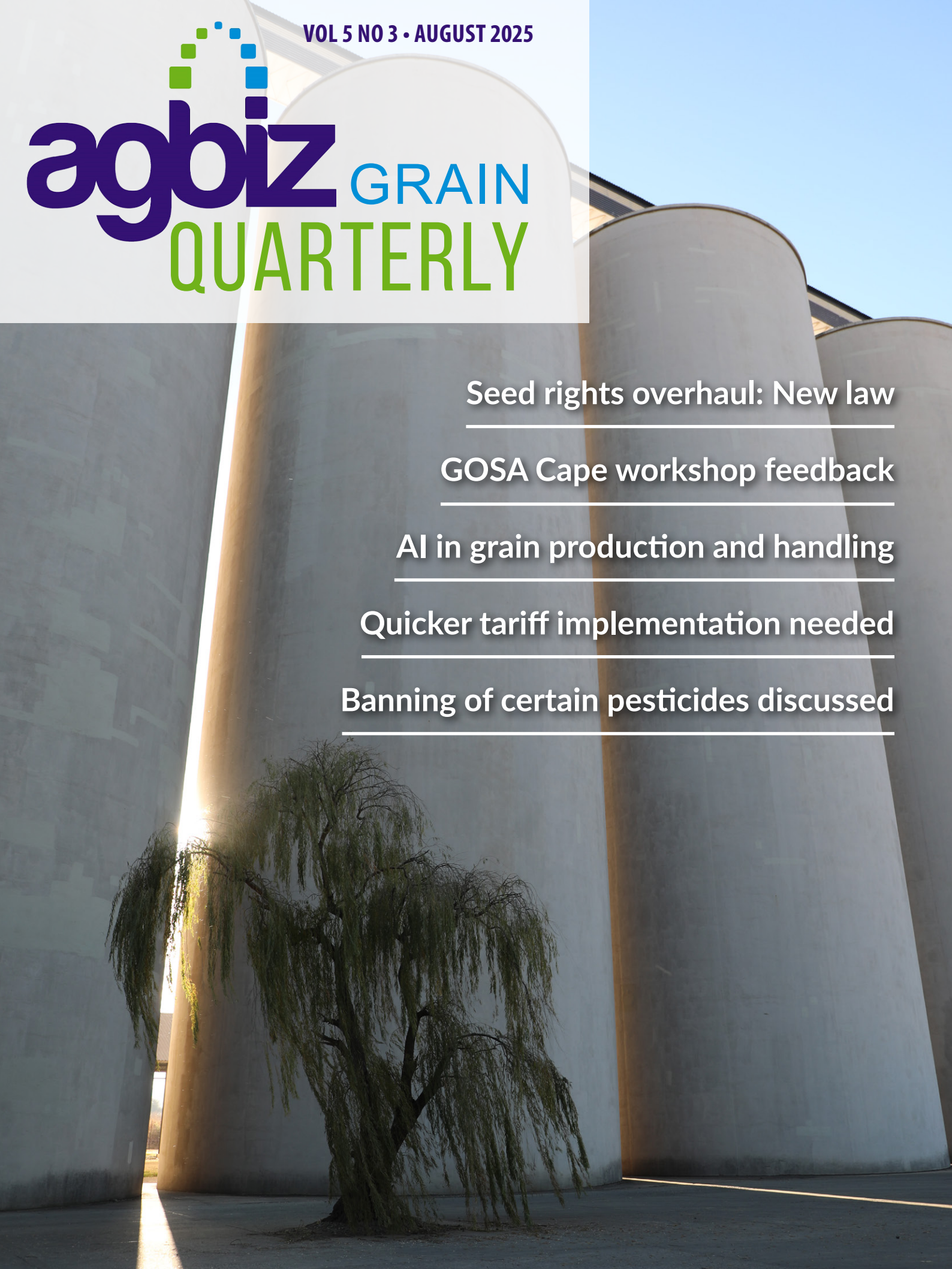
VOL 5 NO 3 • AUGUST 2025

agbiz GRAIN QUARTERLY



Seed rights overhaul: New law

GOSA Cape workshop feedback

AI in grain production and handling

Quicker tariff implementation needed

Banning of certain pesticides discussed

Live for early mornings on the farm.
Not for stressful nights counting sheep.

We know how quickly things can change on a farm. Whether it was planned or unplanned, we always have a plan. As a market leader with over 107 years of experience and a nationwide infrastructure, you can count on Santam to adapt to whatever comes next.

To find out more about our agriculture insurance, speak to your intermediary or visit santam.co.za/products/agriculture.

Santam
this is freedom

K-OBIOL®
EC 25

Jou Vennoot in Winsgewende Graanbeskerming.

Nou met Presisie-Doserings Toerusting.

CONTACT US

Kontak ons vir meer besonderhede (+27) 82 616 2962.

Gebruik insekdoders verantwoordelik. Lees altyd die etiket en produkinligting voor gebruik en volg alle waarskuwings en voorsorgmaatreëls
K-Obiol® EC 25 Reg. Nr. L4586 Wet Nr. 36 van 1947 **Aktiewe Bestanddele:** Deltametrien (piretroied) 25 g/ℓ en Piperonielbutoksied 225 g/ℓ **GEVAAR**
Registrasiehouer: 2022 Environmental Science ZA (Edms) Bpk., AMR Building 3, Ground Floor 9 Concorde E Road, Bedfordview, 2007, Suid-Afrika

envu™

Photograph courtesy of AFGRI.

CONTENTS

Publisher
Plaas Media (Pty) Ltd
217 Clifton Ave, Lyttelton, Centurion
Private Bag X2010, Lyttelton, 0140
Tel: 012 664 4793
www.plaasmedia.com

Chief executive officer
Lynette Louw
084 580 5120
lynette@plaasmedia.co.za

Deputy editor
Jayne du Plooy
jayne@plaasmedia.co.za

Sub-editor
Monique Fourie
monique@plaasmedia.co.za

Layout & design
Inge Gieros
inge@plaasmedia.co.za

Sales manager & accounts
Marné Anderson
072 639 1805
marne@plaasmedia.co.za

Advertisement sales
Karin Changuion-Duffy
082 376 6396
karin@plaasmedia.co.za

Susan Steyn
082 657 1262
susan@plaasmedia.co.za

Illa Hugo
082 898 3868
illa@plaasmedia.co.za

Subscriptions
Beauty Mthombeni
064 890 6941
beauty@plaasmedia.co.za

Published on behalf of
Agbiz Grain
012 807 3002
1st floor, Grain Building,
477 Witherite Road,
The Willows, Pretoria
Email: annelien@agbizgrain.co.za
www.agbizgrain.co.za

Looking to the future of grain handling and storage

By Johan van Rensburg, VKB Grain Services

I was born in Boksburg, Gauteng, in 1975. Two years later, my parents and I moved to our family farm, Pleasant View, near Villiers. There, my father continued the family tradition of grain and livestock farming. He later added a dairy operation, and I was considered a 'milkman'. My passion for agriculture began to take root during the severe drought of the 1980s.

My first grain-related job was as a learner grain silo assistant at VKB's grain silo in Villiers. Over the years, I worked my way through the ranks, gaining experience at organisations such as SOK, OTK, AFGRI, GrainCo, BKB GrainCo, and OVK, before eventually returning to VKB. Along the way, I earned certifications in grain grading, fumigation, and silo operations, and completed a number of management short courses. More importantly, I had the privilege of learning from some of the most respected professionals in the industry.

Throughout my career, I've had the opportunity to pioneer several 'firsts' in South Africa's grain handling and storage landscape. In 2002, I installed and operated the country's largest grain dryer at the time. Two years later, I established and managed Africa's first Australian-style grain bunker using silo bag storage for commercial purposes. From 2014 to 2015, I established South Africa's first high-density lucerne press.

Today, I serve as executive head of VKB Grain Services and am currently pursuing a Bachelor of Management Leadership (BML) degree. This year, I was honoured to be elected president of the Grain Handling Organisation of Southern Africa (Gosa). Above all, I'm a proud husband and father of two – my greatest achievement.

Technology and the impact of AI

Technological advancements in grain handling and storage are expected to become more affordable, safer, and more efficient. This technology should be geared towards improving grain and oilseed traceability, and enhancing food safety. It also provides valuable tools for studying the long-term impacts of genetically modified organisms and limiting the spread of mycotoxins.

Artificial intelligence (AI) holds promising potential, particularly when integrated with blockchain technology. Blockchain allows for data recording across multiple platforms, delivering accurate and actionable information. This can support more informed decision-making. AI also shows great potential in improving the grading of grains and oilseeds, helping ensure compliance with stringent food safety standards.

However, caution is warranted. If a blockchain is compromised, false data could corrupt the entire system. Over-reliance on AI may also be a hindrance rather than a helper.

The vital role of wheat

Wheat remains a critical staple in South Africa, yet we are a net importer of it. This reliance on global markets exposes the country to significant risk, especially in an increasingly unstable geopolitical and economic climate. Local markets are further strained by the government's slow response in announcing and implementing import tariffs for wheat.

Cultivar classification

Certain cultivars are designed for specific applications – not only in production spaces, but also during gritting in production processes. By selecting cultivars with strong disease resistance, producers can reduce pesticide use, improve yields, and contribute to long-term food security.

Johan van Rensburg, executive head at VKB Grain Services and president of the Grain Handling Organisation of South Africa.

A final thought

My passion lies with the next generation. We must make the grain handling and storage industry attractive. A strong, long-term relationship between new talent and the industry will benefit all stakeholders and help feed the nation for generations to come.

To achieve this, we must continually hold ourselves to the highest standards. A willingness to acknowledge our mistakes makes it easier to find sustainable solutions, and build a more resilient and innovative industry and supply chain.

Send an email to Johan van Rensburg at johan.vanrensburg@vkb.co.za for more information.

AGBIZ GRAIN GAZETTE

Agbiz Grain advisory committee gets new member

Helgard Botes recently joined the Agbiz Grain advisory committee as a member. Botes holds an LLB degree from the University of the Free State and was admitted as an attorney of the High Court in Bloemfontein. After a period practicing as an attorney in Bloemfontein, he decided to trade the courtroom for a new career in corporate agriculture.

Botes spent several years as legal advisor, dealing with various legal aspects. In 2019, he joined Senwes as legal advisor and assistant company secretary. During this tenure, he gained extensive experience in commercial law, among others.

In 2024, Botes moved to the Senwes Grainlink operational team and currently serves as project manager: operations and efficiencies. While he continues to apply his legal knowledge daily, he finds great satisfaction in the dynamic nature of operational work, where no two days are the same. – *Agbiz Grain*

Helgard Botes.

Copra delegation visits Agbiz Grain

In July the Cereals and Other Produce Regulatory Authority (Copra) visited South Africa. This Tanzanian organisation is currently developing its five-year strategic plan (2026/27 to 2030/31), with support from the Alliance for Green Revolution in Africa (Agra) Tanzania. The Eastern Africa Grain Council (EAGC) organised a benchmarking visit to South Africa for the Copra delegation, to learn about best practices in agricultural regulation and commodity market systems.

The delegation comprised 12 participants, including officials from Copra, the Tanzanian ministry of agriculture, the Tanzania president's office, EAGC, and Agra Tanzania. The group visited Agbiz and Agbiz Grain on 23 July during which Agbiz CEO, Theo Boshoff, and Agbiz Grain general manager, Dr Charl van der Merwe, discussed the South African grain handling industry and general agricultural issues. – *Agbiz Grain*

Zimbabwe commissions grain silos based on AI

The government has commissioned a cutting-edge artificial intelligence (AI)-powered silo complex in Kwekwe. This is a major boost to Zimbabwe's economic growth trajectory under Vision 2030. President Emmerson Mnangagwa officially opened the 56 000-tonne facility comprising seven advanced silos.

The Kwekwe silos are the first of 14 new complexes planned for key agricultural areas, including Beitbridge, Gwanda, Lupane, Gokwe, Masvingo, and Timber Mills in Mutare.

Each complex will contribute to help increase the country's total storage capacity from 750 000 to 1,5 million tonnes. This expansion will strengthen strategic reserves, protect against drought, stabilise food prices, and cut post-harvest losses.

The smart grain silo integrates IoT-sensing technology, automated environmental controls, and digital-management platforms to monitor temperature, humidity, and grain moisture in real time. – *TV BRICS*

Senwes Group reports resilient 2025 results

Senwes has released its financial results for the year ended 30 April 2025, delivering a resilient performance in a challenging environment.

Despite a 24,6% decline compared to the previous year, the group still achieved its third-best financial results to date. Profit after tax attributable to shareholders was R645 million, with normalised headline earnings per share of 399,1 cents (2024: 484,3 cents).

Challenging conditions including severe drought, high interest rates, and infrastructure constraints affected the local agricultural sector. On a global scale, economic stagnation in Germany muted demand and a constrained second-hand machinery market placed pressure on the group's subsidiary in Eastern Germany.

Senwes' acting group chief financial officer, Wayne Edwards, noted that the group is implementing a turnaround plan in Germany. "While it's still early days, we believe Senwes has laid a strong foundation for future growth in the region."

Senwes declared a final dividend of 54 cents per share (2024: 50 cents) and repurchased shares valued at R51 million, enhancing overall shareholder returns. – *Press release*

China making progress on next-generation granary

The first five 9 000-tonne pneumatic grain storage facilities in China were successfully inflated into shape in Changsha, capital of central China's Hunan province, marking another step forward in the country's efforts to develop its fourth-generation grain storage technology. The silos are 24m in diameter and 33m high.

What's unique about these pneumatic silos is that they can withstand rain and cold air compared to traditional grain storage facilities. For the sake of storing grains, their airtightness is six times higher than national standards, and their thermal insulation performance is three times better than conventional squat silos.

In addition to their waterproofing, insulation and airtightness, the silos offer a significant reduction in operational and maintenance costs, which are expected to be 30% lower than those of traditional silos.

What once required a team of over 100 workers can now be completed by just 18 people, with the construction period reduced by a quarter compared to the previous generation of squat silos. – *China Global Television Network*

Sibusiso Mabuza new CEO of PGP

A businessman with 20 years of agricultural leadership experience, Sibusiso Mabuza has been appointed as the new chief executive officer of Phahama Grain Phakama (PGP), Grain SA's dedicated farmer development division. PGP delivers tailored support to over 5 800 emerging grain producers across South Africa.

Mabuza's experience includes senior roles at Super Grand Agric, Numolux Group, and the National Empowerment Fund. He has secured over R50 million in project funding, led the construction and revival of agricultural infrastructure, raised capital for vaccine trials, and designed finance strategies for feed mills, abattoirs, and grain production. – *Grain SA press release (edited)*

Construction of Tobol production complex started

The construction of a major investment project – the production complex of TOBOL Center KZ LLP – began in the Kostanay region, Kazakhstan. According to *www.gazetamayak.kz*, the project provides for the storage and processing of grain and oilseed crops, vegetable storage, and a modern transport and logistics centre.

The complex will include a silo park with a capacity of 60 000 tonnes, an oilseed processing plant with an annual capacity of 219 000 tonnes, a feed meal production facility for 365 000 tonnes, and temporary storage warehouses.

TOBOL Center KZ LLP also plans to build railway lines, a container yard, a customs control zone, and a logistics hub. The facility is scheduled to be commissioned in December 2027. Temirlan Zhusupov, deputy director of TOBOL Center KZ LLP, clarified at a briefing that the project cost is ten billion tenge and will be fully financed from the company's own funds. – *APK Inform*

Ronin®

Control at your fingertips ART

In a world where precision and traceability define success in agriculture, the Ronin ART system is setting a new benchmark for grain silo and warehouse management. At the core of its innovation lies the creation of a digital twin, an intelligent, real-time virtual replica of your physical storage infrastructure. For grain handlers, co-ops, and commodity traders, this is no longer a futuristic concept but a practical solution delivering measurable value every day.

The Ronin ART system integrates laser and sensor networks, weighbridge data, and inventory information into a centralized digital platform. By mirroring your grain silo or warehouse digitally, it enables full visibility into daily inventory movements whether it's product intake, transfers, or dispatches. Each movement is verified against weighbridge data, creating a seamless audit trail that enhances transparency and accountability.

One of the key advantages of this system is its ability to monitor available capacity and product positioning in real time. Operators no longer need to rely on manual logs or outdated spreadsheets. The digital twin updates dynamically, offering insights into bin fill levels, expected overflows, and underutilized space. This leads to smarter planning, fewer errors, and optimized logistics.

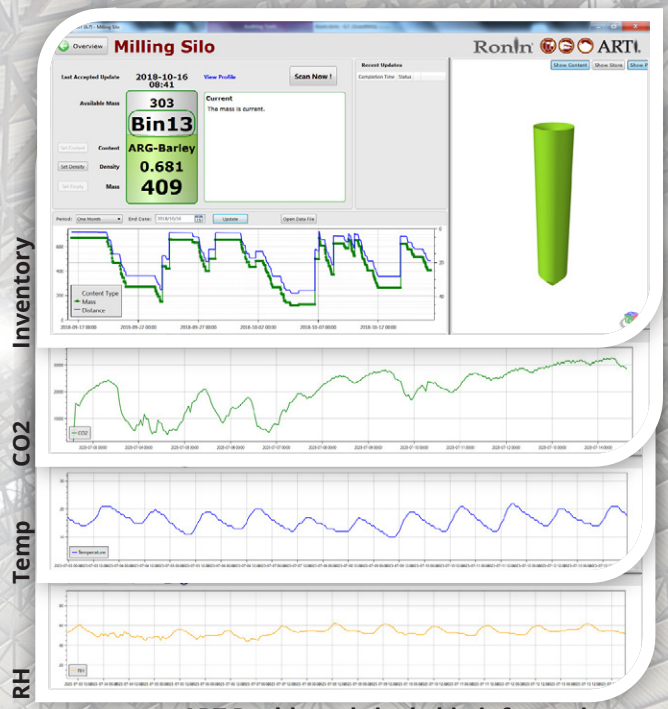
Equally important is the ability to monitor storage conditions. By tracking temperature, CO2 levels, and relative humidity inside the silo, the system helps operators detect early signs of spoilage or infestation.

This empowers preventative action, saving entire batches from loss and preserving grain quality for market. For clients, the benefits are multifold.

The digital twin improves responsiveness to orders, ensures management oversight, and supports compliance with traceability standards. It also builds trust with stakeholders, offering them accurate, real-time data on stock levels and quality. In exportdriven markets, this transparency is a competitive advantage.

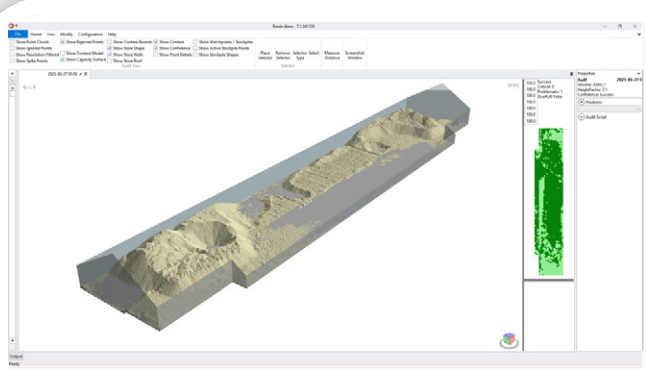
In short, the Ronin ART system turns every silo and warehouse into a smart, data-driven operation. It's not just about monitoring, it's about mastering your storage environment.

With a digital twin, you gain control, confidence, and credibility in a high-stakes industry. For those ready to move beyond guesswork, this is the next step. Ronin calls it ART.

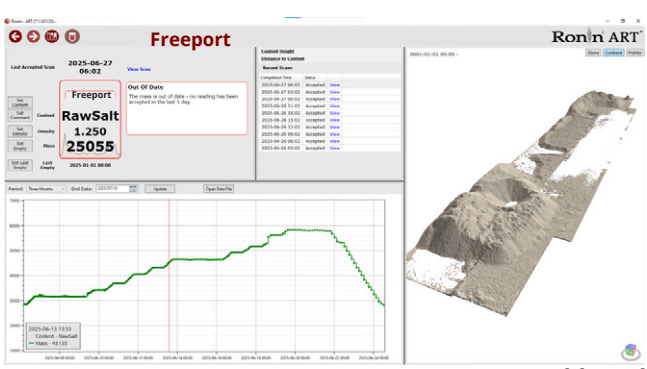


ART Dashboard single bin information

ARTEMIS J42 laser scanner



AIMS Software



ART Dashboard

office@thisisronin.com | www.thisisronin.com

Grain terminal in Duluth-Superior port to close

The CHS-owned grain terminal in Superior, Wisconsin, the largest grain terminal in the Duluth-Superior port, is permanently closing at the end of August.

CHS did not give a reason for the closure beyond citing "shifts in how grain flows through our supply chain". In a statement, the company said it's focussed on "driving growth and efficiency for the future" and remains "committed to serving our farmers in the region, providing access to global markets".

The facility stores grain in more than 500 concrete silos. Those silos have loaded around 40 huge cargo ships with grain every year. But grain exports from the Lake Superior port have plummeted in recent years.

Grain exports have been harmed by several compounding factors. In 2021, a severe drought in the Midwest caused grain prices to spike. Aggressive competition from Russia, Turkey, and Argentina also hurt the port.

Grain shipping out of the Port of Duluth-Superior peaked in the late 1970s at more than ten million tonnes. Today, that's dropped to well below one million tonnes. – *MPR News*

Panamax freight rates expected to stay low

Freight rates for Panamax vessels are expected to remain low but tariffs and geopolitical tensions are creating uncertainties, particularly for United States (US) grain shippers, according to a *World Grain* report.

Although up slightly in the second quarter of 2025 compared to the first quarter, bulk freight rates – particularly in the Panamax sector – are likely to remain low through 2025, according to the latest outlook by the Baltic and International Maritime Council (BIMCO).

As 43% of global grain was carried in Panamax vessels, this was welcome news for shippers of soya beans, maize, and wheat, the 9 July *World Grain* report said. "We expect international grain shippers may benefit from lower freight rates, especially for Panamax ships," Filipe Gouveia, shipping analysis manager at BIMCO, was quoted as saying.

"This segment handles the largest share of grain shipments globally and is typically used for longer voyages, such as from South America or the US West Coast into Asia."

The Supramax segment was generally used to ship grains from the US Gulf Coast into Latin America and Asia, while the Handysize segment contained the smallest ships in the bulk fleet and was often deployed to transport grains out of the Black Sea and into ports in the Mediterranean and beyond, the report said.

Gouveia said both segments were also oversupplied, with freight rates under pressure and "slow cargo growth" forecast this year. However, for US exporters, lower shipping costs could be cancelled out by higher tariffs for those supplying markets in China, *World Grain* wrote. In addition, tariff rates and timelines were almost impossible to forecast.

Although the highest levels of tariffs on US exporters were removed following the US-China 90-day tariff truce announced in May, dry bulk analysts were divided on how things would develop going forward, with some believing the move could support US grain exports, while others warned it may have been introduced too late or might not last long enough, the report said. – *Oils and Fats International*

$39 million to help grain growers reduce on-farm emissions

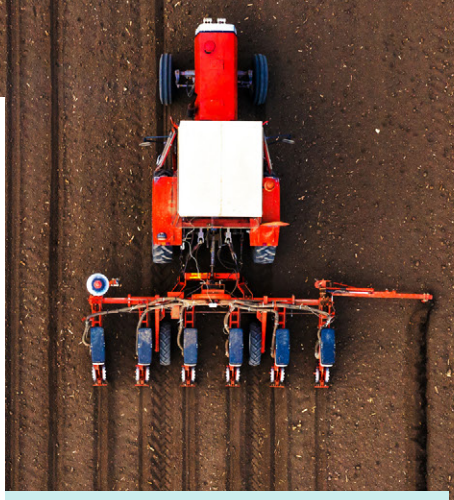
A bold, new $39 million initiative is set to shape the future of sustainable farming by providing Australian grain growers with practical solutions to lower on-farm emissions intensity.

An initiative of the Grains Research and Development Corporation (GRDC), the five-year national Low Emissions Intensity Farming Systems (LEIFS) initiative is set to explore and demonstrate the benefits of monitoring, managing and reporting greenhouse gas (GHG) accounts at the farm scale. It will also offer grain growers practical options to manage emissions risks and identify which GHG markets and sustainability credentialing schemes align with their enterprise goals.

GRDC Board Chair and South Australian grain grower Sharon Starick said the initiative highlighted the forward-thinking and progressive approach of Australian agriculture. "Within Australia, agriculture currently accounts for 17% of emissions. Reducing these is critical for mitigating future climate risks, maintaining global competitiveness, meeting community expectations and maintaining critical social licence." – *miragenews.com*

Seed rights overhaul: New law strengthens IP protection

By Susan Marais, Plaas Media



The new *Plant Breeders' Rights Act, 2018 (Act 12 of 2018)* marks a significant shift in how intellectual property is managed in South African agriculture. While it brings the country in line with international conventions and promises to drive innovation, its impact on commercial farming practices – especially where the saving of seed is concerned – will likely spark further debate. Ensuring that small-scale producers remain protected while also encouraging private-sector breeding will be key to the *Act's* long-term success.

Years in the making

After several years of deliberation, the National Department of Agriculture (NDA) announced in June that the new *Act* had officially commenced. President Cyril Ramaphosa signed the proclamation following the approval of the regulations by minister of agriculture, John Steenhuisen. The *Act* replaces the *Plant Breeders' Rights Act, 1976 (Act 15 of 1976).*

Revisions in the new *Act* include the following:

- Streamlined administrative processes.
- Scope of plants eligible for protection extended to all genera and species.
- Periods of protection revised to up to 30 years in the case of fruit trees, vines, sugar cane, and potatoes, and 25 years for all other crops.
- Categories of producers, crops, and quantities in relation to farm-saved seed defined.
- The establishment of an advisory committee, including representation from a wide range of stakeholders such as breeders, producers, and intellectual property law specialists.

Rights for innovation

The NDA added that this *Act* will contribute to the South African government's objectives and priorities by promoting innovation in plant breeding and agriculture. Through the protection of new plant varieties, the *Act* plays a vital role in enhancing food security, increasing agricultural productivity, and supporting rural development. Additionally, the new *Act* will encourage investment in plant breeding, foster job creation, and support economic development.

The publication of the *Act* was welcomed by the country's seed breeders. Dr Mieke Human, science and policy manager at the South African National Seed Organisation (Sansor) said: "South Africa has a long history of variety protection. This has resulted in producers having excellent choices when deciding which crops and cultivars to plant.

"The new *Act* positions South Africa very well internationally and continues to support innovation. Intellectual property protection is the foundation from which innovation becomes possible. The seed industry in South Africa has been able to grow because of the variety protection put in place by the NDA."

Balancing act: Small scale vs commercial

Dave Cochrane, a partner at leading African intellectual property law firm, Spoor & Fisher, said the updated legislation strengthens protection for plant breeders and encourages agricultural innovation while also balancing the rights of subsistence, vulnerable, and small-scale producers. "This law supports South Africa's producers and plant breeders by protecting investment in new and improved plant varieties. It also ensures that South Africa complies with the international UPOV 1991 Convention, promoting innovation and trade in the agricultural sector."

According to Cochrane, a few changes introduced by the new *Act* that users must take note of, include:

- **Stronger protection for plant breeders:** The term of protection for registered plant varieties has been extended to 30 years for certain crops such as fruit trees, vines, sugarcane, and potatoes, and 25 years for all other crops.
- **Limits on commercial use of protected seeds:** The 'farmer's privilege' – which allows producers to save and use seeds from protected plants – now only applies to smallholder, subsistence, and vulnerable household farmers. Larger commercial producers must now obtain permission and pay royalties to breeders when saving seed from protected varieties.
- **Criminal penalties for infringement:** Unlawfully using protected plant varieties is now a criminal offence, with penalties including fines, imprisonment for up to ten years, or both.
- **Sole rights period extended:** The *Act* increases the period during which breeders have exclusive rights to their variety – up to eight years for specific crops such as fruit trees and sugarcane, and five years for others.

- **Provisional protection at filing:** Breeders now receive provisional protection automatically as soon as they file an application.
- **New rules for plant material submissions:** The timeframes for submitting plant material for testing have changed. For most crops, material must be submitted within two years, and for potatoes, trees, and vines, within five years. Extensions are possible under certain conditions.

- **Clearer definitions and rules:** The *Act* provides clarity on what qualifies as a 'sale' (important for determining novelty), confirms that products made from harvested material are protected, and that preparing plant material for sale (called 'conditioning') can be an infringement.

Saved seed quantities

One of the most controversial aspects of the new regulations relates to the strict limits on saved seed quantities.

Cochrane said the regulations also define what quantities of seed may be saved and shared by small-scale and vulnerable farmers. These limits are significantly lower than initially proposed – for example, allowed saved seed for groundnuts has dropped from 2 000 to just 50kg, and maize from 3 000 to 12kg, while fruit crops have dropped from 100 to five per kind.

For more information, contact David Cochrane at d.cochrane@spoor.com or phone 012 676 1001.

Industry welcomes revocation of Leaf Services contract

By Susan Marais, Plaas Media

The South African grain industry breathed a collective sigh of relief on 27 May this year when the minister of agriculture, John Steenhuisen, officially revoked Leaf Services' appointment as the department's assignee.

Leaf Services was appointed as an assignee on 17 June 2016 in terms of Section 2(3)(a) of the *Agricultural Product Standards Act, 1990 (Act 119 of 1990) (APS Act)*. The department's intention was to introduce independent inspection and grading services throughout the grain value chain. This appointment includes the inspection of commodities such as maize, wheat, sunflower, soya beans, and several other grains and grain products, which have long been a source of frustration and financial strain for the industry.

The appointment was met with immediate and strong resistance from the organised grain industry. The industry argued that it had implemented an effective self-regulation system including the establishment of The South African Grain Laboratory (SAGL), grading courses, the SAGOS contract (contract for the transport of grain, pulses and oilseeds), and a dispute process since the deregulation of commodity control boards in 1998, and that no external oversight would be necessary.

Wessel Lemmer, then general manager of Agbiz Grain, stressed that the industry complied with all relevant legislation and that there had been no request from any sector for further regulation.

Industry leaders have welcomed the recent decision to revoke Leaf Services' appointment as a sign that the government was prioritising the sector's best interests. Annelize Crosby, head of legal intelligence at Agbiz, who facilitated many of the discussions between industry and the National Department of Agriculture, said the outcome demonstrates what can be achieved through a concerted effort by all value chain role-players to engage constructively and present evidence-based arguments. She added that maintaining good working relationships with government is critically important.

Forum facilitates discussions

While assignees can play a valuable and constructive role in certain value chains, costs must be kept to a minimum for the benefit of the sector and consumer. An assignee forum was established in 2024 as a platform for effective, interactive discussion on issues related to the implementation and application of the *APS Act*. This forum meets regularly and affords industry stakeholders, government, and appointed assignees the opportunity to address concerns and resolve problems related to inspections.

Dr Tobias Doyer, CEO of Grain SA, also welcomed the decision, calling it "a long-awaited breakthrough" after almost a decade of persistent industry pushback.

Prof André Jooste, chairperson of the Maize and Wheat Forums, remarked: "This saga underscores the need for meaningful stakeholder consultation, transparent policymaking, and industry-led regulation. It also highlights the importance of a strong, trust-based relationship between industry and government – crucial for the sector's growth and resilience in the face of ongoing challenges."

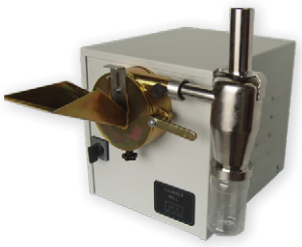
For more information, send an email to Dr Charl van der Merwe at charl@agbizgrain.co.za

Ronin®

Quality in

SPECIAL OFFER

Double Tube Falling Number Instrument



Hammer Mill

Circulation Water Bath

Falling Number Instrument

ORDER NOW

Wholegrain Moisture Analyser

DICKEY-john® A DIVISION OF TSI®

The DICKEY-john GAC 2700-INTL is a high-precision, multilingual grain moisture, temperature, and test weight analyzer using 149 MHz USDA technology.
It delivers fast, accurate results in under 20 seconds, supports over 20 languages, stores up to 5,000 readings, and features USB, Ethernet, and barcode scanner compatibility for streamlined data handling.

GAC 2700-INTL

SALE

Wholegrain Near-infrared Analyser

Infracont Instruments

X Grain

Professional near-infrared grain and flour analyser for determining the constituant ingredients of whole grains, oil seeds and flours with bult in Test Weight Module.

Quality Out

werner@thisisronin.com | www.thisisronin.com

GOSA Cape workshop: SHEQ audit criteria needed

By Hugo Lochner, Plaas Media

Photograph: VKB.

The development of audit criteria for health and safety – specifically regarding the grain storage industry and the growing problem of grain theft in the country – was a key topic at a recent workshop of the Cape branch of the Grain Handling Organisation of Southern Africa (GOSA), held at Aan de Doorns Wine Cellar near Worcester.

Jaco Joubert, health and safety manager at Overberg Agri, briefed GOSA Cape members on the importance of dedicated audit criteria for health and safety. He also shared updates on the progress made by Agbiz Grain in developing an industry-specific audit protocol tailored to the grain storage sector.

Grain storage a unique industry

He explained that the grain storage industry is unique, with its own set of risks and mitigation strategies. As such, there is a need for an audit framework tailored specifically to this sector – one that outlines all the compliance requirements relevant to grain storage facilities.

"With a dedicated audit document, the grain storage industry can identify sector-specific challenges relating to safety, health, environment, and quality (SHEQ), explore practical solutions, establish a platform for continuous improvement, benchmark SHEQ performance across the industry, and offer peace of mind to executives, boards, investors, and insurers," he said.

Joubert referred to the Agbiz Grain SHEQ seminar held in Pretoria in November last year, where a panel discussion focussed on developing an industry-specific SHEQ compliance framework while a process was also proposed for implementation. A SHEQ compliance working group was established, the audit scope (SHEQ) defined, and the biggest risks related to activities identified.

A SHEQ audit is a systematic assessment of an industry's safety, health, environmental, and quality practices. The benefits include fewer accidents and injuries, improved regulatory compliance, greater efficiency and productivity, enhanced reputation, and ongoing performance improvement.

SHEQ audit in place

Joubert stated that the goal of the SHEQ working group is to finalise a draft independent audit protocol for the grain storage industry by the end of July. The protocol must be inclusive and applicable to both small and major role-players.

"The protocol will be tested as soon as possible through audits at selected sites. This will help determine whether the protocol is effective in all cases or if adjustments are needed."

The audit process, which includes the frequency of audits and the use of internal and external audits as part of the audit programme, must still be finalised.

"These audits will help us identify what works, what doesn't, and what we as an industry can do collectively to address shortcomings."

New standard set

"What I see emerging from this protocol is the establishment of a standard for the industry. Right now, everyone is still doing things their own way, but the results of the audit protocol will guide us forward. The protocol will also be adaptable as needs and legislation change."

According to Joubert, the audit will afford each company the opportunity to assess itself: Where are you now, and where do you want to go? "There will likely be recognition for those who perform well."

Not all elements in the audit protocol carry the same weight – some are more critical than others. The current proposal is to classify premises according to levels of compliance. The more a facility complies with the audit criteria, the higher its level will be.

The board members of the GOSA Cape branch are, from the left, Jurie Claassens, technical sales at Agri Enviro Solutions, Johan Lusse, manager of grain and grain services at Overberg Agri, Dries van Jaarsveld, silo bag manager at Bester Feed & Grain and acting chairperson of GOSA Cape, Dieter le Roux, director of trade at Perdigon, and Neil de Lange, national sales director at Massamatic.

Companies can determine their premises' level and choose their target level. The audit will highlight problem areas and show where improvements are needed.

Reduce the cost of insurance

Joubert said the SHEQ audit will enhance risk management. Risk management involves identifying, assessing, and mitigating potential hazards. Effective risk management means identifying and addressing risks to either eliminate them or reduce their impact.

Johan Lusse, manager of grain and grain services at Overberg Agri, emphasised the importance of the grain storage industry developing its own audit protocol instead of external parties imposing prescriptive measures. "With the SHEQ audit in place, the industry can demonstrate that it has the necessary systems in place and is capable of self-regulation," Lusse said. "It is essential that all role-players in the grain handling sector collaborate to establish this protocol. This is our opportunity to maintain control over our own industry."

Grain theft a growing concern

Grain theft is an escalating problem in South Africa, with some companies in the northern provinces reportedly losing up to one load per day, according to Wimpie Nel, senior forensic investigator and owner of Verifraud. Syndicates are particularly active in Mpumalanga and KwaZulu-Natal, where they target and infiltrate warehouses and steal grain loads.

"One of the major challenges with grain theft is that silo owners often only realise the grain is missing once the silo is empty," said Nel. "Secondly, grain lacks a unique identifier or 'DNA', making it virtually impossible to trace stolen commodities back to a specific silo or farm."

From an insurance standpoint, grain handlers must ensure that they do not compromise their insurer's position. If proper risk controls are not in place, claims may be rejected. Insurers will typically assess access control measures – such as whether all loads are registered – as well as the integrity of systems at the weighbridge and silo, and whether they can be tampered with.

In the event of a theft, the forensic investigator must be able to demonstrate that all necessary preventative measures were in place. Without this proof, insurers are likely to reject a claim.

Put correct measures in place

Nel said 80% of grain theft incidents involve fake registration numbers and cloned trucks. It is therefore essential for silo owners to verify that the truck and driver arriving at their facility are legitimate.

Typically, the buyer appoints the transporter and holds a duty of care to conduct due diligence. The transporter should send clear photos of the front and side of the truck, along with a photo of the driver and their driver's licence, to the silo owner. These records should be kept on file so the gatekeeper can verify the truck and driver upon arrival. This is the most effective way to prevent fraud. "As a silo owner, it's your responsibility to ensure that all the necessary steps are completed and that the transporter is properly vetted before loading

From the left are Johan van Rensburg, chairperson of GOSA, with speakers Wimpie Nel, senior forensic investigator and owner of Verifraud, and Jaco Joubert, health and safety manager at Overberg Agri.

or unloading grain," Nel said. "If the necessary documentation and certificates are not in place, your insurance coverage may be compromised."

The silo owner also has a duty of care to confirm that the transporter's group income protection (GIP) cover is valid. "If it's not, you risk losing the load," he added. In addition, the silo owner must have access to the tracking system for every truck collecting grain at the site.

A camera system is key

Nel emphasised the importance of a comprehensive camera system at silo sites. The system should monitor trucks continuously – from the moment they enter through the access gate, proceed to the weighbridge, move to the silo, and return to the weighbridge and gate upon exiting. If any part of this route is not under surveillance, it creates an opportunity for drivers to swap license plates on-site and steal grain.

Ideally, the camera system should be monitored remotely rather than on-site. The person responsible for monitoring must be informed in advance of how many trucks will be loading or unloading each day, along with their specific details.

According to Nel, syndicates are inventive and tend to target companies with the fewest preventative measures in place. He advises such companies to consult forensic experts to implement proper controls and reduce the risk of grain theft.

From the left are Hein Rehr, former chairperson of GOSA, Dries van Jaarsveld, Johan Lusse, and Hugo Lochner of Plaas Media.

For more information, contact Jaco Joubert at 022 433 8300 or jjoubert@overbergagri.co.za, Johan Lusse at 028 214 3813 or johanl@overbergagri.co.za, and Wimpie Nel at 083 339 9395 or info@verifraud.co.za.

Quicker tariff implementation needed

By Christal-Lize Muller, Plaas Media

South Africa's wheat import tariff, designed to shield local producers from the effects of subsidies granted to producers in other wheat-exporting countries, has officially been published on 10 July this year. The recent increase in the tariff was triggered by a decline in international wheat prices below a specified threshold – also known in the industry as the 'trigger level' – prompting the need to provide South African producers with additional protection.

According to the South African Grain Information Service (Sagis), which calculates the tariff using a variable tax formula, the wheat import tariff increased from R549,50 to R851,50/t. This adjustment was published by the South African Revenue Service (SARS), following the triggering of the tariff on 27 May this year due to a sustained decline in international wheat prices over a three-week period.

Why adjustments are necessary

Dr André van der Vyver, executive director of the South African Cereals and Oilseeds Trade Association (Sacota), believes that regular tariff adjustments are necessary to support the local industry during periods of low international prices. However, amid the high international prices of the Covid period, the import tariff was zero. He explains that as international and local market conditions alternate, a variable tariff plays a crucial role in ensuring local food security.

South Africa currently imports around 50% of its domestic wheat demand (approximately 3,5 million tonnes). These imports have steadily increased over the years with significant volumes sourced from Eastern European countries, Australia, and parts of Central and Northeastern Europe (*Figure 1*).

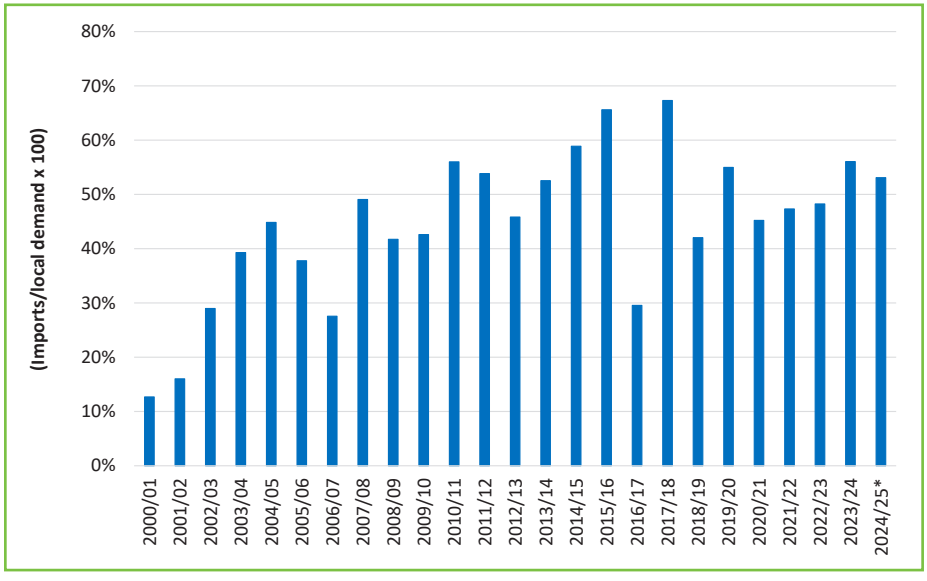
The previous tariff of R549,50/t represented roughly 8,5% of the Johannesburg Stock Exchange (JSE) wheat price in July this year, which stood at approximately R6 500. Despite the recent increase, he expects the impact on bread prices to be minimal. A 2006 study by Jooste *et al*. found that a 30% increase in domestic support (such as an import tariff) led to only a 1,43% rise in the price of bread. To his knowledge, however, no new studies have been conducted since then.

He adds that the wheat tariff increase has a limited impact on consumers, as few people realise that wheat accounts for only about 23% of the retail price of a loaf of bread. "The actual impact on the final price is therefore very small," he explains. "The 23% already includes the import tariff, and even with the adjustment the tariff remains relatively low."

How the tariff works

Sacota's interest in the wheat import tariff stems from the fact that the organisation represents grain traders – those who actually import the wheat and are therefore responsible for paying the tariff. Naturally, this cost is passed on in the price of wheat. As a result, any changes to the import tariff, and especially delays in its implementation, introduce risk into

Figure 1: Annual wheat imports as a percentage of local demand. (Source: Sagis)



the import process. This risk must be absorbed by the industry because in most cases no one knows exactly when the new tariff will come into effect.

The current variable wheat tariff system dates back to 2016, when the industry and the International Trade Administration Commission of South Africa (ITAC) agreed on a formula designed to shield South African producers from the impact of international subsidies. The system also aims to maintain a consistent quality standard in local wheat production, as requested by local millers.

Having been in place for the past nine years, this tariff is determined using a formula: When global wheat prices increase, South Africa's tariff decreases and when global prices fall, the tariff rises to shield local producers. Sagis, as the independent industry body, is responsible for monitoring price movements and calculating the necessary tariff adjustments. While Sagis releases official price updates every Thursday, the formula itself is widely understood within the industry.

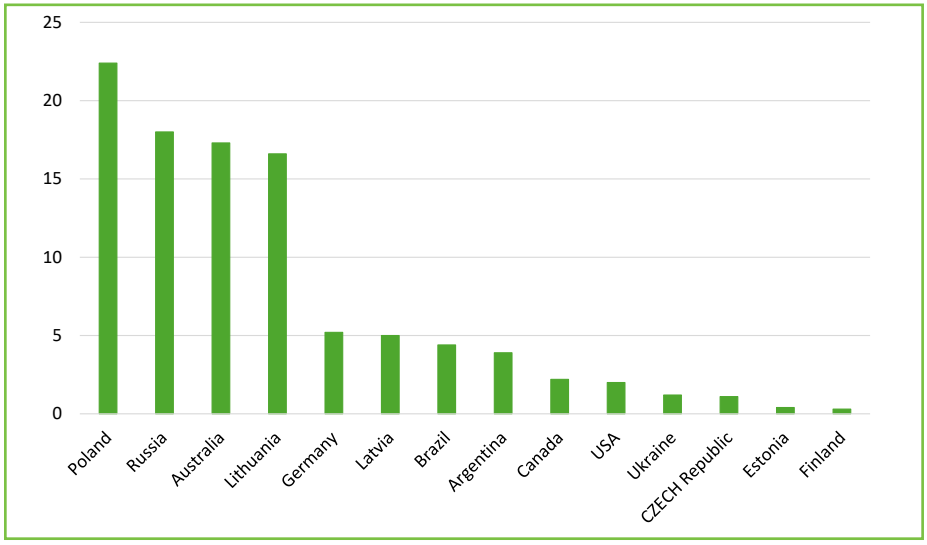
According to Dr Van der Vyver, when an increase is needed, Grain SA typically submits an application to the ITAC. Conversely, the National Chamber of Milling (NCM) usually initiates the application process when a decrease is necessary.

A protective measure

There is also a built-in 'trigger' mechanism: If international wheat prices fall by more than US$10 below the previous trigger level for three consecutive weeks, an upward tariff adjustment is automatically activated. This mechanism was activated during the recent tariff hike in May this year, when the adjustment was based on a three-week moving average of the free-on-board (FOB) price for American hard red winter wheat. This price was then converted into rand to reflect local conditions.

Corné Louw, agricultural economist at Grain SA, underscores the importance of this protective measure. "The primary purpose is to safeguard South African wheat producers from unfair competition, especially from countries where wheat production is heavily subsidised." South Africa's wheat imports are predominantly sourced from Eastern European and other leading wheat-exporting countries.

Figure 2: Wheat import origins (%). (Source: Agbiz Grain)



In 2023, key suppliers of imported wheat to South Africa included Argentina, Brazil, Australia, Canada, the Czech Republic, Poland, Russia, and the United States. These origins accounted for significant volumes of the country's total wheat imports (*Figure 2*).

It is also important to compare the quality characteristics of wheat imported to South Africa during the 2023/24 season with locally produced wheat. *Table 1* features key quality indicators such as protein content, moisture levels, falling number, hectolitre mass (HLM), peak time, extraction rate, and loaf volume for wheat from these countries. This comparison highlights the variation in functional and milling qualities across origins, which has important implications for local millers, bakers, and end-product quality.

Figure 3 presents an analysis conducted by The Southern African Grain Laboratories (SAGL) comparing the baking and milling qualities of imported and local wheat.

A revised implementation system

According to Louw, the most recent implementation of South Africa's wheat import tariff was the quickest in recent years. Following the activation of the trigger due to a decline in global wheat prices, the process took only 23 working days from submission to the ITAC to final implementation. He notes, however, that implementation is often delayed.

Dr Van der Vyver attributes these delays to the lengthy governmental administrative process. Once the ITAC has approved the adjustment, it must be signed off by the minister of trade, industry and competition, as well as the minister of finance before it can be officially published in the *Government Gazette*. Previous adjustments took significantly longer. For example,

Table 1: Quality of wheat from different origins (2023/24). (Source: Agbiz Grain and SAGL)

Quality indicators	RSA	USA	Argentina	Russia	Australia	Poland	Lithuania
Protein	11,8	9,4	11,5	11,2	12,5	11	11,5
Moisture	11,1	12,4	11,9	11,8	10,8	12,1	12,4
Falling number	375	371	284	353	513	329	342
HLM	80,7	79,2	76,2	76,8	82,2	78,2	78,1
Peak time	3,1	4,9	5,6	4,9	3,8	4,5	4,5
Extraction	72,8	70,8	72,2	73,3	71,9	73,1	74
Loaf volume	1 038	899	952	979	1 077	953	982

We don't just manufacture solutions…

We create product combinations

TAILOR-MADE FOR GRAINS

BIOSTIMULANTS

BIOSYNTH SUPER

EZGRO

ADJUVANTS

ABSORPT EAU

ARD

SEED TREATMENTS

BIOSYNTH STSA

NUTRIENTS

NUTRIVO TR-X

MOLBORO TR-X

ALWAYS READ LABEL BEFORE USE. Reg. No. L9550, Act No. 36 of 1947 / Active Ingredients: Saponified Fatty Acids 161 g/kg, Wetters and Spreaders 302 g/kg / Reg. No. L9129, Act No. 36 of 1947 / Active Ingredients: Ammonium Sulphate 1000 g/kg / Reg. No. B6713, B6656, B4307, B4304, B4222, Act No. 36 of 1947.
HAZARD STATEMENTS: Causes skin irritation. Causes serious eye damage. May damage fertility. May damage the unborn child. May cause an allergic skin reaction. May be fatal if swallowed and enters airways. Harmful to aquatic life.

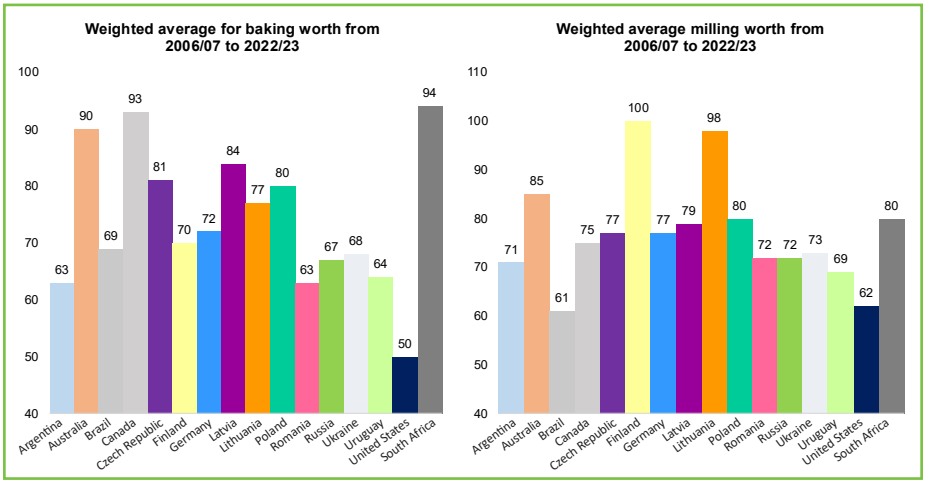
REGISTRATION HOLDER: In Line Trading 112 (Pty) Ltd., (Co. Reg. No. 2003/008663/07) Cedar Lake Industrial Estate, C/O M57 & Porcelain Roads, Olifantsfontein, 1666, Gauteng, RSA, Tel: +27 (11) 392 4072

+27 (0) 11 392 4072
info@nutrico.co.za
Postnet Suite 114,
Private Bag X27,
Kempton Park, 1620
www.nutrico.co.za

Nutrico

Better Growth, Better Yield, Better Value

Figure 3: Baking and milling qualities of imported versus local wheat. (Source: SAGL)



the downward adjustment from R422 to R183,50/t took approximately six months to be gazetted. Similarly, the prior upward adjustment to R549,50/t took around four and a half months to be finalised.

Implications for traders and millers

To address delays in wheat import tariff adjustments, Sacota and Grain SA have jointly submitted a proposal to the ITAC, advocating for a revised system. Their proposal recommends a monthly automated review and publication of tariff rates, similar to the fuel levy adjustment mechanism. Under this proposed system, a new tariff would be calculated and published in the *Government Gazette* each month, either updating the rate or reaffirming the existing one.

The Wheat Forum has endorsed the application. Dr Van der Vyver underscores the urgency of improving the speed at which tariff changes – whether increases or decreases – are implemented. "Currently, announcements are significantly delayed. In some cases, we wait months for an adjustment, regardless of direction. We cannot afford to wait for ministerial approval each time, as it takes far too long."

This challenge is especially critical for traders who must book shipping vessels in advance and need clarity on applicable tariffs to plan effectively. "It isn't just traders who are impacted. Our clients – the millers – rely on this information for planning and pricing strategies. The lack of predictability in the current mechanism is concerning, which is why we are calling for a monthly, formula-based system of tariff adjustments."

Implications for producers

Louw says Grain SA and Sacota requested the automated implementation of the wheat import tariff, as delays in its announcement can significantly weaken its intended effect. If protection for producers is not enacted promptly, the tariff fails to serve its purpose. He notes that the tariff operates as an import duty – an additional charge paid by importers on top of the cost of imported wheat.

Although the tariff does not directly impact producers, it is designed to support them indirectly by establishing a minimum floor price for locally produced wheat. This price is intended to mirror the value of subsidies granted to foreign producers – benefits that South African producers do not receive. "The tariff's primary objective is to create a fairer competitive environment by offsetting these international subsidies. Increasing the import tariff helps establish a stronger price floor for locally marketed wheat, ultimately benefiting South African wheat producers."

Table 2: Delay from trigger to implementation. (Source: Sacota)

Tariff rate	Date triggered	Implementation date	Current methodology	Proposed methodology
R421,95	2 July 2024	25 October 2024	Four months (82 working days)	22 working days
R183,50	1 October 2024	4 April 2025	Six months (129 working days)	23 working days
R549,50	3 December 2024	17 April 2025	4,5 months (93 working days)	19 working days
R851,50	27 May 2025	11 July 2025	1,5 months (33 working days)	24 working days

The base reference price

Dr Van der Vyver explains that the second part of the joint application submitted to the ITAC involves a request to review the formula used to determine the wheat import tariff, specifically the 'base reference price', which is a key component in the calculation. This reference price is based on the international price of Kansas wheat, as it closely resembles the quality of wheat produced in South Africa.

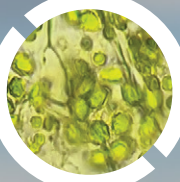
As the price of Kansas wheat fluctuates – either rising or falling – the reference price should ideally be adjusted in line with these movements. When the Kansas price declines, the level of tariff protection should decrease and when it rises, the level of protection should increase accordingly. Under the current system, this reference price is reviewed every three years, based on long-term market trends, in accordance with the framework agreed upon in 2016.

In the recent application, Sacota and Grain SA called for an upward adjustment of the base reference price, citing significant shifts in global market conditions. While the current mechanism provides for regular tariff adjustments based on the formula, stakeholders are permitted to submit separate applications to the ITAC if the structure itself is deemed insufficient.

In this instance, Grain SA is seeking to strengthen the protection mechanism for local producers in response to changes in global wheat prices. At the time of writing this article, no official response had been issued by the ITAC regarding the application.

For more information, send an email to Dr André van der Vyver at andre.vandervyver@sacota.co.za or Corné Louw at corne@grainsa.co.za

Leaf Analysis & Phyto Hormones



Minerals & PHE

Ca

P

Cu

Na

Fe

Cd

Soya Quality

Accredited for the testing of Trypsin Inhibitor Activity (TIA)

Accredited Free Fatty Acids (FFAs) and Peroxide Value (PV) analysis

We are an independent ISO17025 accredited laboratory specialising in a range of tests vital to the agricultural sector.

Mycotoxins

Oil Quality

Feed & Food Nutrients

NIR Analysis

celebrating 10 YEARS OF EXCELLENCE

CHEM NUTRI ANALYTICAL

sanas Testing Laboratory T0713

FAST ACCURATE ESSENTIAL

+27 (11) 316 8800
www.chemnutri.co.za

Factors shaping the state of South African agriculture

By Wandile Sihlobo, chief economist, Agbiz

Various factors, both positive and negative, continue to shape South Africa's agricultural sector. Starting on a positive note, early indicators suggest a strong likelihood of favourable rainfall conditions across South Africa for the upcoming 2025/26 summer season.

Current forecasts indicate a neutral weather phase with average rainfall, which would be generally favourable. Yet the occurrence of La Niña rains remains a possibility, which would further ease concerns about a potential shift from the wet 2024/25 La Niña season to a drier El Niño pattern.

Summer grains and oilseeds

South African producers are likely to begin evaluating the prospects for the 2025/26 summer crop season more seriously by October, once planting gets underway. For now, the focus remains on the ongoing harvest of summer grains, oilseeds, citrus, and other crops.

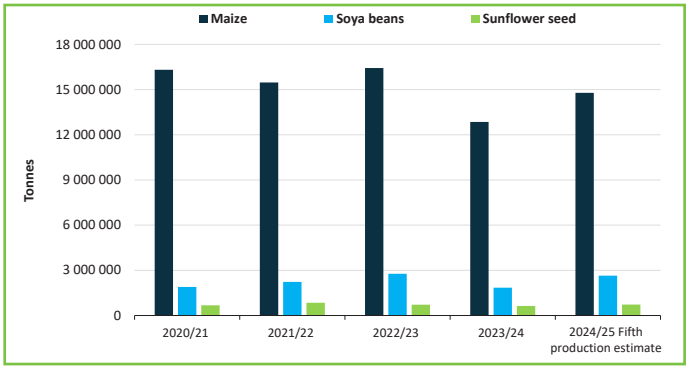
The summer crop harvest is progressing well, with oilseed harvesting nearly complete. Encouragingly, feedback suggests crop quality – particularly in soya bean regions – is better than initially feared. In contrast, the maize harvest is lagging its usual schedule due to delayed plantings and persistent rains through April, which slowed crop development. Current deliveries to commercial silos raise concerns about the quality of white maize, although yellow maize appears to be less affected.

While quality issues may impact producer margins, they do not pose a risk to consumers from a food supply perspective. South Africa's overall grain supply remains stable. With current production levels and commodity prices, we anticipate a supportive environment for moderating food price inflation in the second half of 2025.

We continue to closely monitor winter crop conditions in the Western Cape, which has received excellent rainfall so far. The primary crops cultivated during this season include wheat, barley, canola, and oats. The province remains a key focus area for South Africa's winter crops, as it accounts for more than two-thirds of national production.

Overall, crop conditions in the Western Cape are generally favourable. However, in some areas, producers faced significantly higher input costs due to a snail infestation affecting canola. Despite this, they appear to be managing the situation effectively. In other provinces, winter crops are benefiting from elevated dam levels, thanks to the abundant rainfall during the extended 2025 summer season.

Figure 1: South Africa's summer crop production estimates (selected crops). (Source: CEC and Agbiz research)



Export diversification

The idea of diversifying export markets has gained attention, but remains a long-term endeavour rather than an immediate solution. Businesses cannot simply shift to new markets overnight – significant market development efforts are required.

Meanwhile, countries such as China and India continue to pose challenges for South African agricultural exports, including high tariffs and stringent phytosanitary regulations which persist despite China's recent statements indicating a willingness to lower tariffs on products from Africa.

As a result, continued engagement with the United States remains essential for South Africa, even as it explores new export opportunities. Diversification should be seen as complementary to, rather than a replacement for, the American market.

Logistics

Port logistics have been less challenging than in previous years. The ongoing collaboration between Transnet, businesses, and government is contributing to better planning and operations, resulting in improved service to the sector. However, we are still far from reaching the desired level of efficiency, and further progress will require increased investment.

Biosecurity issues

Beyond trade and harvest dynamics, biosecurity remains a challenge. Foot-and-mouth disease continues to impose growing costs on businesses. The recent vaccination campaign marks an important step towards resolving the current crisis and is effectively managed through collaboration between government and the private sector.

The next critical priority is to rebuild domestic vaccine manufacturing capacity. There is also an urgent need to streamline the registration of new vaccines, as the pace of outbreaks continues to accelerate. One sector that will remain under increasing scrutiny is the poultry industry, particularly regarding avian influenza.

Cautious optimism

The 2024/25 harvest for various field crops appears promising, with ample yields anticipated. The 2025/26 season also shows potential to support continued growth. However, there must be no complacency regarding animal and plant diseases, which continue to pose serious risks to South Africa's agricultural growth and export potential.

For more information, send an email to wandile@agbiz.co.za or visit *www.agbiz.co.za*

SENSAKO

Invest in **Pure Sunflower Potential**

With Sensako's ***sunflower cultivars*** we can help you plant with confidence and change ***good plans*** into ***excellent yields***.

SNK 242 CL
SY 3970 CL
SNK 270 CL
SNK 441 CL

- High oil content with premiums according to production scale.
- Suitable for planting in a Clearfield production system.
- Adapted to local growing conditions.
- Suitable for early and late plantings.

We help you grow

w | syngenta.co.za
f | SENSAKO
Yt | SENSAKO
t | 27 (0) 58 303 4690

syngenta®

Sacta levy boosts research and development

By Koos du Pisanie

Just a few years ago, South Africa's self-pollinating crops industry, encompassing soya beans, wheat, oats, barley, and lupins, was in steep decline. The development of new varieties had slowed, yields had stagnated, and the total hectares under cultivation was shrinking.

Andrew Bennett, CEO of the South African Cultivar and Technology Agency (Sacta), explains that unlike hybrid crops such as maize, self-pollinating crops used to allow producers to retain grain from one season and replant it in the next, often with minimal yield loss. South African legislation permitted this practice, enabling producers to avoid annual seed purchases. The recent proclamation of the new plant breeders' legislation however limits these practices (see article elsewhere in this issue). While beneficial to producers, this undermined commercial incentives for seed companies to invest in breeding programmes for these crops.

The Sacta solution

To address this challenge, Sacta was established as a non-profit agency to administer statutory breeding and technology levies on self-pollinating grain crops. The goal: restore investment in cultivar development and break the cycle of declining innovation.

These levies – approved for fixed terms and subject to renewal and comment by all affected parties – are collected at the first point of sale, whether by the buyer or storage operator, and paid to Sacta. After costs and a 20% allocation to transformation initiatives, the remaining funds are distributed to seed companies in proportion to their market share.

It is worth noting that the parties who collect and pay over the levies also play an important role in collecting information regarding which cultivars from which companies were planted.

Producer and industry benefits

"This funding model enables sustained investment in breeding improved cultivars for South African producers," says Bennett. "The result is a more productive, competitive value chain underpinned by better genetics and less dependence on imported grain."

Producers directly benefit through access to better varieties with higher yield potential, improved disease resistance, and ultimately, greater profitability. In many respects, the levies are a producer-driven investment in the future productivity and competitiveness of South African agriculture.

Need for continual improvement

Bennett emphasises that continual improvement of cultivars is essential for the country's self-pollinating crop industry. While hybrid crops such as maize and sunflower consistently meet domestic demand thanks to ongoing improvements, South Africa has long relied on imports for more than half of its wheat and soya bean requirements.

"Since the introduction of Sacta and new technologies and practices, that's beginning to change – especially for soya beans," he says. National yields and production areas have increased, and South Africa has even exported soya beans in favourable years. Wheat yields per hectare have also improved, though domestic production still lags primarily due to a reduction in planted hectares. As a result, wheat imports rose from 1,5 million tonnes in 2021 to almost 2 million tonnes in 2023. Meanwhile, barley production has climbed from around 330 000 to 377 000 tonnes over the past three seasons.

Bennett notes there is still room for improvement. "There's always a need for more resilient and higher-yielding varieties." Thanks to the levy system, South Africa is now seen as a more attractive market by international seed and technology companies.

"The number of registered soya bean varieties has grown from 150 in June 2022 to 279 by December 2024. For wheat, 65 new varieties have been registered since 2018, and three international breeding companies have established local operations. This indicates growing momentum in cultivar development."

Understanding the technology levy

These advancements would not be possible without financial contributions from producers via the levy system. Sacta administers levies separately for each crop. For soya beans, currently the only crop with approved GMO traits, the levy is split into two components: one for genetics, and one for technology.

"These funds are allocated to seed and technology companies according to industry-agreed formulas. The aim is to ensure ongoing investment in both conventional breeding and biotech innovation, especially for traits such as herbicide tolerance and pest resistance."

A further 20% of the levy goes toward transformation efforts, especially enterprise development and skills training. Sacta operates under the guidelines and requirements of the National Agricultural Marketing Council (NAMC) and the provisions of the *Marketing of Agricultural Products Act, 1996 (Act 47 of 1996)*.

Supporting industry growth

Over the past year, the technology levy has significantly advanced the wheat and soya bean industries. "In wheat, we've seen improved genetic diversity and better-performing cultivars. In soya beans, the levy has accelerated the adoption of new varieties and traits, such as Intacta RR2 PRO, driving record production levels and expansion in planted area," says Bennett.

In the past season, Sacta disbursed approximately R147 million to soya bean seed and technology companies, and R53 million to wheat seed companies in 2024. Additional smaller amounts also supported barley, oats, and lupins. These investments have strengthened local breeding pipelines, broadened variety choices for producers, and contributed to transformation initiatives.

Send an email to Andrew Bennett at Bennet@sactalevy.co.za for more information.

The Next Generation of Mycotoxin Testing

Neogen's Reveal

Perfect for use onsite, the tests have unmatched accuracy and reproducibility allowing for quick and convenient testing.

Why Use Our Reveal Q+ Tests?

- ✓ **Quantitative** - Knowing the accurate level of toxins present allows you to evaluate the safety of your raw materials and compliance with regulatory levels
- ✓ **Detects Low Levels** – Have confidence that our tests can detect even low toxin levels, especially important for those products with lower threshold legislation
- ✓ **Provides Fast, Actionable Results** - From processing through to production and end product testing, instant results can ensure the product is fit for purpose and avoid any unnecessary delays
- ✓ **Easy To Use** - Suitable for all skills levels with only minimal training and equipment required

Our Reveal Q+ MAX aqueous extraction tests are available for:

	Testing Time	Range of Detection*
Reveal Q+ MAX Aflatoxin	6 min	3-300 ppb
Reveal Q+ MAX DON	3 min	300-30000 ppb
Reveal Q+ MAX Ochratoxin	5 min	2-100 ppb

	Testing Time	Range of Detection*
Reveal Q+ MAX T-2/HT-2	5 min	50-3000 ppb
Reveal Q+ MAX Zearalenone	5 min	25-1500 ppb

Results from our Reveal Q+ MAX test are interpreted using our innovative Raptor Reader.
The Raptor reader allows the user to simply add sample and walk away - the instrument controls the volume, temperature and timing of your assay. The system allows you to run three samples at one time.

	Testing Time	Range of Detection*
Reveal Q+ Fumonisin	6 min	300-6000 ppb

*Range of detection with dilutions

Why not ask how we can improve on your current testing today?

NEOGEN®

Analytical & Diagnostic Products
JHB: +27 (0)11-794-5959
CPT: +27 (0)21-975-6390
Email: support@adpsa.co.za
Website: www.adpsa.co.za

AI in grain production and handling: The now and beyond

By Izak Hofmeyr, Plaas Media

Artificial intelligence (AI) is quickly turning the agricultural industry on its head and this is only the beginning, considering the potential of AI-based tools to increase efficiencies and accuracy. Grain handling and storage are no exception.

Smart harvesting

Long before entering the world of grain handling, AI will start on the farm. Developments in terms of planting and harvesting are already gaining momentum to a staggering extent, says Johan van Rensburg, executive manager of Grain Services at VKB.

"AI will increasingly play a role in bringing all facets of crop production – cultivars, fertilisation, pest and weed control – together, to not only increase yields and decrease costs, but to enable producers to distinguish between quality grades and possible mycotoxin contamination in the field.

AI-powered combine harvesters with machine vision and real-time data processing capabilities will optimise grain collection by adjusting speed and blade height based on crop density and ripeness, and detecting and avoiding diseased or contaminated areas.

"In terms of contamination, mainly with mycotoxins, we will see AI being able to differentiate and place various grades in separate bins right there in the field. Heavily contaminated grains may not be fit for human or animal consumption, but there are other applications, such as ethanol, in which it can be used.

"Another application of AI technology involves drones. When used in conjunction with technologies such as satellite imaging, drones can spray specific areas in a field as opposed to the current practice of spraying the entire field. AI-powered drones will be able to identify areas containing weeds and target them specifically. Apart from a cost saving, this will also contribute to more ecologically friendly practices. AI-assisted drone surveillance is expected to play a growing role in optimising harvest timing and strategy.

"Advancements in harvester technology will increasingly enable the operator to measure the nutritional value of grain, such as protein, starch, fat, and oil content. Equipped with multiple bins, harvesters will be capable of sorting grain by quality and directing each group to its appropriate bin. Assisted by satellite imaging, the operator will also be able to identify specific areas in the field where the grain meets the unique requirements of individual processors."

Intelligent logistics

AI technology is already being used in logistical systems, but will increasingly enhance efficiency. "Grain must be transported from the farm to a specific location, whether a storage facility, mill, or press. AI-coordinated fleet systems will optimise grain transport routes, reduce fuel consumption, and avoid congestion. AI-systems will also be able to coordinate transport so that space and capacity are used optimally, which will have a sizable impact on costs and efficiency.

"Blockchain-based technology will enhance traceability, making it possible to trace a specific batch of grain to a specific field of origin. This will, inter alia, make grain theft more difficult. It will also identify the specific cultivar and the chemicals used during production.

"Sensor-equipped trailers will monitor moisture, temperature, and contamination during transport. Predictive maintenance of vehicles and equipment through AI analysis will reduce downtime. Instead of servicing a vehicle at certain intervals, AI sensors will dictate the frequency and scope of maintenance intervals. The same goes for equipment and other infrastructure," predicts Van Rensburg.

Smart storage solutions

Grain silos are increasingly being outfitted with AI systems to monitor and regulate internal climate – humidity, temperature, and CO_2 – and predict and prevent spoilage, or pest infestation. This could ultimately have a significant impact on insurance costs.

AI will automate stock rotation based on real-time quality data while blockchain-backed grain traceability will be used to ensure transparency from storage to sale.

Automated grading

Machine vision and AI will analyse grain samples for size, shape, colour, and uniformity, as well as for the presence of foreign materials or mycotoxins. AI-enhanced sensors will measure protein, moisture, and oil content to reduce human error and standardise grading across regions and seasons.

Market integration and planning

Producers and cooperatives will use AI models to forecast market prices and demand, and decide when and where to sell based on predictive analytics. Which processor, for example, would gain most from a specific batch of grain based on the analysis of that batch?

Leveraging blockchain technology, the optimal value of each batch begins to be unlocked right from the harvesting stage

South African grain producers head to Agritechnica

South African grain producers are once again expected to attend Agritechnica 2025, the world's largest trade fair for agricultural machinery, taking place from **9 to 15 November in Hanover, Germany**.

With over 2 700 exhibitors from more than 50 countries, the event offers a comprehensive showcase of equipment and technologies for every stage of grain production – from soil preparation and seeding to harvesting, storage, and digital farm management.

South African producers have a long tradition of visiting Agritechnica, drawn by its global scale and practical relevance. The 2025 edition will feature innovations in tractors, tillage, seeding, spraying, grain storage, autonomous systems, and precision farming machines. The new Digital Farm Center will spotlight artificial intelligence-driven crop management, robotics, and smart data platforms – technologies increasingly relevant to grain operations in Southern Africa.

Touch smart efficiency

For professionals looking to invest in the future, Agritechnica offers an opportunity to compare solutions, meet other producers, and make informed decisions. The event's theme, "Touch smart efficiency", reflects the growing demand for intelligent, efficient, and sustainable farming systems.

With global challenges such as climate variability and rising input costs, Agritechnica 2025 is the place for South African grain professionals to discover resilient, high-performance solutions. Plan your visit now and be part of the global conversation shaping the future of grain farming.

Traveling to Hanover is straightforward, with regular flights from Johannesburg to major European hubs, including Frankfurt, and easy rail connections to the fairgrounds. Tickets are now available online, with day passes starting at €29 which include free access to local public transport in the Hanover region.

Visit *www.agritechnica.com* for more information.

on the farm and continues throughout the logistics journey, aligning with available processing capacity across various facilities.

Consumer-driven decision-making

As consumers grow more discerning about what they eat, it is not at all far-fetched to imagine a kind of device, much like an app on a phone, that will be able to analyse not only the content of a specific food item but also the origin of the ingredients, concludes Van Rensburg. Consumer preferences will increasingly influence the choice of raw materials, both in terms of production methods and origin.

While there is much to be expected from AI in the future, numerous technologies worldwide are already using AI to perform certain functions in the grain handling and storage industry. These, in a nutshell (and courtesy of AI), include:

1 **AI-powered sorting and quality control**

- **Improved accuracy:** AI algorithms, often using computer vision, can analyse grains with greater speed and accuracy than traditional methods, identifying contaminants, damaged kernels, and other quality issues.
- **Reduced waste and rejects:** By quickly identifying and separating subpar grains, AI helps minimise waste and rejection rates, leading to higher quality products and increased profitability.
- **Real-time monitoring:** AI can be integrated with sensors to monitor grain quality in real-time, allowing for timely interventions to prevent spoilage or further contamination.

2 **Predictive maintenance**

- **Reduced downtime:** AI algorithms can analyse data from sensors on machinery to predict potential equipment failures, allowing for proactive maintenance and minimising unplanned downtime.
- **Lower maintenance costs:** By addressing issues before they escalate, AI-powered predictive maintenance helps reduce the overall cost of repairs and maintenance.
- **Extended equipment lifespan:** Optimising equipment performance through predictive maintenance can also extend the lifespan of machinery used in grain handling.

3 **Smart grain management**

- **Inventory optimisation:** AI algorithms can optimise inventory management by tracking grain quality, quantity, and storage conditions in real-time, preventing spoilage and ensuring optimal storage conditions.
- **Supply chain optimisation:** AI can optimise logistics, including transportation routes and delivery schedules, reducing costs and minimising delays.
- **Predictive analytics:** AI can analyse weather patterns, historical data, and other factors to predict grain yields and market prices, helping producers and businesses make informed decisions.

4 **Pest and disease detection**

- **Early detection:** AI-powered systems can analyse images from cameras and sensors to detect pests and diseases in grain storage facilities, enabling prompt and targeted pest control measures.
- **Reduced pesticide use:** By precisely targeting pest infestations, AI can help minimise the use of pesticides, contributing to more sustainable grain handling practices.

5 **Other applications**

- **Equipment cleaning and maintenance:** AI-based systems can optimise cleaning processes for machinery, ensuring hygiene and product quality.
- **Labour optimisation:** AI can automate repetitive tasks, reducing the need for manual labour and potentially alleviating labour shortages in the grain handling industry.
- **Compliance and traceability:** AI can aid in ensuring compliance with regulations and improving traceability throughout the grain supply chain.

During a GEAPS Exchange 2025 concurrent session, Dave Smit, OT architect for the company Interstates discussed the role of AI in grain facilities, the critical steps for infrastructure readiness, and the importance of data governance in maximising AI's potential. In an article in *Feed & Grain*, Smit said AI adoption in grain handling follows a structured progression through five stages of digital transformation:

- **Standard reporting:** Traditional grain elevators have relied on paper-based systems for data tracking and reporting.
- **Descriptive analytics:** With digitalisation, data is now captured and stored centrally, allowing manual analysis.
- **Diagnostic analytics:** Automation helps identify trends and informs decision-making for operational improvements.
- **Predictive analytics:** AI connects data from multiple departments, enabling proactive maintenance and resource allocation.
- **Prescriptive analytics:** Advanced AI solutions integrate analytics and intelligence to automate complex decision-making.

To effectively implement AI, he said, grain facilities must establish a strong digital foundation. Preparing for AI integration involves several steps that include assessing networks for AI readiness, investing in scalable and secure hardware and software, developing a roadmap that defines short- and long-term AI implementation goals, and evaluating emerging AI technologies. The most important, perhaps, is training personnel in accepting and using AI tools effectively.

For more information, send an email to johan.vanrensburg@vkb.co.za or izak@plaasmedia.co.za

South African good experimental practice

By Chris Coetzee, agriculturist, BioScience Research

The publication of the new regulations relating to agricultural remedies on 25 August 2023 saw the introduction of good experimental practice (GEP) in South Africa. For many companies operating within the South African territory, the need to standardise methods and trial methodology has been a long-standing goal.

What is the history of GEP?

The history of GEP in Europe is closely tied to the need for standardised and reliable data, particularly in the realm of plant protection products (PPP). Here is a breakdown of key aspects:

Early drivers: The need for consistent and high-quality data became increasingly important as the use of PPPs grew. This was driven by the necessity to ensure the efficacy and safety of these products, and to facilitate their registration across different European countries.

Eppo's role: A significant milestone was the publication of the first GEP standard by the European and Mediterranean Plant Protection Organization (Eppo). In 1992, EPPO published its *Standard PP 1/181: Conduct and reporting of efficacy evaluation trials, including good experimental practice*. This standard provided a framework for the design, conduct, and reporting of efficacy evaluation trials. South Africa will be following the same principles from August 2025.

Standardisation and regulation: GEP aims to ensure that trials are conducted according to uniform principles, leading to high-quality and mutually recognised results among European Union member states. It addresses aspects such as personnel qualifications, equipment and facilities, trial protocols, data recording and interpretation.

The GEP standards work in conjunction with the good laboratory practice (GLP) standards but are tailored to the specific needs of field trials for agricultural remedies. It is important to understand that GLP focusses on non-clinical safety studies while GEP focusses on efficacy and phytotoxicity studies. Although the two systems are very similar, their application differs.

Current practices: Today, GEP is a crucial part of the regulatory process for PPPs in Europe. Organisations conducting efficacy trials must often be officially recognised and certified to ensure compliance with GEP standards.

The GEP guidelines are continually being refined and updated to reflect the most current scientific knowledge. In essence, the development of GEP in Europe represents an ongoing effort to ensure the reliability and comparability of experimental data, particularly in the context of agricultural practices and plant protection. There is a clear need to implement a similar approach in South Africa and the GEP steering committee is proud to be pioneering this system for our conditions.

GEP in South Africa

The industry extended an invitation to all current and potential future stakeholders affected by GEP to nominate a representative for the GEP steering committee. The committee comprises members from the South African Bioproducts Organisation (Sabo), CropLife SA, the Fertilizer Association of Southern Africa (Fertasa), Nematological Society of Southern Africa (NSSA), and Plant Science Consultants Association (PSCA).

The steering committee provides feedback on the system's progress to industry associations – through their respective board structures via the CropLife industry liaison meeting – and reports directly to the Registrar.

The South African GEP system will operate as a fully independent certification scheme. It will apply to facilities conducting efficacy and phytotoxicity studies under GEP. To qualify, facilities must comply with the Eppo standard, which requires documented local and facility-specific standard operating procedures (SOPs), proof of personnel qualifications and training, as well as up-to-date equipment calibration certificates.

The purpose of such standards and their implementation will:

- Ensure high-quality field trial results generated in South Africa.
- Ensure that methods for conducting trials and assessments are harmonised across various organisations and locations throughout the country.
- Increase the reliability of results, improve quality of equipment and methods used, and ensure skills and training of the personnel responsible for conducting the research.

Looking at the various elements

Standard operating procedures: These include trial-specific SOPs, relevant Eppo standards, and facility-level SOPs for the design, execution, assessment, and reporting of field trials. While Eppo standards are available, published standards are not always available for all local conditions. In such cases, the industry has appointed subject-matter experts to draft, review, and finalise local SOPs. These will be published on the South African GEP website. The SOPs aim to harmonise methodologies for site selection, pest targeting, trial implementation, assessment procedures, data generation, and reporting.

Trials: Trials are essential to assess the performance of candidate compounds under certain growing conditions, using appropriate equipment. Good experimental practice ensures methodological rigour in trial design and execution to accurately evaluate the efficacy of candidate compounds and to produce reliable reports.

Test organisation: All organisations conducting field trials must be registered and formally recognised under the GEP system. As part of the registration process, each organisation must provide its physical location, fields of expertise, and the geographical areas where trials

will be conducted. The organisation conducting the tests is responsible for ensuring that GEP principles are applied throughout all stages of the trial process – from receipt of test products to the final reporting. Audits will be conducted on key aspects such as application, residue sampling, data collection, and reporting to verify compliance with GEP standards.

Test location: Test organisations must clearly indicate the locations of all trial sites and ensure that data is traceable to its respective site – from the trial's initiation through to the final report.

Study management: Organisations must demonstrate the ability to manage trials in line with GEP standards. This includes having adequate personnel and resources to initiate and execute trials. Internal SOPs must outline the processes for conducting trials, using equipment, and training personnel.

Personnel, training and proficiency: Personnel must have relevant scientific and technical qualifications, formal training, and professional experience. Ongoing training in their respective fields is also essential. The GEP system will support ongoing training for all field personnel.

Equipment: Organisations must have access to appropriate equipment for each study and ensure that personnel are trained to operate it. All equipment must be properly serviced, calibrated, and maintained in accordance with GEP requirements for field studies.

Facilities: Suitable infrastructure must be available. This includes secure storage facilities for equipment and test compounds, field plots, greenhouses, and administrative and data processing facilities.

Good experimental practice verification: A central body will be responsible for issuing GEP verification and assessing compliance through audits. Audits will be conducted by qualified individuals with adequate experience and training in field efficacy and phytotoxicity studies. A draft document is being developed by the steering committee for the recruitment, training, and qualification of auditors. Verification will be conducted independently and with the highest level of integrity.

What is next?

Employees of CropLife facilitated a GEP information session following the liaison meeting held in February this year. During the session, the framework of the GEP system was presented, along with examples of SOPs and guidance on how to draft them. All related resources and presentations were circulated to the industry on 21 February.

A dedicated website for engagement with facilities and facility managers will be launched shortly. This platform will provide access to local SOPs and other relevant documentation.

The application process for GEP accreditation began towards the end of April this year. All industry stakeholders are invited to apply. The target date for full implementation is August this year. Let's make it happen!

For more information and references, send an email to chris@bsrsa.com

Banning of certain pesticides being discussed

By Annelize Crosby, head of legal intelligence, Agbiz

On 12 June this year it was announced that Cabinet had approved a ban on the importation and sale of the pesticide terbufos. This follows the tragic death of six children in Soweto last year, after they ingested food contaminated with terbufos. This may only be the start, as non-governmental organisations (NGOs) have called for the immediate ban of all 194 highly hazardous pesticides (HHPs) currently registered in South Africa. These NGOs reject the notion of phase-out periods subject to industry discretion.

The South African government appointed multi-disciplinary task teams to investigate the deaths of the children. Terbufos is sold illegally and informally as a so-called 'street pesticide' for domestic use in townships and informal settlements to control rats. On 24 November 2024 president Ramaphosa said in a statement on the matter: "The unregulated use of restricted pesticides in communities has become a growing problem with devastating consequences. In many townships another chemical, aldicarb, and an organophosphate known as galephirimi are commonly sold by street vendors and hawkers to control rat infestations. Aldicarb has been banned for use in South Africa since 2016.

"One of the reasons that people use pesticides is to deal with rat infestation. The problem of rat infestation is due in part to poor waste management in several municipalities. Rubbish is not collected regularly and streets are not being cleaned, creating conditions for rats and other pests to thrive. Often, the poorest communities are the worst affected, and often the cheapest remedies used are highly hazardous substances like terbufos and aldicarb.

"The fact that local government is responsible for environmental health in our communities is another challenge. However, many municipalities do not have the capacity and resources to conduct inspections of these businesses and enforce regulations."

Dr Gerhard Verdoorn, a prominent expert in pesticides and pesticide use said that the terbufos present in local communities has been imported from other countries. Despite this, Cabinet has now decided to ban terbufos, and NGOs are lobbying parliament to ban all highly hazardous chemicals from the country.

SAPToA presentation

On 20 May this year the South African Peoples Tribunal on AgroToxins (SAPToA) briefed the Portfolio Committee on Agriculture on their findings regarding the impact of highly hazardous chemicals in agriculture. This group conducted public hearings in Stellenbosch and received testimonies from farm workers, trade unions, and health experts. They did not, however, invite any industry or farming groups to testify at these hearings. It appeared that the National Department of Agriculture was also not invited to the hearings.

The group claims, among other things, that there is widespread secrecy surrounding pesticide use in agriculture and that the state is colluding with industry. According to SAPToA, farm workers across generations have been exposed to harmful pesticides and that HHPs carry significant risks, including cancers, birth defects, and environmental degradation.

Broader perspective

The death of people due to exposure to pesticides is completely unacceptable, and the death of the children due to poisoning is tragic. Environmental degradation and health problems that can be linked to the use of HHPs should also concern all of us. However, it is important that all decisions should be based on fact and science, and that a holistic approach should be taken considering all the socio-economic, food security, and health and environmental implications, and weighing all available options.

A vital part of sustainably producing enough safe food is the ability to protect crops from devastating pests and diseases, minimise the impact of weeds on crops, and mediate certain responses in the crops to support growth and yield. Agricultural remedies, when used responsibly and in accordance with the label and the law, are critical tools in this pursuit.

Apart from the *Fertilizers*, *Farm Feeds*, *Agricultural Remedies and Stock*

Remedies Act, 1947 (Act 36 of 1947), South African agriculture operates under multiple layers of legislation beyond the *Act*. These include the *Occupational Health and Safety Act, 1993 (Act 85 of 1993)* and the *2021 Regulations for Hazardous Chemical Agents*.

> "Sustainability lies at the heart of every farming operation and is embedded across the agricultural value chain. Responsible pesticide use is very much part and parcel of sustainability."

Environmental legislation in the form of the *National Environmental Management Act, 1998 (Act 107 of 1998)* plays a crucial role in regulating pesticides, focussing on environmental protection and sustainable use.

It should be recognised that terbufos, for example, is a highly effective pesticide that is widely used on many different crops. It is used in combatting pests that plague potatoes, beans, grains, fruit, and vegetables. Alternatives are not readily available or viable in terms of aspects such as efficacy, cost, and residue management. In many cases alternatives are also considered to be highly hazardous.

A direct comparison between products authorised for use in South Africa versus other countries is also not a fair comparison. Climate conditions, agronomic practices, pest composition, and even crop types are not exactly the same in South Africa than in Europe, for example. A controlled phase-out of older agricultural remedies, with the concurrent introduction of new technologies that are less hazardous to people and the environment, is already underway in South Africa.

It also needs to be recognised that banning a product will not necessarily solve the problem of illegal use and accidental poisoning. Despite being banned in South Africa in 2016, aldicarb is still available at taxi ranks and street vendors in our country.

Conclusion

Crop protection is a vital tool that producers require in order to protect the crops that ultimately become our food or drink, feed for livestock, or fibre. We have a responsible industry that is very focussed on sustainability. We also have a comprehensive regulatory framework.

Agriculture is a long-term business. Sustainability lies at the heart of every farming operation and is embedded across the agricultural value chain. Responsible pesticide use is very much part and parcel of sustainability. The agricultural industry wants to be part of the solution in coming up with less harmful crop-protection methods and remedies, but this will not happen overnight. A science-based holistic approach is required.

For references and more information, send an email to Annelize Crosby at annelize@agbiz.co.za

Safe handling and storage of pesticides

By Koos du Hofmeyr, Plaas Media

The safe use of pesticides on farms is critical and cannot be overstated. Given the potential risks to human health and the environment, it is essential to adhere to all safety protocols, legal requirements, and manufacturer instructions when handling pesticides.

This was the key message shared by Hiresh Ramanand and Quade Sing Jam of CropLife SA during a recent webinar. The course they presented aimed to equip role-players with the knowledge and skills to use pesticides responsibly and safely in agricultural environments.

Read the label

Reading the pesticide label carefully and understanding each part is essential for safe and proper use. The label is a legal document that specifies the pesticide's intended use, product name and registration number, product group, formulation and usage declaration, batch number, manufacturing and expiry dates (if applicable), active ingredients, manufacturer's name and logo, volume of contents, and all relevant safety precautions and instructions. It's better to be safe than sorry.

Safe storage of pesticides

Pesticides must be stored safely to protect people, animals, and the environment. Officials strictly enforce pesticide regulations and are authorised to inspect any farm where pesticides are stored, handled, or used.

Agricultural remedies must be kept in a secure, locked facility to prevent unauthorised access. Ideally, this storage area should be in a separate building located at least 500m from open water sources or boreholes. Pesticides must never be stored alongside animal feed or seeds. The site should be easily accessible to vehicles, and surrounding flammable vegetation must be regularly cleared to reduce fire risks. The facility must also be located at least 500m away from sensitive areas such as schools, residential zones, hospitals, shops, food-processing facilities, and recreational spaces.

> By law, anyone working with pesticides must wear personal protective equipment (PPE) and use appropriate tools and techniques to minimise exposure to agricultural remedies.

Specific regulations apply to the buildings used for pesticide storage. Clear warning signs must be posted outside the facility, indicating that it contains dangerous goods. These notices should also display the names and contact details of the responsible owner or manager. In addition, emergency contact information for the South African Police Service, local hospital, ambulance, and fire brigade must be provided to ensure a prompt response in the event of an emergency.
Each entrance to the storage facility must display a warning sign stating: 'Storage of dangerous goods – unauthorised entry prohibited', or a similar message. This sign must be printed in red lettering at least 75mm high on a white background and presented in both English and one relevant indigenous language.

Management of the pesticide store

Proper management of the pesticide store is essential for safety and regulatory compliance. Best practices, as recommended by the course leaders, include storing liquid and solid pesticides separately, organising inventory so that older stock is placed at the front for first use, and keeping accurate written records of all products in storage. The store must not be used to house animal feed, flammable liquids, or inorganic solid fertilisers.

Every pesticide store should be equipped with key safety items, including a washbasin with running water and soap, a first aid kit for treating general injuries, an eye wash bottle, a safety shower, and dry chemical powder (DCP) fire extinguishers. The store must also be prepared to deal with accidental chemical spills. A spill kit must be available on-site, and a clear protocol or standard operating procedure (SOP) should be in place to ensure that

any spills are managed responsibly and that hazardous materials are disposed of in accordance with national regulations.

Safe handling of pesticides

By law, anyone working with pesticides must wear personal protective equipment (PPE) and use appropriate tools and techniques to minimise exposure to agricultural remedies.

Before mixing any pesticide, it is essential to read and fully understand the product label. The person responsible for mixing should consider the following questions:

- Is the product registered for use on the specific crop, pest, weed, or disease?
- What warnings and precautions are there?
- Do I have the required buffers, adjuvants, and access to clean water?
- Are the spray tanks properly decontaminated?
- What is the correct mixing sequence according to the label?
- What is the recommended dosage rate per hectare?
- How much pesticide must be measured and added to my spray tank (i.e. calibrated dosage)?
- Are current weather conditions suitable for product application as per the label?
- Is the PPE appropriate for the pesticide(s) being used?

Safety precautions when spraying

Because pesticides can pose risks to people, animals, and the environment, always ensure that bystanders, livestock, wildlife, pets, poultry, children, and bees are not present during application.

Once the pesticide is applied, follow these critical safety practices:

- Do not reuse empty containers or bags for any purpose or give them to others.
- Do not burn or bury empty containers or bags, as this releases harmful toxins and fumes.
- Never leave partially full or empty containers or bags in crop fields.
- Triple rinse or spray rinse all empty containers, then puncture and recycle them.
- Store triple-rinsed, empty containers or bags in a secure area until they can be collected by a CropLife SA-certified recycler.
- Do not leave spray mixtures in sprayers overnight.
- Empty the sprayer completely before beginning the rinsing process.
- If required by the label, use a commercial decontaminant.
- Inspect, repair or replace all pipes, nozzles, valves, and seals as needed.
- Leave sprayer caps off to allow water to evaporate fully.
- Store sprayers in their designated place, away from direct sunlight.

Visit CropLife SA's website at *www.croplife.co.za* for more information on the dos and don'ts of pesticide use.

For more information, contact Hiresh Ramanand at hiresh@croplife.co.za or Quade Sing Jam at quade@croplife.co.za

agbiz GRAIN agricultural business chamber the way to prosperity

MEMBERS

AFGRI SINCE | SEDERT 1923
+27 11 063 8000
jerry.maritz@afgri.co.za
www.afgri.co.za

AGRIMARK GRAIN
+27 22 931 8205
akriel@agrimark.co.za
www.kalgroup.co.za

GRAINCO STORAGE A DIVISION OF BKB
+27 21 807 8936
christie.engelbrecht@bkbgs.co.za
www.bkb.co.za

GWK innovate agriculture
+27 58 863 8111
francoisf@vkb.co.za
www.vkb.co.za

NWK
+27 18 633 1000
jdurand@nwk.co.za
www.nwk.co.za

OVERBERG SINCE 1918
+27 28 214 3854
johanl@overbergagri.co.za
www.overbergagri.co.za

OVK
+27 51 923 4500
rudolphvw@ovk.co.za
www.ovk.co.za

SCHOEMAN
+27 13 665 7700
brent@witklip.co.za
www.schoemangroup.co.za

Senwes
+27 18 464 7800
Wikus.Grobler@senwes.co.za
www.senwes.co.za

Silostrat
+27 57 391 1900
cassie@silostrat.com
www.silostrat.com

SSK
+27 28 514 8600
Pieter.Malan@ssk.co.za
www.ssk.co.za

TWK agri
+27 17 824 1005
aduvenage@twkagri.com
www.twkagri.com

vkb
+27 58 863 8111
francoisf@vkb.co.za
www.vkb.co.za

agbiz GRAIN
agricultural business chamber
the way to prosperity

ASSOCIATE MEMBERS

AES Agri-Enviro Solutions
Solutions for Analytical Technology

Malcolm Holman
malcolmh@aelab.co.za
www.AELab.co.za

ANALYTICAL & DIAGNOSTIC PRODUCTS

Paul Burke
paul.burke@adpsa.co.za
www.adpsa.co.za

BÜHLER

Taryn Browne
taryn.browne@buhlergroup.com
www.buhlergroup.com

henchem
environmental management solutions

Chantelle Henning
chantelle@henchem.co.za
www.henchem.co.za

Ronin®
www.thisisronin.com

Munro van der Westhuizen
munro@thisisronin.com
www.thisisronin.com

RR
Rhine Ruhr (Pty) Ltd, since 1956

Philip van der Merwe
philip@rhineruhr.net
www.rhineruhr.net

Santam
agriculture

Hanlie Kroese
hanlie.kroese@santam.co.za
www.santam.co.za

Points to ponder

By Jannie de Villiers

Keep doing the right things

How do we navigate this new world, one where we've lost our homefield advantage and find ourselves increasingly marginalised in a growing culture of corruption? No one can deny that South Africa has shifted from relative stability to a period of disruption and the uprooting of deeply held values and practices. There is a sense of loss of control and emotional numbness settling over many South Africans.

Identifying and analysing these emotions is often easier than discerning how we, as agriculturalists, should respond in such a season. We long for a return to stability, predictability, and shared values. But what should we do in the meantime?

In search of guidance, I turned to my bookshelf and rediscovered two books that once helped me make sense of life's complexities: *Crossing the Bridge* by Alan Roxburgh, which explores leadership in times of change, and *The Church in Babylon* by Erwin W Lutzer. These are powerful resources, especially for those grappling with the challenges South Africa is currently facing. What follows is a reflection on what I've read and what I believe we should do.

Face the facts

One of the toughest truths I had to face is that I feel like a stranger in my own country. We are exiles – not geographically, but morally and spiritually. It often seems as though South Africa belongs to something or someone else now, which is why I refer to the current situation as the 'new' South Africa – not the real one.

We live in a culture increasingly driven by self-interest, greed, and a willingness to exploit others by any means, legal or not. Admittedly, this is a generalisation, but it is hard to ignore how far we've drifted from the Christian values that shaped my childhood and still drive my adult life.

Violence and corruption have become routine. Even our own labour union representative admitted to president Donald Trump that we are, or have become, a violent nation. Social media now has more influence over society's values and emotional state than the moral guidance we once received at our mothers' feet. And while it may seem tempting to isolate yourself or create a protective bubble for you and your family, such a strategy is unsustainable in the long term.

Lessons from scripture

I was shocked when I read the story of Jonah and realised that the storm at sea did not arise because of the people on board, but because of Jonah's disobedience. The message is clear: We need to examine our own hearts before pointing fingers at others.

My best advice is this: Revisit the promises God has given you. Write them down, share them with your loved ones, and continually remind God of them. He evaluates our obedience and not our performance or success. In this new South Africa, we are being humbled. It is time to turn back to God.

There are no quick fixes. In Jeremiah 29, the exiles in Babylon are told to adapt – learn the language, plant crops, trade, build homes, start families, and live peacefully with their neighbours. But they are also called to live God-honouring lives of personal holiness. Do not compromise your values by adopting the ways of those who do not honour God. This is more than survival advice for us living in South Africa.

Disruption and confusion also call for a shift in your leadership style. In stable times hierarchy works but in a season like this, we need leaders who bring people together – synergists with the skills to unite diverse groups.

> "Social media now has more influence over society's values and emotional state than the moral guidance we once received at our mothers' feet."

Both Noah and Lot lived in lawless times, yet their responses differed. Lot, though righteous, stayed silent about the sin around him, and it ultimately cost his daughters dearly. Noah, on the other hand, kept on spreading the gospel despite hostility.

We are not in this difficult season to be destroyed, but to be refined. God has not forsaken us. So, my final encouragement to you is this: Keep on doing the right things. If you are unsure what that is, turn to scripture, and maybe even ask your mother again.

For enquiries, send an email to Jannie de Villiers at Jannie@devilliersfamily.co.za

In landbou dink jy altyd aan die volgende seisoen.
Ons verstaan.

Kom ons praat oor langtermyngroei,
van een geslag na die volgende.

absa.co.za/business

Your story matters

absa

TALISMA® EC

SEED TREATMENT

THE BEST LINE OF DEFENCE AGAINST GRAIN STORAGE PESTS

WHAT IS TALISMA® EC

TALISMA® EC is a maize and wheat-grain, liquid seed protectant with a broad-spectrum insecticidal activity for the control of insects that infest stored grains and seeds. Also, used as a thermal fogging solution for maize and wheat-grain, in seed storage facilities, for the control of Maize weevil, Granary weevil, Saw toothed grain beetle, Lesser grain borer, Larger grain borer and Tropical warehouse moth.

THE BENEFITS

TALISMA® EC has a broad spectrum: Coleoptera, Lepidoptera, Mites:

- Has remarkable speed of action, curative efficacy and excellent preventive properties..
- Has a low level of residues - No withholding period is required with **TALISMA® EC.**

ACTIVE INGREDIENTS

Cypermethrin | 80g/ℓ
Piperonyl butoxide | 228g/ℓ

THE APPLICATION

Dual-purpose application: Grain admixture treatment and fogging solution for grain storage facilities

DIRECTIONS FOR USE

Dilute **TALISMA® EC** with water and apply to harvested grain before it goes into storage using calibrated grain spraying equipment (semi-automatic or manual pumps) with continuous agitation of spray solution.

In order to ensure optimal effectiveness, the nozzle should be positioned at the foot or the top of the elevator, on a conveyor belt (avoiding direct contact with the belt itself) or where the grain falls.

The application rate must be adjusted according to the grain flow rate through the conveyor in tons per hour.

TO FIND OUT EVEN MORE ABOUT THIS PRODUCT

Please scan the QR Code

UPL South Africa
7 Sunbury Office Park
Off Douglas Saunders Drive
La Lucia Ridge
4300
031 514 5600
www.upl-ltd.com/za

AVAILABLE IN: 5ℓ

UPL

ACTIVE INGREDIENTS: Cypermethrin 80 g/ℓ; Piperonyl butoxide 228 g/ℓ | SIGNALWORD: WARNING | Hazard statements: Combustible liquid. Harmful if swallowed or if inhaled. May causes damage to organs (nervous system) through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.L11151, Act Nr. 36 of 1947 | IRAC INSECTICIDE GROUP CODE: 3A | Registration holder: UPL South Africa (Pty) Ltd. I Co. Reg. No.: 2009/019713/07 | 7 Sunbury Office Park, Off Douglas Saunders Drive, La Lucia Ridge, South Africa, 4019 | Tel: 031 514 5600