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Just when you thought 2021 couldn't throw more curveballs, it did just that. The full effects of the violent unrest that swept our country as we put this issue to bed will only become clear as time goes by. Yet despite the grave losses suffered by poultry producers and many of our partners in the value chain, the resilience of our people, and the willingness of ordinary South Africans to come together, pick up the pieces

Ensuring the industry's sustainability has never been more important, so in this issue we look at future-focused initiatives and investments, and actions that our members take to protect the environment. Read about innovative waste-to-value technology (page 12) and big-ticket infrastructure investments that build a sustainable tomorrow in line with the Poultry Industry Master Plan (page 28). Learn farmers' recycling tips (page 58) and cook a warming curry using that clever, energy-saving local invention, the Wonderbag (page 64).

and move forward has provided so much hope.

We were saddened to hear of the passing of a former editor of *Poultry Bulletin* from complications related to COVID-19. Cameron McKenzie edited the magazine from 2010 to 2018. Our condolences go to his loved ones.

As winter draws to a close, let's focus on staying safe and looking out for each other.

Melinda

editor@poultrybulletin.co.za

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Editorial team

Editor: Melinda Shaw editor@poultrybulletin.co.za

Editorial board: Gary Arnold, Izaak Breitenbach, Christopher Mason, Marthinus Stander, Vincent Sharp, Aziz Sulliman, Adel van der Merwe

Design and layout: Twisted Toast

Contributors: Michael Acott, Alyn Adams, Natalie Berkhout, Jason Bronkhorst, Ellen Heydenrych, Glenneis Kriel, Charmain Lines, Diane McCarthy, Wandile Sihlobo

Advertising & production

Ad sales & production manager: Louisa Nel Email: advertising@poultrybulletin.co.za

Tel: +27 11 795 9920 Fax: +27 86 627 5897

Printing and binding: Seriti Printing

Distribution: The Tree House



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Vice chair Adel van der Merwe
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FROM THE BOARDROOM

Advice to prospective farmers

Dear members

At the SA Poultry Association we take pride in being a resource for our country's poultry producers, and assisting those who want to enter the industry.

I take daily calls from people expressing a desire to become poultry farmers. What is evident from these conversations is that there is a misperception that poultry farming generates quick returns and is easy money.

Many of these prospective farmers fondly recall raising a few chickens at their childhood homesteads for home consumption or as family pets. But the reality is quite different if you are reliant on the production success as an income, and it is part of our role to advise on these realities.

The importance of research before starting out cannot be underestimated. Are you able to answer the relevant questions: where will you be farming, and is poultry production allowed on that land? Do you know the regulatory requirements? Is there access to enough water of the right quality? Is there access to power and backup power?

Farming in the mass-production environment is a science, requiring knowledge of equipment, how to monitor and maintain house temperature, water intake, feed intake, feed conversion ratios (FCR), vaccinations, litter control and biosecurity.

Many small operators share their dream to escalate production to a couple of hundred thousand birds to either compete as independent producers or to enter into an off-take agreement with a large commercial producer. Again the issues of resource capacity, water quantity and water-use licences and environmental impact assessments come into play, not to mention the cost of establishing the infrastructure for large-scale production. The costs are considerable and access to funding in the current environment is extremely challenging.

Commercial lenders want a safe investment, assured of the repayment of the loans with as little risk possible. Is poultry a risky business? If you look at what has transpired this year, from civil unrest and avian flu to lockdowns, loadshedding and the increase in fuel and feed prices, the answer is not simple.



'SAPA's egg and broiler financial model can help assess the viability of a business plan'

So what advice do we have for that prospective farmer who dreams of a productive poultry business? Start with a realistic business plan that considers all the business aspects, including quantifying your market opportunities based on analysis of demand and supply. Ensure you are familiar with statutory legislation, register your business with SARS, ensure your business is registered correctly.

SAPA has developed an egg and broiler financial model to help assess the viability of a business plan, and we offer our services to provide peace of mind in this regard.

Finally, we cannot warn enough against scams, which take advantage of the tough economic climate. Everyone likes a good deal, but if it sounds too good to be true, it is very likely too good to be true. When in doubt, ask SAPA and we'll refer you to trusted suppliers. We want to see our farmers prosper, and a robust poultry industry contributing to the economy of our country.

Christopher Mason

Manager: Sustainability and Development



LETTERS

Appreciation for the generosity of our farmer members and a call for buying local... now *that* is something we can get behind





Thanks to the generous poultry farmers of SA

Chefs with Compassion is a welfare NGO that was started in response to the hardship faced by so many communities as a result of COVID-19. We have 32 participating kitchen hubs that have prepared over 1,7 million meals since last April, to help combat hunger across the country. We have been humbled by the participation of so many individuals and organisations with respect to donating food, and would like to commend the South African poultry industry for its ongoing generosity in donating chicken and eggs for us to turn into meals..

Your industry's overwhelmingly generous support of our recent Mandela Day initiative for which we needed protein for the 67 000 litres of soup we aimed to cook, enabled us to reach our goal and so much more. We want to thank the SA Poultry Association for coordinating an effort that delivered over 8 tons of chicken and almost 10 000 eggs from your wonderful members, including Astral, RCL, CBH, Bushvalley, Quantum Foods, Aldabri Argiculture, Beckley Brothers, KZNPI and others, and which enabled us to cook proteinrich meals to stave off hunger in a number of impoverished communities in Gauteng, KZN and the Eastern

Cape for weeks to come. In our conversations with these farmers who donate so generously, we have learnt that the local chicken industry is fighting an ongoing battle against dumped chicken from other countries, which takes over local farmers' market share. It makes no sense that South Africa would let foreign chicken push our own chicken out of the market, when local production means local jobs, and local charity.

Chefs with Compassion supports South African chicken because we are proudly South African, and because the South African chicken industry provides food security to South Africans. We support the antidumping tariffs that the local industry has applied for, because we believe that local production should be protected. Local chicken farmers support local welfare initiatives such as ours, while I can assure you we receive no chicken or eggs from Brazil and Europe to nourish South Africa's most vulnerable people. We owe it to ourselves and our own people to support local production.

Marion Tanzer.

General Manager, Chefs with Compassion www.chefswithcompassion.org.za

YOUR VIEWS COUNT

Mail us at editor@poultrybulletin.co.za with your issues, insights and photos of your chickens! In honour of this issue's theme of sustainability, the writer of the best letter wins a Wonderbag, the simple but revolutionary no-electricity slow cooker that is a proudly South African invention. To find out more about the Wonderbag, visit www.wonderbagworld.com – and turn to page 64 for our recipe cooked using this amazing energy-saving tool.



We want to hear from you. Send your letter to editor@poultrybulletin.co.za marked "Letter to the editor"

How will YOU promote "Buy Local"?

Congratulations! It's only taken two issues to establish the new Poultry Bulletin as a trusted and useful information resource for poultry farmers big and small.

HPAI is obviously the priority concern at the moment, and you've helped farmers understand its spread, its likely duration and the measures they must take to protect their flocks. But you've also set about informing farmers about other issues, from the antidumping application to antibiotics. You're promoting the growth of small

farmers with both information, such as how to access funding for expansion, and inspiration, by highlighting how other small farmers have overcome obstacles.

FairPlay was hugely encouraged by the letter from Eustace Mashimbye, CEO of Proudly South African. He detailed the progress made in getting poultry producers to sign up to "Buy Local", and in encouraging retailers and wholesalers to stock mostly locally produced chicken. More producers will hopefully sign up - a Proudly South African sticker on retail packs helps consumers identify local product.

Being identified as a Proudly South African producer is important, because there will be another "Buy Local" drive later this year, and FairPlay will be working hard to encourage consumers to buy local chicken, in partnership with Proudly South African. Why don't you help us to make the most of the opportunity in this promotion of local chicken and local jobs? Write to Poultry Bulletin and share how you will promote "Buy Local".

> Francois Baird, Founder, FairPlay www.fairplaymovement.org



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A roundup of what's new in the world of chicken and eggs

Compiled by Charmain Lines



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(KZNPI) offers a number of online courses in the second half of 2021 at reduced rates. This is a wonderful opportunity to improve your poultry farming skills at an affordable price – without leaving your home.

Course name	Dates	Normal rate	Special rate
Poultry business skills	13/09/21 to 18/10/21	R7 035	R5 276
Profitable broiler production	20/09/21 to 25/10/21	R6 566	R4 924
Profitable egg production	04/10/21 to 08/11/21	R6 566	R4 924

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According to Stats SA's Agricultural Survey, the preferred diet of South Africans is chicken and maize. Based on how much we spend on different food items, we eat 10 times more chicken than beef, as much maize as chicken and little fruit and vegetables.

The survey tracked sales of agricultural goods in South Africa between 2017 and 2019, and was

released in June this year.

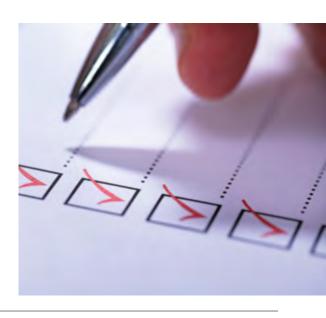
Meat products accounted for 23%, or R71.9 billion, of all income in the agriculture sector, with chicken sales contributing 10%. Beef's share was only 1%, much lower than other animal-related products such as milk, cream and eggs. Vegetables only contributed 6% of all income generated by farming.

Standards for chicken welfare

The South African Bureau of Standards (SABS) has developed a draft South African Standard that focuses on the welfare of chickens. The standard aims to create national specifications for the breeding, rearing and production practices of chicken farming in South Africa, especially in a commercial context.

"The health and welfare of chickens lead to more sustainable agricultural practices that will ultimately result in greater food quality and sustainable food security for South Africa," noted Jodi Scholtz, SABS lead administrator.

The 53-page draft standard covers poultry production performance against breed standards, the condition of the chicken, the environment of the practice, management practices, daily care of the poultry, euthanasia, live bird sales and health controls.







Poultry auctions on WhatsApp

Outside the world of poultry production for food, it turns out there is also a realm where chickens are celebrated for their, well, looks. Twice a week, on Tuesday and Saturday evenings, South African lovers of beautiful poultry convene for a virtual auction on WhatsApp. North Westbased entrepreneur Saartjie Odendaal ran her first digital poultry auction in 2015. Six years later, Poultry WhatsApp Auctions is a thriving business that was also a lifeline for many a poultry breeder during lockdown in 2020.

Whether you are a professional breeder of high-value Orpingtons, or simply someone who likes a pretty bantam in the backyard, the auctions have something for any chicken enthusiast. "From the outset my goal was to make beautiful poultry accessible to everyone interested in them," says Odendaal.

These catalogue-based auctions are simple and efficient events. Odendaal informs all her subscribers of the lots

going on auction, buyers show up and bid, and lots go to the highest bidder. Once the auction is done, Odendaal puts buyer and seller in contact, and they conclude the transaction and arrange delivery logistics.

According to Odendaal, June, July and August are peak auction times. "Show poultry are at their best this time of year, just before the breeding season starts in September," she says. With COVID-19 interrupting regular poultry shows, the WhatsApp auctions have become an important platform for poultry breeders. "We make it possible for breeders of show poultry to run production auctions," says Odendaal. And there is money to be made...at a recent production auction of an Orpington breeder, a top-class cock fetched a whopping R18 200.

If you are interested in participating, WhatsApp Odendaal at 084 290 7576. For more information, visit the Poultry WhatsApp Auctions Facebook page: facebook.com/poultryauctions/

A question of building resilient food systems

by Wandile Sihlobo

The debate in global agriculture circles currently revolves around the United Nation's 2021 Food Systems Summit, to be held later this year, whose focus is on building resilient global food systems. This essentially refers to resilience from production to consumption of the food chain – across all commodities. For South Africa, this might seem not an urgent debate compared with other African countries; after all, we export roughly half of what we produce in value terms and are a net exporter of food.

But such a high-level view is not always helpful. South Africa is a net importer in various agricultural subsectors, and the spirit of building resilient food systems could be beneficial in such cases.

A case in point is the poultry industry, where imports, viewed for an extended period, account for roughly 20% of annual poultry consumption of about two million tonnes. In recognition of this reality, industry and government have embarked on the Poultry Industry Master Plan, and there is an overarching Agriculture and Agro-Processing Master Plan. The ultimate goal of these plans is to build an inclusive poultry industry, and agriculture sector at large. In a way, we too, here in South Africa, embark on a similar road as the United Nations in building a resilient and inclusive agriculture and food sector.

This resilience and inclusivity journey will require increased investments, particularly for industries such as poultry, which are building first to ensure self-sufficiency in the country. The supporting industries, such as maize and soybeans, which account for a significant share of input costs in poultry production, will also have to be in sync with the vision of the poultry sector.

Simply put, South Africa needs to find ways of ensuring affordable feed production in order ito support the poultry sector expansion.



South Africa needs to find ways of ensuring affordable feed production in order to support the poultry sector expansion

As ever, trade policy also has its place in providing appropriate cushioning measures to the poultry industry while rebuilding is underway. Still, the authorities will, in the process, have to ensure that consumer welfare is also prioritised so that trade policy actions are not inflationary to a much-preferred protein source of many South Africans.

In essence, the global discussions of building resilient global food systems are relevant to South Africa. Our engagement should prioritise interventions in value chains that we still need to improve our self-sufficiency.

Wandile Sihlobo is the chief economist at Agbiz. Contact him on wandile@agbiz.co.za



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KEEPING-THE CHRISTIAN BALANCE

No other animal converts feed into food for human consumption more efficiently than chickens. So why should we even bother with making the industry 'greener'? **Charmain Lines** finds the answers



What is good for the environment is so often considered to be bad for the bottom line but good for the public image. For far too long, this sentiment has positioned sustainability initiatives as steps companies take when they have spare cash, or when they

need positive publicity.

South Africa's large integrated poultry producers, however, follow a philosophy of implementing initiatives that benefit the environment and the economics of doing business at the same time.



ENVIRONMENTAL IMPACT



Why do they do that, one might ask, when broilers are already the most efficient of all farm animals? No other livestock can compete with them in terms of feed conversion rate and productivity. For eggs, the statistics are even more favourable. And yet, the bigger picture is that sustainability is about a balance between the environment, the interests of people, and the bottom line.

Solar energy and the recycling of water and waste jumps to mind when one thinks about sustainability and saving the environment. RCL Foods' two waste-to-value (W2V) plants, however, are prime examples of how innovative the technology is becoming and why, increasingly, sustainability makes excellent business sense.

Worcester W2V

Built in 2017, the Worcester W2V plant converts waste water from the chicken processing plant into biogas and produces enough renewable energy to meet up to 30% of the site's requirements. The 1.5MW-plant produces between 6 500MWh and 6 800MWh per year. From an environmental point of view, 3 500 tons of biological waste – fats and suspended solids – no longer end up in the municipal wastewater treatment system and landfill sites every year.

Ettienne Thiebaut, sustainability executive at RCL Foods, notes that the W2V plant depends fully on the abattoir's outputs. If lower volumes come through the abattoir, gas production decreases accordingly. "This dependency gave us some headaches in 2017/2018 with the avian influenza outbreak and in 2020 when the hard lockdown stopped demand from our fastfood customers," he says. "But we don't want to introduce external risk by taking waste water from other plants. In our model we have control over what comes into the process, and we live with the potential fluctuations in gas output."

Rustenburg W2V

At 6MW, the Rustenburg plant has four times the capacity of the Worcester plant, and uses different inputs to generate a larger variety of outputs. Thiebaut explains that the plant generates biogas from a combination of waste-water sludge from the abattoir and chicken litter from the chicken farms. It was designed to provide up to 65% of the power needs of the Rustenburg chicken and animal-feed site, plus 100% of the steam requirements of the animal-feed mill.

"The beauty of the system is that nothing at all goes to waste," says Thiebaut. "Even the ammonia



of people & the bottom line

that is removed in the watertreatment plant is recycled into ammonium sulphate and sold as liquid fertiliser.

The further beauty of the system is that in the event of a power outage, at least half of the Rustenburg processing plant and animal-feed mill can continue working. By recycling and reusing the site's process water, RCL Foods will significantly reduce its dependency on municipal water, and cut the site's fresh-water consumption by up to 50%.

The plant currently performs at around 40% of capacity, with full capacity expected within the next six to eight months.

Water and electricity supply aside, the W2V plant is solving a problem that had significant environmental and community impacts. The Rustenburg site has always sold its chicken manure to local farmers. However, the offtake was not consistent and particularly in summer, large piles of waste would build up. Apart from being unsightly and smelling bad, run-off from the piles posed a groundwater contamination risk.

At full capacity, 100 ton chicken manure will go into the W2V plant's digester every day. The same contractor still cleans out the chicken houses, but now delivers the waste to the W2V plant instead of

The W2V facility at the RCL Foods plant in Worcester significantly reduces the site's reliance on municipal water

'A project has to make business sense as well as deliver great environmental impact. The W2V plants, for instance, pay their own way'

to farmers. The contractor still gets paid and RCL Foods earns a small return on its investment from fertiliser sales to farmers.

Integrated approach

Thiebaut notes that RCL Foods always looks for sustainability projects that also have an economic impact: "For us a project has to make business sense and deliver great environmental impact," he says. "The W2V plants, for instance, pay their own way."

One of the ways in which this was achieved, is the joint venture agreement between RCL Foods and Green Create (see "Homegrown sustainability excellence" opposite).

Astral has a similar integrated philosophy, backed by an enabling organisational structure, says Evert Potgieter, who chairs the company's sustainability committee. "The troubles we had in Standerton triggered our CEO, Chris Schutte, to establish the committee in 2017."

The committee, on which Potgieter serves along with the MDs of the feed, agriculture and commercial divisions, Astral's processing executive and Anil Rambally, purchasing and sustainability executive, is a conduit for company-wide projects.

How it works: a site identifies a project and proposes it to the committee. Rambally, a member of the investigation team, then scrutinises the project for impact, payback, operational viability and, of course, sustainability. The team also identifies appropriate suppliers and vets them for compliance, obtains quotations and calculates the cost savings.

The full package goes back to the committee and, once the project passes muster, it is presented to the Astral board for approval. The committee monitors project implementation and performance, and oversees expansion to other sites in the group, if appropriate.

Projects already implemented through this structure include a solar-power project at a hatchery in Boschkop, and a reverse-osmosis water-recycling project that was piloted at Country Fair and then implemented at Goldi with potential for roll-out to the rest of the group.



ENVIRONMENTAL IMPACT





Astral's reverseosmosis recycling facility at the Goldi plant. The technology will likely be rolled out to the rest of the group



HOME-GROWN SUSTAINABILITY EXCELLENCE

Having graduated with a PhD in chemical engineering and biotechnology from Cambridge University in the UK in 2013, Alister Inglesby returned to South Africa to turn waste into value. His studies focused on the treatment of waste water with a high fat and nitrogen content – the kind that comes out of chicken-processing plants.

In 2015, his fledgling company TriGen, built and started operating a waste-to-value (W2V) plant at Supreme's site in Tigane, in North West. Buoyed by this first success, TriGen entered into an agreement with RCL Foods in 2015 to build and operate a W2V plant at its Worcester plant.

RCL Foods was soon convinced of the plant's value, and the two companies established a joint venture called Matzonox. In terms of the JV agreement, TriGen is contracted to do the day-to-day operation of the plant, while RCL Foods buys the energy generated by the plant from the JV. Both companies are joint owners of the W2V infrastructure.

In 2017, Ingelsby established Green Create in the UK, with TriGen as the South African subsidiary. A year later, construction started on the RCL Foods Rustenburg plant, which is also part of the Matzonox JV.

On the back of its South African successes, Green Create has developed several projects in Europe and the UK. Early next year, the company will make history when it commissions one of the world's largest chicken-manure-based W2V plants in the Netherlands. The facility will process manure from more than 100 chicken farmers, and its energy products will be traded on the global market.

SUSTAINABILITY STATISTICS*

GHG EMISSIONS PER 100G OF PROTEIN PRODUCED

Beef: 49.89kg

Lamb/mutton: 19.85kg

Pork: 7.61kg
Poultry meat: 5.7kg

Eggs: 4.21kg

WATER NEEDED TO PRODUCE 1KG OF PROTEIN

Beef: 15 415 litres Lamb: 10 412 litres Pork: 5 988 litres

Chicken meat: 4 325 litres

1 egg: 196 litres

LAND NEEDED TO PRODUCE 100G OF PROTEIN

Lamb/mutton: 184.8 m²

Beef: 163.6 m² **Pork:** 10.7m² **Poultry:** 7.1m² **Eggs:** 5.7m²

FEED CONVERSION RATE**

Beef: 8 Pork: 3.9 Chicken: 1.9

**The amount of feed (in kg) an animal needs to increase its

bodyweight by 1kg.

*Sources: ourworldindata.com; The Guardian Datablog,

Statista.com

These stats show poultry and egg production's low environmental impact compared to other sources of animal protein. Yet they also show that the impact is significant. Given that poultry is the fastest-growing animal protein in the world, the industry has a responsibility to balance profits with environmental and societal impacts.



ENVIRONMENTAL IMPACT



The latest to receive approval is a waste-recycling project at National Chicks that uses BiobiN, a system that converts waste into compost in only six days. "This project is particularly exciting from a carbon-footprint point of view," says Rambally, "given that all the hatchery waste will be diverted from landfill sites and instead put to use to improve agricultural land."

As the planet buckles under the strain of humankind's relentless pursuit of profit, South Africa's poultry industry is showing what can be achieved when the sustainability lens is widened to include societal needs and environmental imperatives, and extended to look beyond quarterly results presentations.

DID YOU KNOW?

Biodegradable is not the same as compostable. While biodegradable materials return to nature and can disappear completely (although it can take 1 000 years in the case of plastic), they sometimes leave behind harmful residue. Compostable materials, in contrast, break down within a matter of weeks and, in the process, release valuable nutrients into the soil that aid the growth of trees and plants.

GOING-GREEN SOLUTIONS

While some sustainability initiatives, such as W2V plants, only make sense on a big site, smaller egg and broiler producers can go green as well.

- Chicken manure makes excellent fertiliser. Use it on your own farm or sell it to farmers or compost providers in the area.
- Use compostable packaging, preferably made from recycled paper, such as the egg containers supplied by Huhtamaki. "We undergo an annual assessment to maintain our sustainability certification," says national sales manager, André du Toit. "This means our packaging breaks down completely within 30 to 90 days, and becomes part of nature."
- Start a business by investing in a sustainable, end-to-end solution like the containerised egg layer, invented and manufactured by SG Engineering Solutions.

The layer units are moveable, and can be run by unskilled persons. As the units can be built off site and simply installed, they open up opportunities to even the remotest communities to create decent work and economic growth. At the heart of the design is an environmentally friendly approach that features extremely efficient cooling and heating systems, renewable energy to run other operational systems, and the recycling of all waste products. The units also





allow for good returns by enabling the production of high-quality eggs at an affordable price. Each unit houses 2 240 layer hens in vertically installed cages, has an automatic cleaning and by-product removal system, a water silo and feed silo on the roof, and a bio chamber for sanitation purposes. The high-production units house 4 480 layer hens.

 Pay attention to feed quality. Experts say that the best way to minimise environmental impact is to maximise diet and nutrition. By fine-tuning a flock's diet, feed conversion can be improved and greenhouse gas (GHG) emissions brought down – resulting in a smaller carbon footprint and better bottom-line results. This is particularly relevant for egg producers, given that GHG emissions from manure makes up 20% of the egg industry's total emissions. Only GHG emissions associated with feed production are higher.

Sustainable farming solutions will help poultry farmers reduce risk from climate change





Daneel Rossouw Functional Head of Agriculture at Nedbank's Relationship Channels

Poultry plays an important food security role across Africa, but agriculture in sub-Saharan Africa is expected to be among the hardest hit by climate change. Poultry flocks are particularly vulnerable to climate change, because birds can tolerate only narrow temperature ranges. That is why poultry farmers urgently need to consider mitigation strategies to cope with new climate conditions and weather extremes more effectively.

One of the biggest game changers for the poultry industry is the use of renewable energy – such as solar or wind power – to power operations, or the newer technology of using biomass to create biofuel. Biomass can be sourced from waste resources such as cleared alien vegetation, offcuts from lumbermills that use wood from sustainably managed plantations, or waste matter from orchard and vineyard recycling.

In the case of poultry farms, poultry litter is also an excellent form of biomass for renewable energy. Manure is one of the biggest sources of greenhouse gas emissions from agriculture globally, contributing 20% of agriculture's emissions in the form of nitrogen, which has 300 times more warming potential than carbon dioxide. An anaerobic digester deprives the biomass of oxygen, so it breaks down with the help of bacteria. The resulting gas is predominantly

biomethane, which is then used as renewable fuel for a biomass combustion system to power operations.

Whether using biomethane or biomass such as wood pellets, carbon emissions savings alone are significant: farms in the UK that are using biomass from poultry litter are reporting average savings of 90% on carbon emissions compared to conventional electricity sources. Other advantages include substantial operational cost savings, with biomass yielding the lowest cost of energy, including coal; near-zero carbon tax; a fuel that burns cleaner than coal; and a very efficient system, with studies indicating that biomass burners convert 90% of the fuel into heat.

While the initial costs of installing the infrastructure are high, calculations indicate that the payback period of a biofuel system is between one-and-a-half and four years, after which the energy costs of your agribusiness will be negligible. Nedbank is the market leader in renewable-energy finance and our innovative solutions are helping many farmers and agribusinesses to benefit from more cost-effective and cleaner power generation than the national grid can provide, while potentially off-setting surplus electricity to the grid to reduce operational costs further. Our innovative renewable-energy financing solutions include using the commodity produced or infrastructure itself as security, extended repayment periods of up to 10 years, and f energy cost savings to enhance debt repayment.

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A closer look at the reports the South African Poultry Association distributed to keep members informed during a very challenging period

Compiled by Michael Acott

SAPA calls for prosecution of those stoking unrest

The violence that hit KwaZulu-Natal and Gauteng in July seriously affected the country's poultry industry. The SA Poultry Association (SAPA) said the destruction would also have a lasting impact on all South Africans.

Production and distribution were affected, as well as outlets in the fast-food and retail industries. The movement of poultry products and other essential food items to South African consumers had been hindered, if not completely halted in certain sectors.

In a statement, Broiler
Organisation GM Izaak Breitenbach
said violent mobs had invaded
farms, stolen poultry livestock and
equipment, destroyed infrastructure
and endangered the lives of industry
employees. There had also been
numerous cases of arson and credible
threats to burn down large poultry
processing plants.

Farm invasions had destroyed biosecurity measures in place to protect against avian influenza infections, putting those flocks at risk. Day-old chicks had to be euthanised because deliveries were interrupted.

Photograph: Gareth_Bargate / Shutterstock.com

Breitenbach said the violence, lawlessness and looting endangered an industry essential to food security in South Africa. Industry finances were already under enormous pressure due to high input costs, the impact of COVID-19 and hard lockdowns, and recently the bird flu outbreak.

"The destruction of infrastructure seen over the past days will have grave consequences for South Africa, negatively impacting future investment, economic growth and transformation, and will increase hunger due to broken food-supply chains and rising costs."

Breitenbach noted that the poultry industry, under the Poultry Industry Master Plan, had been working tirelessly to create jobs in an environment of growing unemployment, and transforming the industry to open up opportunities for more emerging farmers to own businesses and farms. It had invested in excess of R1 billion to make this a reality.

He promised the industry's support for efforts to restore safety and stability, and called for the arrest and prosecution of those complicit in creating instability and fuelling the criminality.

Thousands of eggs were destroyed during farm invasions in KZN, and day-old chicks had to be euthanised because deliveries were interrupted





√ Valuable lessons learnt during the 2017 outbreak has so far helped to contain HPAI this year

Avian flu update

Although outbreaks of highly pathogenic avian influenza (HPAI) seem to be diminishing in South Africa, the industry is not out of the woods yet.

In KwaZulu-Natal, for instance, the current wave of infections are affecting broiler breeders as well as commercial layer farms. This as producers in the beleaguered province are also dealing with the aftermath of the destructive civil unrest.

SAPA believes that a second wave of infections will follow once the current one has run its course. The virus is expected to linger in wild birds for up to 12 months.

One positive development is that so far fewer farms have been affected than in the devastating 2017 outbreak.

This is most likely due to improved management by the industry and poultry producers – according to SAPA valuable lessons were learnt in 2017 and that has helped to contain the spread this time.

While there has been some instances of spread from farm to farm, infections still seem to be primarily transmitted by wild waterfowl, and in the Western Cape, for instance, an outbreak was detected among pelicans. Waterfowl and other species have been affected.

According to Izaak Breitenbach, the outbreak has been very well managed by poultry producers, private veterinarians and the veterinarians from the Department of Agriculture, Land Reform and Rural Development (DALRRD).

He explained that due to the low prevalence of farm-to-farm

transmissions, SAPA has asked DALRRD to be more lenient in ordering the culling of birds, which results in heavy financial losses for poultry producers because the government does not compensate farmers.

"We are requesting a responsible but more lenient approach, both to the culling of birds and to the use of product from facilities with no infections, even when they are in close proximity to one where birds have tested positive," he said.



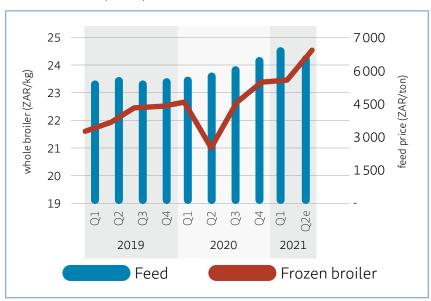
MEMBERS' NOTICEBOARD

Improvement, and then the unrest

Rabobank's latest report painted a picture of hope, before widespread violence and destruction hit parts of South Africa

South African broiler and feed price trends, Q1 2019-Q2 2021e

✓ Source: Source: SAPA, News24, SAFEX Rabobank 2021



The Rabobank quarterly report

looking forward to the third quarter of 2021 (July – September) said the outlook for the global industry was improving as COVID-19 restrictions were being eased worldwide and supply chains improve. For the South African industry it was "moderately optimistic".

Unfortunately, that was written before the outbreaks of violence and their impact on the South African poultry industry. And it is partly based on a continued strengthening of the rand, which the looting has reversed.

Nevertheless, the quarterly forecast contains good news for the local industry. Poultry consumption increased in the first two quarters, and gradual improvement was expected in the third. Although feed prices were expected to stay high, a strong maize harvest outlook (+5%) and a recordhigh soybean crop (+44%), together with a strengthening of the rand, were expected to make the outlook for grain prices stable to bearish, in other words, prices could decline.

Before the unrest, Rabobank believed this could make poultry more affordable, benefiting the local industry. It said tighter COVID-19 restrictions might temper the outlook. Those restrictions happened, and so did the unrest.

Production increases continue

South Africa's poultry production has continued to rise this year, building on the increase of 2020.

The industry's broiler production report for March 2021 shows production averaged 21.419 million birds per week that month, a 3.4% increase on March a year ago. Average weekly production for the first three months of 2021 was 21.384 million, higher than

the 20.453 million per week average for 2020.

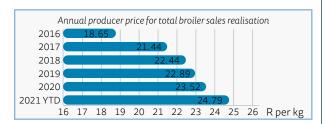
This continued the production advance registered in 2020. Annual broiler production increased from 1 017.9 birds in 2019 to 1 069.6 million birds in 2020.

Production has risen despite the economic impact of the coronavirus pandemic and culls where outbreaks of avian influenza have occurred.



Broiler prices up on last year

Production prices on average over 5% higher



Broiler production prices for the first three months of 2021 were more than 5% up on the prices realised in 2020.

The industry's broiler production report for March 2021 shows frozen chicken prices for the year so far are on average 5.2% higher than in 2020, while fresh chicken producer prices are up 5.1% on 2020.

On a monthly basis, frozen broilers increased 1.8% from February to R23.89/kg, while fresh chicken prices are up 0.9% to R33.78/kg.

Frozen chicken makes up the bulk of production – 87.4% in March 2021 and 88.3% for 2020.

For the first three months of 2021, the total broiler price (fresh and frozen) averaged R24.79/kg, an increase of 5.4% over 2020. Average prices rose 2% in 2019 and 2.7% in 2020.

Also over the first three months, individually quick frozen (IQF) portions averaged R24.09/kg, up 5.5% over 2020 while whole frozen birds registered the largest increase – 12.7% to R26.19/kg.

IQF portions comprised nearly half (45.4%) of first-quarter production, while other frozen cuts accounted for another 18.2%. Fresh cuts were only 5.9% of production, with fresh whole birds taking up 4.1%.

The largest shares of sales in the first quarter went to retail (42%) and wholesale (38%) while food service took 16.5%. The export figure remains low – only 0.8% of production in the first three months was exported.





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Brazil keeps the lead as import levels drop



Bird-flu outbreaks in Europe has kept Brazil in the lead with exports



Brazil accounted for almost 70% of South African poultry imports during May, slightly down on April Brazil's steady dominance of poultry imports into South Africa has continued this year, as highly pathogenic avian influenza outbreaks have severely impacted exports from the European Union (EU).

Brazil took over from the EU in 2017 when bird-flu bans first reduced EU exports. A new round of bird-flu outbreaks in Europe has consolidated Brazil's lead.

SAPA's analysis of the May 2021 import statistics shows Brazil accounted for 69.7% of South African poultry imports that month. This is slightly down on Brazil's 72.9% in April, but the EU is languishing at 11.8%, with only Spain licensed to export poultry to South Africa. Most (52%) of Brazilian imports are mechanically deboned meat (MDM).

The overall poultry imports total continues to shrink. Imports have been declining since the 2018 peak and particularly since the trade and market disruptions caused by the coronavirus pandemic from early 2020. Poultry imports for May 2021 continued this trend, and they were 18.6% lower than the previous month and 28.4% down on May 2019.

The United States is South Africa's third largest poultry supplier (11.3%), mainly because of a substantial quota of bone-in chicken that comes in free of antidumping duties in terms of the 2016 AGOA trade agreement.

Tariff restructuring

An independent Brussels-based trade-monitoring organisation suggests that South Africa could learn from the European Union's trade policies, which very efficiently protect EU poultry producers and limit imports.

Epamonitoring.net says that South Africa should not focus only on tariffs and dumping. The organisation points out that in addition to tariffs, the EU uses a range of non-tariff trade-policy tools to defend the interests of EU agricultural producers.

Noting the South African review of its import tariff structure, the organisation says South African poultry farmers could benefit from an entry price system.

This is one of the areas being considered in the review and specified in the Poultry

Industry Master Plan.

According to the report, "EU agricultural trade policy is certainly designed with wider public policy objectives in mind, with the EU then seeking to frame international

TARIFF

trade rules in ways consistent with the EU's chosen trajectory for the pursuit of wider public-policy objectives through its agricultural trade policies in what are deemed to be sensitive sectors."

Food for thought.

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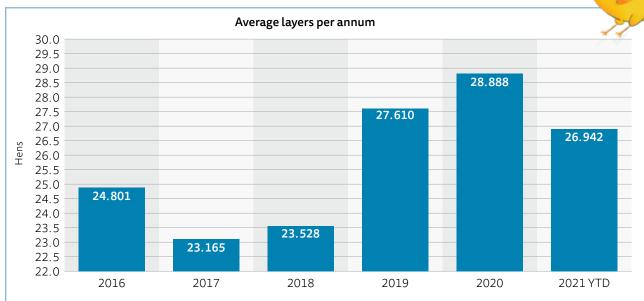




MEMBERS' NOTICEBOARD

Decline in egg production

In May SA had a laying flock of around 26.5 million hens



▲ The size of the national laying flock since 2016 Source: SAPA

South Africa's laying flock and egg production is declining slightly after growth in the previous two years, but recovery is indicated in rising numbers of day-old and point-of-lay pullets.

SAPA's Egg Industry Report for May 2021 estimated a laying flock of 26.5 million hens. This is a month-onmonth decrease of 1.05 million hens (-5.3%) and a year-on-year decrease of 2.85 million hens (-9.7%). The projected number of laying hens for August 2021 is 26.3 million.

The average flock size for 2020 was 4.7% larger than it was in 2019. The average flock for 2021 (to August) is 6.7% smaller than 2020.

There's better news in the numbers of day-old pullets: 2.35 million produced in May 2021, an increase of 5.3% on the previous month and a significant 23.8% up on the previous year. There was a small 2% year-on year increase in the 2.08 million layer replacement pullets transferred to the laying flock in May. The projected number of point-of-lay pullets to be transferred in August 2021 is 2.20 million. These are young birds about to start laying eggs.

There has also been a drop in egg production, partly because of the impact of avian influenza which started in April. In May 2021 an average of 445 900 cases of eggs was produced per week. This is a monthly decrease of 15 700 cases (-3.4%). The average weekly egg production during



May 2021 decreased by 50 500 cases (-10.2%) compared to May 2020.

An average of 452 500 cases per week is expected for up to August 2021, a decrease of 7.0% over 2020 volumes.

It's also noticeable that more jumbo and extra-large eggs are being produced than in previous years. This is partly due to upgraded standards and partly to the increase in the number of older birds in the national flock from the longer laying cycle.

In 2016, most (52.2%) eggs sold were large and medium-sized. By 2020 this had reversed, with 64.6% of eggs being extra-large and jumbo, with 35.4% large and medium. In the first five months of 2021, the ratio is similar – 63.7% to 36.3%.

More jumbo and XL eggs are being produced than in previous years, due to upgraded standards and higher numbers of older birds



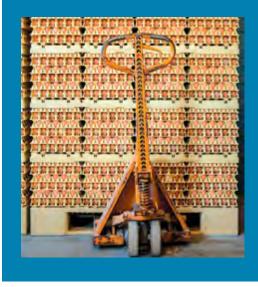
Egg exports bring in the cash

Although egg exports have declined recently, they nevertheless earned egg farmers a healthy R335.7 million in 2020.

According to SAPA's latest Key
Market Signals for the Egg Industry
report, in 2020 South Africa exported a
total of 12 584 tonnes of eggs and egg
products from all species (excluding
ostriches). Exports included fertile,
fresh, preserved and cooked chicken
eggs as well as dried and liquid
egg products.

The 2020 total was a 21.3% below that for 2019. Exports dropped again in the first quarter of 2021, down 12.9% on the last quarter of 2020.

The main countries of destination for South African exports of eggs and egg products in 2020 were Mozambique (82.4% of exports), Swaziland (12.7%), Botswana (3.1%), Lesotho (1.0%), Nigeria (0.5%); Namibia (0.2%); and others (0.1%).







How SAPA helps emerging farmers

High feed costs, unstable or poor market conditions, loadshedding and hot weather are among the problems reported by subsistence and small commercial poultry farmers surveyed by the SA Poultry Association (SAPA).

For the 2020 survey, just released, SAPA contacted 407 small-scale farmers across the country. It noted the difficulties these farmers had experienced and offered advice on farm and poultry management.

Of those surveyed, 46 broiler farmers and 11 egg farmers had stopped farming, temporarily or permanently. Most of those who had stopped operating expressed a desire to resume farming in time. None of the contract growers, hatcheries or abattoirs contacted went out of business in 2020.

The results of the annual survey, which details difficulties encountered in each poultry farming segment, as

well as production and feed statistics, is circulated to small-scale farmers to enable them to benchmark their business against others and plan for the future.

In addition to providing detailed advice to emerging farmers, SAPA responds to queries with information on poultry equipment or medication, and availability of day-old chicks. To find out more, the contact number is 011 795 9920.

Join SAPA and get the benefits

As a member of the South African Poultry Association community you get access to information, support, a network of suppliers and advice on all the issues relevant to poultry. All producers of eggs or broilers in South Africa are eligible to apply for membership of SAPA. If you want to have a voice in the poultry industry, there is no better place to start.

Membership fees comprise R405 per year, excluding VAT, plus an additional fee based on slaughter volumes for broilers or a statutory levy for eggs.

Members also receive a free subscription to Poultry Bulletin,

which is published six times a year. Nonmembers can subscribe for R420 per year, excluding VAT.

For more details, visit www.sapoultry.co.za or email reception@sapoultry.co.za with any queries. 72



Steps to become a member:

- Request the official application form by calling 011 795 9920 or emailing reception@sapoultry. Return the completed form as stipulated.
- The Egg or Broiler Board will evaluate your application, which will then be ratified by the SAPA Board. The board reserves the right to accept or reject any application at its discretion.
- Once your application is approved, your annual membership fee will be payable.



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Towards a sustainable industry

The Poultry Industry Master Plan is already producing positive economic and social spin-offs, thanks to significant investments by producers. Glenneis Kriel reports

While the COVID-19 outbreak

has caused some hiccups with the implementation of the Poultry Industry Master Plan, producers have already invested R1,35 billion of the R1,7 billion pledged towards production improvements and expansions by 2022.

According to Izaak Breitenbach, general manager of the SA Poultry Association's Broiler Organisation, these investments have generated R4,7 billion worth of growth and 1 298 jobs in the poultry industry alone since early this year, with huge economic spins-offs for the feed-manufacturing, grain, packaging and other sectors.

"The investments are bringing the industry closer to the master-plan



INVESTMENT IN GROWTH



targets of generating 3 600 new jobs in the poultry sector, and increasing broiler production by 9% to 1,7 million per week, soybean and maize consumption by 300 000 tons per year and gross domestic product from R48 billion in 2019 to roughly R54 billion by 2022," Breitenbach says.

The sustainability of the poultry, feed and grain markets is highly interdependent, stresses De Wet Boshoff, executive director at the Animal Feed Manufacturers Association (AFMA). He confirms that the investments made in poultry production expansions in terms of the master plan has already resulted in movements in feed manufacturing and grain consumption.

"We are importing roughly 500 000 tons of poultry meat annually, representing about 25% of local consumption," says Boshoff. "For every 10 000 tons of imports replaced by locally produced poultry, the local feed demand could be increased by 25 000 tons, maize consumption by 15 000 tons and soybean meal consumption by 7 500 tons.

"This could further unlock growth in the entire grains and oilseed value chain, and the larger economy, which in turn will help to create even more jobs and accelerate transformation."

Chicken producers Daybreak, Henwil Chickens, Country Bird Holdings, Bushvalley, Sovereign and Astral have so far made good on their investment promises, with Sovereign, specifically, investing over R200 million in a brand-new processing plant at Kariega in the Eastern Cape that promises to double value-added production and further increase production capacity as and when needed.

Astral, in turn, has invested R800 million, increasing its capacity by 16% or 800 000









For every 10 000 tons of imports replaced by locally produced poultry, the demand for South African maize would increase by 15 000 tons, unlocking growth in the feed value chain



Gary Arnold, Astral



Frans van Heerden, Astral

birds per week, creating 428 new jobs and, simultaneously, growing the number of black out-grower suppliers.

"We reached our production capacity, so investments were on the radar to prevent an erosion of margins through cost creep," explains Gary Arnold, managing director of agriculture at Astral Foods. "The master plan has the potential to increase returns from these investments by, among others, addressing unfair trade such as the dumping of poultry products in South Africa and growing the local portion of domestic consumption."

To protect its investments, Astral focused on fresh and value-added product categories that do not compete with imported meat, such as individually quick-frozen or bone-in portions.

Frans van Heerden, commercial managing director of Astral, adds that the company is making these investments because it has confidence in South Africa.

"The past five years were characterised by poor economic growth, but we see potentially better growth prospects in the short to medium term, following the contraction of the economy due to COVID-19," he says. "Chicken remains in high demand and is an affordable source of protein for all South Africans."

Rural stability

Sifiso Ntombela, agricultural economist of the National Agricultural Marketing Council (NAMC), says these types of investments are becoming increasingly important, not only for industry but also rural stability.

"While primary agriculture contributes

ASTRAL CSI IN NUMBERS

1 500 000 meals provided during 2020 to:

- 30 children's homes
- 25 homes for the elderly
- 32 feeding schemes

140 000 kg of chicken donated to workers and their families



Pressure on agribusinesses is increasing to provide services such as water where municipalities fail

less than 2,8% of the GDP, farming and agribusinesses have turned into the lifeblood of many rural areas, where they create upand downstream business and employment opportunities," he says.

But many farmers and agribusinesses are now also filling in for municipal and government failures to provide critical services, such as waste removal, sewerage-system maintenance, infrastructure maintenance and water and electricity.

"It is actually not a new phenomenon – many farmers in various industries have for many years supplied workers with services, ranging from transport and crèche and aftercare facilities, to social and health services," says Ntombela. "Pressure to do so, however, is increasing due to collapsing municipal infrastructure and services in combination with the need to comply with ethical farming standards demanded by consumers."

This dependence on agriculture for stability is likely to remain for some time, as finance minister Tito Mboweni, during his budget speech in May, said that that 163 of the 278 municipalities in South Africa were in financial distress, 40 in a financial service and delivery crisis and 102 have adopted budgets this year that they cannot fund.

Ntombela says that the master plan promises to add stability to rural economies by growing agricultural production and enhancing food

Sifiso Ntombela, NAMC

INVESTMENT IN GROWTH



security. Its success and that of the industry, nevertheless, will greatly depend on the functionality of towns, with dairy group Clover's closure of its cheese factory in Lichtenburg because of poor service delivery being just one example of how things can go wrong.

Clover's closure, reportedly, has resulted in a loss of jobs for 380 permanent workers, 40 temporary workers, 20 general workers and 20 truck drivers and cleaners. But it has also been a devastating blow to the farming industry and other businesses that sold supplies to the company.

Going the extra mile

Agribusinesses in the poultry supply chain, specifically, are going way beyond investments in production expansions and efficiencies to bring stability to rural areas.

Astral, for one, helps to equip emerging outgrowers with skills and knowledge to turn their businesses into commercially viable units.

Arnold points out that Astral physically assesses the viability and sustainability of a project before it takes on a new out-grower, and based on the outcomes helps with the design of a plan to guarantee the success of the farmer. He explains, "We look at everything from water availability to infrastructure, and environmental and biosecurity hazards."

'Poultry businesses go way beyond investments in production expansion to bring stability to rural areas'

to technical, veterinary and logistical support, plus product uptake once they have become an out-grower. "These farmers form an integral part of the economy of their community. Each of our micro-growers create an average of 30 jobs, with spill-over effects to other sectors. Our goal is to turn them into fully fledged commercial farmers," Arnold says.

Investments are also made that directly benefit the community. Van Heerden points out that Astral has pledged R10 million towards infrastructure support and development in Lekwa in Mpumalanga, where it employs 3 625 workers in its feed and processing plants.

Roughly R5 million of this has so far been spent on pumps to resuscitate water works in the area and fix and upgrade electricity infrastructure. Water is also supplied directly to communities, with the Goldi plant, last year, giving 400 hectolitres of water to the Lekwa community, following the total collapse of municipal infrastructure.

Says Van Heerden, "We are making these investments because secure power and water



Astral's Goldi processing plant outside Standerton in Mpumalanga



supplies are crucial for the stability of our business. Over the past five years, we have lost R39 million due to power cuts, and we lost R6 million due to water interruptions in June this year."

Going off the grid and supplying their own electricity in Standerton is not an option, he explains. "We have looked into it, but it would cost R250 million to R350 million to erect an 11MW electricity plant, which is needed in Lekwa only. Hence, it does not make financial sense to erect our own plant. We have to work with what we have."

Besides this, Astral, like many other companies, supply workers with transport in areas where transport is not available; and they have strong corporate social investment (CSI) programmes.

"The devastating impact of COVID-19 and lockdown regulations have sparked major job

losses in our communities, necessitating an adaption to Astral's CSI investment focus. CSI primarily focused on training and education in the past, and in addition to this we launched the Astral Cares Programme, focused on providing in the basic nutrition needs of our local communities," says Gideon Jordaan, human resources executive at Astral. "These investments bring stability and improve morale in our local communities where our people live. We do this because we want to make a difference," Jordaan says.

Adding value

Over in the eastern Free State, Grain Field Chickens (GFC) was started in 2012, when VKB saw the opportunity to add value to the 800 000 tons of maize and 200 000 tons of soybean produced in the province.



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GFC managing director Theo van Strijp explains: "These two crops make up most of the ingredients of the average formula food for broilers, so VKB built two feed mills to convert maize and soy into broiler feed, as well as a chicken abattoir in Reitz to get VKB involved higher up in the value chain."

Today, GFC produces an average of 900 000 chickens per week, which will be increased to 1,2 million once phase two of development is reached. The company provides close to 3 500 jobs via the feed mills, abattoir and out-growers.

The company has 22 out-growers, of which three are BEE farms. One of these is in a workers' trust, through which GFC workers have received annual dividends for the past two years.

"The workers' trust was initiated four years ago to acknowledge people for their contribution to the success of the company,' explains Van Strijp. "It is a strategic way of creating a sense of family and a culture where people take responsibility for their work. We had 1744 employees in April this year, and workers retain shares as long as they work for GFC."

The workers' trust is one of GFC's pillars of transformation in that it creates, among other objectives, an important channel to foster new company and industry leaders. Its example has also sparked some of its contract growers to go the same route, and GFC is currently looking at different models to help guarantee the success

Two chicken houses with a capacity of 41 500 broilers each, which belong to the Grain Field workers' trust



of these initiatives.

GFC is also highly involved with the Reitz municipality, and works together with it to ensure constant supply of water and electricity.

"We run various feeding schemes and CSI projects, such as the upgrading of school kitchens, and ever since the start of COVID-19 we've been supplying sanitiser to the taxis that transport our workers," Van Strijp says.

Interdependence

While each producer has a distinct footprint within rural South Africa, Ntombela points out that the size or type of farming or agribusiness does not really matter, since each has its own unique role in enhancing and strengthening the community. The spent-hen industry, for instance, is an example of how small business is adding value and rendering the layer industry of South Africa and many other African countries more sustainable.

Producers in most first world countries get paid virtually nothing for hens that have reached the end of their productive lives. These birds are

'The workers' trust is a pillar of transformation at Grain Field Chickens, to foster new leaders'



Shelley Johnston of Leading Edge Poultry Software

primarily diverted to the pet-food market, but producers sometimes even have to pay for their removal. In some countries, the hens are forcemoulted to go into a second cycle of production, but production is never as high or as profitable as during the first cycle.

By selling their spent hens to informal traders, the commercial egg producers in South Africa made, on average, R28.04 per hen in 2020, representing a third of the replacement cost of a hen, which averages between R75 and R90, according to Shelley Johnston, owner of Leading Edge Poultry Software, the company contracted to SAPA to write the statistical reports for the poultry industry.

To put this in perspective, the total number of spent hens, or culls, in 2020 amounted to 23.81 million, representing a turnover of R667.53 million.

Subsistence, small-scale and small commercial farmers made even more from these hens, with prices averaging R40.54 per hen in 2020. Total volumes sold via this market segment is estimated at 767 000 hens, representing a total value of about R31 million.

Johnston says that buyers are generally

areas. "The customer base includes anyone from individual community members to schools, catering companies, crèches, local spaza shops, smaller hawkers and vendors at informal markets, and restaurants," she explains.

The meat is not as tender as broiler meat, but provides good-quality protein to lower-income households, mostly rural people who prefer buying a live bird as they don't have fridges to store frozen or fresh meat. There is a very specific market for "hardbody" chicken, that is considered extra flavourful and preferred because it is tougher and doesn't fall apart when used in stews and curries.

Contract growers

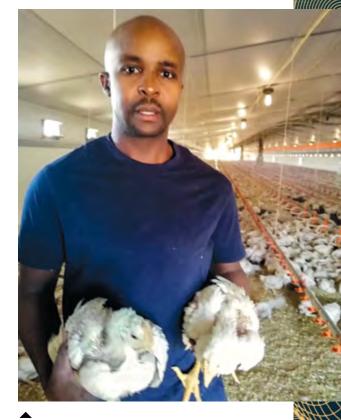
Out-growers, or contract growers, are another case in point that shows the wider growth enabled by industry investment. Sbusiso Mavuso is the CEO of KwaMhlanga Poultry Project in





vendors and hawkers who have an arrangement with farmers to collect large quantities of hens at the end of their laying cycle. "For biosecurity reasons, farmers are reluctant to deal with large numbers of small hawkers. And at the moment, due to the current H5N1 avian influenza outbreak, live bird movements are restricted and permits are required to move birds."

The hens are sold to consumers for anything between R60 and R100 each. According to Johnson the birds are typically sold live at pension pay-out points, on street corners, and at informal markets in cities, towns and rural



Sbusiso Mavuso CEO of KwaMhlanga Poultry Project







Mpumalanga, a 100% black-owned contract grower for Daybreak Farms, which has been in operation since 2017. KPP produces roughly 1,2 million broilers per year in at least seven cycles on 30 hectares of farmland leased from the Department of Agriculture, Land Reform and Rural Development (DALLRD).

Mavuso views contract growing as a dynamic partnership between small farmers and agribusiness companies that benefits both parties without sacrificing the rights of either.

"There are many players in the value chain that ultimately fulfils the needs of the consumer, from farmers and traders to transporters, processors and retailers. We're all separate but linked in terms of materials, information and financial flows. Each have an important role to fulfil," says Mavuso.

"Daybreak plays a huge role in our success by facilitating the procurement of inputs, such as day-old chicks, feed, vaccines, medication and cleaning services at the right quantity, quality and time, resulting in increased production levels that help to raise our revenues. We also benefit from support from seasoned technical advisors, who work tirelessly to help us perform at optimal levels."

KPP, in turn, feeds and cares for the birds from the date of delivery until they have completed the growth cycle and are collected for slaughter.

The nine shareholders are seeing financial

growth, and the company provides employment to 12 permanent staff and six casual workers, while four indirect opportunities have also been created. Mavuso points out that only local people from in and around KwaMhlanga are hired, creating local jobs.

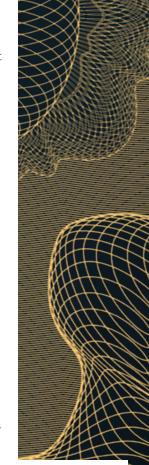
The company has also developed a CSI policy to guide their social and environment investment efforts. "We believe in being responsible corporate citizens, and frequently support local community empowerment initiatives and make donations to local schools and other institutions," Mavuso says.

Contract growing protects a smallholder farmer from many of the risks associated with poultry farming, but Mavuso is very aware of the pressures that have kept the greater industry from expanding to fully meet growing consumer demand. His hope is that the master plan will help to address the challenges, which have been exacerbated by unfair competition from imports.

"The master plan has the potential to push forward the wheels of transformation, through its focus on financial and technical assistance to small-scale farmers," says Mavuso.

"By constraining imports of poultry it will encourage further investment and encourage expansion in order to supply both the local and the export markets. This should in turn lead to job creation which is so necessary in South Africa right now."

Contract growing protects a smallholder farmer from many of the risks of farming



Ensuring productive layers: a guide for small-scale farmers

Ensuring that your hens produce the optimal number of table eggs is an enterprise that requires a number of key steps.

Stephani Barker, Technical Advisor in monogastrics at Meadow Feeds Paarl, provides invaluable guidelines for small-scale farmers





ADVERTORIAL

To produce table eggs successfully is not rocket science, but it requires being guided by a handful of basic farming principles. These include selecting the correct genetics or breed of bird, following a recommended nutritional programme, good farm-management practices and providing and maintaining a suitable environment in order for the hens to be productive.

Types of housing systems

There are many different housing systems for layers; the most popular types are battery cages and floor systems. Each has their own advantages and disadvantages. Battery cages allow for ease of management, lower incidence of diseases spreading and the absence of litter issues, while some disadvantages are that cages restrict physical space for hens' movement, which can increase their risk of developing metabolic diseases and foot-related injuries. The opposite is found in floor systems with nest boxes: these afford the birds more space and the ability to move around, and are therefore regarded as more humane. On the down side hygiene is often a problem, with the cost of litter adding to the overheads. There are also some combination systems that contain open cages on the floor with a slat design.

Use trusted suppliers

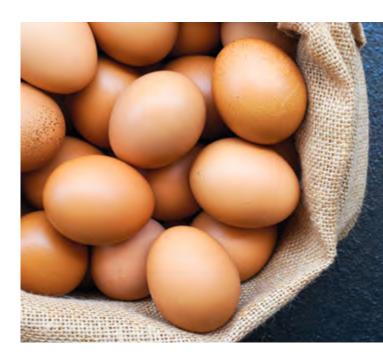
Most of the commercially available breeds in South Africa were developed from the White Leghorn and New Hampshire crosses, with Amberlink, Hy-Line and Lohmann being the most commonly available genetic strains. Carefully select a breed based on production goals. The birds purchased need to be able to maintain a high level of production from point of lay until around 80 weeks of age. Only purchase point-of-lay hens from a reputable source where the pullets are raised correctly, following a good quality nutrition programme, vaccination programme and on-farm processing.

Only purchase point-of-lay hens from a reputable source where the pullets are raised correctly, following a good-quality nutrition programme

Balanced nutrition

Feed cost is around 70% of a farm's running costs, so it's imperative that the hen is provided with exactly what she needs for both production and maintenance. Anything more is a waste of money and anything less will impact hen production. Point-of-lay hens require a balanced ration to meet their egg production and maintenance needs. A 20-week-old layer has high maintenance needs because it's still growing. Offering a scientifically formulated feed such as the Meadow Feeds Powerlay range will ensure all the essential nutrients are provided for optimum egg production, frame development, feathering and plumage, while keeping birds healthy and capable of laying eggs until 80 weeks and older. Meadow Feeds only sources the best quality raw materials, and the company's nutritionists formulate diets to provide the birds with high-quality grains, proteins and digestible sources of energy.

Powerlay Early Lay: When point-of-lay birds arrive on the farm they need to be fed an early lay diet such as the Meadow Feeds Powerlay Early Lay (V 16416), which has been designed as part of a phase-feeding programme for hens. It is formulated using grains and pulses and contains no animal by-products or fishmeal. It should be fed from point of lay until 35 weeks of age.





ADVERTORIAL

Powerlay Utility Lay: Meadow Feeds Powerlay Utility Lay (V 16417) should be fed from 35 to 50 weeks of age. This feed is formulated to either be a two-phase or three-phase feeding programme or can even be a single-phase feed, which is useful for smaller flocks. This means that the Powerlay Utility Lay feed can be fed throughout laying (single-phase feeding) or it can be incorporated into a programme together with just the Powerlay Early Lay (two-phase feeding) or the Powerlay Early Lay and Powerlay Late Lay (three-phase feeding programme).

Powerlay Late Lay: The Meadow Feeds Powerlay Late Lay (V 16418) is the last diet to complete the three-phase

feeding programme to be fed from 50 weeks of age to the end of the laying period. This diet is formulated to meet all the requirements of a fully grown layer bird while maintaining hen health and allowing the hen to continue producing eggs for as long as possible.



Water

Water will always be the most important nutrient on any farm. A 50g egg contains 33g of water, therefore a water shortage will result in a dramatic decrease in egg production. Birds should always have free access to fresh, good-quality water. As a rule layers should consume twice as much water as feed, which is around 220ml of water per bird per day.

Meadow Feeds Powerlay specifications:

MEADOW FEEDS POWERLAY SPECIFICATIONS								
			POWERLAY EARLY LAY	POWERLAY UTILITY LAY	POWERLAY LATE LAY			
PROTEIN	MIN	g/kg	150.0	130.0	130.0			
FAT	MIN	g/kg	25.0	25.0	25.0			
FIBRE	MAX	g/kg	70.0	70.0	70.0			
MOISTURE	MAX	g/kg	120.0	120.0	120.0			
CALCIUM	MIN	g/kg	35.0	27.0	35.0			
CALCIUM	MAX	g/kg	45.0	45.0	45.0			
PHOSPHORUS	MIN	g/kg	5.0	5.0	5.0			
TOTAL LYSINE	MIN	g/kg	6.0	5.0	5.0			



MEADOW FEEDS POWERLAY FEEDING PROGRAMME									
	FEED FROM	KG EATEN PER BIRD OVER THE PERIOD	NUMBER OF BIRDS	KG NEEDED PER CYCLE	NUMBER OF BAGS NEEDED				
EARLY LAY	POL - 35 WEEKS	10.0	100	1000	20				
UTILITY LAY	35 - 50 WEEKS	10.5	100	1050	21				
LATE LAY	50 - 66 WEEKS	13.5	100	1350	27				

Take note: feed intake will be affected by environmental conditions, housing and breed; use the above recommendations as a guideline only.



Lighting

Layer birds are very sensitive to changes in day length and the supply of light is a powerful tool to manage a consistent level of production. Layers require 14-16 hours of light a day in order to maintain egg production throughout the year. Ensure that there is even lighting throughout the house, with no dark areas. A warm light should be used to ensure birds get red-spectrum light, which is required to stimulate egg production.

Air quality

A comfortable temperature for layers is between 18-25°C and a maximum relative humidity of 80%. Birds will start to pant at temperatures above 25°C and this will negatively affect egg production. Ventilation is another important aspect of air quality. Good ventilation is required for birds in order to remove excess moisture and heat from the house, provide adequate oxygen levels and remove carbon dioxide produced by birds, and also to prevent buildups of dust and ammonia.

Vaccinations

Certain diseases are widespread or difficult to eradicate and will therefore require routine vaccinations. Most flocks are vaccinated against Marek's disease, infectious bronchitis (IB), Newcastle's disease (NDV), infectious bursal disease (Gumboro), avian encephalomyelitis (AE) and fowl pox. Unfortunately a single programme cannot be recommended for all areas. It is therefore best to work with a local veterinarian to design and implement a vaccination programme specifically for your flock.





Disease control

In order to remain disease free, proper biosecurity protocols need to be in place on farms. The easiest elements to control are the movement of people, equipment and the birds themselves. Some simple processes to implement:

- 1. Control the movement of people and equipment, and limit the access of outside people onto the farm as well as movement between the houses on the farm:
- Limit contact between free-ranging poultry and wild birds;
- 3. Ensure visitors to the farm have not been in contact with any other poultry for at least 24-48 hours;
- 4. Change into clean boots and overalls whenever re-entering the farm from outside;
- 5. Place footbaths with disinfectant at the entrance to the farm and all poultry houses;
- 6. Ensure rodent control is in place, as rodents carry a risk of disease;
- 7. Use of coccidiostats, usually done via vaccination.

At the end of every production cycle, keep two weeks open between previous and new flocks. Thoroughly clean and disinfect houses, including drinkers, feeders, nest boxes and all other equipment..

In the event of mortalities, quickly and properly dispose of dead chickens to halt the spread of disease. It is recommended to contact a veterinarian in case of any suspect mortalities.

Moulting

Moulting is natural process, where birds lose their feathers to make way for new growth. It normally occurs towards the end of the laying period and causes a decrease in egg production. Moulting can also occur sooner in hot, humid weather. This process allows the reproductive physiology of the bird to rest and build up a reserve of nutrients.

Record keeping

Record keeping and data management are important tools to establish production goals and monitor animal performance. Examples of records to keep include:

- Feed intake
- · Water intake
- Mortality
- Vaccination
- · Bird weight
- Egg production, for instance numbers of eggs produced per hen per year

Contact your nearest Meadow Feeds technical advisor for further technical support.
Find more info at www.meadowfeeds.co.za
References available on request.



MEET OUR PEOPLE



Cynthia Ncube

Helping the poultry industry make sense of mountains of data to enable the right business decisions

You won an award for your contribution to the poultry industry at the last SAPA congress - congrats! How long have you been with SAPA?

Thank you very much! Receiving the award was such a highlight. I've worked for SAPA for 14 years, and my job as an administrative assistant has grown to include many different facets.

Tell us a bit about your background, and what your job entails.

I worked in retail before joining SAPA, but statistics became my focus at SAPA as I am very detail oriented. I process large quantities of data from our producers, which are turned into reports, and then I distribute those to members and other stakeholders. I work on various projects, including subsistence and small commercial farmers, the avian influenza surveillance monitor, live bird traders, SAPA's database and the monthly commercial stats.

When it comes to the poultry industry, what variables do you find the most complex to analyse? What is your biggest task every month?

Because I'm involved in many projects simultaneously, a lot of multitasking is needed to meet the deadlines and they are all equally demanding. For instance, I have to ensure that my data corresponds with the SAPA models, that data is captured correctly to avoid double counting, and confirming large amounts of information supplied by producers.

Are there aspects about the industry that surprised you when you first were exposed?

I never realised before that chickens are really quite fragile! It was driven home when I attended a course at KZNPI and we had to take showers before and after visiting chicken houses - I learnt that if we are to make a profit from chickens we have to respect biosecurity measures. I now



'Having accurate data helps the industry to make informed decisions that benefit everybody'

also understand why many farmers wake up in the middle of the night to monitor their houses, because chickens are like babies!

What do you find most fulfilling about working with poultry industry statistics?

It is rewarding to see a steady increase in participation in SAPA surveys by both members and nonmembers and small and commercial producers. Having accurate data helps the industry to make informed decisions that benefit everyone and it is very fulfilling to play a part in compiling and keeping that data up to date.

What do you like to do in your free time?

I enjoy gardening and baking for my nieces, who love my malva pudding in winter! My scones are also a favourite. I learnt a lot about baking from other women, including SAPA colleagues Louisa and Hendrien, and between us we've baked many koffiekoekies, condensed-milk koekies, jam squares and rusks!

Lastly - why did the chicken cross the road?

To negotiate for an AI vaccine, seeing that humans now have COVID-19 vaccines...







Every morning, James Minton wakes up to care for nearly 200 chickens on his farm in Windsor, in upstate New York, in the United States. He also watches over two dogs, named after Star Trek characters, a cow named Maribel, and nine greatgrandchildren.

Triple J Farm sells eggs with a message of amassing generational wealth for black people.

Before moving to Windsor, the 86-year-old farmer and his wife, Wilhelmina Minton, raised seven children in New York City. They now have 28 grandchildren, 40 greatgrandchildren and a great-greatgrandchild, many of whom have lived on and frequently visit the farm.

When Minton packed up his apartment in Harlem, New York a decade ago and bought the eighthectare parcel that became Triple J Farm, he wanted a place where his family could find refuge, whenever they might need.

"This will be here for ages," Minton says. "As long as there's a descendant from the Minton family, this place will be here for them."

Black Americans own just 1% of rural land in the United States. While there are 58 000 farmers in New York, according to the US Department of Agriculture's 2017 census, only 139 of them are black.

Minton's grandson Jarrad Nwameme, who lives full-time in New York City, says access to land like his grandfather's is an opportunity few black Americans have. Because of this, Nwameme says the significance of maintaining the land with his grandfather goes beyond their family story.

"We're also promoting the message of generational wealth. We're promoting the message of buying land," Nwameme says. "We're promoting the message of black is beautiful and black excellence and being able to pass this down to

generations to come."

Each dozen eggs they sell comes with that message, with "#BuyLand" or "#MakeFarmersBlackAgain" stamped on the inside of each carton. The phrase is on hats Triple J Farm sells alongside their eggs at the Downtown Courtyard Market in the nearby town of Binghamton, too.

Land ownership is just one form of generational wealth, but between historic redlining (a discriminatory practice in Canada and the US where residents of certain areas were systematically denied access to services and finance, often based on race or ethnicity) dispossession and lending discrimination, black Americans still face persistent barriers when it comes to accessing land.

In 1910, black farmers accounted for about 14% of the country's farmers and held titles to 6-7 million hectares of land, according to a report from the progressive think tank Data for Progress.



Daryl Minton holds eggs collected at one of the coop. The farm now sells close to 200 dozen eggs each week

> 'We're promoting the message of generational wealth, and the message of buying land'





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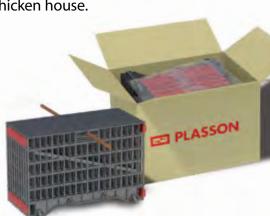
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Over the next century, however, black farmers were dispossessed of nearly 98% of their land, continuously denied loans and credit from the United States Department of Agriculture (USDA) and other federal farm programmes. A 1999 classaction lawsuit affirmed evidence of this systemic discrimination and resulted in a \$1.25 billion settlement to black farmers.

Land loss and structural racism continue to contribute to America's racialised wealth gap. White families have a far greater net worth than black families, meaning they have less wealth to pass down. A 2010 study concluded that inheritances account for the racial wealth gap in the US more than any other demographic or socioeconomic factor.

Minton says he prioritised saving money, investing in the company where he worked and investing in a retirement fund with tax benefits. According to his grandchildren, he encourages his family to do the same with any extra money they have.

Minton used the money he put in



stocks to buy the Windsor homestead, which will appreciate in value over

Minton prioritised saving money, and investing in a retirement fund with tax benefits

time. Now, he wants to utilise that land so they can support their own.

Nwameme says he's working to make the farm a family effort that even the youngest generations can

get involved in. That way, there will always be someone to care for the

> land, keep the business going and pass down the wealth Minton set aside for his family.

"I'm sitting here telling my little cousins, 'Where's your licence?' because we need help, we need people,"

Nwameme says. "My little cousins -I'm training them as we speak."

Minton and his family plan to expand the farm beyond eggs. They recently acquired ducks and turkeys, as well as chickens for a new flock. They want the land to pay for itself and provide for them, too.

When looking around at all he has cultivated so far, Minton says growing a farm is a lot like raising his family.

"When you put something down, you see something grow - it's a lot like kids," Minton says. "You have kids and you see them grow up and become something. It makes you feel good."

With that idea at their core, eggs from Triple J Farm come with a lot of love. 🌃

Originally published by WSKG



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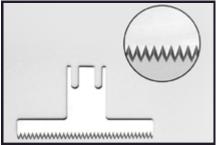
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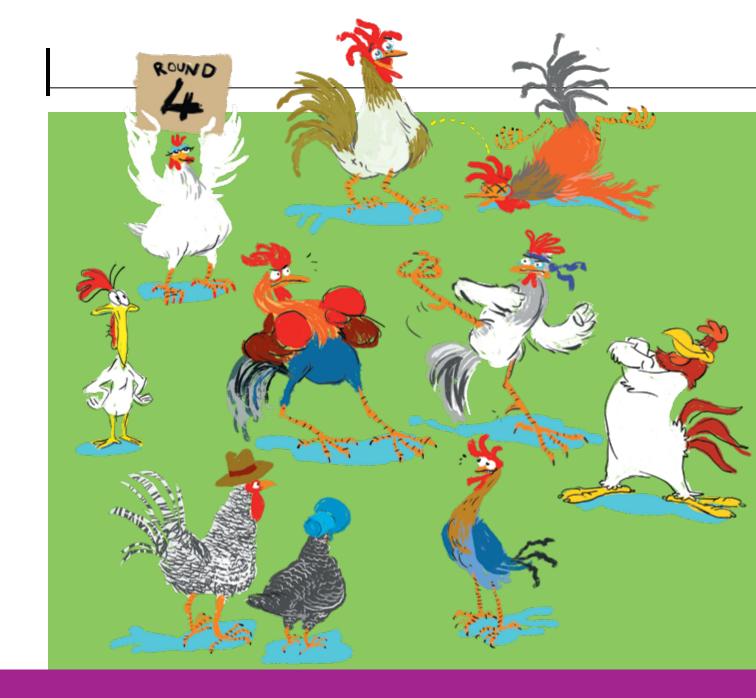
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The 3-minute chicken quiz

Words Alyn Adams

Illustrations Jason Bronkhorst

QUESTIONS

- All chickens are descended from a species of red junglefowl, domesticated around 8 000 years ago in southeast Asia. DNA evidence also suggests that the chicken shares an evolutionary link with which dinosaur?
- a) Velociraptor
- b) Pterodactyl
- c) Tyrannosarus Rex
- d) Archaeopteryx
- Chickens were first introduced to the Americas from:
- a) China
- b) Polynesia
- c) Europe
- d) Researchers are still arguing about that...
- Which of the following terms do not indicate a chicken's age?
 - a) Pullet
 - b) Capon
 - c) Cockerel
 - d) Biddy

- When chickens first arrived in the lands around the Mediterranean, the birds were primarily bred for:
 - a) Meat
 - b) Eggs
- c) Feathers
- d) Fighting
- Adult male chickens, originally called a "cocks" or "roost cocks" in English, were rechristened "roosters" to avoid upsetting Puritans in which country?
 - a) Ireland
 - b) Australia
 - c) USA
- d) England
- Which of the following is not a breed of chicken?
- a) Green-legged partridge
- b) Italian tricolore
- c) Potchefstroom Koekoek
- d) Czech gold brindle chicken

- If a hen decides she has mated with an inferior rooster, she can:
 - a) Temporarily halt egg production until his sperm dies
 - b) Lay her eggs in another hen's nest
 - c) Smash her eggs with stones after they are laid
- d) Expel his sperm
- Sexing a newly hatched chick by examining the shape of its internal genitals is difficult because:
- a) A chick can close its vent with the same force as a hyena's jaws
- b) There are 15 different possible shapes you need to be able to identify
- c) Chickens don't develop genitals until sexual maturity
- d) Male and female parts look identical, except during mating

- By the time chickens are fully grown, it's easy to spot the males.
 That's because:
- a) They have prominent combs and wattles
- b) They piddle in groups outdoors
- c) They gobble fermenting fruit and start fights
- d) They never ask for directions
- Males are aggressive when competing for mates. When fighting, cocks try to injure each other with their:
- a) Spurs
- b) Beaks
- c) Claws
- d) Razor-sharp wingtips
- There are now many unique chicken breeds and some countries have produced dozens. Which country has the most identified chicken breeds, if you include
- a) Nigeria

bantams?

- b) USA
- c) Germany
- d) France
- Which of the following are found only in the yolk of an egg, not the white?
- a) Selenium
- b) Protein
- c) The B-vitamin riboflavin
- d) Monounsaturated fats, iron, and vitamins A, D and E



HUMOUR

ANSWERS

- **1** C Chemical structures in preserved proteins from the soft tissue within a T. Rex leg bone indicate an evolutionary link to chickens. And yes, both the Pterodactyl and Archaeopteryx are also related to the ancestors of modern birds... but they aren't dinosaurs. Sneaky!
- **2** D Chickens that lay blue-green eggs in the Americas support a Chinese origin, but on DNA evidence, some South American chickens may have had Polynesian ancestors and the Spanish, Portuguese, British and French brought European chickens to the "New World" when they arrived. Take your pick...
- **3** B A pullet is a hen less than a year old (or before she reaches sexual maturity, in the poultry industry), a cockerel is a rooster less than a year old, and a biddy is a newly hatched chick. A capon can be any age he's a rooster that's been castrated young. This lets farmers raise the bird to a decent eating size, without his meat developing the unpalatable taint that

- is caused by floods of male hormones when roosters reach sexual maturity.
- **4** D Sad but typical the first chickens in the region appear to have been gamecocks, bred for blood sports.
- **5** C British Puritans, who made up many of the early settlers in the US colonies, quickly decided that some words were just too rude to bandy about the barnyard...
- **6** B The green-legged partridge is a Polish chicken breed, the Potchefstroom Koekoek is a South African hybrid bred for both meat and eggs, and the Czech gold brindle is goldish brindle, as described. And the tricolore is the Italian flag shame on you if you thought it was a chicken!
- **7** D Talk about keeping up with the Kegel exercises!
- **8** B Yes, 15! That's why professional chicken sexers, who spend years learning their craft, look like psychics.

- **9** A Yes, they piddle outside; all chickens like that! But not in groups roosters don't have guy friends. That's why they have no-one to get drunk and fight with, either. And we know they do ask for directions why else would they cross the road?
- 10 A Several centimetres long and covered in the same sharp keratin as the beak and claws, a chicken's spurs can be formidable weapons. Both hens and roosters have them, for defence against predators, but only the roosters fight each other for mates.
- **11** C Germany has at least 31 distinct, full-sized chicken breeds and an amazing 52 bantam breeds. France, in comparison, has 56 breeds overall.
- 12 D Selenium, riboflavin and protein can all be found in the egg white but don't forget that half an egg's total protein is found in the yolk, along with most of its vitamins and nutritional value.



SCORE

0-4 points: BRONZE You're way down the pecking order!

5-8 points: SILVER Hope you didn't count your chickens before they hatched...

9-12 points: GOLD Something to crow about! You rule the roost!

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ON THE WIRES

We check the satellites for the hottest poultry news on the global scene

Compiled by Charmain Lines

Could the chicken market be shifting?

Africa's chicken-dumping woes are rooted in American and European consumers' preference for white meat, which causes an excess of brown meat being exported and destroying domestic markets where they land.

This might change if American fast-food outlets and restaurants can convince their customers to eat chicken thighs instead of wings. With wing prices currently sky high, at least one fast-food chain has already introduced crispy thighs on its menu. If the world's big chicken producers find another market for their excess thighs, this might even spell an end to the flood of dumped frozen leg quarters which SAPA is constantly having to monitor and battle with antidumping duty applications!

America's appetite for white meat was created by restaurants, and their need for ease and versatility. Breast meat is easy to pull off the bone, they say, and simple to turn into a variety of dishes, from chicken nuggets and



strips to breaded chicken sandwiches, all popular fast-food items in the US.

Chicken wings reportedly owe their popularity to the Anchor Bar in Buffalo, New York State, that started serving the product in the 1960s. They became a real hit once marketing turned wings into the must-have snack at the Super Bowl, the iconic annual championship game of the National Football League (NFL).

A 2019 report from CoBank, which offers loans and services to American cultural businesses, shows that changing demographics are already driving up demand for dark meat in the US. If the fast-food and restaurant industry start fuelling demand with the kind of marketing that was the making of chicken wings, the international trade in chicken could look very different in the not-too-distant future. 🛮



UK retailers are stocking white eggs in large numbers for the first time since the 1980s, following unprecedented demand during the height of the COVID-19 pandemic.

Traditionally, British consumers have favoured brown eggs. White eggs make up just 1% of total production in the UK and are mainly used by the food-service sector, including fast-food restaurants.

Since April this year, Tesco, the UK's largest retailer, has started

offering mixed packs of white and brown eggs in a 30%/70% ratio.

According to Adel van der Merwe of Quantum Foods, South African consumers also prefer brown eggs. "Through the years there have been many attempts to introduce white eggs to the South African market, but consumers have never showed a real interest," she says. "As far as I'm aware, there is only one producer of white eggs and that is in the Western Cape." 7

Revival of Ghana's poultry industry on the cards



The United States Department of Agriculture (USDA) is sponsoring a project to revive the poultry industry in Ghana. A deluge of cheap imports and dumping has reduced the West African country's poultry industry from producing 80% of the locally consumed chicken meat in the 1980s to barely participating in the domestic market today.

The comprehensive project seeks to improve both the poultry value chain and the enabling environment. The latter includes awareness of policies, advocacy and biosecurity, the strengthening of local poultry-focused organisations and veterinarian services, and improved access to finance and quality inputs.

With implementation partner ACDI/VOCA, the project hopes to leverage the potential inherent in the Ghanaian market. Poultry is, for instance, the most consumed meat type in the country, and 76% of Ghanaian consumers prefer locally produced chicken. Given the perception that local chicken is tastier, healthier and fresher, consumers are willing to pay a premium for it.

Welcome to the table, UAPP

The world's newest regional poultry association, the Union of Arab Poultry Producers (UAPP), was recently established.

Representing the poultry producer associations in Algeria, Bahrain, Egypt, Jordan, Kuwait, Morocco, Oman, Saudi Arabia, Sudan, Tunisia and the United Arab Emirates, the UAPP is a trade body to be taken seriously. According to data from the United Nations' Food and Agriculture Organisation, the grouping's combined output in 2019 amounted to 979 million birds. This was more than what India produced, and placed the UAPP among the world's top 10 producers.

With headquarters in Abu Dhabi, the UAPP wants to help poultry



farmers in member countries to improve production through workshops and training. It will also organise conferences. Membership is open to poultry farmers, poultry associations and related research centres in all parts of the Arab world.

The UAPP will hold its first official meeting at EuroTier Middle East in March next year.

How do you like your eggs, Father?

A restaurant in a building that was a monastery in the 13th century in the British city of Newcastle recently tasked the University of Durham to research how the monks of that era preferred eating eggs.

It turns out that different religious groups held contrasting culinary views. One order of monks, for instance, only allowed eggs to be boiled (anything else was thought to be ostentatious and sinful), while another used eggs in literally hundreds of different recipes.

The monks were also aware of the cultural importance and symbolism of food. Eggs were considered useful for fast days: being neither meat, fish nor fowl, there were no restrictions on eating them for medieval worshippers.

Food security at risk in Colombia

Colombia has the third-largest poultry industry in Latin America, but the country's political crisis is putting it all at risk. With roads blocked by protestors, more than 60 million birds could starve to death in the main poultry-producing regions.

According to Colombia's poultry producers association, 120 million eggs and 16 000 tons of chicken are stranded, and some 400 000 day-old chicks have died. Farmers have appealed to congress for a humanitarian corridor, with the help of the Red Cross and the protestors themselves, to bring feed to the farms and allow chicken and eggs to reach the markets.

Colombia already experiences a food shortage of between 20% and 40%, depending on the area.

SOCIAL INVESTMENTS

Making Mandela Day magic in multiples of 67

On 18 July, the poultry industry showed it cares by helping to feed 283 588 people with huge donations of chicken and eggs

South African Poultry Association

members went all out this Mandela Day in a very special collaboration with Chefs with Compassion. The NGO set out to cook 67 000 litres of soup for destitute people across the country, and thanks to our generous members over eight tons of chicken and almost a thousand eggs could be channelled towards fighting hunger.

According to Broiler Organisation GM Izaak Breitenbach, SAPA wanted to reach out in solidarity on Madiba's birthday to help fight hunger. "We recognise that there's so much hardship out there, and want to make a difference. For one day at least, there was a warm and nutritious, protein-rich meal for each of the people reached by this initiative. Some of the soup was even sent to KZN to support communities affected by the recent violent unrest in the province."

SAPA members contributed chicken and eggs in combinations of the Madiba magic number of 67, with Astral Foods, RCL Foods and Country Bird Holdings challenging one another to donate chicken meat worth R67 000, or around 2.6 tons each. Quantum Foods joined in with 67 x 10 dozen Nulaid eggs, and East





This page: The teams from RCL Foods, Country Bird Holdings and Quantum Foods deliver a bounty of chicken and eggs for the Mandela Day



This page: Tons of chicken and dozens of eggs arrive at the Chefs with Compassion kitchens, courtesy of Astral Foods, Bushvalley Chickens and Aldabri Agricultural.

Bottom: The community of Thokoza queue up for a nutritious meal on Mandela Day











London producer Beckley Brothers and Pietermaritzburg-based KwaZulu-Natal Poultry Institute each pitching in with 67 dozen eggs. Gauteng egg farmer Aldabri Agricultural pledged 67 litres of liquid eggs and 67 trays each of large and XL eggs. A further ton of meat was donated by Bushvalley Chickens in Tzaneen, ensuring that feeding programmes in several outlying districts could also



SOCIAL INVESTMENTS



benefit from the initiative.

Says Chefs with Compassion GM Marion Tanzer, "Your contributions meant that much needed and much appreciated protein was added to soups across the country. The chicken and eggs were especially appreciated by our regular CWC kitchens who cook on a weekly basis for their beneficiaries and who rarely see such an abundance of good protein

sources. Our heartfelt thanks!"

The NGO smashed its target and 280 participants across nine provinces cooked 70 897 litres of soup, providing a nourishing cup of soup to 283 588 people on Mandela Day.

"We're proud that our members' poultry injection could help stretch the food prepared to chase hunger from the door for even more people," says Breitenbach.



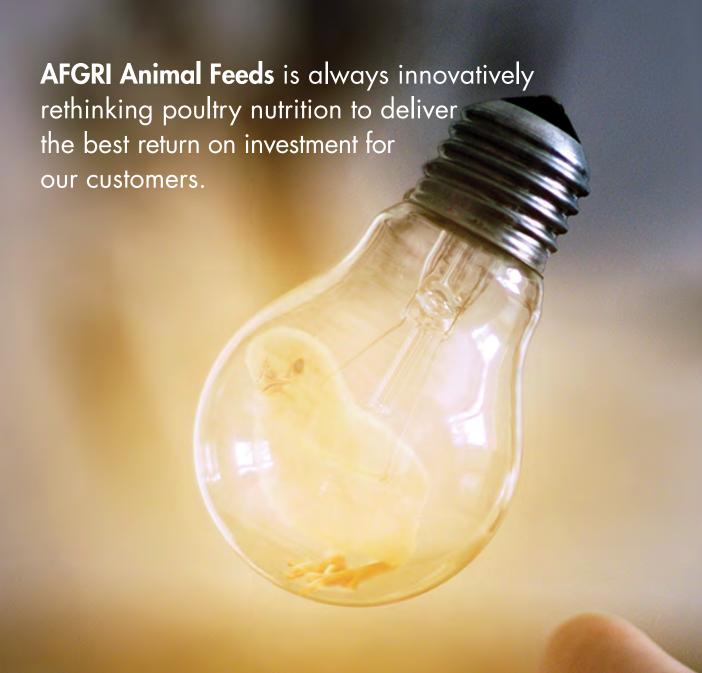


Top left: Despite the civil unrest upheaval in KZN, KZNPI pulls out all the stops to deliver their egg donation Left, above and below left: The Goldi Chicken team of volunteers help with the Joburg soup effort on Mandela Day





Above: The Beckley Brothers team deliver their pledged contribution of 67 dozen eggs to the participating East London kitchen



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HACKS&TIPS

Farmers share their tips for saving resources in their operations







M&H Agri Middelburg, Mpumalanga

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- To save costs we buy wood shavings at a pine factory instead of buying from third-party suppliers like feed stores. We use organic meds such as aloe vera instead of expensive antibiotics and perhaps the most important one now, use stoves for heating instead of electric heaters.
- We dry and reuse the waste from day one to 21 as grazing stock feed. I use the manure as fertiliser on my crops, and on my lawn. The feed bags I resell as there is quite a demand, and I reuse them for my maize harvest.

Nthabiseng Philison





PhirimaBronkhorstspruit, Gauteng

Philison is a member of SAPA's broiler board

After cost, broile heati

After feed, electricity is our biggest cost, and in the past I stopped broiler production in winter as heating costs were just too much. Now I am installing stoves with chimneys in the poultry houses, and insulating the corrugated iron sheets to keep the house warm. My Eskom tariff is time-of-day based, so I do activities that use a lot of energy, such as pumping water from the boreholes into storage tanks, in the evenings.

Insurance for small farmers



What are the options to keep your operations safe? Theo Potgieter of Unigro Insurance Brokers advises

"Dear Poultry Bulletin, I need advice. What is the best insurance to use for broiler farming as a small-scale farmer? This is a very important subject for beginner farmers like me." @Tsogang3, via Twitter

When considering insurance for a broiler farm such as Tsogang's, we look at two categories: fire and business interruption.

Fire insurance covers the chicken

houses and equipment. To qualify for a policy, buildings must comply with the national building regulations. If buildings are constructed out of corrugated iron, for instance, the risk

will be assessed before cover is issued.

Business interruption (loss of profits) is the section of the policy that covers the farmer's chickens, from the time they are day-old chicks until they are sold. It is important to note that insurers only pay out if the chickens died because of fire or weather conditions, and the chicken house must have been damaged too. This section of the policy covers the chickens in cycles, for instance, one day old until ready to be sold or slaughtered. Unigro normally covers four cycles per year

All Unigro policies have Sasria (SA Special Risks Insurance Association) cover in place. This means that chicken losses and damage to chicken houses caused by civil unrest is covered.

Fire and business interruption are the two main aspects of the policy, but farmers can extend their cover to include theft, cash losses, liability, machinery breakdown, and even their vehicles, homes and home contents.

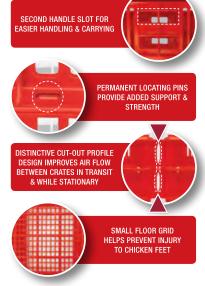
Farmers who manage their risk get the best cover. For instance:

- · Maintain your buildings.
- Make sure you have fire extinguishers that are in good working order.
- Lock your chicken houses at night to prevent theft. Theft cover will only apply if the lock was broken.
- Adhere to SAPA's biosecurity measures to prevent the spread of diseases.

To find out more, contact your broker. At Unigro we will do an analysis for the farmer and advise on the appropriate cover and the premium. Insurance is very specific to the type of risk and cover a farmer needs.

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Poultry and transport – success for one, success for all

Carl Malherbe, executive of Unitrans's consumer division, explains how a robust poultry industry is essential for the transport sector

The welfare of South Africa's transportation industry might not be the first thing South Africans think of when they hear talk of a Poultry Industry Master Plan, and yet those of us in the transport sector look very closely at any macro development in agriculture in general and poultry specifically. South Africans all love chicken, and eat more of it than any other meat, and we are the industry that crisscrosses the country, covering millions of kilometres every year to bring feed to those chickens, and ultimately deliver their eggs and meat to the markets, with many logistical steps in between.

The South African Poultry Association's application for antidumping duties on imported chicken from Brazil and four EU nations and the review of the tariff structure for poultry imports as called for by the master plan will therefore also directly impact the transport sector and affect overall economic growth.

According to Stellenbosch University and the World Bank, the cost of South African logistics is estimated to be 11.8% of GDP. StatsSA estimates that South Africa's road freight income (excluding rail) is R115 billion. As one of the largest transport service providers to the poultry sector, Unitrans has for the past 25 years supported businesses throughout the poultry-production value chain.

In many areas of South Africa, job creation and livelihoods in the domestic agriculture sector depend on a thriving poultry industry, which in turn relies on established transport services. Often located in rural areas with otherwise bleak prospects for a means of income, transportation in the sector paves the way for many job opportunities. Drivers, vehicle assistants, vehicle hygiene, cleaning, poultry handling and refrigeration are examples of the support services that the transport sector offers to poultry farms, hatcheries and the feed sector. Spare parts, fuel and infrastructure services also need

to be taken into account.

As logistics partners to the domestic poultry industry, involved in all cycles of the chicken process – from the delivery of feed to the movement of eggs and day-old chicks to the collection and delivery of poultry products – Unitrans and other major players in the transport sector commit substantial and ongoing investment into the specialised nature of poultry supply chains. A deep commitment and long-term approach to research and development, equipment innovation, business intelligence and excellence in risk and disease management all support our incredibly dynamic domestic poultry transport sector.

We aim to approach macro poultry challenges with high levels of agility; however, in an industry where quality in execution is merely an entry ticket, the retention of extended poultry industry partnership capabilities – and communities – are central to supporting a thriving and sustainable domestic transport industry.

UNITRANS BY NUMBERS

- 300 million eggs moved annually
- 250 million day-old chicks moved annually
- 190 million broilers moved annually
- 1.35 million tons of feed moved annually
- 17 million kilometres travelled annually on poultry and feed-related trips
- 280 000 tons of chicken meat transported annually
- 5 300 workers employed (16% associated with poultry and feed)

In 2020, the South African transport industry employed 943 000 workers. (Statista.com)



Unitrans is a diversified supply chain solutions company serving the South African market. Our highly successful business model incorporates innovative design, implementation expertise and the continuous delivery of world class solutions to our customers.

Creators of leading-edge supply chain solutions for almost 60 years, we focus on six key industries: agriculture, fast moving consumer goods, chemicals, petroleum, general freight incorporating specialised warehousing, and mining.

With more than 25 years' experience in the poultry value chain Unitrans offers farm services, transportation services for eggs, chicks, live birds and animal feed, as well as downstream cold logistics services.

Our strong national footprint comprises a team in excess of 5 000 people across 86 depots around the country. Our fleet of approximately 2 000 vehicles travels more than 150 million kilometres each year.

Our people are central to our business success incorporating a strong learning culture. The quality and extent of driver training conducted as an integral part of our operations is testament to our commitment to our people and to safety.

We pride ourselves in establishing strategic alliances with all stakeholders by continuously striving to unlock value through operational and SHERQ excellence. Subscribing to and promoting excellent safety, health, environment and quality practices including bio-security, forms part of our standard service offering.

Unitrans is a proudly South African company with level 3 B-BBEE empowerment credentials incorporating effective black ownership in excess of 60% and black woman ownership in excess of 30%.

We are driven to constantly innovate – whether it be through design, systems or leadership. Our strategy is to revolutionise the transport and logistics industry through delivering service, innovation and expertise.



For more information:

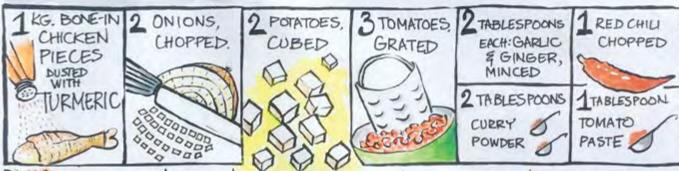
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CURRY POWDER & FRY

UNTIL FRAGRANT - I MIN.

2) ADD TOMATOES,
TOMATO PASTE, CHILI,
CINNAMON & WATER
(SEXTRA LOOMLS FOR
NON-WONDERBAG USERS)
2 SIMMER UNTIL &
SAUCY & STANLY
2 SAUCY & STANLY
3 SAUCY & STANLY
4 SAUCY & STANLY
4 SAUCY & STANLY
4 SAUCY & STANLY
5 SAUCY & STANL

ADD BROWNED CHICKEN & POTATOES. MIX WELL & BRINGTO THE BOIL, COVER & COOK FOR 25 MINUTES.

AFTER 25 MINUTES, GIVE
CURRY A GOOD STIR.
BRING BACK TO THE BOIL,
COVER & TRANSFER DIRECTLY
TO THE WORDERBAG. THE TIGHTLY
A & LEAVE FOR 3 HOURS.

OO DO NOT PEEK !!

NON-WONDERBAG USBRS;
FINISH COOKING ON THE STOVE!

GARNISH WITH CORIANDER SERVE WITH RICE & ENJOY.

THE DISH WILL KEEP WARM IN THE BAG FOR 5 HOURS OR MORE



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