from January 2017, to bring down the glut of 300 million barrels of oil currently in global supply. In January, the World Bank held steady its forecast for the 2017 crude oil price at \$55 a barrel, which would represent a 28 % increase on the 2016 average of \$43 a barrel. The oil price surged to \$57 a barrel on December 12, making the World Bank forecast look more likely, after OPEC and a number of non-OPEC nations (including Russia) signed an agreement which should have seen the non-OPEC nations cut production by 558 000 barrels per day. However, after several months of sustained prices in the \$50 to \$55 band, prices are beginning to slide in mid-March. American shale rigs are coming on-line and increasing production; global stocks are rising and the resolve of OPEC and non-OPEC nations

to continue the hold on production beyond the June 30 expiration seems to be wavering. Saudi Arabia's over-compliance with the agreement has compensated for only partial compliance amongst other signatories and the OPEC nation's patience now appears to be wearing thin. Saudi Arabia has now reported an uptick in production at the end of 1Q 2017 and looks set to try to regain market share from the US who have exploited the agreement to bring shale rigs back on-line. Some commentators are suggesting prices could drop to lows seen in early 2016.

In South Africa, the unleaded petrol price in December 2016 was 4 % higher than in January 2016 and the diesel price averaged 9.5 % higher. The Central Energy fund announced an average increase of 38 c a litre in the price of diesel in early January and an average increase of 49 c in in petrol prices. In February and March, diesel prices went up by 21 c and 2 c a litre, respectively; and petrol went up by 25 c and 8 c a litre, respectively. Motorists will be hit with a 30c/litre increase in the fuel levy on April 1.

A more reliable electrical supply has been experienced over the past year, reducing the need for producers to install expensive alternatives in their operations. Eskom was granted a 2.2 % increase for the 2017/2018 year by the regulatory body, NERSA; effective 1 April 2017. This is lower than the 9.4 % tariff increase granted in 2016/2017.

In this difficult economic climate, the South African egg industry is experiencing another year of real challenges which include:

*High commodity prices, related to drought conditions and the volatile rand.*  
*Soaring food inflation and constrained consumer spending (as discussed above)*  
*Reduced consumer spending in a recessionary environment, as discussed above*  
*Disappointingly low local consumption of eggs (141 per person per year)*  
*Weak export demand*  
*Hen welfare*

The total rainfall in the period January to December 2015 was the lowest since records began in 1904 (403 mm, compared to a long term average of 608 mm). Looking at periods in which the annual rainfall in consecutive years has been below the long term average of 608 mm, the four-year period from 2012 to 2015 is one of the three most severe dry spells to hit South Africa in the past one hundred years. The average rainfall from January 2012 to December 2015 was 544 mm, compared to an average of 519 in the four-year period 1930 to 1934 and 545 in the six-year period 1944 – 1949 (South African Weather Service). In November, the US Climate Prediction Center and South African Weather Service reported that a weak La Niña had developed, with average temperatures in the Pacific having dropped below -0.5°C for a period of several months. Wetter and cooler conditions have been experienced over much of the summer rainfall areas of the country and, by the beginning of March, several dams had overflowed: the Vaal (103 %); Grootdraai (103 %) and Spitskop (126 %). The Gariiep and Bloemhof dams were also above 95 % and expected to exceed 100 % in the first two weeks of March. Whilst residents along the banks of the Vaal River were being warned of flooding and water restrictions were being eased in Gauteng, in the Cape Town and Nelson Mandela Bay metros, restrictions are getting tougher as dam levels continue to drop. Cape Town's dams now

average below 30 % of capacity and dams servicing the Nelson Mandela Bay municipality are at 47 %. Both metros are asking to be declared drought disaster areas, with Cape Town set to run out of water within three months. Dams in Mpumalanga and Swaziland have received good rains, but are not full and the uMngeni catchment area in KwaZulu-Natal is still under pressure, with Midmar at 75 %, Albert Falls at 35 % and Inanda at 67 %. In its January 2017 Seasonal Climate Watch briefing, SAWS reported that most forecasting systems point to wetter than normal conditions over South Africa in the late-summer to early-autumn period, but with a relatively low likelihood. The La Niña state has weakened and the ENSO (El Niño Southern Oscillation) has returned to neutral, making rainfall predictions uncertain. The Weather Service cautioned that the above-normal rainfall predicted comes at a time of year when the rainfall will usually decrease dramatically in the summer-rainfall areas.

South Africa continues to import yellow maize from Argentina and white maize from Mexico. By the end of February, 668 504 t of white maize had been imported in the current season (89 % of seasonal import forecast), along with 1.31 million t of yellow maize (76 % of seasonal import forecast). Poultry feed price inflation is driven by the exchange rate as the country seeks to import almost 17 % of its requirements for maize through the 2016/2017 season. South Africa is expected to import 2.475 million tonnes of maize (SACOTA) through to April 2017.

The South African maize crop for the 2015/2016 season has been revised upwards to 7.778 million tonnes (Crop Estimate Committee); 22 % down on last season's crop (9.942 million tonnes) which was already 30 % lower than the 2014 harvest. By the end of February, maize futures for May delivery of white and yellow maize had crashed to R1 996/t and R2 074/t, respectively. Maize futures for July delivery sat at R1 917/t and R2 025/t for white and yellow maize, respectively, at the end of February. Maize prices had peaked at around R5 300/t for white maize and R4 100/t for yellow maize in 2016. Maize plantings are up 35 % over 2015/16 levels (GrainSA). South Africa is forecast to consume R10.47 million tonnes in the 2016/2017 season (AgBiz), whilst the harvest is now expected to be 13.912 million tonnes (Crops Estimate Committee). If these predictions hold, South Africa will be a net exporter of maize again within the half-year and prices will moderate further. The white maize crop has been estimated at 8.31 m tonnes (+ 144 % over 2016 crop: 3.41 million tonnes) and the yellow maize crop at 5.61 million tonnes (+28 % over 2016 crop: 4.37 million tonnes). Soybean futures, for May delivery, reached R6 252 at the end of December 2015 and hit R 6 520/t by mid-January, before moderating to R5 300/t at the end of February. The bumper US harvest may temper prices a little in 2017 but Chinese demand for soybeans remains high and will support prices.

Local demand for eggs remains disappointingly low (141 eggs per person per annum (2016)), despite changing views on cholesterol and the increasing popularity of high protein/high fat diets which has fuelled a resurgence in the consumption of eggs elsewhere in the world. The Mexicans eat a staggering 357 per person per year (IEC). A Mexican family of five will consume roughly a tray of eggs (36 eggs) per week, every week of the year. With eggs featuring in so many traditional dishes, especially breakfasts (huevos rancheros, huevos divorciados, etc.), it's easy to see why consumption is so high. It's not inconceivable that South African consumption could be pushed towards these levels, in a country fanatical about its sport and outdoor living, but, given the current state of the economy and the likelihood of deepening recession, it will

require clever and effective marketing programmes to push consumption up from existing levels. The British and Americans have shown that all that is needed is to identify the right celebrities to be egg ambassadors on social media platforms. Who might fit the bill here?

Locally, the “cage-free revolution” is starting to gain traction. McDonalds South Africa has yielded to pressure and will follow the example set by their parent company in the US to “uncage the Egg McMuffin” by 2025 (hsi.org). The company has negotiated with its supplier to increase the cage-free content of its eggs by 10 % every year. The issue is no longer on the horizon for South African producers – within 18 months of the revolution starting in the US, it has found its way to our shores. Some local producers are already restructuring their businesses to take advantage of this change in the global industry. Companies such as Walmart, Unilever, Kellogg’s, etc. can all be expected to extend their cage-free pledges to all countries of operation in the not too distant future.

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