

Poultry Bulletin

OFFICIAL MAGAZINE OF THE SOUTH AFRICAN POULTRY ASSOCIATION



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R60

THE SOLUTIONS ISSUE

THE BIRD-FLU SAVE THAT EARNED INTERNATIONAL RECOGNITION

MAKING BROILER MAGIC

*The transformation
story of the year*

**'CHICKEN PEOPLE
DOING CHICKEN
THINGS'**

*Inside the engine
room of an
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THIS TIME OF YEAR ALWAYS FEELS EXCITING. First the scents of jasmine and Yesterday Today and Tomorrow colonise streets and gardens, and then the purple exuberance of the jacarandas explodes to convince any last doubters that spring has sprung. It is hard not to rekindle hope when nature puts on such a display even after the bleakest winter. That is also why we themed this issue around solutions, to celebrate the spirit of the poultry industry, and its solutions-driven people.

Starting with our cover star, Phiwe Shabangu, who also graced our cover back in 2021, and who has come so far in three years by finding solutions for every challenge that the poultry industry threw at her. Hers really is the transformation story of the year – turn to page 32 to find out how she did it.

We also hear more about the new beginnings at Rainbow (page 42), where the solution was to unbundle from its parent company and launch a new era of growth and abundance.

These and other stories in the following pages illustrate again why this industry is so unique – on the one hand down-to-earth and free of airs, but on the other a well-oiled machine that has no rival as producer of the people's protein.

Take inspiration from each other, and enjoy the issue!

Melinda
@melshaw001
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VAT-FREE CHICKEN: THE TIME HAS COME



WE AT THE SOUTH AFRICAN POULTRY ASSOCIATION (SAPA) want to applaud President Cyril Ramaphosa for announcing that the new Government of National Unity plans to review the basket of essential food items that are exempt from value-added tax.

This announcement, made during President Ramaphosa's parliamentary opening address, signals multi-party support for an initiative that is aimed at reducing food costs for low-income households.

We firmly believe that selected chicken products should be included in the expanded list of VAT zero-rated items.

The meat that our industry produces is the most popular and affordable in South Africa, making up 66% of all meat consumed in the country. Chicken remains the primary source of meat protein for millions of low-income individuals, including children from disadvantaged families.

Our members and all other South African chicken

producers are already doing everything possible to keep chicken prices low. Even in the face of mass losses due to avian flu, we ensured that there was no chicken shortage by importing millions of fertilised eggs. Government can now provide immediate price relief and ensure that this essential protein source remains accessible to those who need it most, by removing the 15% VAT from the chicken portions most frequently purchased by poor households.


The basket of zero-rated food items was last reviewed in 2018, following the increase in the VAT rate to 15%. At that time, SAPA proposed that selected chicken products, including the IQF portions that are most popular with poor households, be exempted from VAT due to their crucial role in the diets of millions of disadvantaged people.

However, due to differences within the review panel, chicken was not included in the expanded list of VAT-exempt food products at that time.

'It is unfair that SA's poorest consumers still have to pay an extra 15% on every chicken portion they buy'

Over the past six years, the need for VAT exemption has grown as food prices have risen sharply, both locally and globally. While food inflation may be decreasing, prices remain high and it is unfair that South Africa's poorest consumers still have to pay an extra 15% on every chicken portion they buy. In reality, we know that those consumers often have to make do without, as the VAT-inclusive prices put meat completely out of their reach.

The Competition Commission has noted an increase in consumer purchases of VAT-exempt tinned pilchards, which are primarily imported, while chicken remains subject to VAT. We know that South Africans would much prefer to feed their families chicken, and we sincerely hope that this time around that wish will be granted.

SAPA would welcome the opportunity to participate in any further studies to establish the most cost-effective and efficient way to roll out a VAT-free plan for chicken to benefit those who need it the most. 

Izaak Breitenbach
GM, Broiler Organisation



Photograph: Elaine Banister Photography

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LETTERS

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CHICKENS OF THE KOUE BOKKEVELD

WE TRAVEL TO THE KOUE BOKKEVELD a few times a year to spend time on a remote farm owned by my husband's family. Antoinette de Goede has been part of the community taking care of the farm for 12 years and she introduced a small flock of chickens, which are her beloved pets. I have never seen more free-range chickens – in fact, you never see

them during the day as they forage for insects and other veld food. They come back late afternoon for mielies and treats, and then Antoinette locks them inside the coop for the night, to protect them from the caracals. The eggs that she shares when we visit are delicious – they taste like liquid sunshine! It is such a delight to watch her with her beloved chickens!


Alida Croudace





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PRIORITIES FOR THE NEW AGRICULTURE DEPARTMENT

By **Wandile Sihlobo**

SINCE THE GOVERNMENT OF NATIONAL UNITY commenced with its work, some in the agricultural sector have continued to ask about the policy path for the sector. I believe the path for the sector that the Department of Agriculture should follow is clear. The priority areas include (1) addressing animal health; (2) dealing with the complexities and excessive costs that assignees add to businesses under the Agricultural Products Standard Act; (3) modernisation of Act 36 that regulates the registration of agrochemicals, seeds and other agricultural products; (4) continuing to expand market access for agricultural products in various export markets; and (5) dealing with rural crime incidents.

Beyond agriculture-specific matters, structural reforms of the network industries are vital in supporting the growth of the agricultural sector. Here, the Government of National Unity should support the work of Operation Vulindlela, which

the Presidency and National Treasury are currently leading. The urgent reforms that would benefit the agricultural sector include (1) improvements in the water infrastructure and policy; (2) improving the efficiency of logistics, particularly the ports and rail and road conditions; (3) continued reform at Eskom and the broader energy sector; and (4) improved digital communication in rural areas.

The focus of land reform and rural development plans should be the continuous release – with title deeds – of the state's over two million hectares of land acquired over the past few decades to appropriately selected beneficiaries. Title


'The GNU should continue to release - with title deeds - the state's 2+ million hectares of land to appropriate beneficiaries'

deeds should be a priority as they lend these beneficiaries much-needed dignity and a source of financing.

Still, releasing the government's land should not be the be all and end all for the land-reform programme.

Instead, land reform should continue through all its existing levers: redistribution, restitution and land tenure.

To successfully achieve transformative outcomes in agriculture, state capacity should be reinforced. Also, corruption must be dealt with decisively so that the resources for land reform reach the intended beneficiaries.

Another important programme for driving change in the sector is blended finance. The former Department of Agriculture, Land Reform and Rural Development has been driving this programme in collaboration with the Land Bank and other financial institutions. It should be expanded to reach more beneficiaries, primarily to expand black commercial farming. 

Wandile Sihlobo is chief economist of the Agricultural Business Chamber of SA (Agbiz)



NEWS IN BRIEF

Research that might bring feed prices down, a poultry icon retires, and more

Compiled by **Charmain Lines**

ASTRAL SUPPORTS RESEARCH INTO SOYA



Here's where invaluable research into SA soya is conducted: the University of Stellenbosch's Mariendahl research farm

IN 2023, SOUTH AFRICA PRODUCED ENOUGH soya-bean meal to meet local demand for the first time ever. This new-found self-sufficiency has caused local prices to shift to export-parity levels, resulting in local soya beans trading around 30% lower than imported beans, and this has boosted crushing margins and volumes significantly.

South Africa can process 2.5 million tons of soya beans at present, thanks to huge investments in equipment to heat treat and extract the oil from soya-bean seeds and produce high-quality oilcake suitable for feeding poultry and pigs. Sadly, many feed compounders are reluctant to use the local product as they believe that the quality is inferior to

that produced in Argentina. In addition, some poultry farmers blame South African soya-bean oilcake whenever they experience performance problems.

This situation prompted the Oilseeds Advisory Committee to task the Faculty of AgriSciences at Stellenbosch University with establishing a research programme to evaluate the nutritional value of locally produced soya-bean oilcake on a continuous basis to put the quality concerns of farmers and feed compounders to rest.

While the university could upgrade an existing building on its Mariendahl research farm for the project, it needed practical support. "What we did not expect, but which has proven to be an

enormous boost to our research, is the support that Astral, through its County Fair operation in the Western Cape, has agreed to give us," says project leader Professor Rob Gous.

County Fair installed biosecurity measures at the test facility and supplies day-old chicks, gas for the heating system and shavings. At the end of a trial, County Fair also removes the broilers and clears the litter, and disinfects and prepares the house for the next trial. "It would have been difficult and expensive for us to do all this ourselves; we are greatly indebted to Gary Arnold of Astral, and to Alewyn Carstens, Gerrie van der Wath and Gerrit Visser of County Fair." The first

2 500 chicks were placed on 23 August and the trial was terminated in the last week of September.

A further bonus is the great enthusiasm that undergraduate students are showing for the research.

"They are flocking to assist where they can, and some have already expressed their wish to use the facility for their postgraduate studies in poultry science starting next year," says Prof Gous.

Astral sees this potential pipeline of poultry professionals as one of the main benefits of supporting the project, as well as the fact that County Fair will be able to apply the research results to its own feed programmes. 📷



Professor Rob Gous with the first batch of chicks that was placed in August



Zarinah Viljoen manages the trial on behalf of the university

SA SUSPENDS IMPORTS FROM PROVINCE IN BRAZIL

ABAN ON POULTRY IMPORTS FROM the Brazilian province of Rio Grande do Sul came into effect during August this year. The ban was prompted by an outbreak of Newcastle disease on a commercial poultry farm in the province that killed more than 7 000 chickens. The outbreak was reported on 9 July and Brazil voluntarily halted poultry exports to 44 countries.

South Africa's ban applies to all products produced after 18 June 2024, including consignments that were already en route to this country. The ban's biggest impact is on mechanically deboned meat (MDM), which is not manufactured in South Africa in noteworthy quantities.

Despite the Newcastle disease outbreak, Brazilian exports of chicken meat remain strong, trending 7.3% higher in July this year than in July 2023. In the year to date (January to July), export volumes were 0.3% lower than in 2023, arguably due to the suspension of exports following the Newcastle disease outbreak mentioned above.

It should be noted that Rio Grande do Sul is not Brazil's main source of



exports – it ranks, in fact, third among the exporting provinces.

Furthermore, South Africa remains the fourth biggest importer of Brazilian chicken products and have imported 9.3% more chicken products in July 2024 than in July 2023. Finally, the ban is a temporary measure and should be lifted soon, given that Brazil was declared free of Newcastle disease on 1 August.

Claims by South African importers that the ban on chicken from Rio Grande do Sul would have devastating consequences for South African consumers with chicken shortages and price hikes are, therefore, nothing more than irresponsible scaremongering born from own interest. 📷

Photograph: Bay_Media / Shutterstock.com

INDUSTRY LEGEND CALLS IT A DAY

AFTER 41 YEARS in the world of chicken, Chris Schutte will retire as CEO of Astral at the end of January 2025 when he reaches the company's mandatory retirement age of 65.

Schutte's poultry journey started in 1984 when he joined Golden Lay Farms, a division of Tiger Oats, as an assistant farm manager. When he left 18 years later, he was the company's sales director.

In 2002, Schutte joined Astral Foods as the retail sales manager for Meadow Feeds. He was promoted first to the

Feed Division's national sales manager and, in 2004, to its managing director. He joined Astral's board of directors in 2006 and was appointed CEO in May 2009. Schutte is recognised as one of the longest-serving CEOs of a JSE-listed company in South Africa.

In his stock-exchange news-service (SENS) announcement, Astral's executive chairman, Dr Theuns Eloff, noted that Schutte will consult to Astral in a strategic role for a year from February 2025. 📷



BIRD-FLU WATCH

An eye on the disease that worries all poultry farmers, both here and abroad

Compiled by **Charmain Lines**



HOW EGG IMPORTS SAVED THE DAY

Dutch agricultural bank Rabobank has described as “impressive” the SA poultry industry’s response to the 2023 HPAI outbreak that claimed 25% of the country’s breeding stock and over 30% of its laying hen flock.

DURING THE WINTER OF 2023, highly pathogenic avian influenza claimed about a third of the local poultry industry’s long-living birds that keep the broiler and egg supply chains going. The loss of broiler breeders specifically raised the threat of

significant chicken-meat shortages in the run-up to the December holidays.

“We estimated that a 30% shortage was possible, which would cause an increase in the price of meat as well as secondary poultry products, such as necks, livers and gizzards, that would



make them unaffordable for millions of consumers,” says Izaak Breitenbach, GM of SAPA’s Broiler Organisation. The result would be that a nation already plagued by malnutrition would suffer a punishing protein shortage at a time of year when chicken is traditionally the

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DESPITE NO OUTBREAKS, SA IS NOT HPAI FREE



SOUTH AFRICA CAME THROUGH winter 2024 without a single case of bird-flu reported. However, despite the fact that the last outbreak was recorded in November 2023, the country still remains under HPAI restrictions.

This, according to SAPA, is because the 29 commercial layer flocks that survived during 2023 are still in the system. South Africa can only be declared HPAI free once those birds

have exited the production chain. In anticipation, SAPA has applied for permits for the layers to be slaughtered and transported.

Given the restrictions that remain in place, South Africa cannot export chicken products, including day-old chicks and hatching eggs. However, some of our neighbouring countries, such as Namibia, currently imports meat from flocks that have been officially declared to be HPAI negative. 🇿

VACCINATION IMPASSE PERSISTS IN SA

DURING NOVEMBER 2023, the government published the biosecurity and monitoring protocols that would guide vaccination against HPAI in South Africa. Although negotiated with the poultry industry, these protocols are proving to be impossible to implement and, as a result, vaccination is yet to start. Instead, the poultry industry remains in negotiations with government to relax the biosecurity protocol and make monitoring more affordable.

According to SAPA's Izaak Breitenbach, not even export farms can meet the biosecurity requirements and the published monitoring programme is too expensive for all producers, regardless of size.

In addition, the state does not have enough officials to administer the vaccination programme and not enough veterinarians to take the samples needed for monitoring, leaving it up to producers. Ironically, the three approved H5 vaccines are relatively inexpensive.

The vaccines developed against the H7 strain has not yet been approved. 🇿

UK LAUNCHES STUDY INTO HPAI TRANSMISSION

RESearchers from the University of Bristol in the UK are recruiting poultry farmers, bird keepers and others who have contact with domestic and/or wild birds to take part in a major bird-flu study. The study objectives include understanding how the virus is spread from bird to human and from human to human so that steps can be taken to protect the wider public.

During 2022/23, HPAI was confirmed on more than 150 poultry

farms in England and the UK's Health Security Agency confirmed that four people had become infected with avian influenza. 🇿



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HPAI RETURNS TO EUROPE



EVEN BEFORE WINTER has set in, several European countries reported their first bird-flu cases to the World Organisation for Animal Health (WOAH). During August, a poultry flock in France tested positive for an H5 strain, with cases also confirmed in Germany and Portugal.

Wild-bird cases appear to be on the increase, with Belgium, Germany, the UK, the Netherlands, Poland, Portugal and Spain submitting reports to the WOAH. With around 40 cases, France leads the tally.

French authorities reported that by 1 August, about 10 months

after vaccination started in October 2023, almost 48 million of the nation's commercial ducks had received a first dose.

The poultry flock that tested positive for H5 was most likely infected by seabirds along the northwest coast of France. Of the 1 200 poultry on the farm, 190 died and the rest of the flock has been destroyed.

In Germany, 700 ducks, geese and chickens died on two commercial farms. The case in Portugal involved a non-commercial flock of 100 laying hens, 60 of which died. The rest were destroyed. 📌

H7 STRAIN RAVAGES EGG FARMS DOWN UNDER

AN OUTBREAK of the H7 strain of HPAI that started in May in Australia has seen the culling of around 2 million layer hens – about 10% of the national flock – by mid-August. For now, only one broiler farm has been affected.

State governments compensate farmers for birds culled, and the cost of cleaning up after outbreaks is covered by levies imposed on the poultry industry. Compensation for culling losses takes into account a bird's age, body condition, live weight and production records. Premium layers are valued at around \$AU25 (R299) per bird, but as hens age and produce lower-quality eggs, their monetary value diminishes.

Australia views existing avian-flu vaccines as ineffective and therefore the country's approach remains instead focused on disease detection and elimination. 📌



AI STARTS HELPING IN THE BATTLE AGAINST HPAI

LASERS POWERED by the other AI, artificial intelligence, has a ring of intergalactic warfare to it, but a UK company has developed technology that can help farmers in their efforts to keep wild birds away from commercial poultry houses.

The system entails setting up a camera that uses AI to distinguish between poultry that belong on the farm and foreign birds. When an unwanted bird is spotted, a targeted laser emits green light at a wavelength of 520 nanometers, which shows up brightly in the eyes of birds.

Previous systems using lasers deployed every five or 10 minutes, but wild birds were quick to learn a pattern and soon stopped being wary. AI, however, adds randomness to the system and the birds cannot get used to a pattern.

Further afield, American and Iranian researchers are collaborating on developing technology that can detect bird flu (and Newcastle disease) before clinical symptoms appear by using thermal images. The technology rests on the fact that sick animals have an abnormal body temperature.



The scientists claim that bird flu can be predicted with great accuracy within 24 hours after infection. A less reliable method that was also tested was 90% accurate in identifying infection within eight hours. 📌

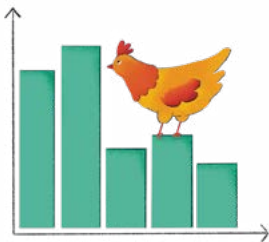
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MEMBERS' NOTICEBOARD

The latest poultry industry intel disseminated to members, here in short form

Compiled by **Michael Acott**

POULTRY MASTERPLAN TO BE UPDATED



Broiler Organisation GM **Izaak Breitenbach** reported the following to the board



THE POULTRY MASTERPLAN is being revised with input from the new Minister of Trade, Industry and Competition (dtic), Parks Tau.

A masterplan meeting was held in August to look at the second phase of the plan, which has been in effect since 2019.

Minister Tau has asked for four focus areas to be included in the revised master plan, namely transformation, localisation, skills development and export promotion. The meeting decided to keep the masterplan's existing five pillars and to



SAPA has requested that the removal of VAT from certain chicken products be added to the action points in the revised masterplan

Photographs: Shutterstock

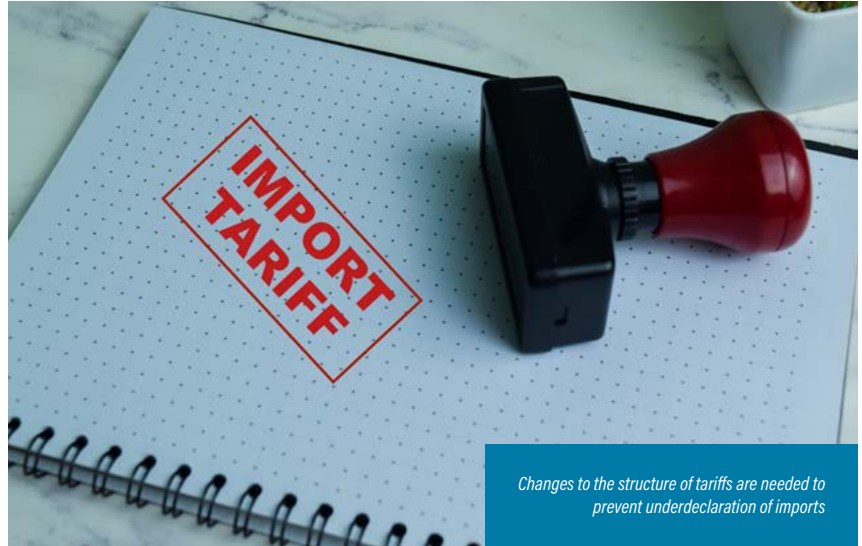
propose actions under these pillars.

On behalf of the poultry industry, I presented a number of points to be actioned in the revised master plan. These were:

- The masterplan to support and action the removal of VAT from poultry meat.
- The escalation of the lack of vaccination against HPAI to the ministers of agriculture and the dtic, whose predecessors signed the original masterplan.
- The actioning of exports to the EU, UK, UAE and Saudi Arabia
- Revision of all trade measures.
- The nonpayment for training by the Agri Seta.

All the proposals were well received except for the push to get vaccination against HPAI done. No progress was made on this issue.

A follow-up meeting will be held to review the progress achieved under the old masterplan, and to consider



what is planned for the updated version of the plan.

The restructuring of import tariffs was included in the original masterplan. SAPA has asked for changes to prevent the underdeclaration of chicken imports as well as the declaration of imported products under the

wrong tariff heading.

The matter has been investigated by ITAC, which submitted a report to former minister Ebrahim Patel. Earlier this year, Minister Patel told us this issue was now a priority. We sincerely hope that Minister Tau sees this in the same serious light.

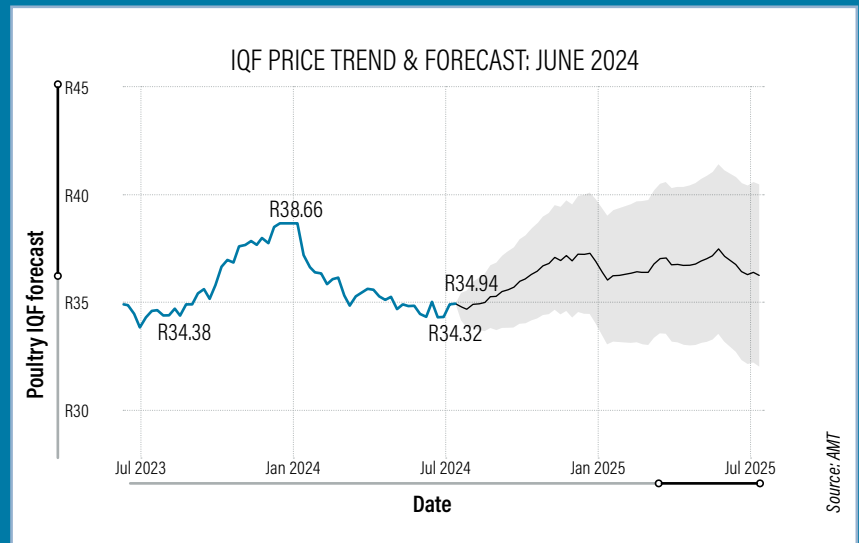
A lower peak for poultry this year

WHILE POULTRY PRODUCER prices are expected to rise as usual in the second half of the year, the December peak is likely to be lower than the seasonal highs at the end of 2023.

This is the forecast by agricultural trend-analysis company AMT, as contained in graphs in its livestock report for the second quarter.

While pork prices are expected to follow the same trend as poultry, producer prices for beef and lamb are likely to be higher at the end of 2024 than in December 2023.

Poultry prices in the second quarter were slightly lower than in the first three



months of this year. AMT reported a producer price for frozen poultry of R34.84/kg in June 2024, a quarterly drop of 0.29%. Fresh poultry sold for

R34.66/kg, down 0.45% on a quarterly basis, while individually quick-frozen (IQF) chicken portions at R30.15/kg were 0.82% below the first quarter.

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A LOW-RISK PERIOD FOR BIRD FLU

GLOBAL MAP SHOWING REPORTED CASES OF HPAI (APRIL - JULY 2024)



Source: SAPA, FAO

THE FIRST HALF OF SOUTH AFRICA'S winter passed without any avian influenza (AI) outbreaks, and the risk of an outbreak occurring was classified as low. The good news is contained in SAPA's AI surveillance report for the second quarter of 2024, from April to June (find more up-to-date news in "Bird-flu watch", page 15).

There had been limited outbreaks in the northern hemisphere during its summer months, and only a few in the southern hemisphere winter. Outbreaks in Australia were apparently due to local mutation of H7 viruses from wild birds into chickens.



The report noted SAPA's serious concern about the lack of approval for bird-flu vaccinations.


"Although three HPAI H5 vaccines have been registered in South Africa no-one has yet been granted permission by the Director of Animal Health to vaccinate against HPAI, despite numerous applications. HPAI H7 vaccines have been submitted for registration but none have yet been approved, pending local efficacy trials."

Discussions between the SAPA HPAI technical team and the Department of Agriculture were ongoing, "but progress is slow".

The report said detection of bird flu in dairy cows and unpasteurised milk

in the United States was a worrying development. By July this year, the virus had been reported in 152 dairy herds in 12 US states.

"Typically avian influenza viruses have difficulty infecting humans because humans have low levels of the receptors required by these viruses to bind to host cells. The mammary glands of cows contain high levels of these receptors, resulting in high levels of the virus in the milk of infected cows. Pasteurisation effectively kills AI viruses in milk, meaning there is little risk of transmission to the public.

"There is presently no evidence of avian influenza in cattle in South Africa," the report said. 

Poultry production is recovering

THE RECOVERY OF THE POULTRY INDUSTRY following last year's devastating bird-flu outbreaks is illustrated in SAPA's latest broiler-industry production report, for May 2024.

Chicken production had been growing steadily since 2020, but then took a nosedive in 2023 as millions of birds died or were culled. Production dropped by 4.4% last year to an average of 20.3 million birds per week.

By the end of May 2024, the five-month average had recovered back up to 20.7 million birds per week, with production in May reaching 21.1 million per week.

The report shows that chicken

consumption has dropped over the past three years. From 2.2 million tons in 2020, it was down 1% in 2021, 0.5% in 2022 and a further 1.9% last year. Consumption is calculated as

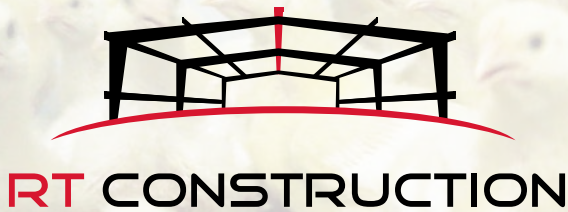
production plus imports minus exports.

In the five months to May 2024, chicken imports comprised 19.9% of national consumption and 24.1% of local production. 📄

ANNUAL BROILERS PRODUCED

Year	Total	% change	Avg./week	% change
2020	1 069 645 984		20 452 676	
2021	1 090 271 728	1.9	20 923 753	2.3
2022	1 112 718 865	2.1	21 334 419	2.0
2023	1 063 395 564	-4.4	20 388 792	-4.4
to May 2024	450 702 338		20 753 159	1.8

Source: SAPA



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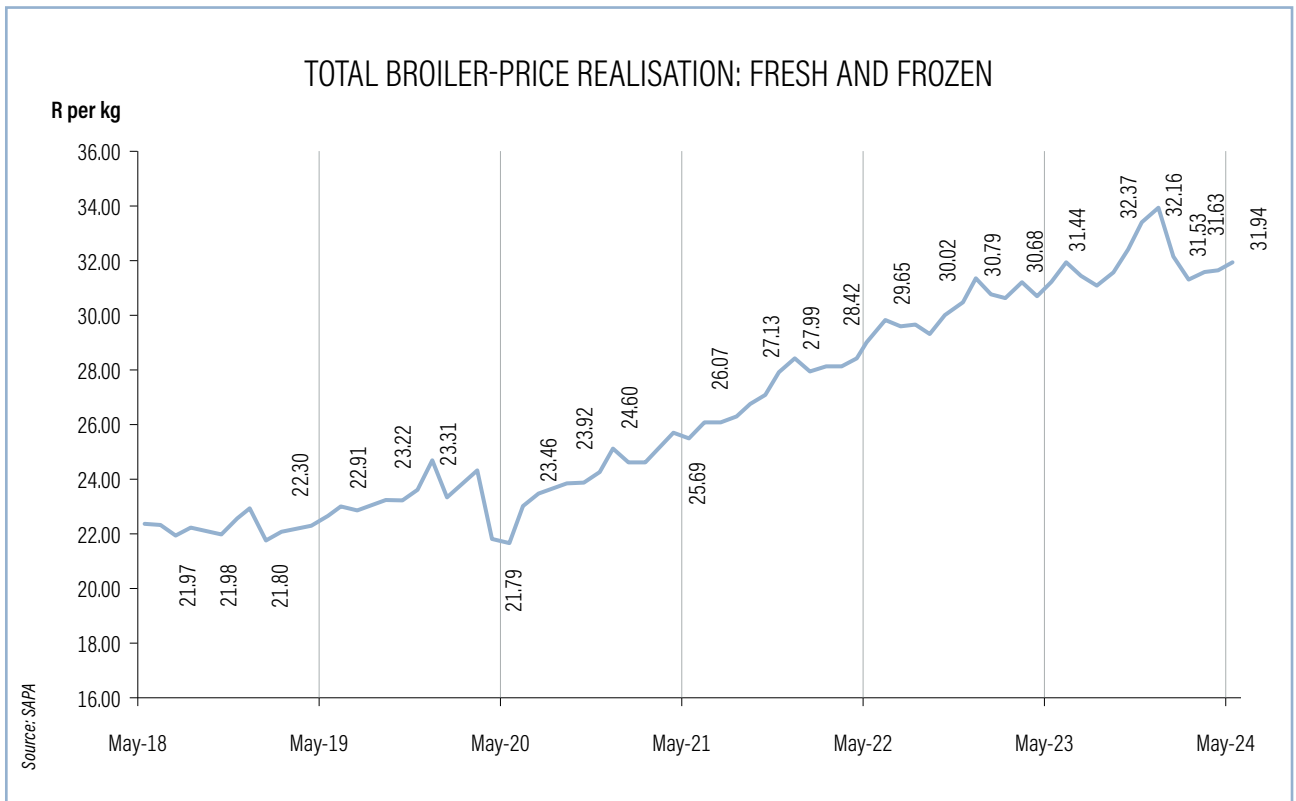
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PRODUCER PRICES HOLD STEADY



THE AVERAGE PRODUCER PRICE for chicken in May this year was R31.94/kg, nearly 1% up on the previous month and just over 2% above the price in May 2023.

The prices are shown in SAPA's monthly broiler producer price reports. The total includes fresh product (15% of sales) and frozen chicken (85%).

The average price for the five months to May was R31.71/kg, virtually unchanged from the R31.70/kg achieved in 2023. Prices have, however, risen over the previous three years, from R23.52/kg in 2020 to R26.18/kg in 2021 and R29.36 in 2022.

The producer price of fresh chicken in May was R39.89/kg, a monthly rise of 7 cents/kg and 17 cents/kg higher than May 2023. Frozen chicken sold for R30.58/kg, 33 cents/kg higher than in April and 79 cents/kg above the producer price in May last year.

Individually quick-frozen (IQF) portions sold for an average of R30.57/kg at producer level, a rise of 8 cents/kg from April and 48 cents/kg higher than May 2023. The producer price of whole frozen chicken dropped in May. The average price of R33.81/kg was down 75 cents/kg from the previous month and R1.20/kg lower than May 2023.

IQF portions made up 44.1% of the product mix in the first quarter of this year, with other frozen products taking up a large portion of sales. These included frozen cuts (14.8%), frozen sundries and bones (14.4%), frozen chunks/soup packs (5.3%) and frozen value-added (4.8%).

The largest category of fresh chicken products was fresh cuts at 7.3%, followed by fresh whole at 5.6%. Most chicken sales in Q1 went to retail (41.7% of volume sold) and wholesale (40.1%). Food service accounted for 14.9% of sales while institutions took 0.9% and exports trailed in last at 0.6%. ▶

OBITUARY

ROBERT JOHN GALWAY

18/01/1943 - 28/05/2024



ROB GALWAY WAS an amazing personality in SA's poultry industry. So many of us who were colleagues or associates invariably ended up calling him "friend".

Galway started out in the poultry industry in 1964, by managing a manufacturing facility that made wire cages for layers in the table-egg sector.

In 1984 he and his wife, Ros, started Dynamic Automation, and they built a very successful business over the following 35 years. From a small cage-manufacturing business it grew to a company that was truly dynamic,

and Galway's quiet and innovative guidance was recognised far, even beyond South Africa's borders.

The couple eventually retired in 2018, leaving the business in their two sons' capable hands.

Galway never sought the spotlight, in fact he made a point to avoid it. He was an astute listener who quietly went about getting things done. He had an amazing ability to cut through the chatter, making things happen without any fanfare. A one-of-a-kind innovative thinker, he had an uncanny ability to create and resolve any

manner of design and engineering challenge, keeping things simple, cost effective and functional.

The growth of Dynamic Automation is a testament to Galway's resourcefulness, tenacity, guidance and innovation, in which he was supported every step of the way by Ros. "Can't do" was never in his vocabulary, and the support, encouragement and quiet guidance he gave to all around him will be an enduring legacy.

All of us who had the privilege of interacting with Galway will remember him fondly and certainly miss him.

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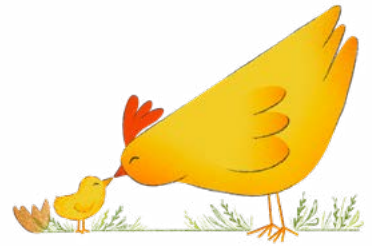
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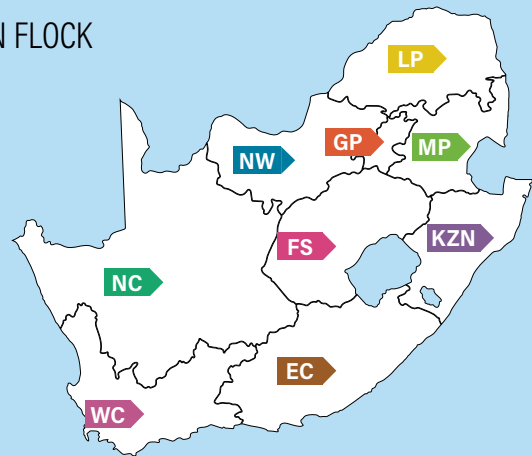


NORTH WEST THE HEART OF SA POULTRY



PROVINCIAL DISTRIBUTION OF THE NATIONAL CHICKEN FLOCK

NC Northern Cape: 0.2%	LP Limpopo: 4.2%
WC Western Cape: 16.9%	GP Gauteng: 13.9%
EC Eastern Cape: 5.5%	FS Free State: 11.0%
NW North West: 22.2%	MP Mpumalanga: 17.5%
KZN KwaZulu-Natal: 8.5%	



Source: SAPA

NORTH WEST PROVINCE has the most chickens in South Africa and is the country's broiler-industry leader, according to SAPA's latest provincial distribution report.

The report is compiled from information provided as part of SAPA's regular avian-flu surveys. It showed that South Africa had 167 million chickens in the second quarter of this year; 137 million in the broiler industry and 30 million in the egg industry, including breeding stock and hens in rearing.

North West was in the lead with 37 million chickens, 22.1% of the total. Mpumalanga was second on 29 million (17.7%) and the Western Cape third on 28 million (16.6%).

North West was also the clear leader in the broiler industry, with 24.4% of the nation's broiler birds, followed by Mpumalanga (19.8%) and the Western Cape (16.5%).


Gauteng has the most egg-industry chickens (24.5%), with the Western Cape second on 17.1% and the Free

State third on 15.5%.

The report also shows that most of South Africa's poultry producers run large operations. Of the 973 producers on SAPA's database, 685 are classified as large commercial farmers. In the broiler industry this means 40 000 birds or more, and in the egg industry it is 50 000 or more.

Many of the operations are larger than this. There are 375 broiler producers with between 100 000 and 500 000 birds, and 95 egg producers in this range. At the upper end of the scale, 42 broiler producers and six egg producers work with more than 500 000 birds.

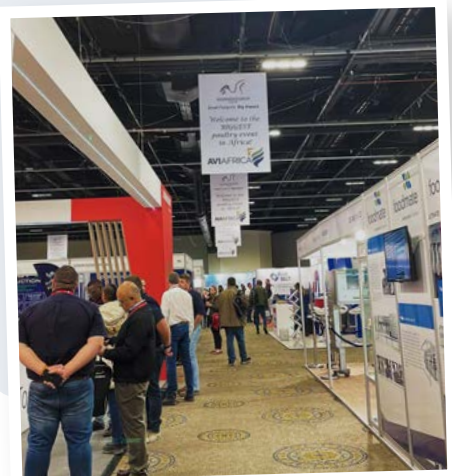
SAPA's database also contains 113 small-scale commercial farmers in the broiler industry (who have between 1 500 and 40 000 birds) and 117 in the egg industry (between 500 and 50 000 birds).

It says 58 subsistence poultry farmers take part in its statistical surveys, although this does not represent the national total. 

NOTICE

SAVE THE DATE

SAPA has confirmed the date of the next AVI Africa poultry conference. All poultry industry stakeholders are invited to diarise 3 – 5 June 2025. More information to follow soon on the SAPA website, sapoultry.co.za. Watch this space! 



Cull trade is recovering

THE NUMBER OF CHICKENS sold in South Africa's cull trade has continued to increase after falling dramatically during the bird-flu outbreaks last year.

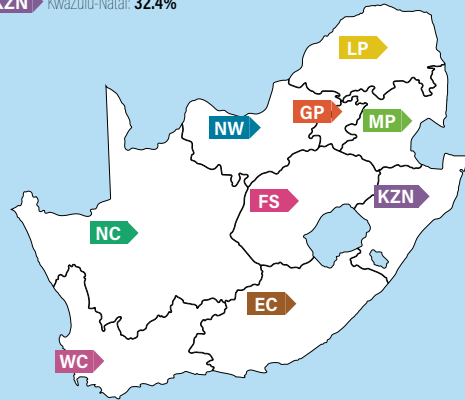
The cull trade is a feature of the South African poultry business. Older laying hens and broiler breeders are sold live off farms to traders who distribute them in townships across the country.

Since the country's first bird-flu outbreak in 2017, the cull trade has been regulated because of the risks when live birds are transported.

Cull-trade sales reached 1.8 million in the last quarter of 2022, but dropped to 454 000 a year later when the poultry industry was hit by the worst bird-flu outbreak in its history. SAPA's cull-trade reports for this year show the trade is recovering. Sales rose to 562 000 in the first quarter of 2024, and increased further to more than 935 000 birds in the second quarter.

PROVINCIAL PURCHASES OF CULL BIRDS FROM FARMS

NC Northern Cape: 0%	LP Limpopo: 1.2%
WC Western Cape: 3.9%	GP Gauteng: 29.5%
EC Eastern Cape: 27.9%	FS Free State: 1.1%
NW North West: 3.0%	MP Mpumalanga: 1.0%
KZN KwaZulu-Natal: 32.4%	



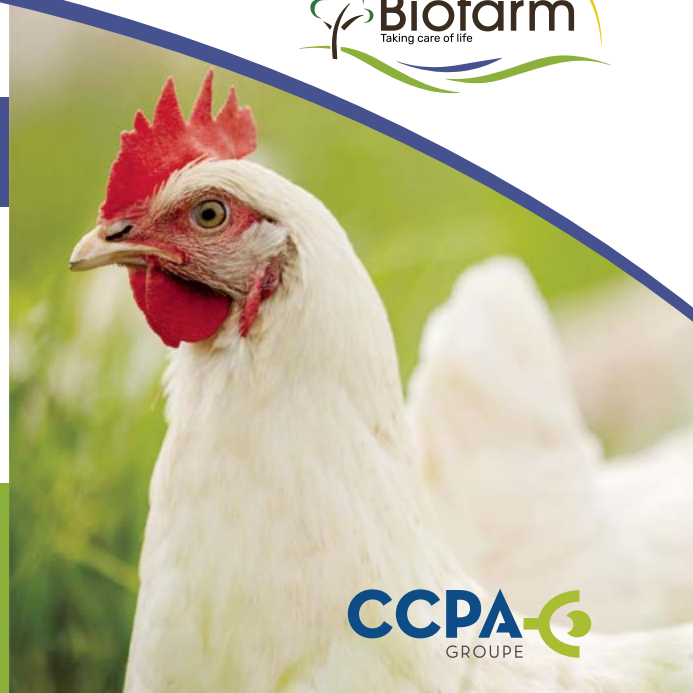
Source: SAPA

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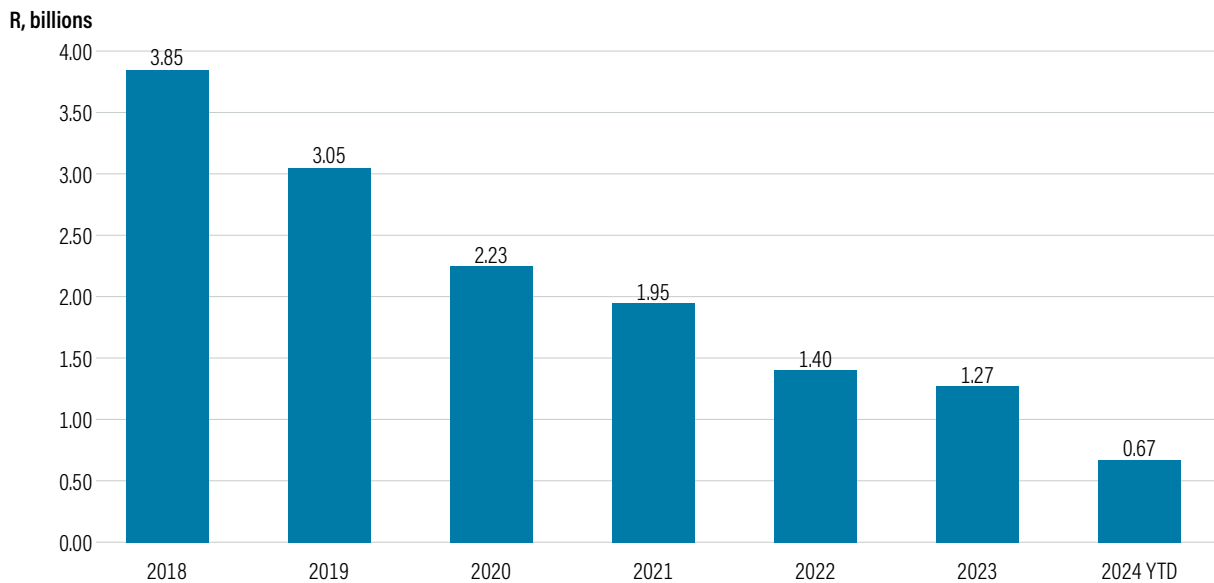
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- Southern Regions
Deon Vosloo, 083 266 3489
- National
Nick Stevenson, 082 494 2657



CHICKEN IMPORTS HEADING UPWARDS AGAIN



TOTAL ANNUAL FOB VALUE OF FROZEN BONE-IN PORTIONS



Source: SAPA

CHICKEN IMPORTS ROSE sharply in July. Although the seven-month total is still below previous years, the 2024 trend is becoming a rising one.

The big increases in July were in offal imports (up 14.8% monthly and 44.1% higher than the previous year) and mechanically deboned meat (MDM), which was up 35.6% in July and 36.7% above July 2023. MDM is a paste used in the manufacture of processed meats such as polony.

While imports of bone-in portions have dropped significantly in recent years, imports of MDM and particularly offal have risen sharply.

Bone-in imports dropped again in July, with declines in volumes from the four major producing areas – Brazil,

the United States, the European Union and Argentina. Import volumes have dropped steadily since peaking in 2018, and the total of 2 615 tons imported in July was 34% below June and 57% lower than July 2023.

The sharp drop in bone-in import volumes is attributable to two main factors – SAPA's successful applications for antidumping duties which now has an effect on nine producer countries, and the spread of bird flu in Europe and North America.

While EU imports are slowly recovering, they are nowhere near the huge volumes South Africa was subjected to up until 2018. Imports from the US have dropped as bird flu spread across that country – nearly all US

imports are bone-in portions and evade antidumping duties because of a duty-free quota the US has imposed on South Africa since 2016.

The new threats are the steadily rising volumes of offal imports and suspected dumping of bone-in portions from Argentina. In June, Argentina landed leg quarters at R15.64/kg, about half of the South African producer price. In both June and July Argentina landed frozen whole and half chickens full of meat at R4.04/kg, cheaper than their stripped chicken carcasses which came in at R7.71/kg. 📌



WASTE NOT, WANT NOT

CHICKEN LIVERS & OTHER OFFAL CLAIMS ITS MARKET SHARE

Aside from portions and whole chickens, the rest of the chicken has a huge market of its own, with hearts, necks, gizzards, feet and livers being a staple of millions of South African consumers. **Charmain Lines** take a closer look at this market and why imports of so-called secondaries and tertiaries are on the rise

In tough economic times, these products become more popular



Photograph: Shutterstock

HOW BIG IS THE MARKET for chicken offal, those parts of the chicken that some people shun? A relatively simple calculation of total local chicken production plus imports, suggests the size of the South African offal market was around 340 000 tons in 2023 (see “Offal in numbers” sidebar alongside). However, SAPA statistics show that chicken-offal imports have quadrupled over the last few months.

The most logical explanation is that cash-strapped consumers looking for protein sources are trading down from more expensive cuts to what industry insiders call secondaries and tertiaries.



Peri peri and mild chicken livers are deli counter favourites in SA



Even high-end Woolworths customers have a choice of free-range hearts, necks and livers



A supermarket freezer stocked with popular frozen product



Offal in numbers

On average, 1 billion broilers are slaughtered in South Africa annually (SAPA Broiler Report 2023). Applying an average broiler mass of 1.82kg and an 85% yield, this results in just shy of 1.7 million tons of chicken produced per annum. Offal (hearts, gizzards, giblets, livers, heads, feet and mala) comprises roughly 15% of a bird, hence an estimated 250 000 tons of offal are produced per annum locally. According to SAPA, 86 252 tons of offal were imported in 2023. Combined, local and imported supply come to around 340 000 tons per annum. 📊

“During 2023, we have seen an almost 2kg per capita decrease in chicken-meat consumption,” says SAPA Broiler Organisation GM Izaak Breitenbach. “This was mainly driven by higher food prices and household budgets under increasing pressure.”

Not only was a shift from meat to tertiary products notable; consumers were trading down even further to substitutes such as beans and other plant-based proteins, as well as products using mechanically deboned meat (MDM), such as polonies and similarly highly processed products.

The latter is also the most likely reason for the recent spike in MDM imports from mainly Brazil.

It is important to note that South Africa produces virtually no MDM for two main reasons. The first is that local producers prefer to sell the offcuts and carcasses that would elsewhere end up as MDM as soup packs, and the second is that it would be just about impossible to compete with the extremely low prices at which MDM is imported.

A compelling alternative explanation for the spike in tertiary imports is that



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tariffs and duties on bone-in portions have largely done away with high profits for importers. Offal, however, especially in view of rising demand, remains a viable revenue stream, according to Azeem Sayed, owner of Farm Fresh, a buyer of locally and internationally produced chicken products.

Interestingly, both Farm Fresh and Rainbow agree that South Africa produces enough offal to satisfy local demand. Keegan Reddy, chief customer officer of the country's second biggest poultry producer, says Rainbow produces an average of 45 000 tons per year, which is mainly sold to the wholesale sector. Other customers include retail, quick-service restaurants and the HoReCa (hotel, restaurant, catering) industry across South Africa. "Within these channels are key customers that purchase offal, all according to their target markets' needs and preferences," notes Reddy.

From Farm Fresh's perspective,

wholesalers that trade in local as well as imported products regard imports as an important market-balancing factor. "Supply from different sources keeps us all honest and the market transparent," says Sayed.

Tertiaries are an important link in the local chicken value chain. South Africa is one of the few markets that consumes the full bird, in stark contrast to particularly first-world markets where white meat, often deboned, is favoured.

"Given that offal accounts for about 15% of a broiler's slaughter weight and the high consumer demand for it, it is most certainly an important part of the product mix for us," says Reddy. "Our aim is to put the full bird to use. Selling offal supports cost recovery, which reduces the price of our prime portions and benefits consumers."

The Poultry Bulletin Test Kitchen created a delicious chicken gizzards recipe especially for this issue – see page 64

The case for canned chicken

Tinned fish is one of the most popular chicken-meat alternatives for low-income households. If it's possible for fish, why not chicken?

Canned chicken is almost completely unheard of in South Africa but is well known and popular in the United Kingdom and the United States. In the US alone, consumers can choose from 13 different brands, including a whole chicken in a can. In the UK, the country's megaretailer Tesco sells, among a wide range of canned-meat products, chicken curry and chicken in white sauce.

The products are nearly all chicken breast meat, in chunks or shredded, and are said to be ideal for

salads, pastas and pies.

Locally, Astral has indicated that it plans to test the market for canned chicken but has offered no further details. Lucky Star, best known for producing canned pilchards, already sells tinned chicken livers in South Africa.

Canned chicken is sold fully cooked, with a shelf life of two to five years. But apparently a properly sealed can of chicken will last a lot longer than that.

The BBC reported that in Britain in 2006, a man celebrated his golden wedding anniversary by opening a 50-year-old tin of chicken. He ate it, with no ill effects. To read the story, scan the QR code alongside with your smartphone.



GIRL POWER MAKES BROILER MAGIC



Partners in shine: Palesa Mokoka and Phiwokuhle Shabangu in front of one of their new chicken houses

October is a big month for broiler farmer Phiwokuhle Shabangu, as our cover star welcomes her first intake of day-old chicks for her new contract with Astral, after a massive expansion over the last couple of years. She shares her inspiring story of growth with

Melinda Shaw

From 2 500 chickens to 450 000 every 32 days... Phive Shabangu is grabbing the opportunities with both hands





WHEN *POULTRY BULLETIN* last spoke to Phiwokuhle Shabangu in 2021, the young entrepreneur was producing 2 500 broilers weekly for the live market around Bronkhorstspuit. Poultry farming was far from her core business at the time; in fact, she came from an entertainment and events background, and she and her husband, Lucas, had only dipped their toes into farming two years earlier.

Today, MokokaShabangu Farming and Poultry is in a very different league. As a contract grower for Astral's Festive brand, it will be raising 450 000 broilers per cycle in 10 brand-new state-of-the-art chicken houses, starting just in time for the festive season this year.

Shabangu credits her mother,

Nomsa Shabangu and her aunt, Maggie Shabangu, as the forces that led her towards the broiler business. "My aunt was the one who identified the farm and helped facilitate our purchase of it – never in my wildest dreams did I ever think I would be

November 2019. Their first step was to apply for an environmental impact assessment.

Fully aware that 2019's poultry masterplan had emphasised the need for more black farmers, Shabangu planned from the outset to

commercialise the operation. "We decided to start small and familiarise ourselves with the industry, the business and the basics of raising broiler chickens and running a profitable chicken farm," Shabangu explains.

The disruptions of Covid-19 provided more reasons to pursue the business. "During 2020 we cleared the land, installed sprinkler systems, purchased farm equipment, installed tunnels for growing vegetables, and planted our first spinach crops."

'We decided to start small and familiarise ourselves with the industry, the business and the basics of raising broilers'

in the farming business, let alone chickens!" She found a business partner in Palesa Mokoka and they quickly registered MokokaShabangu Farming and Poultry (Pty) Ltd, taking occupation of the 21.5 hectare farm in



Phiwokuhle Shabangu's business has grown by leaps and bounds since she first featured on Poultry Bulletin's cover in 2021.



Photographs: Sifiso Shady, Pumza Ndlebe



“In October of that year our EIA was approved and in December, as we were delivering our first spinach to Boxer, we placed our first chicks. We started with 1 500 chicks in the empty double-storey farmhouse. We then turned other parts of the house, such as the carport and patio, into chicken coops which further increased our capacity,” she recalls.

FINDING THEIR FEET

Over the next couple of years the operation slowly expanded, as the partners found their farming feet. The process was not without mistakes, admits Shabangu. “In 2021 we built a 150sqm house, which we had to take down when winter came and we realised it was not built in the correct direction and orientation. In the process we learnt a very important lesson about not rushing in and making investments before doing the necessary research.”

However, by the start of 2022 they had a capacity of 20 000 birds per cycle, housed in a 506sqm open-sided chicken house. They were selling their broilers into the informal market to hawkers and households predominantly in Bronkhorstspuit, Tembisa, Olievenhoutbosch, Centurion and Siyabuswa. Marketing was through word of mouth and Facebook, which presented its own challenges. “Our market was not active on social media, and Facebook attracted online scams, so we only dealt with customers we already knew, for security reasons. This limited our market opportunities.”

The vegetable production side of the farm was doing well, and they had found a client in McCain, to which they supplied pumpkin and butternut, while also successfully growing and selling green peppers and spinach.

Then in April 2022 the poultry operation got its big break, when Shabangu signed a contract-growing agreement with Astral, to house and rear 450 000 birds per cycle, speci-



A former poultry house was converted to staff quarters with en-suite bathrooms as part of the expansion



In March this year, the construction of the 10 new houses kicked off, and Shabangu's poultry dream rose from the ground in a matter of months

STEPS TO GET FUNDING

THE FIRST CRITICAL REQUIREMENTS, Shabangu explains, are an approved environmental-impact assessment (EIA) and a water-use licence with proof that you have sufficient access to water for the approved capacity.

“These documents give you access to an opportunity to get a Letter of Intent (LOI) from your potential market. With an LOI you are able to start looking for funding. This process requires you to have a comprehensive business plan and some equity. You can upload the business plan and other critical company documents through the IDC’s online registration and application portal.

“A due-diligence process will follow to conclude whether or not your deal is approved. Thereafter the legal process will ensue.

“When all legal agreements are finalised and all the required conditions are met, disbursements will start taking place according to the stages of the construction project, right through to the delivery of final project.

“The process can be somewhat frustrating, but you must let it run its course and be patient, because it does take time. Always make sure you’re efficient when it comes to your deliverables to avoid unnecessary delays with the process,” says Shabangu. 📄

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fically for the Festive brand. They immediately started with the process of applying for funding at the IDC and stopped production to focus all their resources on the application and its compliance requirements.

“We had big challenges to overcome, starting with high compliance costs for municipal plans, and various tests and reports,” recalls Shabangu. “We realised that our financial model was not bankable and that we would need to add more houses, which meant we needed a new EIA and more municipal submissions. It turned out we had a shortage of water, so we had to sink new boreholes. We had to reevaluate our staff and find a suitable farm manager...”

After dotting all the i’s and crossing all the t’s, funding of R100 million was approved by the IDC in the form of blended finance through the Agri-

Industrial Fund fostered by the poultry masterplan. The funding structure, Shabangu explains, is a combination of a 50% loan from the IDC, a 40% grant from the Department of Agriculture and 10% in own contribution.

In September 2023, they broke ground for the civil works, and started with the conversion of one of the existing structures into staff quarters, creating 10 rooms with en-suite bathrooms. A brand-new house was also built for the farm manager.

Between March and August 2024 10 state-of-the-art climate-controlled poultry houses were constructed and equipped to each accommodate 45 000 birds. An official roof-wetting was hosted on 17 August – a proud day indeed for Shabangu and Mokoka, with high-level guests including executives from Astral, SAPA, the IDC and GDARD, but also fellow farmers,



Construction of the farm manager's house was completed in August

HOW SAPA HELPED

“SAPA subsidised the Profitable Broiler Production course I did with the KZN Poultry Institute, and they were helpful in sending support services like vets when we had high mortalities during our early start-up phase when we were still producing for the informal market. SAPA continues to be a great support in feeding us with relevant, timely and up-to-date industry information which is critical for the success of our business in the sector.”

At the time of going to press the finishing touches were being finalised, equipping the new houses to each accommodate 45 000 day-old chicks in October



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and the partners' closest family and friends. "It was special to be able to inspire other farmers who aspire to commercialise in the sector, and other entrepreneurs in general who dream to go big in their different industries and spheres of their entrepreneurial life," says Shabangu.

WHY CONTRACT GROWING

"And now we wait for our first chicks – it is such an exciting time, and I have to pinch myself sometimes when I think how far we have come. The contract with Astral has been a real game changer, removing many of the uncertainties that we had to deal with before," she says.

"Contract growing works for us as it provides a guaranteed and consistent market – whatever we place in our houses all goes to one client at one time. With contract growing, everything is structured, compared to the informal market which is not consistent and where the clientele is not loyal, nor is it guaranteed because hawkers buy from anyone who has stock available, as and when they need it.

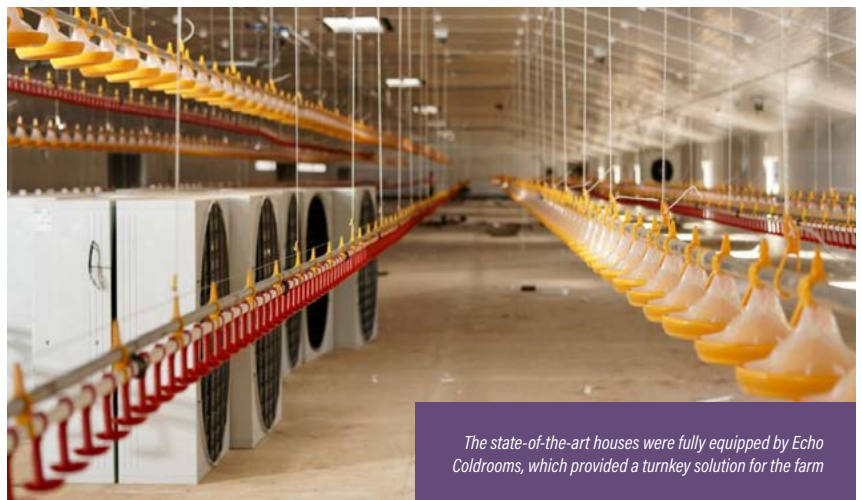
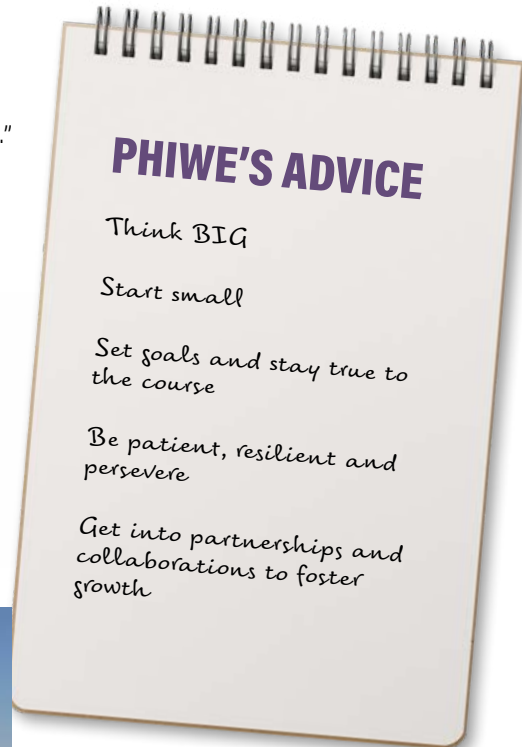
"To keep up with the informal market's needs, we used to have chickens of different ages at any given time to allow us to sell on a weekly basis, but this method made it more difficult to see profits or losses, because we were running multiple cycles at a time. That requires you to have a consistent and healthy cash flow at all times."

Shabangu now employs 28 people, having started with only three workers. "It gives me such pleasure to know that I am contributing to the economy of our area, and providing jobs for men, women and youth."

As she further expands her experience, the young entrepreneur plans to continue growing the business. "We aim to build a smart farm incorporating hi-tech hydroponics farming that will focus on high-value crops. We also plan to purchase another farm where we will replicate the same poultry

model on a larger scale. As the years progress the idea is that we will look into table eggs and explore other activities along the poultry value chain."

There is no doubt that Phiwe Shabangu is a name to watch in the future. 📌



The state-of-the-art houses were fully equipped by Echo Coldrooms, which provided a turnkey solution for the farm

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EXPERIMENTAL POWER IN POULTRY NUTRITION RESEARCH

Before performing an experiment, researchers are confronted with how to design a trial to reduce experimental error to ensure that the correct answer will be attained.

There are two types of experimental error. Type I error is declaring a difference between treatments when none exists (rejecting the null hypothesis when it is true). In traditional statistics, the probability of achieving a Type 1 error is 1 in 20, and this 5% level of probability ($P < 0.05$) is commonly used in nutrition experiments to determine if treatment means are significantly different from one another. Type II error is when treatments are not stated to be different when they are (failing to reject the null hypothesis when it is false).

One of the ways to avoid Type I and Type II errors is to ensure that the experiment has sufficient “experimental power” to reach the correct conclusions. To quote renowned nutritionist Gene Pesti, from the University of Georgia: “experimental power is an indication of the probability that an experiment will arrive at a proper conclusion” (Pesti *et al.*, 2016). An experiment with high experimental power should enable smaller “detectable differences” between treatments. The experimental power of nutrition trials can be increased by minimising any environmental variation (factors other than the imposed treatments that may affect the results), using robust experimental designs, and minimizing variation within the animals used (e.g. placing male or female chickens alone versus more variable as-hatched placements). Experimental power can also be increased by increasing the sample size, i.e. using more experimental units (animals) in the experiment.

To determine the sample size for a successful experiment, the researcher should have an idea of the expected difference between treatments for

the variable to be measured, and the expected variation for that variable. As a practical example, let us say that a broiler producer that currently slaughters birds at an average live mass of 1.80 kg and a uniformity of 10% CV wants to test a feed additive. For the additive to deliver a return on investment that will be worth the producer’s expense, the producer is looking for the additive to deliver an extra 25 grams of live mass at slaughter. A researcher who is tasked to test the feed additive has a few options available in a trial facility and needs to decide on a design that will result in a successful trial, within a given budget. Figure 1 shows the minimum detectable difference that an experiment to test the additive versus the control would yield when using different numbers of as-hatched birds per pen, and different numbers of replications per treatment, that are available to the researcher. For the experiment to deliver a statistically detectable ($P < 0.05$) difference of 25 grams of live mass between the treatments, the researcher decides on a design of

12 replicates with a minimum of 40 birds per pen to ensure that the 25 grams of improvement will be able to be statistically detected by the experiment. If the researcher were to perform the experiment with fewer replicates, or fewer birds per pen, he or she may run the risk of Type II error, failing to pick up the difference in performance between the two treatments at $P < 0.05$, purely because the experimental design was inadequate to do so.

It is generally more common for nutrition experiments to fall into a Type II error than a Type I error, particularly for experimental designs in which it is difficult to minimise environmental variation (e.g. field trials). The perfect experimental design is often out of reach due to funds or practical concerns, but researchers should be aware of the experimental power of their research trials and try to address the limitations in facilities that are available to them as much as possible by using appropriate experimental designs and adequate numbers of animals.

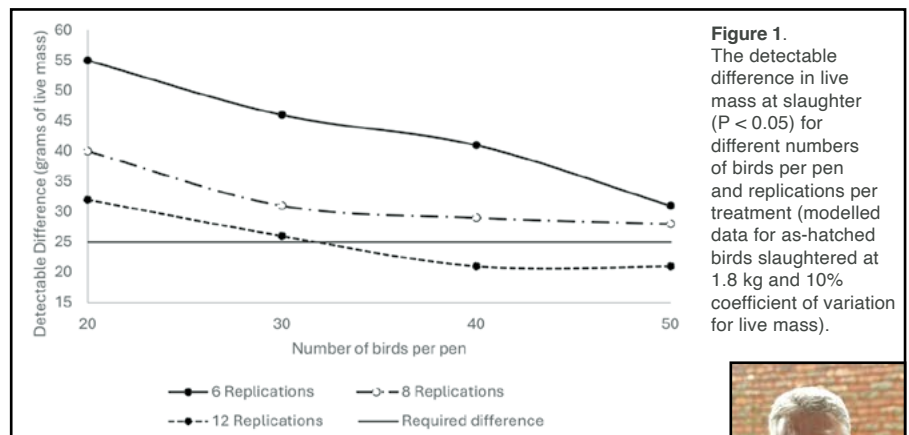


Figure 1. The detectable difference in live mass at slaughter ($P < 0.05$) for different numbers of birds per pen and replications per treatment (modelled data for as-hatched birds slaughtered at 1.8 kg and 10% coefficient of variation for live mass).



Dean Backhouse
EPOL Innovation and
Research Manager

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'CHICKEN PEOPLE DOING CHICKEN THINGS'

At Rainbow, that is exactly what a visitor will find, and the company's focus will remain firmly on 'chicken things', to make sure it produces the cheapest chicken possible for South Africa's consumers, says CEO Marthinus Stander. He talks to **Melinda Shaw**

Photographs: supplied





Marthinus Stander at the listing of Rainbow on the Johannesburg Stock Exchange in July. This happy event marked new beginnings for SA's second biggest integrated poultry producer, where producing the most affordable chicken is a priority



IT HAS BEEN A COUPLE OF MONTHS since Rainbow listed on the JSE, following its unbundling from RCL Foods, and CEO Marthinus Stander is enjoying a brief lull after the excitement and heightened activity around the listing. Although it was the much anticipated end of a long process, he confesses to being delighted at how much joy surrounded the big day. "I was blown away by the sheer enthusiasm from everyone involved – from our shareholders and board members, to our sponsors RMB and all our own people who attended the launch at the JSE. It was such a cheerful day!"

Back at the coalface, the intention was always to hit the ground running as their new financial year started on 1 July and, says Stander, everything is on track. He has undertaken to show

shareholders that the company can remain profitable despite headwinds and commodity cycles, and the necessary measures are being put in place to achieve this goal. "Aside from keeping our shareholders happy, our aim is simple: we want to produce the most affordable chicken possible for South Africa's people, and it is an ongoing process to streamline our processes to get better and better at that."

Stander has been steeped in the industry for three decades, since starting back in the '90s at Tydstroom Poultry in the Western Cape, and he notes that when it comes to producing chicken, surprisingly little has changed. "Of course we have new technological advances that allows us to be more efficient, especially in further processing, but the basics are still the same." ▶

RAINBOW



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The widespread infrastructure failure of the last years however make producers' lives more difficult, as it has chased up all expenses. Stander explains, "The energy crisis is one element, but we also used to be able to send maize from inland to the coast via rail, for instance. Without that option we are now reliant on much more expensive road transport."

What is abundantly clear, he says, is the benefits that come with economies of scale, not only for individual companies, but for the industry as a whole – and by extension, for the consumer. Stander is very clear when it comes to the opinion that is sometimes expressed that having a handful of very large companies driving the industry is somehow bad. "We have to address this fallacy that 'big is bad', which is also behind the Competition Commission's inquiry – the concern that the concentrated nature of production among South Africa's



Thanks to the investments by Rainbow and other large companies, SA is one of the world's most efficient producers

so-called 'Big Five' companies leads to uncompetitive behaviour to keep others out. Nothing could be further from the truth," he says.

ECONOMIES OF SCALE

"For a domestic industry in any country to thrive it's essential to be globally competitive, and we have repeatedly shown that we are one of the most efficient chicken producers in the world – the University of Wageningen in the Netherlands does a regular global comparison. This is only possible thanks to the integrated nature of the large companies.

Without this structure we wouldn't have the genetics producing high-quality day-old chicks for everyone – it is prohibitively expensive to breed first grandparent stock and then the parent stock that eventually deliver the chicks that become the broilers South Africans eat," explains Stander. "Smaller-scale producers simply don't have the resources to invest in these programmes, but they too benefit from the investment when they buy day-old chicks. By the same token small-scale producers wouldn't have ready access to quality feed without the investments by the integrated producers who have



Rainbow has an output of 4.5 million birds per week, making it the second biggest producer in the country





economies of scale on their side. You need big in order to have small.”

At present, Rainbow, as the second biggest producer, has an output of around 4.5 million birds a week, on the heels of Astral, which produces in the order of 6 million. Compare that to Tyson Foods, the biggest producer in the United States, which slaughters more than 45 million chickens every week. For South Africa’s industry to keep pace with growing demand, and to pursue export opportunities, we should ideally create even bigger companies, Stander ventures. “Scale is your friend! The higher the volume of production, the cheaper the chicken we can deliver.”

Last year Rainbow reinstated a second operational shift at its Hammarsdale processing plant which was suspended in 2017 due to the losses caused by years of unchecked chicken dumping. Thanks to interventions by government to curtail dumping, in line with the poultry masterplan, the company was able to reinstate the jobs lost at

that time. However, the same could not be done with the lost production facilities. “All our farms were sold back then, and the infrastructure was all flattened and repurposed for commercial redevelopment or other forms of farming. So for us to increase production again, we have increased our reliance on contract growers,” Stander explains.

Two new growers were brought on board, and existing growers increased their capacity with investments in excess of R300 million to supply Hammarsdale’s P2 processing plant with the extra broilers. Stander is a firm believer in the contract-grower business model as one that provides guarantees to both parties, and enables industry entry for farmers who would otherwise not be able to afford setting up a commercial business. (Also read “Girl power makes broiler magic” on page 32.)

“Contract growers apply for the financing and make the investment to build more houses and increase their capacity, so we don’t have to find



Rainbow directly employs 9 600 people at present, and 1030 more jobs are created by its contract growers



The Hammarsdale complex in KwaZulu-Natal, where the second shift was reinstated

that budget. In return, growers don't have to budget for day-old chicks, feed or medication, which we supply. They receive a fee for raising the birds within performance parameters, with a margin that is profitable if they do everything right. They are further guaranteed that once the birds are ready they're all collected in one go at a pre-agreed contracted grow-out fee – no uncertainty about off-take and no need to worry about potentially fluctuating market conditions. The beauty of the model is that it doesn't matter if the big company deals with a completely different economy – we absorb those fluctuations."

It is a symbiotic relationship that works to the advantage of consumers as well, he says. Where the big

**'Scale is your friend!
The higher the volume of
production, the cheaper
the chicken we can
deliver to the consumer'**

integrated companies can't service the huge informal market, smaller-scale producers function in that space to provide consumers in villages and informal settlements with the chicken that they want.

"Chicken really is the dynamo of South Africa's agricultural sector," says Stander. "This industry consistently produces the cheapest meat for the consumer. This is essential for food security, it creates thousands of jobs, and supports rural development and local infrastructure in the towns where it operates. It is the biggest user of maize other than for human consumption, and has created a thriving South African soya industry, creating scores of jobs in those sectors too."

At present Rainbow directly employs 9 600 people, with 1 030

more jobs created through its contract growers. And if you were to follow the vast footprint of the industry through further processing, packaging, transport, pharmacology and more, Stander's dynamo comparison is right on the money.

VAT-FREE CHICKEN

Stander is a staunch supporter of the call for VAT-free chicken, which was revived following President Cyril Ramaphosa's promise at the opening of parliament that the basket of zero-rated essential foodstuffs is up for revision. Quoting South Africa's alarming statistics for child stunting (one in three children under five suffer from this preventable nutrition-related condition, which has life-long health consequences), he stresses the importance of making protein available to South Africa's poorest citizens.

The panel that made recommendations the last time when chicken was up for consideration in 2018, claimed that it would cost the fiscus too much to zero-rate individually quick-frozen (IQF) portions. "Yes it will cost, but can you put a price on the health and development of our citizens?" asks Stander. "This is one sure way to increase the poorest South Africans' access to nutritious food, without which they often become a burden on the economy – how is this even up for negotiation?"

Tinned pilchards, which is mostly

On the AGOA agreement

STANDER, along with Astral CEO Chris Schutte, represented the poultry industry in the negotiations for the African Growth and Opportunity Act in 2015, when the industry agreed to a quota of chicken from the US that is free of dumping duties. In return, other SA sectors, including the automotive and citrus industries, benefited from favourable export conditions for their products.

AGOA is up for renewal in 2025, and in the last year of its current form, the quota stands at 72 000 tons of chicken annually that can in effect be dumped in South Africa without penalty.

Says Stander, "From our industry's point of view any imports are undesired, because it exports jobs instead of creating employment here at home. However, with AGOA we put on our patriotic South Africa Inc hats and considered the bigger picture. Without poultry on the table the agreement would not have happened. That is what good corporate citizenship is all about."



Some of the further processed convenience foods that form part of the Rainbow offering



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The Rainbow team is set on honing the company's processes to drive down costs, and exploring new opportunities while remaining profitable

imported, is still the only animal product in the zero-rated basket other than eggs, and it's time for a change, he says.

The convenience and versatility of tinned fish is widely accepted, as it needs no special storage and comes in small, affordable portions. Would Rainbow ever consider tinning chicken, for these reasons?

Stander says yes, and confirms that tinning is one of many options the company is looking into in its ongoing quest to give the consumer the best variety of options to choose from, for the sake of affordability and nutrition.

Having ushered Rainbow out of the RCL fold, Stander is now focused on honing the company's processes, keeping an eye on the engine room and leading his team of "chicken people doing chicken things" to delight their customers while remaining profitable and on a growth path.

"We'll be doing more of the same, finding ways to reduce costs, innovating and exploring new opportunities and remaining profitable, with an element of growth. The dream is not to be the biggest, but the best in class, and I am confident that we can get there."

As for the poultry-industry bigger picture, Stander is optimistic and looks forward to bringing the newly elected officials in the government of national unity into the fold. "I see a great future for chicken as a versatile, affordable product that is relevant to all South Africans." That future, he believes, should be more inclusive and diverse in terms of shareholding, "but without chopping up the big companies into smaller bits, because that will simply lead to more expensive chicken".

Ministers John Steenhuisen and Parks Tau and their departments are key to the collaboration needed to unlock the full potential of this industry, he believes, and he calls for all stakeholders to get around the boardroom table with their South Africa Inc hats on and a willingness to implement positive change. 📌

PRIZE WINNER!

Congratulations to Raj Moodley of Northdale, Pietermaritzburg, who wins a copy of *The Rainbow Story*.

Stander's favourite chicken recipe

"I love to braai a flattie on a Friday evening, or a juicy chicken burger – can you get more South African than that?"

"However this past winter I often made chicken curries – chicken korma or Cape Malay curries being favourites.

"I use chicken portions, and build the curry slowly from the base ingredients upwards, adding spices and layering until it's fragrant and delicious. And then I serve it with all the trimmings – rotis, sambals or yellow rice and raisins." 📌





ROOSTER ON THE MENU

Words: **Neil McCarthy**

Illustrations: **Jason Bronkhorst**



Is the midnight crowing of a suburban rooster enough of a disturbance that you'd eat one on a holiday in Greece?

I HAVE RECENTLY RETURNED from a holiday in Greece. There are many positive things to be said about Greece; its seas are the most see-through seas in the world. It has many more beaten-up cars on its roads than most places, so you feel like you are driving a Ferrari in even a mid-level family sedan with many mysterious scratches on it, which is a plus because it comes in much cheaper than renting a Ferrari.

But alongside these admirable aspects I put its food. It is almost always excellent. I've been to Greece before and on previous visits I noticed that the menus were dominated by dishes centred on lamb or pork (and occasionally goat which I tried only once and won't attempt again). Since contributing to this magazine I've become especially alert to the chicken and its place in the modern world, so I was pleased to discover that there are more chicken options on Greek menus than there used to be. The Greek chicken has gatecrashed the Greek kitchen.

I was so busy scanning menus for chicken options that I nearly missed a

very arresting new addition – rooster. "Baked Rooster in Wine Sauce" read the listing. Once I noticed it I could not get past it. What was a rooster doing there? That's not a proper place to find one. It probably sounded better in Greek, maybe that rooster was just a badly translated "chicken", but I was surprised at how much more difficult I found the thought of ordering a baked rooster rather than just an

Roosters are loud, flashy and fiercely individual, all things I find hard to handle in my own species

ordinary roast chicken.

In my mind roosters stand on the tops of farm walls and crow in the first rays of the rising sun. They are a symbol of pizzazz and power, of not giving a damn about what others think of your feather colour schemes or about the funny wobbly bits that might be sprouting from your chin. They are loud, flashy and fiercely individual, all things I find very difficult to handle in members of my own species, but

admirable in a rooster.

"I can't eat a rooster," I thought. The waiter was approaching.

And then a memory returned to me with a curious clarity. I had once known a rooster, although we never met. He and I had been neighbours.

This was a rooster that had lost his way a bit, or perhaps he was objecting to living in a Joburg suburb and not on a farm, or he was making his feelings clear about the unreliable service delivery or the absence of female company or something. Maybe he was thrown by the street lights and his difficulty in even seeing any horizon from the clutter of the unseen

backyard to which some neighbour had confined him, but, whatever the reason, he used to crow very loudly, very often and always at maliciously disruptive intervals.

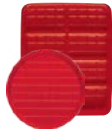
His crow was penetrating and slightly cracked. It had a crazy edge that left you convinced that if you ever came face to face with that rooster he would not hesitate before taking out your eyes or making disparaging remarks about your style choices. ▶

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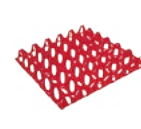
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He would wait until I had just nodded off before launching into one of his most cracked and crazy assaults, pitched at just the volume and frequency so that it travelled directly from his nearby backyard and into my brain. He would bide his time until I had had a particularly demanding night of entertainment that might have resulted in a few too many flaming sambucas and, knowing that I had an early start the next day, he would let rip.

That slightly crazy edge to his crowing would be enough to throw me completely. To an oversensitive nature like mine it felt personal, as if the universe was laughing at all my puny dreams and my badly fitting Joburg windows which sucked out all the heat from the house and let in all the noise.

He knew the darkness that flooded into my soul with each of his calls, the way his cry of madness unsettled me and made me vividly recall humiliations from my past and all the most painful and outlandish ways I might die suddenly. And just when I had zipped those sorts of demons back into the tin trunks of the mind to which they are usually confined and my eyes would start closing he would have another go.

One night I had had enough. I got out of bed and got dressed. I was determined that I was going to find this bird and end it. There are laws about domestic fowl in urban areas, as the readers of this magazine know better



than anyone. Why are those laws not enforced? What were the police doing? I was going to identify which nearby house was keeping this animal. I put on shoes with soft soles. I zipped myself into a dark hoodie and picked up a blunt object. I padded out into the night and listened. Nothing.

I walked up and down the neighbourhood streets, stopping now and then to listen. That bastard rooster knew I was there, he could feel me hunting him and decided that tonight he would just shut up. I had been at

it for almost an hour when a cop car pulled up and took me to the station for questioning. "You are making a mistake! You should be stopping the illegal rooster owners!" I protested.

"We have real criminals to deal with," they said. "People like you. Which house were you going to break into?"

"AND FOR YOUR MAIN COURSE, SIR?" ...asked the Greek waiter. I suddenly remembered where I was. "I'll have the baked rooster," I said darkly, "Well done." 🍗

SAVING EGYPT'S CHICKENS AND THEIR FARMERS

Canadian expat **Maryanne Stroud Gabbani** has lived in Egypt for two decades and started blogging in 2003, at the age of 54, about all things Egypt and life as a farmer. Here she shares her learnings after avian flu hit the rural chicken farmers of Abu Sir hard...

LIVE ON A FARM south of the pyramids of Giza and have done so for about 20 years. I built the farm after my husband's death primarily for my dogs, my horses, my parrots, and my need to live in a reasonable place, which was for me anything *but* the city.

Since 2012, the staff at my farm, our vet, and other vets and volunteers have been carrying out a programme of outpatient animal care for our neighbours, most of whom are small farmers on very tight budgets. We treat minor wounds, do preventative maintenance such as deworming or nasolacrimal duct flushing to prevent habronema infections, and we provide information and suggestions about nutrition and basic care for animals in the area.

When asked if our work is "animal rescue" I have to say that helping farm animals is also helping farmers, as these animals are the basis of any health and security for the farm families. Unlike industrial farms, the farms in our area are hands-in-the-dirt

Stroud Gabbani has lived in the area since 2004 and has close ties with the farming community

farms and their owners are all at the ground level of all socioeconomic status.

I moved to my area near the pyramids of Abu Sir in January 2004, initially renting a small house while I looked for a good plot of land to purchase. In February 2006 avian influenza hit Egypt hard. As the owner of six much-loved parrots, I had been following the progress of this new avian disease very closely. In the winter of 2006 no-one seemed to know exactly which birds would be affected by this virus, although for the most part it seemed to be chickens, ducks, turkeys and geese, all of which are essentially birds that are domesticated.

Egypt is an important flyway for migratory birds, but for the most part birds coming from Asia, as the virus was reportedly passed on as they travel through in the autumn on their way to warmer places in Africa.

In the late winter/early spring, migratory flocks would be travelling from Africa back to Asia and northern Europe, so I was entirely astonished when the government authorities suddenly banned any shipments of poultry into the city in February 2006, sent truckloads of thousands of chickens back to the warehouse farms that dot the countryside, and informed the population that any poultry flocks within a kilometre of an outbreak would be destroyed.

I had chickens in my aviary as janitors for the parrots who were extremely messy diners, and when I heard that there was bird flu in the neighbourhood, like a good citizen, I had my chickens slaughtered.

It was a strange transformation of the villages in my area, where I was in the habit of riding my horses daily, from our path being crowded with poultry to one where there was not a chicken, duck, turkey or goose to be seen.

The cull was catastrophic for farm families who relied on their chickens for



Stroud Gabbani saw the devastation of AI first-hand while riding her horse



Before AI hit the area most families had poultry that lived free range

eggs and meat for their families. Most families had a number of chickens, geese, ducks and turkeys that were left to live free-range during the day and then collected into a room at night to protect them from predators. The families generally marked their poultry with a daub of paint on the feathers on the back of each bird, with each family having a different colour.

When the poultry came home in the evening, the women would feed them chopped greens, crumbled dry bread, and household leftovers to supplement the poultry's foraging during the day. If there was a large flock, the family might buy a bit of commercial poultry feed to supplement, but the area around the villages with its irrigation

canals generally contained plenty of insect life. I often admired the flocks as I rode by.

Having lost their flocks to the governmental cull in the spring of 2006, families were extremely cautious about bringing in new birds, since all of the birds killed had been a serious economic blow to the families. I wondered what the families were doing for eggs and meat, and on chatting with neighbours I was told that quietly and slowly families were building rooms on the roofs of their houses in which to keep poultry. That made sense to me and I didn't think much more about it for a while.

During the years after the revolution in Egypt in 2011 that deposed Hosny ▶

Mubarak, it became clear that much of the governmental structure was more or less on sabbatical for a while. Many of the normal services that we had come to expect in rural areas (and they were very few, not providing water or sewage systems, garbage collection, reliable public schools and so on) were not available.

Services from agricultural authorities were especially thin on the ground at the time. I had been working out how to cheaply deworm horses and donkeys just prior to the revolution since I cared for 20 adopted equines, and had discovered that I could use medications sold in bulk for injection to deworm horses and donkeys orally for a fraction of the cost of imported meds.

Armed with some good volunteer veterinarians and this knowledge we started the Rural Wellness Initiative Egypt in 2012 to provide free services to our farming neighbours.

While caring for the donkeys was very important since they were the primary source of transport, it quickly

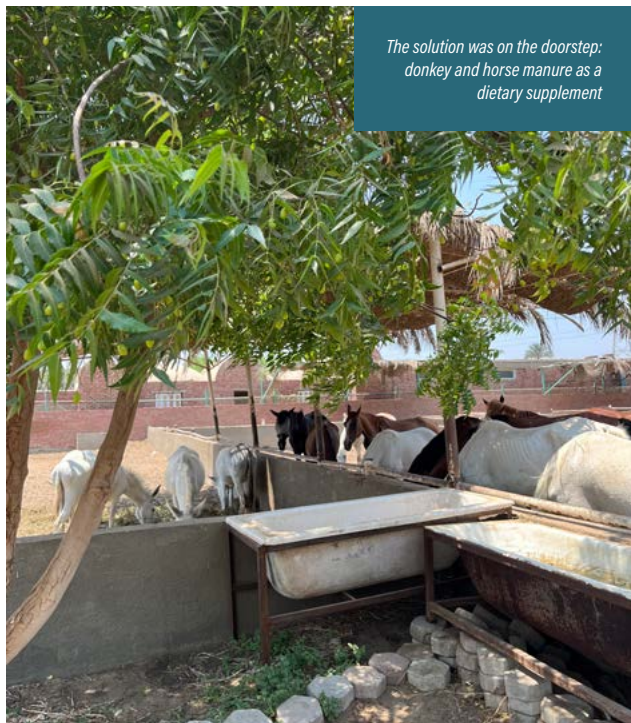
became clear that the villagers had returned to raising poultry in secrecy on their rooftops.

There were two main complaints regarding the hens that we were seeing at our weekly mobile clinics. The first was that the chickens were not growing fast enough and the second was that hens were not laying. Once we'd determined that these complaints were not due to respiratory infections or digestive infections such as salmonella, most of which, other than AI or pox, can be managed with powdered antibiotics, we were stuck with the problem that the flocks were dealing with malnutrition.

Asking the families what the poultry were being fed, the answers were generally the industrial poultry feed (soya meal), maize, dried bread, chopped green forage, kitchen scraps and so on. Not much protein for birds that used to be cleaning up all the cockroaches, beetles, larvae and so on that could be found around an Egyptian village.



Now confined, the chickens lacked calcium and protein in their diet



The solution was on the doorstep: donkey and horse manure as a dietary supplement



The birds' response to the bathtub of equine manure was an eye-opener



If I suggested that the chickens were in need of protein and calcium that they might have gained from insects in the past, the younger wives who would have been children in 2006 were horrified that I might think that they had insects in their house or in the chicken room on the roof.

Older women who could remember the free-range flocks would ruefully admit that the flocks were definitely short of bugs.

So I began studying what plant materials could be given to the flocks to supplement calcium and proteins. Cabbage, kale, broccoli and cauliflower leaves could help, but evidently it was not enough.

When Egypt began its economic descent into inflation in 2022, much of the imported maize and soya beans destined for manufacture into poultry feed got stuck in customs due to a lack of hard currency and as a result the country had a major lack of poultry feed.

The news that poultry producers were slaughtering chicks because

they couldn't feed them pushed the government to ease up on the financial issues for the larger producers, but the villagers were buying their feed from secondary and tertiary sources where the protein content of the feed was being diluted while the price was increasing exponentially.

The end result of this was that a farm family might have to spend a large proportion of their disposable income on poultry feed that would barely keep the birds alive, and at the same time

'I'd noticed that birds like to scratch around in manure, and assumed they were searching for bugs'

would not be helpful at all for egg or meat production.

This prompted me to do more thinking about what it was that poultry were eating when they were ranging free and egg production had not been a problem. One of the first things to come to mind was manure, most of which was from horses or donkeys in

the villages, since the cattle are taken to the fields every day.

The next step was to see if anyone had done any research on the use of equine manure for feeding poultry. Like most people around poultry, I had casually noticed that birds like to scratch around in manure, but I had assumed that they were searching for bugs in it, despite the fact that the piles they were often picking through were quite fresh. Too fresh, in fact, to have had the time to develop eggs, larvae, or adult forms of any insects.

I went to YouTube to see if there were any independent farmers uploading videos, and one of the first videos I saw was a five-year-old film about a compost farm in Vermont in

the United States (see sidebar on page 59) where they were raising chickens and selling eggs without the use of any grains.

I found others and the one thing that they all agreed on was the importance of equine manure in the process. That is when I began reviewing my studies of the equine digestive system. ▶



Horses have two stomachs: the first one being where ordinary digestive processes extract simple sugars and such from the food available. Ideally this food should not include much grain as this contains more sugar than the horse needs for energy. The second stomach, the hind gut, generally produces the short-chain fatty acids that provide much of the animal's energy.

The hind gut is essentially a brewery where fermentation changes the cellulose of the grasses into products that the horse's body needs from its food source, which should be mostly grass of some sort. It stands to reason that a pile of fresh manure would also contain much of these products. So it wasn't that chickens were looking for bugs in manure, it was that they were looking for manure.

While all sorts of research has

been done on equine digestion, most of it has involved the stomach rather than the hind gut. This is clear in all of the articles that are still trying to teach horse owners to back off on the amounts of grain that they are feeding and to concentrate on the forage, since too much grain in the stomach can spill an excess of sugar into the hind gut, causing all sorts of problems from laminitis to Cushings disease.

Oddly enough, as far as I have been able to find, no-one has tried to find out just what it is that is produced by a horse or donkey hind gut that is so good for chickens.

The next step in our research was to take an old bathtub, fill it one quarter full of fresh horse manure from my farm's horses, sprinkle a cup of poultry feed on top to attract the chickens in my aviary and then see what would happen.



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The results were startling. It only took about ten minutes before most of the hens in the cage were investigating the magic bathtub and within an hour or so, they were all scratching about and eating happily. Oddly enough, what they were eating was *not* the poultry feed, but the manure.

We had just installed a new flock of 15 hens and a rooster to replace our old flock which we'd slaughtered when a few of them had come down with bird flu.

The new hens had arrived clearly believing that commercial poultry feed was the only thing to eat, as it took us a couple of days to get them to try old scrambled eggs, salad, macaroni or even chopped chicken bones. Their demeanour and activity had improved with the acceptance of the additions but to be honest they were still a bit listless.

On the day after giving them the manure, however, it was as though we had a totally different flock in there. They were much more active and attentive to their environment, happily attacking the cabbage leaves that we suspended on baling twine from the ceiling. We added some calcium

powder to the manure to help them to grow and produce eggs, as well as the crushed eggshells from the household consumption.

Any listless birds that were moping about soon stopped and one hen that had a case of pox (a virus for which there is no medication available), healed on her own. I began talking about the results of our experiment with some of the interested village women and showed them photos in the first week of the trial.

After three weeks of the manure trial we added 15 hens to the flock. These hens adapted easily to the manure feed too, although they, like the first batch, were used to commercial feed. In this case they learnt quickly about the bathtub through observation of the other hens.

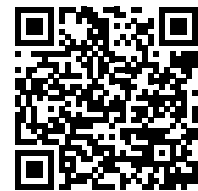
At this point we have stopped buying commercial poultry feed, which is a savings of at least 2 000 Egyptian pounds (around R750) per month for us. We have a few bags remaining but as we are only using it as a supplement those will last quite a while.

One of the interesting things for me is that on casual inspection, the feathers of all of the birds are




The man who feeds 600 chickens without grain

Scan the QR code with your smartphone camera, for the story of a Vermont, USA, farmer whose secret for grain-free poultry feed is... compost!



"My birds' feathers have noticeably improved on the new diet"

enormously improved. Having spent ten years looking at scrawny bare chicken butts in the course of diagnosing diarrhoea and other problems, I am amazed at the beautiful fuzzy feathery butts on my chickens. No patch of skin can be seen. I never knew that chicken butts could be so beautiful!

Now our job is to let the rural farmers (as opposed to the industrial farmers who have their own agendas) know that the saving of their flocks is not only free, but it is just outside their front door. 

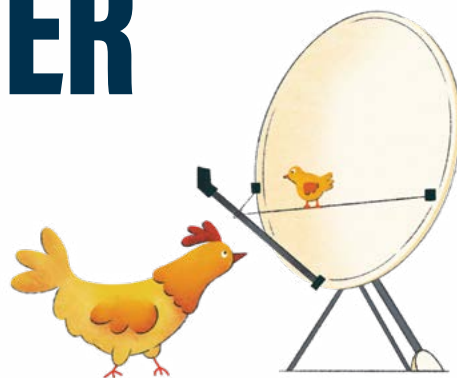
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ON THE WIRES

Policy challenges in Iran, the chicken toll in Gaza, and more global news

Compiled by **Charmain Lines**

POULTRY ANOTHER CASUALTY OF WAR IN GAZA



FOOD SECURITY IN ISRAEL AND PALESTINE is at ever-increasing risk if the poultry industry in that region is anything to go by.

As far back as March, the Poultry Breeders and Animal Production Syndicate in Gaza estimated that nearly 90% of the poultry industry in the enclave has been reduced to rubble as a direct result of the hostilities. Around 6 500 farms had previously supplied the local market with 3 million chickens per month.


These days, most chicken products enter the region as humanitarian aid from Egypt, but it is estimated that the quantities supplied do not even meet 10% of demand.

On the other side of the border, nearly 70% of layer farms in Israel are physically threatened by the ongoing war by dint of being located close to the frontline.

Animal welfare is a further casualty of this war, as reforms intended to modernise the egg industry that were approved by Israeli lawmakers in 2022 have been suspended in the face of the war's impact on production and investment. The Ministry of Agriculture



and Rural Development argues that the poultry industry requires additional protection, given that it had not yet recovered from the Newcastle disease outbreak in the last quarter of 2023 when the war started. That outbreak

claimed 16 million birds. Officials state that Israel cannot afford to lose hens – and around 35% of its national egg production – due to reforms at a time when farmers have no opportunity to invest in their operations. 

Photographs: Rokas Tenys, Alexey Smyshlyayev, Matyas Rehak / Shutterstock

MONETARY POLICY HAMSTRINGS IRAN'S POULTRY INDUSTRY

IRAN'S POULTRY PRODUCERS are confident of producing 3 million tons of chicken this year, enough to meet domestic demand and continue exports, mainly to neighbouring Iraq. This return to being a net exporter of poultry marks a remarkable recovery from last year when Iran had to import chicken and consumers endured sharp retail-price increases.

While the recovery is good news, the industry is not out of the woods due to, strangely enough, the country's monetary policy.

Iran currently has three exchange rates: the open market rate, the official rate and the Central Bank's NIMA rate. According to the country's Chamber of Commerce, exchange-rate uncertainty makes it difficult for poultry farmers to accurately plan input costs. This, in turn, fuels instability in the supply chain and increases production costs, leaving investors unwilling to invest in the industry. 📌

RUSSIAN POULTRY FARMERS NEED MORE HANDS



A STUDY BY THE RUSSIAN CENTRAL Bank in April 2024 showed that 70% of Russian firms did not have the employees they needed, while the Russian Institute of Economics estimates the country's labour shortage at 4.8 million workers.

Among the businesses affected are poultry producers, who are intensifying their efforts to hire workers from India, Africa and even North Korea. Among other factors, the agriculture sector has been hit hard by shrinking rural populations.

Cherkizovo, Russia's largest broiler meat producer, recently said that nowhere in Russia are there more people than jobs. The company tries to pull workers from traditional Russian workforce sources, such as Uzbekistan,

Tajikistan, Kyrgyzstan, Kazakhstan and Belarus, but also recruits labour in India and Sri Lanka.

Foreign workers, however, are not taking the bait, mainly because the Russian ruble's depreciation has lowered wages in real terms. It has also become difficult and complicated to enter the country, with foreign citizens often kept waiting at the border for 12 hours only to be turned away. 📌



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IMPACT OF NOISE ON POULTRY PRODUCTIVITY

A veterinarian researcher explains why peace is important in the hen house

"When I run the generator, I have noticed that my chickens are restless. Should I be worried about their productivity - can you give me advice?" Anna, via email

GENERATORS PRODUCE MUCH NEEDED electrical energy, but they cause noise pollution too. This unwanted, disturbing and excessively loud sound can have a negative effect on human and animal health, as well as on environmental quality. Small (50kW) and large (1500kW) generators produce noise levels of around 85dB and 105dB respectively.

Studies have shown that the average noise levels at chicken houses are nearly 80dB, and that levels above that are regarded as high and negatively affect the behaviour, physiology and productivity of the chickens. Effects include anxiety, fear, aggression and tonic immobility, which is characterised by severe involuntary inhibition of movement and responsiveness to external stimuli due to perceived overwhelming danger. Increased blood corticosterone, cholesterol and other proteins, sleep interruptions, reduced feed intake due to stress, as well as stunted growth, decreased weight gain, poor meat quality and lower egg numbers and size are reported. Stressed birds are also susceptible to diseases due to weakened immune systems.


Breed, age, sex, production status, farming system, noise level and duration and frequency of exposure among other factors, influence the outcome



of exposure to high noise levels. Some investigators observed the negative effects of noise pollution only in the first months of exposure, following which the birds acclimatised and returned to normal, while others reported ongoing deterioration of the wellbeing of the birds and productivity.

To decrease the noise levels, place the generator as far away from the birds as possible. Replace a high noise-producing generator with one equipped with noise-reduction features such as low-noise alternators and variable-speed engines. Other noisy equipment used on the premises should be replaced as well. Alternatively, use soundproofing materials such as acoustic panels and sound barriers to enclose the generator and

block sound waves. Using mufflers and silencers to reduce the sound generated by the engine and exhaust is another option. Regular servicing of equipment to prevent excessive noise production due to malfunctioning is recommended.

In short, noise pollution on chicken farms is a serious animal health and welfare challenge that causes considerable economic losses. It is well worth your while to allocate resources to mitigate the problem. 

Dr Baratang Alison Lubisi is research team manager in diagnostic services at the Agricultural Research Council, Onderstepoort Veterinary Research: LubisiA@arc.agric.za



500g GIZZARDS | **1 Tbsp PAPRIKA** | **2 BAY LEAVES** | **1 CHILI** | **1 glass BEER** | **1 ONION** | **3 cloves GARLIC** | **1 cup TOMATO PUREE** | **1 glass WINE** | **2 Tbsp OLIVE OIL** | **SALT & PEPPER**

MAKE A BUDGET-FRIENDLY CHOICE. IT'S WORTH THE EFFORT.

- ① **CLEAN** THE GIZZARDS: WASH WELL-REMOVE GRISTLE, GRIT & LOOSE FAT. RINSE AGAIN. CUT EACH GIZZARD INTO 3 PIECES.
- ② **MARINADE** IN A BOWL, COVER THE MEAT WITH 1 GLASS BEER, 1 Tbsp PAPRIKA & 2 BAY LEAVES. COVER & REFRIGERATE FOR 6 HRS.
- ③ WHEN READY **SOFTEN** 1 CHOPPED ONION IN OLIVE OIL IN A LIDDED POT. ADD CHOPPED GARLIC & CHILI. SAUTE UNTIL FRAGRANT.

- ④ **DRAIN** GIZZARDS. **SAVE THE MARINADE** ADD MEAT & 1/2 GLASS WATER TO POT & BRING TO THE BOIL.
- ⑤ **ADD** 1 CUP TOMATO PUREE, 1/2 GLASS WINE, THE MARINADE & SALT & PEPPER. BOIL FOR 2 MINUTES.
- ⑥ **TURN DOWN HEAT** TO A SIMMER COVER & COOK FOR 1 HOUR. CHECK FOR SEASONING & TENDERNESS. IF SAUCE REDUCES TOO QUICKLY, ADD WATER. SIMMER UNTIL GIZZARDS ARE TENDER.

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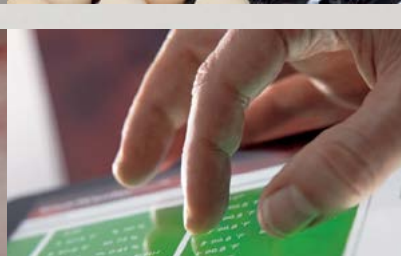
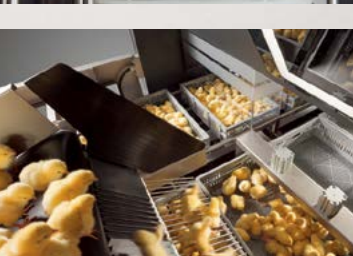
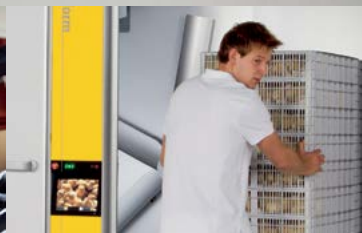
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