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Maize Prices May Find Support After Heavy Supply Year

South Africa enters the 2026/27 maize marketing year with another large crop and sizeable carry-over stocks. While this keeps pressure on prices, regional demand, deep-sea exports and global market shifts could offer support later in the season.

South Africa's maize market has moved into the 2026/27 marketing year with a clear message: there is enough maize in the country, but the price outlook will depend on export demand.

The previous season delivered a maize harvest of about 16.5 million tonnes, comfortably above South Africa's domestic maize requirement of roughly 12 million tonnes. That surplus created room for exports, but demand was weaker than expected. At the start of the 2025/26 marketing year, the industry expected exports of about 2.4 million tonnes. By the end of April 2026, exports were closer to 2.0 million tonnes, with softer demand from traditional Far East buyers such as Vietnam, Taiwan and South Korea.

"South Africa has enough maize. The price question now depends on how strongly export demand returns."

The new season again begins with strong supply. Grain SA's May 2026 supply-and-demand figures place total maize production for 2026/27 at about 16.84 million tonnes, with a national average yield of around 6.15 t/ha. Commercial supply is projected at 18.59 million tonnes, supported by higher opening stocks of 2.36 million tonnes.

This supply position is positive for food security and for maize users, especially feed buyers and processors. However, it is more difficult for producers, as high supply has placed pressure on local prices. On 20 May 2026, Grain SA's Market Watch showed white maize trading at R3 370/t and yellow maize at R3 459/t.

The key question for the months ahead is whether exports can absorb enough of the surplus. Grain SA projects total maize exports of about 3.81 million tonnes for the 2026/27 marketing season, up from 2.38 million tonnes in the previous season. About 1.40 million tonnes is expected to move into Sub-Saharan African markets, while 1.80 million tonnes is projected for deep-sea markets.

"The 2026/27 maize market will be shaped less by scarcity and more by how quickly surplus grain can move."

Yellow maize will be especially important in this export picture. Grain SA expects yellow maize ex-

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In This Issue

GUIDELINES TO REDUCE WINTER BOLTING IN CABBAGE

Bolting in vegetable crops refers to the plant flowering and producing seed prematurely. In a cabbage crop this would result in the produce being unmarketable and therefore reduced income. Bolting in cabbage is generally triggered by cold weather and can be initiated fairly early in the plant's development, with the bolting itself occurring when the plant is more mature. It is therefore extremely important that bolting is well understood so that preventative action can be taken in order to produce a marketable product.

"Bolting in cabbage is generally triggered by cold weather and can be initiated fairly early in the plant's development, with the bolting itself occurring when the plant is more mature."

Factors inducing bolting

The seedling has to have a leaf width of about 10 cm for bolting induction to occur. Bolting can then be induced by temperatures ranging from 5º to 15ºC, but particularly below 7ºC, provided seedlings are exposed to such cold for a lengthy period of time. The length of cold required to induce bolting depends on a number of factors.

a) Fertility of seed beds

Seed beds and seedling trays that are over-fertilised will cause the plant to have premature seed shoot development. This, in turn causes the plant to rapidly grow and become large enough for bolting induction to occur. Secondly, excess fertilizer, especially Nitrogen, favours leaf development over root development, which causes greater transplant shock.

b) Size of seedlings at transplant

Oversized, vigorous seedlings would be more inclined to bolt than smaller seedlings, for the same reasons as above.

c) Size of plant at induction temperature

There is a minimum plant size required for bolting induction to occur.

Generally, this size would be when the leaf width of the seedling is about 10 cm. This size would vary from variety to variety and would also be determined by the width of the growing point of the plant. A variety with narrow leaves and a thick stem could be induced at a narrower leaf width.

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d) Growth checks

Once the induction has taken place, the response time to bolting is influenced by a number of factors. If there is a growth check, then the response time is shortened and the plant can begin bolting quickly. These growth checks can be caused by heat waves, drought, waterlogging, disease after induction size has been reached, fertiliser and phytotoxic sprays.

e) Diurnal Swings

"The seedling has to have a leaf width of about 10 cm for bolting induction to occur."

Large diurnal swings are inclined to cause the plants to bolt very fast once induction has occurred. Induction would depend on the lower temperature of the diurnal swing.

f) Cold fronts and heat waves

Cold fronts produce low temperatures that may induce

bolting, with heat waves shortening the response period. If there is a succession of such weather, bolting will rapidly occur.

g) Maturity of the variety

Varieties that are late maturing can be more susceptible to bolting than those that are early maturing. The reason for this may be that the growing point of the plant, which is sensitive to cold, is quickly covered in early varieties. These plants will also head before the response time has taken effect. Later maturing varieties are subjected to cold conditions for longer periods of time, which may cause increased stress and bolting induction.

h) Heat susceptibility of the plants

Heat resistant plants are more prone to bolting than heat susceptible varieties. To breed for heat resistance, one automatically predisposes the variety to get early induction to bolting. To select a safe variety for the whole year is difficult; therefore heat resistant and cold resistant varieties should be kept for their specific slot. Heat resistant varieties are also more inclined to be later maturing varieties.

"Site selection is extremely important in the prevention of bolting."

i) Cold grown seedlings

It has been stated before that the plant is responsive to induction to bolt when the leaf blade becomes 10 cm in width.

However, seedlings that are sown in very cold areas are more prone to bolting than those that come from warm areas and are transplanted into the same field.

Reducing bolting incidence

Several measures can be taken to prevent excessive bolting of crops and should be carefully considered when a cold season is expected. It is important to be aware of those factors that induce bolting as discussed previously in order to counteract such conditions.

a) Seed beds should not be over-fertilised to prevent cold induction occurring at a young age. Nitrogen should not be added in excess as this will favour leaf development over that of the roots and causes transplant shock.

b) Plant smaller seedlings that are not over sized and too vigorous. These would be less inclined to bolt.

c) Be aware the growth checks caused by cold fronts, heat waves, drought, water logging, disease after induction size has been reached, fertilizer and phyto-toxic sprays will shorten the response time and the plant could go directly to seed.

d) Ensure that seedlings are not grown in cold conditions and that the nursery is fairly warm.

Choose a reputable nursery or take special care when growing your own seedlings. It is also better to obtain seedlings from a nursery in your area to avoid large changes in temperature from the nursery to the field.

e) It is essential to plant on warmer fields and not to use areas that tend to be colder. Low lying areas tend to be much cooler and should therefore be avoided. Site selection is extremely important in the prevention of bolting.

f) It is important to check for signs of bolting throughout the winter season. This can be easily done by cutting heads in half and checking core length. If the core is extending it may be wise to harvest slightly

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earlier before bolting occurs. The heads may be smaller but will be marketable compared to those destroyed by bolting.

g) It is extremely important to choose a good variety that is bolting resistant to plant in cool times. However, it cannot be guaranteed that a variety will or will not bolt in an area. One can say that a variety is resistant to bolting but the plant reaction will differ from year to year and according to area. The response of a particular variety to an area will vary due to growing techniques, the climate and the characteristics of the variety.

What should be emphasized is that caution should be taken with new lines introduced into a new area, until growing confidence has increased in the area. It is not wise to plant a variety to go through winter that is described as heat resistant.

Conclusion

Many varieties which do not normally bolt, may bolt in a particular year and over a wide area due to a very cold winter or other contributing factor. This winter is expected to be very cold and therefore measures should be taken to prevent bolting wherever possible. Understanding the factors that induce bolting is essential in reducing bolting incidence and implementing preventative measures.

However, planting the correct variety in its correct slot will have the greatest impact on the final results of the crop.

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NAMPO Bothaville 2026
Shows Agriculture's Strength, Scale and Resilience

A Strong Turnout Despite Tough Conditions

NAMPO Bothaville 2026 once again confirmed its place as one of South Africa's most important agricultural gatherings and one of the Southern Hemisphere's leading open-air agricultural exhibitions. Held from 12 to 15 May 2026 at NAMPO Park outside Bothaville in the Free State, the 58th NAMPO Harvest Day carried the theme "Resilience through Innovation" — a fitting message for a sector navigating climate pressure, rising input costs, infrastructure challenges and animal-health risks.

Despite wet conditions before the show, NAMPO welcomed 81,822 visitors over four days. Wednesday was the busiest day, with 24,579 people passing through the gates. While attendance was slightly lower than the record 87,191 visitors recorded in 2025, the 2026 figures still reflected strong confidence and support from farmers, agribusinesses, suppliers, policymakers and the wider agricultural community.

More Than 910 Exhibitors Showcase Innovation

The scale of the event remained impressive, with more than 910 exhibitors presenting machinery, technology, production inputs, services, finance, safety solutions, genetics and practical farming innovations. The event once again brought together the full agricultural value chain, creating a platform where producers could compare products, discuss challenges and explore new ways to improve efficiency and resilience.

The skies above Bothaville were also busy. NAMPO 2026 recorded 311 aircraft, 100 helicopters and 657 total air-traffic movements during the week, underlining the national reach and continued importance of the Harvest Day.

Weather, Traffic and a Hilux Highlight

Heavy rainfall created one of the biggest operational challenges, leaving parts of the grounds waterlogged and making more than 30 km of gravel access roads unusable. This placed extra pressure on the R30 corridor. Even so, organisers, traffic authorities and exhibitors worked hard to keep the event moving.A major highlight was Toyota South Africa Motors' Hilux Guinness World Record attempt, which brought 1,545 Hilux bakkies to NAMPO Park and added a strong lifestyle and motoring element to the week

Biosecurity Shapes the Livestock Displays.

Due to foot-and-mouth disease concerns, no live cloven-hoofed animals — cattle, sheep, goats or pigs — were permitted. Breed societies responded positively through digital displays, performance data, genetics information and creative breed presentations.

Overall, NAMPO Bothaville 2026 was more than a trade show. ***It was a confident statement of adaptability, innovation and belief in the future of South African agriculture***.

Written by (M.O)

Undocumented Workers:

Why Agriculture Must Move from Informal Labour to Compliance

A Hot Debate Moves into the Workplace

South Africa's debate over undocumented workers has moved from street-level anger into the workplace. For agriculture, agri-processing and logistics, the issue is no longer only about migration policy. It is now about whether employers can prove that every person on the farm, in the packhouse, behind the wheel or in the yard is legally employed, fairly paid and properly recorded.

Government's message has hardened. Employers who knowingly hire undocumented foreign nationals, especially where they use their vulnerable position to pay below the law or demand excessive hours, are being placed under sharper scrutiny. At the same time, President Cyril Ramaphosa has warned against scapegoating migrants for South Africa's economic difficulties. That distinction matters. The employment of foreign nationals is not illegal in itself. What is illegal is employing people who do not have the legal right to work, or employing them outside the conditions of their visa, permit or status.

Agriculture's Longstanding Labour Reality

Agriculture is particularly exposed because the sector has long depended on migrant labour, especially during peak planting, harvesting and packing periods. Workers from neighbouring countries such as Zimbabwe, Lesotho, Mozambique and Malawi are part of the labour reality in many production regions. In fruit, vegetables, livestock and mixed farming, many producers say seasonal labour gaps cannot easily be filled at short notice. But the fact that labour is needed does not remove the legal duty to verify documents.

"Compliance now needs to become a farm-management function, not a once-off paperwork exercise."

For farmers, compliance now needs to become a farm-management function, not a once-off paperwork exercise. Employers should keep copies of passports or South African IDs, valid work visas, permanent residence documents, refugee or asylum papers where applicable, employment contracts, wage records, UIF details and proof that documents have not expired. Relying on a verbal assurance or a photocopy kept in an old file is no longer enough. If a worker's status is uncertain, the answer is to verify and regularise where possible, not to ignore the risk until an inspection arrives.

"The employment of foreign nationals is not illegal in itself. What matters is whether the person has the legal right to work."

Agri-Processing Cannot Hide Behind Labour Brokers

Agri-processing carries the same risk, often in a less visible form. Packhouses, abattoirs, cold rooms, food factories and distribution depots frequently use seasonal, casual or outsourced labour. Where labour brokers are involved, the temptation is to assume that

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the broker has checked everything. That is dangerous. If a compliance inspection finds undocumented workers or underpayment in a processing facility, the reputational and operational damage can still land at the door of the business whose product is being packed, processed or moved.

Inspections are not limited to immigration status. Labour authorities have been checking compliance with the Basic Conditions of Employment Act, UIF, COIDA, the Employment Services Act and the National Minimum Wage Act. From 1 March 2026, the national minimum wage is R30.23 per ordinary hour worked, including for farm workers and domestic workers. Any arrangement that depends on lower pay, unpaid overtime or fear of dismissal places the employer at risk.

Logistics Becomes the Hottest Flashpoint

Logistics is the hottest flashpoint. Freight and trucking have already been drawn into national discussions, with government referring to a plan

developed with the logistics and freight industry and labour organisations. Here the distinction between lawful cross-border transport and unlawful local employment is critical. A foreign driver moving goods legally across borders is not the same as an undocumented person being employed locally without authorisation. Agriculture cannot afford confusion on this point. Food, seed, fertiliser, fuel, livestock, exports and fresh produce all depend on stable, lawful transport networks.

"The sector's strongest defence is not politics. It is proof."

Domestic Workers and Gardeners Are Also in Focus

The debate has also reached households that employ domestic workers, gardeners, caregivers and drivers. Although Nufarmer Africa's main concern is agriculture, many farm households and rural businesses employ people in these roles. The proposed Employment Services Amendment Bill has raised concern because it could strengthen penalties against employers who unlawfully employ foreign nationals. Importantly, the Bill is still before Parliament and does not ban the employment of foreign nationals who have lawful work authorisation

The Responsible Response: Audit, Do Not Panic

The responsible response is not panic, mass dismissals or xenophobia. It is a calm audit of every employment relationship. Farmers and processors should check documents, update contracts, verify wages, regularise UIF and COIDA records, and seek legal advice where a worker's status is unclear. Workers should be treated with dignity throughout the process.

The new reality is simple: agriculture may still need migrant labour, but it can no longer afford informal labour. The sector's strongest defence is not politics. It is proof: lawful documents, fair wages, proper records and ethical employment practices.

Written By (M.0)

Farm Gate Compliance Checklist

Before the next labour inspection, producers and agri-processors should review:

- ***Copies of South African IDs, passports, visas, permits, refugee or asylum documents.***
- ***Expiry dates on all documents linked to foreign employees.***
- ***Written employment contracts for permanent, seasonal and casual workers.***
- ***Wage records showing compliance with the national minimum wage.***
- ***UIF and COIDA registration where applicable.***
- ***Labour-broker agreements and proof that supplied workers are legally employed.***
- ***Transport-provider compliance where drivers move produce, livestock, inputs or exports.***
- ***A documented process for checking new workers before they start work.***

South Africa's Angora Industry in 2026

Quality, Genetics and Biosecurity Shape the Future of Mohair

A Karoo fibre story is entering a new phase — one where record prices, active stud sales, emerging farmers and FMD pressure all form part of the same national picture.

South Africa's Angora goat industry has always been more than a livestock story. It is a Karoo story. A fibre story. A story of farmers turning dry country, selective breeding and careful clip preparation into one of the world's most recognisable natural luxury fibres.

In 2026, that story is still alive, but it is also changing.

The modern Angora farmer is no longer judged only by the number of goats on the farm or the total weight of mohair sent to market. The industry is moving deeper into an era where quality, genetics, certification, traceability, animal health, biosecurity and market confidence all matter. The best clips are attracting strong prices. Stud sales show continued investment in breeding animals. New entrants are being supported into the sector. At the same time, foot-and-mouth disease has reminded all cloven-hoofed livestock producers that animal movement and biosecurity can no longer be treated as background issues.

Born from chance, raised by the Karoo

The South African mohair story began in 1838, when Angora goats were introduced from Turkey. The often-told founding story has almost mythical timing: a small group of animals was sent to South Africa, and although the rams were believed to be infertile, one ewe was already pregnant. That single ram kid helped establish the foundation of the local Angora breeding base.


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From there, the breed found its South African home in the Karoo, especially in the Eastern Cape. The region's hot summers, cold winters, open veld and semi-arid conditions suited the animal. Over time, Angora farming became tied to the identity of towns and districts such as Willowmore, Jansenville, Graaff-Reinet, Aberdeen, Somerset East, Prince Albert and Beaufort West.

The goat itself became the beginning of a much larger value chain. Mohair, the fleece clipped from Angora goats, is prized for its lustre, strength, durability, colour reflection and soft handle. It is used in luxury knitwear, yarns, woven textiles, blankets, upholstery, fashion, interiors and other high-end products.

The industry's progress was not accidental. South African producers refined their flocks through selection, practical experience and hard-won knowledge of veld conditions. Better breeding, better shearing, improved classing and more disciplined marketing helped the country build a strong

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reputation in the global mohair trade.

The 2026 market: strong, but selective

The current market picture is encouraging, but it requires careful reading. South Africa's mohair sector is not in a simple across-the-board boom. It is in a quality-driven phase where the best-prepared, finer and certified clips are being rewarded most clearly.

House of Fibre's 12 May 2026 mohair market report offers one of the clearest snapshots of this environment.

The report listed the average RMS market indicator at R468.28/kg, the average RMS indicator with outsorts at R413.80/kg, kids at R679.63/kg, young goats at R385.70/kg, adults at R311.08/kg, and the overall average at R413.29/kg.

The same report recorded a new world-record price of R1,330/kg, achieved by Jordi Van Hasselt and Michau Nortje. That figure deserves attention. It shows that exceptional mohair can still draw fierce buyer competition. But it also tells a more specific story: the market is paying for excellence, not merely for volume.

[Photo suggestion: Close-up of clean, well-classed kid mohair in a bale or on a sorting table. Placement: Near the market section, ideally as a detail image with a caption about quality premiums.]

Mohair South Africa's recent 2026 auction reports confirm the same direction. On 21 April 2026, 161,907 kg of mohair was offered, with 95% sold and 86% of the offering RMS-certified. The average market indicator closed at R395.76/kg, down 2% in rand terms but up 2% in dollar terms. The highest price was R1,261/kg for a 24-micron super-style kid mohair bale.

On 31 March 2026, Mohair South Africa reported 156,849 kg on offer, 96% sold and 84% RMS-certified. Buyer competition was good, especially for finer segments, although the average market indicator eased by 1% to R403.86/kg.

The message is clear. Demand exists, but it is discerning. Currency movements still influence the market. Fibre type still matters. Certification matters. Preparation matters. The modern mohair market rewards farmers who manage the whole production chain carefully, from genetics and nutrition to shearing, classing and certification.

Studs are still investing in tomorrow

A healthy fibre industry also needs a lively breeding base. On this front, early 2026 offered encouraging signs. Angora studs and commercial farmers were not only trading mohair; they were investing in breeding animals and replacement stock.

BKB's events platform listed the Karoo Angoras 2026 production auction for 3 February 2026 at Baakensrug, Nelspoort, Beaufort West. The offering included 60 Angora rams, 60 Angora rams on silent auction, 450 2T ewes, 450 4T-FM ewes, 150 kid ewes, 100 kid kapaters and 150 2T kapaters.

That scale points to an active replacement-stock market. It also shows that producers are still looking for the genetics needed to improve fibre quality, flock structure, reproductive performance, hardiness and future profitability.

House of Fibre also reported several Angora ram and production sales in early 2026. The Van Hasselt & Guest Seller Angora Veld Ram Sale on 15 January achieved 100% sales, with the highest selling ram going for R80,000.

The Elite Angora Veld Ram Sale on 22 January reported a highest ram price of R40,000 and a top pen of ewes at R7,250 per ewe. The Heritage Angoras Veld Ram Sale on 28 January also reported a highest ram price of R40,000.

This activity continued into February. The Grootrivier Angora Production Sale on 18 February reported a top lot of R32,000, sold to Colborne Angora Stud from Willowmore.

The Vleikuil Boerdery Angora Veld Ram & Production Auction on 24 February reported a highest-priced lot of R19,000 at the BKB Humansdorp-hosted sale.

These are more than auction results. They are signals of confidence. In a market where quality premiums are becoming sharper, genetics are part of the answer. Farmers who

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want better clips tomorrow must make breeding decisions today.

New farmers, old barriers

The future of South Africa's Angora industry cannot depend only on established studs and long-standing commercial producers. New entrants and small-scale farmers are essential if the industry wants to grow, transform and remain socially relevant.

There is already a small but important emerging-farmer pipeline. The Mohair Empowerment Trust, working with industry partners, has focused on establishing emerging farmers in financially viable Angora goat farming operations and developing broader participation in the mohair value chain.

The opportunity is real. Many small-scale mohair producers already have access to formal markets through brokers. This means the challenge is not simply finding someone to buy the clip. The bigger challenge is building a farming system that can produce quality mohair consistently, survive risk and reinvest in improvement.

Small-scale Angora farmers need suitable land, secure fencing, water infrastructure, shearing facilities, classing knowledge, animal health support, transport, working capital and access to good breeding animals. They also face losses from stock theft, predation and disease. For a small flock, losing animals is not a minor setback. It can delay commercial progress for years.

Cash flow is another issue. Even where farmers sell through brokers, delayed payments can affect their ability to buy feed, repair infrastructure, treat animals or improve the flock. A good mohair price is only useful if the farm remains strong enough to keep producing.

This is why new entrants need more than animals. They need mentorship, practical training, production guidance, record-keeping support, disease control, financial planning and market information. The pathway from smallholder to sustainable commercial Angora farmer is possible, but it is not automatic.

If South Africa can support these producers properly, transformation in the mohair sector can become more than a policy ambition. It can become a production advantage

Mohair is made long before it reaches the bale

The value of mohair is unlocked long before the final bale reaches the auction floor. It starts in breeding choices, nutrition, veld management and animal health. It continues through shearing, sorting, classing and preparation.

Kid mohair is usually the finest and most valuable. Young goat and adult mohair serve different product categories depending on micron, length, style, strength and preparation. This gives the industry a broad product spread, from fine fashion and luxury knitwear to blankets, upholstery and interior textiles.

The premium end of the market demands consistency. Buyers want fibre that performs. Brands want traceability. Consumers increasingly want assurance that natural fibres were produced responsibly.

This is where the Responsible Mohair Standard has become central. RMS certification gives

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buyers confidence around animal welfare, land management and chain of custody. In recent 2026 auction reports, the high percentage of RMS-certified mohair shows how deeply certification has moved into the mainstream of the South African industry.

For farmers, this raises the bar. But it also protects the industry's global reputation.

FMD: the risk that cannot be ignored

Foot-and-mouth disease is not an Angora-specific disease, but it is highly relevant to Angora farmers. Angora goats are not FMD-proof. They are cloven-hoofed livestock, and goats are susceptible.

The danger is that FMD signs in sheep and goats can be mild or difficult to notice. That makes small-stock surveillance and biosecurity more complicated. A goat flock may not show the dramatic signs producers often associate with cattle, but that does not remove the risk.

For the Angora industry, FMD is both a biological and commercial threat. It can affect movement, production sales, ram auctions, replacement-ewe purchases, flock expansion and regional confidence. When infected properties are placed under movement restrictions, live cloven-hoofed animals and unprocessed products can be restricted from leaving the farm. That kind of disruption matters in a fibre industry where timing, logistics and market access are critical.

The practical message is simple. Farmers buying rams, bringing in ewes, attending auctions or moving animals between farms need strong biosecurity habits. New animals should be isolated. Records should be kept. Visitors and vehicles should be controlled. Movements should follow official veterinary requirements.

In 2026, biosecurity is part of business resilience.

The road ahead: protect the premium

South Africa's Angora industry has a strong foundation. It has history, climate fit, experienced producers, recognised studs, an established auction system, brokers, processors, certification structures and global market recognition.

But the road ahead will not be won by tradition alone.

The next phase of Angora farming will be shaped by the ability to protect quality and prove responsibility. That means better genetics, stronger flock health, careful veld management, improved clip preparation, RMS certification, traceability, smallholder support and tighter biosecurity.

There are pressure points: stock theft, predation, drought risk, FMD, rising input costs, transport, export logistics and cash-flow constraints. These challenges are especially heavy for new entrants and small-scale producers. Yet the opportunity remains considerable.

The 2026 picture is not one of decline. It is a picture of selectivity. The industry is rewarding farmers who produce better, not merely more. It is rewarding genetics, preparation and responsibility.

Angora farming in South Africa is no longer just a story about goats on the Karoo veld.

It is a story about luxury fibre, market trust, breeding decisions, farmer resilience and the discipline required to keep South African mohair among the world's most respected natural fibres.

The future will belong to producers who can combine the old strengths of the Karoo with the new demands of the global market.

Written By: (M.O)

Goat Farming in South Africa:

Turning Veld Potential into Market Profit

As South Africa moves toward spring, goat farmers are entering a season filled with opportunity — but also pressure. Demand for goat meat, skins and genetics is real, both locally and abroad. The challenge is no longer whether goats have value. The challenge is whether South Africa can organise production, health control, traceability and marketing well enough to unlock that value.

South Africa's goat industry has always carried more potential than its formal market figures suggest. Across communal areas, commercial farms, stud operations and smallholder enterprises, goats play a vital role in food security, cultural markets, rural income and genetic exports.

Yet the industry remains largely underdeveloped when compared with beef, sheep, poultry and pork.

This is beginning to change. Fresh interest in goat meat exports, particularly to the Middle East and Southeast Asia, has placed new focus on chevon (the culinary term used to describe goat meat), breeding stock, goat skins and structured production systems. Recent discussions around a possible R1.2 billion goat meat export plan have highlighted what many producers already know: South Africa has the animals, the genetics and the demand. What it still needs is a stronger production line from farm to market.

"The opportunity is not simply to produce more goats. It is to produce the right goats, at the right weight, with the right health status, for the right market."

A Sector Rooted in Communal Farming

A large share of South Africa's goats is found in communal and smallholder systems, especially in provinces such as the Eastern Cape, Limpopo and KwaZulu-Natal. These farmers are not on the edge of the goat industry. They are at the centre of it.

For many rural households, goats are a living bank account. They can be sold when cash is needed, slaughtered for family or cultural events, or used to build herd wealth over time. Goats are also well suited to tough environments because they browse shrubs, bushes and mixed veld that larger livestock may not use as efficiently.

But this strength also creates one of the industry's biggest challenges. Much of the trade happens informally. Animals move through private sales, cultural markets, local traders and auctions. These channels are important, but they do not always provide the traceability, health records, grading or consistent supply needed for formal retail or export markets.

"Communal farmers already hold much of the national goat base. The next step is not exclusion, but connection."

Meat, Skins and Genetics

South Africa's goat farming value is not limited to meat. Boer goats, Kalahari Reds, Savannas and indigenous goats all contribute to different parts of the industry.

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The Boer goat remains South Africa's flagship meat breed and is internationally recognised for hardiness, fertility, adaptability and carcass quality. Kalahari Reds and Savannas also offer strong commercial value, especially in hot and dry areas. Indigenous goats remain vital in communal systems, where resilience, survival and cultural value often matter as much as carcass traits.

Goat meat itself has an important market advantage. It is lean, high in protein, and widely accepted across many cultural and religious markets. In South Africa, live goats are already in strong demand for traditional ceremonies and family use. Internationally, chevon is a familiar meat in many parts of Africa, the Middle East and Asia.

Skins also deserve attention. Goat skins can be used in leather products, including footwear and specialised leather goods. However, this part of the value chain needs better handling, preservation, slaughter systems and market access if farmers are to benefit properly.

Spring: A Critical Management Window

The July/August period is an important planning time because spring is approaching. For goat farmers, spring is not only about better veld. It is about preparing for breeding, kidding, nutrition, parasite control and market timing.

Farmers who want stronger profits must focus on the basics before the season turns. Rams should be checked for fertility and condition. Does must be assessed before breeding or late pregnancy. Kids need better protection after birth. Weak animals should be culled rather than carried through another cycle. Parasite control should be managed carefully, especially where warm and wet conditions increase risk.

Good genetics are valuable, but they cannot compensate for poor management. A superior ram cannot fix weak nutrition, uncontrolled breeding, high kid losses or disease problems. Profit is built through survival, growth, fertility and consistent market readiness.

"A farmer does not only make money by getting a better price. A farmer also makes money by losing fewer kids."

The Foot and Mouth Desease Reality

Foot-and-mouth disease remains one of the biggest constraints on South Africa's red meat and livestock export ambitions. Although FMD is often discussed mainly in relation to cattle, goats are also cloven-hoofed animals and form part of the wider disease-control picture.

The impact is practical. Animal movement, live exports, slaughter supply, quarantine, veterinary certification and buyer confidence are all affected by the national animal health situation.

For goat farmers, this means that health records, movement permits, biosecurity and traceability can no longer be treated as "commercial farm issues" only. They are becoming essential for anyone who wants to participate in formal markets.

FMD does not remove the opportunity. It raises the standard required to access it.

What Must Change

To unlock the full potential of goat

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farming in South Africa, the industry needs better coordination. This includes producer groups, regional collection points, farmer training, veterinary support, abattoir access, skin handling, cold chain development and practical traceability systems.

One of the strongest models may be a linked system. Communal and extensive farmers can breed and supply animals. Regional finishing units can bring goats to consistent weight and condition. Processors can handle slaughter, cold chain and packaging. Exporters can manage buyer requirements and health protocols.

This kind of structure would allow more farmers to participate without expecting every smallholder to become a full-scale commercial exporter.

> *"The future goat industry will not be built by one farmer or one breed. It will be built by connecting the full chain."*

From Potential to Profit

Goat farming in South Africa has reached an important moment. Demand exists. Genetics exist. Communal herds exist. Export interest exists. The question is whether the industry can become organised enough to keep the production line filled and profitable.

If South Africa can improve traceability, health control, breeding, kid survival, finishing systems, formal slaughter and market access, goat farming can become far more than a traditional rural activity. It can become a stronger contributor to rural income, food security, exports and value-added agriculture.

As spring approaches, the message is clear: the potential is already in the veld and in the kraal. The work now is to organise it.

Written by (M.O)

What South Africa's Goat Industry Needs Next

1. Farmer organisation
Communal and smallholder farmers need stronger access to producer groups, auctions, buyers and technical support.

2. Better traceability
Formal markets require proof of origin, animal movement records, health checks and disease-control compliance.

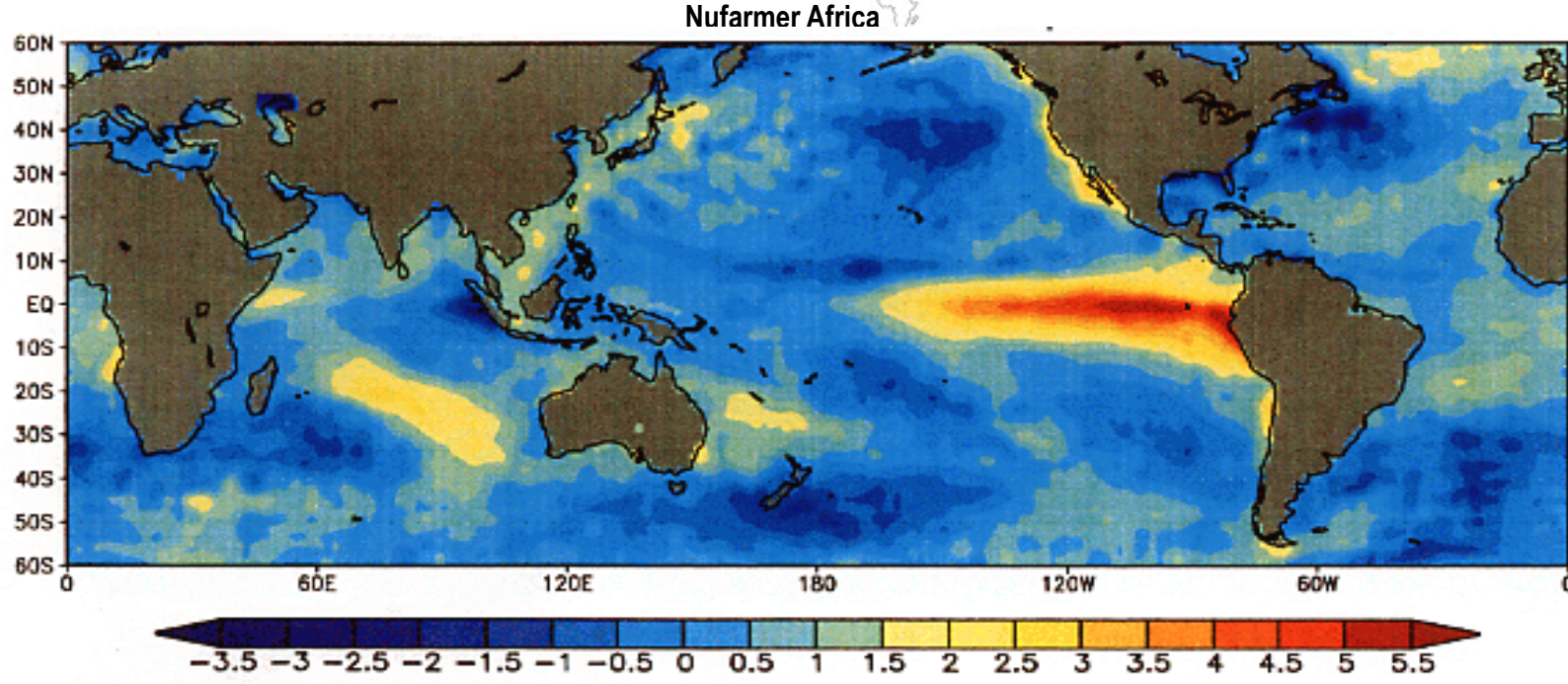
3. Regional finishing systems
Not every farmer needs to finish goats alone. Shared finishing units can help standardise weight and quality.

4. Stronger kid survival
Protecting newborn kids, improving nutrition and managing breeding seasons can increase the number of saleable animals.

5. More formal processing
Goat-friendly abattoirs, cold chain systems and chevon branding are needed to grow retail and export markets.

6. Skin value recovery
Better slaughter, handling and preservation can turn goat skins into a stronger income stream.

7. FMD-aware marketing
Export plans must be built around animal health, quarantine, veterinary certification and buyer confidence.



El Niño 2026/27: South African Agriculture Facing a Water, Heat and Food-Price Stress Test

A developing El Niño could place South Africa's food system under pressure across rainfed crops, irrigated agriculture, livestock, poultry, dairy, fruit, vegetables and household food prices. The warning is not a call for panic, but it is a clear call for preparation.

South Africa's agricultural sector is moving into the 2026/27 production season with one eye on the sky and the other on the dam wall.

The developing El Niño signal is no longer a distant climate discussion. It has become a practical production risk. Forecasts from leading climate institutions point to a high probability that El Niño conditions will develop during 2026 and continue into the 2026/27 summer season. For South Africa, that timing matters. It overlaps with summer crop planting, grazing recovery, irrigation planning, feed demand, input purchasing and household food-price sensitivity.

This does not mean South Africa is guaranteed to face a catastrophic drought. Every El Niño is different. Regional rainfall patterns can vary, and local production outcomes depend on soil moisture, dam levels, farm management, planting decisions and the timing of rainfall during critical growth stages.

However, the probability is now high enough for the agricultural value chain to take a firm position: the 2026/27 season should be planned as a hotter, drier and more expensive risk season.

For *Nufarmer Africa's* readers, this is not only a weather story. It is a food-production story. It cuts across maize, sunflower, sorghum, soya, wheat, cotton, fruit, vegetables, livestock, milk, poultry and eggs. It also cuts across water policy, irrigation technology, input supply, transport, energy, trade and household affordability.

The country has been warned early enough to prepare. The question is whether farmers, agribusinesses, water managers, policymakers, financiers and buyers will act early enough.

From forecast to farm gate

The El Niño–Southern Oscillation, commonly known as ENSO, is one of the major global climate drivers. In an El Niño phase, sea-surface temperatures in the central and eastern equatorial Pacific become warmer than normal. This shift can alter atmospheric circulation patterns across the world.

In Southern Africa, El Niño is often associated with hotter and drier summer conditions, although the impact is never identical from one event to the next. That is why responsible reporting must avoid sensationalism. "Super El Niño" makes a good headline, but it is not a management plan.

The more useful message is this: South Africa has a materially elevated risk of experiencing above-normal summer temperatures and below-normal rainfall in key production regions during the 2026/27 season.

That risk is enough to affect decisions now.

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Ankole Cattle in South Africa
Ancient Genetics, Modern Value

A rare African cattle breed is finding its place in South Africa through heritage, strict registration, Agricultural Research Council (ARC)-supported recording systems and growing interest in hardy livestock genetics

With their sweeping horns, rich colours and royal East African heritage, Ankole cattle have become one of the most recognisable breeds in South Africa's specialist livestock sector. They are often admired first for their beauty, but the real story lies deeper: origin, genetics, adaptability, fertility, controlled breeding and the need to preserve a small but valuable gene pool.

"The Ankole's value is not only in its horns, but in the African genetics those horns represent."

Origin and arrival in South Africa

The Ankole breed traces its roots to East Africa, especially Uganda, where it has long been associated with wealth, culture and status. Often called "the cattle of kings", Ankole form part of Africa's long-horned cattle heritage and are valued for their ability to survive in challenging environments.

South Africa's modern Ankole population began through imported genetic material, mainly embryos, because direct livestock movement was restricted by animal-health controls. The breed was later evaluated under the Animal Improvement Act process and formally recognised in South Africa in 2019.

Registration, SA Stud Book and INTERGIS

A key development for the breed is that Ankole is now part of South Africa's formal livestock recording environment. The breed appears on SA Stud Book's breed list, while registered Ankole animals are recorded through the Ankole Cattle Breeders' Society's herd book and on INTERGIS, the Integrated Registration and Genetic Information System.

INTERGIS is hosted by the Agricultural Research Council and forms part of the national animal database. This is important because it gives breeders a structured system for recording pedigrees, ownership, birth notifications, transfers, inspections, reproduction data and other animal information.

For buyers, this matters greatly. In a high-value breed, visual appeal alone is not enough. A properly registered animal should be backed by traceable records, DNA information, inspection status and verified ancestry.

ARC's role in animal improvement

The Agricultural Research Council has played an important supporting role through South Africa's broader beef recording and animal improvement systems. ARC's work includes performance recording, genetic evaluation,

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conservation of animal genetic resources, climate-smart livestock research and the use of modern DNA technologies to improve production.

In the Ankole context, ARC-supported systems are especially important because the South African population is still small. ARC has specifically highlighted the risk of inbreeding in breeds with limited numbers, using Ankole as an example. The concern is not that the breed is unsuitable, but that small gene pools require disciplined breeding decisions.

This makes accurate records essential. Breeders need to understand relationships between animals, avoid careless mating decisions and use new approved genetics responsibly. Linebreeding may have a place in elite stud programmes, but it must be managed transparently and scientifically.

"For a small breed population, the stud book is not paperwork. It is the protection of the breed's future."

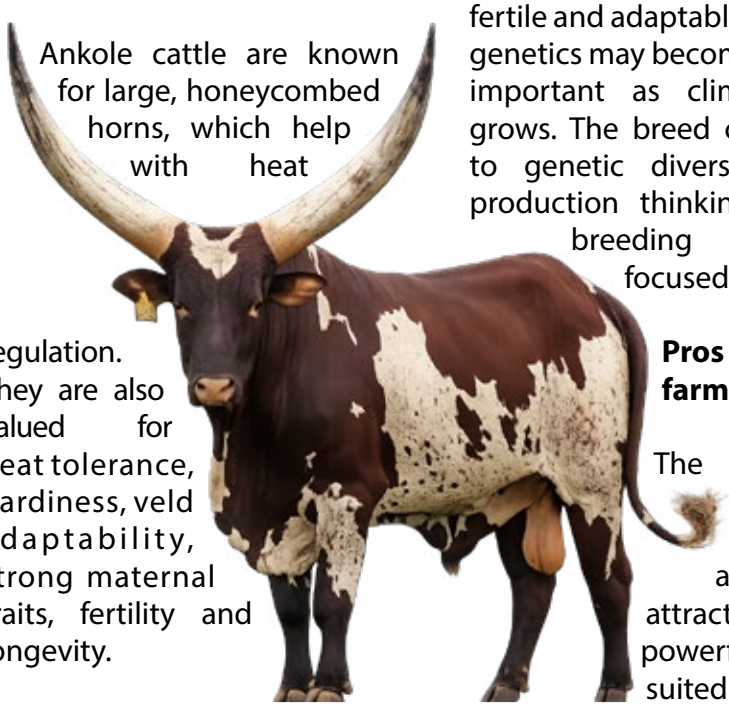
Genetics and numbers

South Africa has fewer than 2,000 registered Ankole cattle, with the number of registered breeders generally reported in the range of several dozen. This makes the breed rare compared with mainstream beef breeds.

Fullblood Ankole animals must be traceable to approved genetics. Purebred and upgrading categories are also managed under defined rules. DNA submission, calf identification, inspection before maturity and correct transfer records all form part of responsible breeding.

New genetic material from approved sources will be important for the future. Without genetic broadening, the breed could face unnecessary pressure from inbreeding. With responsible importation, embryo transfer and careful selection, however, South Africa can build a stronger, more diverse Ankole base.

Special traits



Ankole cattle are known for large, honeycombed horns, which help with heat regulation. They are also valued for heat tolerance, hardiness, veld adaptability, strong maternal traits, fertility and longevity.

They can perform in extensive systems and are often described as good grazers and browsers. Their moderate frame and efficient survival traits make them relevant in a country where producers are facing higher input costs, hotter conditions and pressure on natural grazing.

Ankole cows are particularly valued for parenting ability. Good mothering, ease of calving and long productive lives are major advantages in any cow-calf system. These traits are central to the breed's appeal beyond its visual identity.

Contribution to food security

Ankole cattle are not yet a mainstream beef-production breed in South Africa. Numbers are too low and animal values are still too high for the breed to play a major direct role in beef supply.

"The Ankole may not feed South Africa at scale today, but its genetics may help shape more resilient herds tomorrow."

Their contribution to food security is therefore more strategic. Hardy, fertile and adaptable African cattle genetics may become increasingly important as climate pressure grows. The breed can contribute to genetic diversity, low-input production thinking and future breeding strategies focused on resilience.

Pros and cons for farmers

The advantages are clear. Ankole cattle are hardy, attractive, culturally powerful and well suited to niche stud, tourism and genetic enterprises. Breeders may create value through live animal sales, semen, embryos and elite cow families.

The disadvantages are equally real. Entry costs are high. The market is specialised. Handling facilities must account for the horns. Buyers must be careful of animals that look like Ankole but do not have verified registration. The breed also requires a long-term approach because genetic quality takes time to build.

For commercial beef farmers, the breed should not be judged only against conventional feedlot metrics. At this stage, its strongest South African role is in stud breeding, genetic preservation and specialist low-input adaptation.

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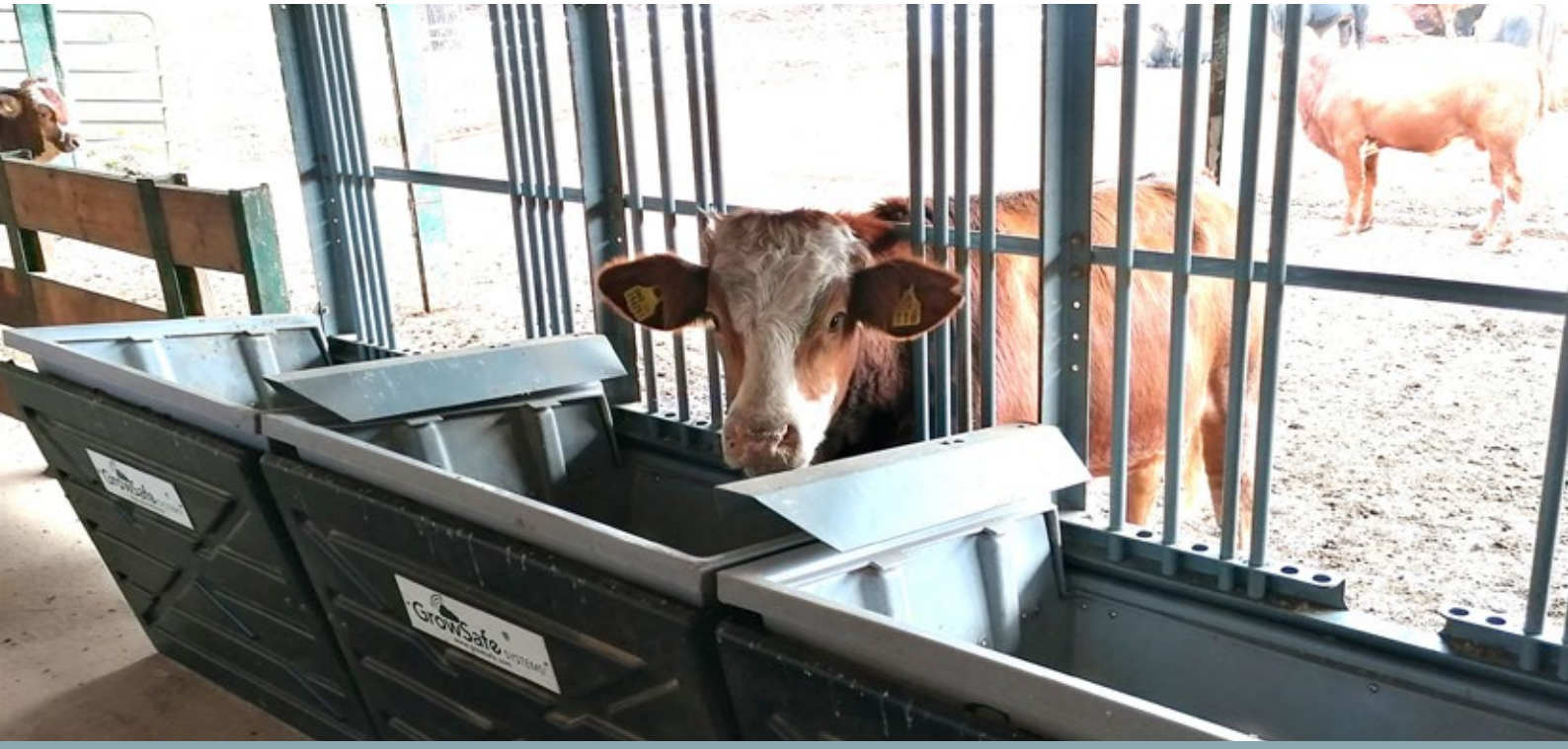

Feed Efficiency: The Hidden Profit Lever in Beef Production

In beef production, profitability is often measured in visible outcomes: calf weights, carcass performance, market prices and herd numbers. Yet one of the most powerful profit drivers sits quietly behind the scenes — how efficiently cattle convert feed into meat.

Feed efficiency is not a new concept, but it is becoming increasingly important as feed costs continue to place pressure on beef producers. In simple terms, feed efficiency describes the relationship between what an animal consumes and what it produces. The less feed required to achieve the same level of growth, the more efficient that animal is.

In beef production, the most profitable animal is not always the one that grows fastest, but the one that uses feed most efficiently."

For South African beef producers, this is no small matter. Feed is one of the largest costs in beef production, and up to 65% of the feed used on a beef farm goes towards maintaining mature cows. That means long-term herd profitability is not only shaped by how fast calves grow, but also by how much feed breeding females require throughout their productive lives.

Ideally, cows and heifers should be able to produce and reproduce successfully under extensive veld conditions. Once calves are weaned, however, they must also be able to adapt and perform in more intensive feedlot systems. This balance is especially relevant in South Africa, where more than 70% of beef is produced in feedlots.

The question is therefore not simply whether cattle can grow. The real question is whether they can grow efficiently.

Why Feed Conversion Ratio Is Not the Whole Story

For many years, feed efficiency has commonly been measured through the feed conversion ratio, or FCR. This measurement shows how much feed an animal requires to produce one kilogram of gain.

On the surface, it is a useful measure. A lower FCR means the animal requires less feed to produce the same amount of growth. In feedlot systems, even a small improvement can have major financial value. International examples show that moving from a feed conversion ratio of 6 to 5.9 can save a significant amount per calf in feedlot conditions.

The problem is that FCR is a ratio trait. Improvements in FCR can come from reduced feed intake, higher growth rate, or a combination of both. If breeders focus only on faster growth and lower FCR values, they may unintentionally select for larger-

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framed cattle.

These larger animals may perform well in a feedlot, but they can also require more feed for maintenance throughout their lives. In a cow herd, that becomes expensive. The result may be cattle that look efficient on paper during a growth test, but cost more to maintain over the long term.

This is why researchers and breeders have placed greater focus on Residual Feed Intake, better known as RFI.

Understanding Residual Feed Intake

Residual Feed Intake measures the difference between an animal's actual feed intake and the amount it is expected to consume for its body weight and growth rate.

In practical terms, RFI asks a sharper question: if two animals grow at nearly the same rate and have similar body weights, which one ate less feed to get there?

Expected feed intake is calculated using models that account for body weight and growth over a set testing period. The animal's actual intake is then compared with this expected intake. Animals that eat less than expected have a negative RFI and are considered more efficient. Animals that eat more than expected have a positive RFI and are less efficient.

A useful example comes from a 77-day growth trial discussed by Dr Gordon Carstens in the United States. Two steers had almost identical starting weights and average daily gains. At first glance, their performance looked much the same.

Performance comparison over 77 days

Indicator	Steer 1	Steer 2
Initial body weight	244 kg	243 kg
Average daily gain	0.96 kg	0.98 kg
Expected feed intake	681 kg	684 kg
Actual feed intake	779 kg	559 kg
RF	+1.27 kg/day	-1.62 kg/day

The difference only became clear once actual feed intake was measured. The first steer consumed about 98 kg more feed than expected over the trial period. The second consumed about 125 kg less than expected. Despite almost identical growth, the more efficient steer ate approximately 220 kg less feed during the test.

That is where RFI becomes so valuable. It identifies animals that maintain growth performance while consuming less feed.

"RFI allows breeders to select animals that eat less without automatically increasing the mature size of the cow herd."

Why RFI Matters in South African Beef Systems

In feedlot conditions, animals with negative RFI values can reduce feeding costs while still achieving acceptable growth.

Because they consume less feed for the same level of performance, they may also show a better feed conversion ratio.

However, South African feedlot systems also require animals to meet specific growth rates and carcass weight expectations. For this reason, RFI should not be used in isolation. Selecting only for low RFI may not always deliver the full production outcome required by commercial feedlots.

Traits such as residual growth rate should also be considered. A selection index that combines feed efficiency, growth and other economically important traits can help breeders make more balanced decisions.

The aim should not be to produce cattle that simply eat less. The goal is to produce cattle that eat efficiently, grow well, reproduce reliably and fit the production system

Benefits Beyond Feed Savings

The value of selecting for negative RFI extends beyond

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the feedlot. When breeders use bulls with favourable RFI values for replacement heifers, they can improve the efficiency of the cow herd without increasing mature cow size.

Studies suggest that this approach can reduce the maintenance requirements of the cow herd by as much as 9–10%. Over time, that can make a meaningful difference to production costs, especially in systems where mature cows account for such a large portion of total feed use.

Low-RFI animals also tend to digest feed more efficiently. This may be linked to differences in body composition and metabolic processes, including how energy is used and how proteins are broken down in the body.

Research has associated low-RFI animals with several additional benefits. These include a lower carbon footprint, reduced liver, stomach and intestinal weight, lower levels of internal fat and higher percentages of carcass protein.

These advantages matter in a beef industry that must produce efficiently while responding to growing pressure around sustainability, resource use and environmental impact.

Testing as an Investment in the Herd

Feed efficiency testing is ultimately about profitability. By identifying and selecting more efficient animals, producers can reduce input costs while maintaining or improving performance.

Performance testing also strengthens the beef industry as a whole. When breeders test their bulls and contribute data to national databases, they help build the information needed for ongoing research, genetic improvement and better decision-making.

ARC testing stations provide breeders with access to scientific performance data and advanced testing technologies. These facilities make it possible to measure traits that cannot be judged accurately by eye alone.

For producers, the cost of testing should be seen as an investment rather than an expense. The genetic benefits of improved feed efficiency can remain in a herd for generations. Over time, this can contribute to lower production costs, better profitability and a more sustainable red meat industry.

Bull testing is therefore not a luxury. It is a strategic tool for building cattle that are better suited to the economic realities of modern beef production.

As feed costs, environmental pressures and market demands continue to shape the industry, feed efficiency will become even more important. The future of profitable beef production will belong to animals that do not simply grow well, but grow well while using resources wisely.

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What Producers Should Know About RFI

RFI stands for Residual Feed Intake.

It compares what an animal actually eats with what it is expected to eat for its weight and growth rate.

Negative RFI is favourable.

A negative RFI animal eats less than expected while maintaining performance.

RFI is different from FCR.

FCR can favour fast-growing, larger-framed animals. RFI allows breeders to improve feed efficiency without automatically increasing mature cow size.

RFI should be part of a bigger selection plan.

Growth rate, carcass performance, reproduction and herd suitability must still be considered.

Testing is essential.

Without measured feed intake data, producers cannot accurately identify the most efficient animals.

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Herd reports generated from the National Database as a selection tool.

A true reflection of your beef herd performance on profit drivers.

ARC Performance tested - your quality assurance trademark

National Beef Recording and Improvement Scheme

Commercial beef producers can **increase** their **profitability** by:

- **Improvement on weaning,** year and eighteen months' weight
- **Bull selection** to support breeding goals from auction catalogues
- Identification of **best performing replacement heifers**
- Identification of **profitable cows**
- Identification of **non-efficient animals**

ADDITIONAL BENEFITS:

- **Data captured** on the National Database (INTERGIS) and compliance with Animal Improvement Act
- **Farmer's Days** with stakeholders
- **Data available for research** purposes and technology development
- **Central bull testing facilities** and technical staff for regional support
- **On-farm Phase D bull testing**
- **Accredited technicians** for **Real-time Ultrasound** Scanning for carcass traits
- **Services comply** with internationally accredited standards
- **Affordable fees** (subsidised by government)
- **Training courses** in beef herd management, BLUP, performance testing and the auction catalogue
- **Affordable on-farm consultation fee**

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Performance Testing

Can Improve Sustainable Beef Production in a Challenging Environment

South African beef producers are farming in an environment where resilience is no longer optional. The current outbreak of FMD is one more challenge in a production landscape already shaped by higher fuel and fertiliser prices, rising input costs, water pressure, animal health risks and a changing climate. While fuel and economic pressures may ease over time, climate change is a longer-term reality that beef producers will have to manage directly.

Performance testing turns observation into evidence — and evidence into better breeding decisions

For South Africa, where extensive production systems remain the norm for beef cattle production, these challenges are especially important.

Extensive systems depend heavily on natural grazing, seasonal rainfall, adapted animals and efficient herd management. When drought becomes more frequent, when grazing quality declines, or when heat stress affects fertility and growth, the sustainability of the entire beef enterprise can come under pressure.

This is where performance testing becomes a practical and powerful tool. It allows producers to move beyond visual judgement alone and identify cattle that can perform under real South African conditions.

Why Performance Testing Matters

Performance testing has been used for decades, especially in the stud industry, but it is just as relevant to commercial producers. At its core, performance testing helps farmers monitor whether their animals are still performing at an acceptable level for the commercial market. It also helps identify the most adapted animals for future breeding, ensuring that production levels can be maintained or improved where necessary.

In simple terms, performance testing is an objective method of measuring traits that have economic importance. Fertility and reproduction remain the most important traits in any beef herd, commonly measured through calving percentage and inter-calving period. Once the calf is born, growth traits become essential. These include birth weight, weaning weight, yearling weight and eighteen-month weight.

Feed efficiency is another important measurement, as it shows how well animals convert feed into body mass. Carcass traits such as back fat, rib-eye area and marbling are also important because they influence carcass quality and market value.

A healthy herd that copes with its environment is also a strong indicator of adaptation, including reduced heat stress and better resilience.

The goal is to identify animals that perform best under a farmer's own conditions and use them to breed the next generation. In business terms, it means investing in the animals that give the best return through growth, fertility, survival

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and efficiency

Why Climate Change Makes Performance Testing Essential

Farmers can no longer rely only on tradition, appearance or past experience. Traits that may once have been sufficient for survival may not be enough in a changing climate. Heat stress can reduce feed intake, fertility and growth. Drought can limit pasture availability and force animals to survive on poor-quality forage. Changing temperature and rainfall patterns may also create new animal health challenges.

In this context, adaptation traits become just as important as traditional production traits. Heat tolerance, feed efficiency on poorer forage, disease resilience and the ability to maintain condition during periods of scarcity are all critical to future herd performance.

Physical attributes such as frame type, hair cover and skin pigment remain extremely important for a specific environment. These characteristics can enhance the adaptability of a breed type under local conditions. However, visual appraisal alone cannot tell the whole story. Performance testing provides the objective information needed to identify animals that will not only look adapted, but actually perform under pressure

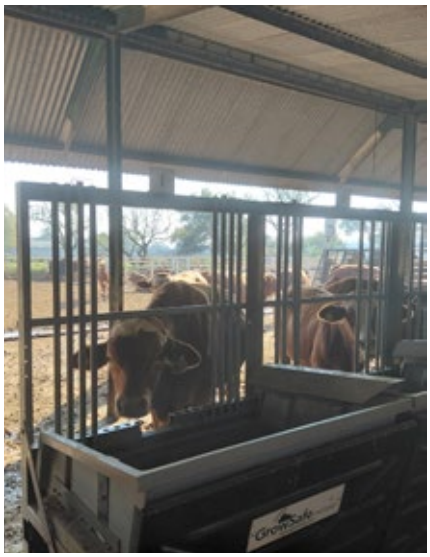
How Performance Testing Benefits Producers.

1. Data-Driven Breeding Decisions

Traditionally, many commercial farmers relied heavily on appearance or pedigree when selecting animals. While these still have value, they do not always reveal hidden inefficiencies. An animal may look strong but struggle in harsh conditions, while another may quietly outperform the herd year after year.

Performance testing provides objective, measurable information. A specific bull may produce calves that grow faster on limited feed. Certain cows may consistently wean heavier calves despite drought conditions. These are the animals that strengthen a herd over time.

By selecting the right animals, producers can ensure that future generations are more productive and resilient. This gives the herd a competitive advantage in a challenging production environment.



2. Improving Feed Efficiency and Reducing Costs

Feed is one of the largest cost drivers in beef production. Animals that convert feed into live weight efficiently are more profitable and more environmentally sustainable. In a time of rising input costs, this is not a small advantage — it can determine whether a herd remains viable.

Performance testing helps identify animals that gain weight with less feed, calves that reach market weight faster because of better growth rate, and cows that calve earlier in the calving season while maintaining condition on low-quality pasture. The frame size of the cow also plays an important role, as larger animals may have higher maintenance requirements.

Important information on an auction catalogue can also assist producers when buying a breeding bull from a stud auction. Correct interpretation of this information can help commercial farmers choose bulls that will improve feed efficiency and performance in their own herds.

The result is reduced feed costs, improved profit margins and less pressure on limited resources.

3. Enhancing Reproductive Success

Reproductive performance remains the foundation of profitable beef production. Drought, heat and disease can reduce fertility, delay calving or increase calf mortality. A cow that does not conceive, calve and wean a calf consistently is a direct cost to the enterprise.

Performance testing tracks conception rates, indicated through pregnancy diagnostics or calving percentage. Fertility can also be assessed through inter-calving period, while weaning success is re-

In a climate-challenged beef industry, the best animal is not simply the biggest — it is the one that performs, reproduces and survives efficiently·

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flected in weaning percentage.

This information allows producers to select adapted cows and bulls that maintain reproductive performance under stress. In doing so, farmers safeguard herd growth, cash flow and long-term sustainability.

4. Improving Carcass Quality

Markets are changing, and premium prices are increasingly linked to measurable carcass

traits. These include rump and rib fat thickness, rib-eye area and marbling.

The Agricultural Research Council renders ultrasound scanning services to predict carcass quality on live animals, especially young bulls tested at centralised testing centres and on-farm. This allows producers to identify superior animals for breeding stock without waiting until slaughter. Technicians are accredited every four years to ensure accuracy and repeatability.

For producers, this creates an opportunity to breed cattle that not only survive and reproduce well, but also deliver carcass quality that meets market expectations.

Performance Testing in Practice

Performance testing does not have to be complicated. The most important factor is consistency. Even simple measurements, taken accurately over time, can provide valuable insights for herd improvement.

Practical approaches include recording the birth date of every newborn calf and linking each calf to its mother.

Weighing calves at birth and weaning provides a simple but effective basis for growth comparisons. Yearling and eighteen-month weights help identify the fastest-growing animals during the post-weaning phase.

Feed trials or feed intake measurements monitor efficiency under controlled conditions, while ultrasound scanning measures carcass traits in live animals. Health and adaptation scoring can also be used to monitor tick burden, heat tolerance and disease resilience.

Record-keeping systems such as the Integrated Recording and Genetic Information System, or INTERGIS, managed by the ARC, provide a platform to capture data and generate information that farmers can use to interpret reports and make better selection decisions.

The future beef herd will be built by farmers who measure, record, select and adapt.

Fertility, feed efficiency and carcass quality are not separate goals — together they determine the real profitability of the herd.

Selection for Adaptation Can Lead to Higher Profits

In a climate-challenged Southern Africa, performance testing is not just about growth. Adaptation traits are crucial. Animals that are heat tolerant are better able to maintain appetite, fertility and growth under high temperatures. Cows and calves that survive and maintain condition during feed scarcity are valuable breeding animals. Reduced susceptibility to ticks, tick-borne diseases and other endemic conditions also supports profitability.

By tracking adaptation traits alongside traditional performance measures, producers can select cattle that will thrive in future conditions, not only in today's climate.

The economic benefits of performance testing can accumulate significantly over time. Higher growth rates mean cattle can reach market weight faster. Better feed efficiency means lower costs. Improved fertility means more calves from the same number of cows. Superior carcass traits can result in better pricing for the producer.

The research document also notes that feed efficiency measurements have allowed producers to optimise rations, lowering feed costs by 10–15%. Ultrasound scanning programmes have produced bulls with superior rib-eye area and back fat, attracting premium buyers.

Performance testing also supports sustainable production. Efficient animals use feed and water more

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effectively. Resilient herds can reduce mortality and veterinary interventions. Climate-adapted cattle can help produce beef with lower greenhouse gas emissions per unit of production.

Opportunities for Farmers

The ARC provides important support to producers through services, short courses in beef cattle management and farmer days that create opportunities for interaction between farmers from different sectors. Mobile apps and digital tools can also simplify data collection and analysis, while collaboration between producers and national databases allows for benchmarking and faster genetic improvement.

Farmers who embrace performance testing position themselves to remain competitive and adaptable in a changing production and market environment.

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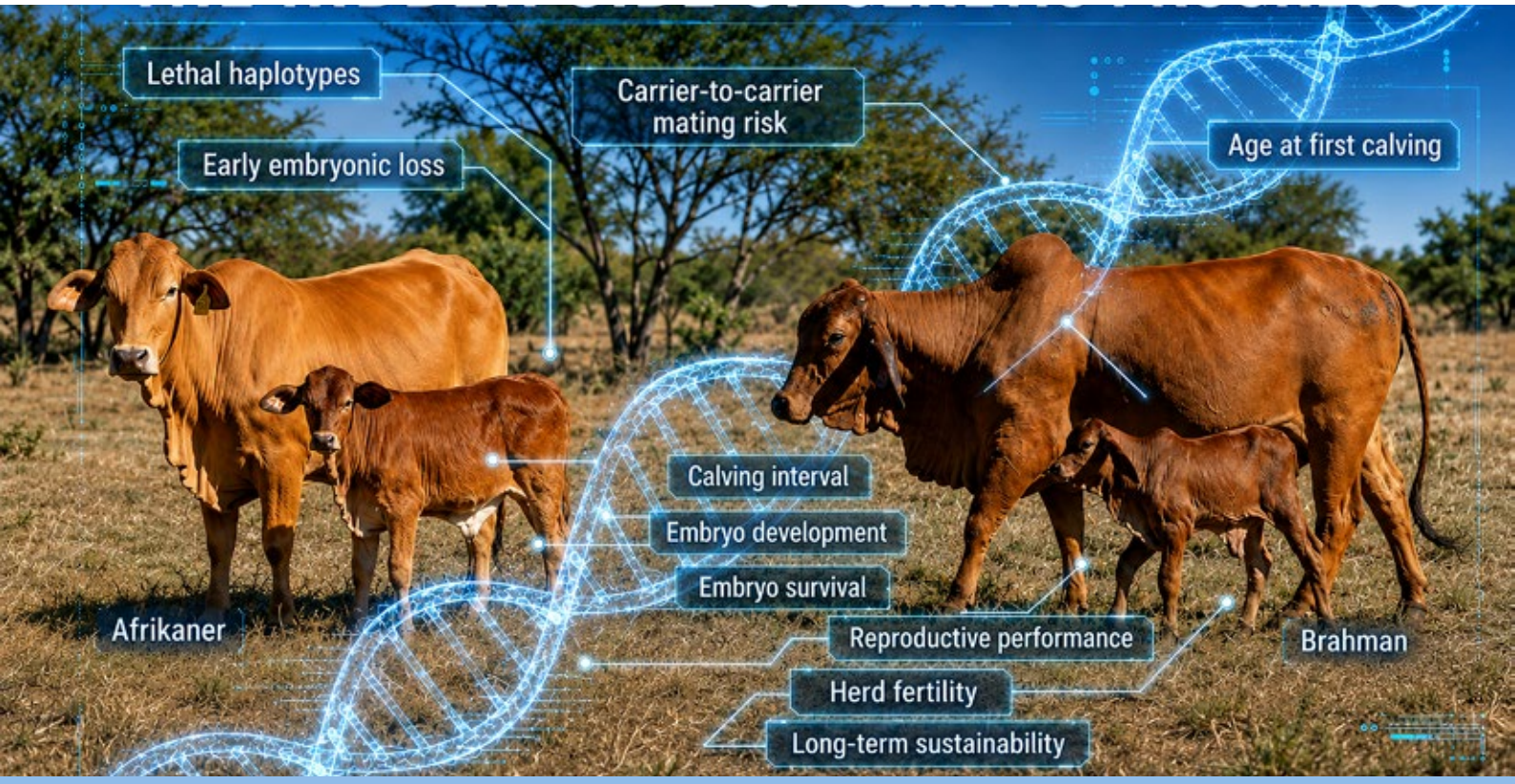
Practical Tips to Improve Performance Data Quality

1. ***Start with the basics:*** Register as a commercial producer on the ARC's national database, INTERGIS, and register the complete herd.
2. ***Record every calf:*** Birth notifications are important because they keep cow records updated and link calves correctly to their mothers.
3. ***Weigh consistently:*** Begin by weighing calves at birth and weaning. Measure at the same time and under similar conditions.
4. ***Submit data:*** Send records to INTERGIS so that raw data can be processed into useful information.
5. ***Train staff:*** Accuracy matters. Everyone involved in weighing, recording and handling data must understand the correct protocols.
6. ***Use technology where possible:*** Mobile apps, electronic scales and ultrasound scanning can improve data quality.
7. ***Include adaptation traits:*** Track fertility, survival, heat tolerance, drought resilience and health status.

Measure, Select, Adapt and Thrive

- *Climate change is real, and South Africa's beef industry cannot rely on past practices alone. Performance testing equips producers with objective data to make better breeding, feeding and management decisions.*
- *By measuring growth, feed efficiency, reproduction, carcass traits and adaptation, farmers can build herds that perform under heat and drought, improve profitability, reduce input costs and strengthen long-term sustainability.*
- *Performance testing is a powerful tool for survival, resilience and profitability. For the South African beef producer, the message is clear: measure, select, adapt and thrive.*



The Hidden Cost of Genetic Progress

See what genomics is revealing about fertility in beef cattle

Genetic progress is one of the great success stories of modern beef production. It has helped farmers breed cattle that grow better, adapt better and remain productive in tough environments. But as genomic technology becomes more advanced, it is also revealing a quieter truth: some of the most costly fertility losses in a herd may be hidden in the DNA long before they are visible in the calving camp.

That is the central message of research submitted by the ***ARC-Animal Production, Elsenburg, Stellenbosch.*** Their work, titled The Hidden Cost of Genetic Progress: See what genomics is revealing about fertility in beef cattle, focuses on South African beef breeds such as the Afrikaner and Brahman, both highly valued for their adaptability, resilience and contribution to sustainable beef production under harsh environmental conditions.

For farmers, these breeds are not just genetic resources on paper. They are practical cattle for real South African conditions: heat, veld pressure, variable rainfall, parasites, feed shortages and long breeding seasons. Yet, despite their importance, reproductive performance remains a major challenge in cattle breeding because reproductive traits are influenced by many genetic and environmental factors and are often slow to improve through traditional selection methods.

The fertility loss farmers cannot see

In addition to the reproductive problems farmers can observe, there are also hidden harmful genetic variants, known as lethal haplotypes, that can reduce herd fertility by causing early embryonic loss or calf mortality that goes undetected by breeders.

A carrier animal may look completely normal. It may grow well, breed well and show no outward sign of a defect.

The risk appears when two carriers of the same harmful genetic region are mated. If the embryo inherits two copies, one from each parent, it may not survive.

On a farm, this may show up as reduced calving rates, longer inter-calving periods and lower overall herd productivity. The farmer may blame nutrition, bull fertility, disease, heat stress or management — and those factors may indeed play a role — but genomics is now showing that some losses may also have a hidden inherited cause

"The most expensive calf in a beef herd may be the one that was conceived, lost early, and never counted."

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Genomics brings the hidden risk into view

Genomic technologies make it possible to identify harmful genetic regions by examining DNA markers and patterns of inheritance across an animal's genome. Once breeders know which animals carry lethal haplotypes, they can make better mating decisions and avoid carrier-to-carrier matings.

This does not mean every carrier animal must be culled. In many cases, a carrier may still carry valuable genetics. The practical aim is to manage the mating plan so that two carriers of the same harmful haplotype are not paired.

The ARC study aimed to identify potential genetic defects, or lethal haplotypes, in Afrikaner and Brahman cattle, determine genes associated with these regions, and assess their impact on fertility traits such as age at first calving and calving interval.

The findings provide valuable insights into the genetics of reproduction and can support breeding strategies aimed at improving fertility, productivity and long-term sustainability in beef herds.

What the ARC data shows

The research team generated genomic data for 456 Afrikaner and 399 Brahman cattle. Corresponding pedigree and performance data were obtained from INTERGIS. The pedigree records included 226 172 animals for the Afrikaner and 886 277 animals for the Brahman.

The Brahman dataset contained 91 287 reproduction records and 256 565 production records. The Afrikaner dataset contained 12 825 reproduction records and 104 581 production records.

Researchers identified one lethal haplotype in the Afrikaner breed and four in the Brahman breed. In the Afrikaner, the haplotype occurred on chromosome 4. In the Brahman, haplotypes were identified on chromosomes 10, 17, 21 and 26.

"When expected calves are missing from the genetic record, genomics starts telling the story the calving book cannot."

For each of the identified haplotypes, approximately five calves carrying two copies of the haplotype were expected in the population, yet none were found. This absence is important. It suggests that embryos inheriting the harmful genetic variant from both parents likely died during pregnancy before birth.

Because these losses can occur very early, farmers may not realise they are happening. Instead, they may simply observe lower conception rates or fewer calves born.

Longer calving intervals mean real money

The identified haplotypes were not only associated with reproductive performance, but were also located near genes known to play important roles in embryo development and survival.

In the Afrikaner breed, the detected haplotype overlapped the BRAF gene, which has been associated with embryonic lethality in mouse studies. In the Brahman breed, several candidate genes were associated with embryonic lethality, abnormal sperm function, reduced embryo size and poor early development.

These findings suggest that the identified haplotypes may contribute to hidden reproductive losses through early embryonic death, even though carrier animals appear healthy and show no obvious signs of a problem.

Importantly, some of these haplotypes were also associated with measurable differences in fertility. In Afrikaners, carriers of the chromosome 4 haplotype had a longer calving interval, averaging 473 days compared with 421 days in non-carriers. In Brahmans, carriers of certain haplotypes had calving intervals of 456 to 470 days, compared with 391 to 414 days in non-carriers.

Calving interval is one of the clearest measures of reproductive efficiency.

"Every extra day open is feed, time and profit lost before the next calf is even on the ground."

A cow that takes longer to produce her next calf gives the farmer fewer calves over her lifetime.

In a commercial herd, this directly affects income, replacement planning and herd productivity.

The breeding warning: progress must be balanced

One of the most important

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messages from the ARC work is that genetic selection can carry unintended consequences if it is too narrow. One of the Brahman haplotypes was located near the SORCS3 gene, a region previously linked to favourable production traits such as body weight and milk fat yield.

This highlights a major challenge for cattle breeding: selection for desirable production traits may unintentionally increase the frequency of harmful recessive alleles if genetic screening is not considered.

The answer is not to slow genetic progress. The answer is to make it smarter.

Whole-genome sequencing in South African Afrikaner and Bonsmara cattle has confirmed the importance of locally adapted breeds as reservoirs of genetic diversity. International work on livestock genetic variation also stresses the need to combine demographic, pedigree and genomic data when making breeding decisions. Studies on fetal loss and fertility haplotypes in cattle further show that reproductive failure can have a genetic basis that is not always visible through conventional observation.

For South African farmers, the message is practical. Genomics does not replace visual appraisal, stockmanship, veld management, nutrition, disease control or sound bull selection. It adds another layer of protection. It helps identify risks that cannot be seen in the crush or at the auction ring.

The future of beef breeding will not be built on production figures alone. It will belong to herds where fertility, adaptation, genetic diversity and performance move forward together. The hidden side of genetic progress is no longer completely hidden. Genomics is giving breeders the opportunity to protect the calf crop before the loss ever appears on the farm balance sheet.

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ARC • LNR

THE HIDDEN GENETICS FARMERS CANNOT SEE

- **The ARC study found warning signs in both Afrikaner and Brahman cattle linked to what scientists call lethal haplotypes**. In farming language, this is a section of DNA that may not harm an animal carrying only one copy, but can cause serious problems if a calf inherits the same harmful section from both parents.
- **This is why the term homozygous calf matters. It means the calf receives two copies of the same genetic section — one from the sire and one from the dam.** In this study, researchers expected to find calves with two copies of these haplotypes, but none were observed. This suggests that some embryos may not have survived long enough to be born.
- **In Afrikaner cattle, one risk area was identified on chromosome 4. About 5.16 homozygous calves were expected, but 0 were observed**. In Brahman cattle, four risk areas were found on chromosomes 10, 17, 21 and 26. In each case, about five homozygous calves were expected, but again 0 were observed.
- **For farmers, the concern is that this loss can happen very early in pregnancy.** There may be no dead calf, no visible abortion and no obvious warning sign. The cow may simply return to service, calve later than expected, or produce fewer calves over her lifetime.
- **The ARC study also compared carrier animals with non-carriers. A carrier has one copy of the haplotype and may look completely healthy**. In Afrikaner cattle, carriers had an average calving interval of 473 days, compared with 421 days in non-carriers. In Brahman cattle, some carrier groups recorded calving intervals of 456 to 470 days, compared with 391 to 414 days in non-carriers.
- **Age at first calving also varied. Afrikaner carriers averaged 33.7 months, compared with 35.5 months for non-carriers.** In Brahmans, carriers ranged from 34.55 to 37.49 months, while non-carriers ranged from 34.76 to 36.71 months.
- **The message is simple: a carrier animal can look normal and still carry valuable genetics**. The danger comes when it is mated to another carrier of the same harmful haplotype. Genomic screening helps breeders avoid risky matings, protect fertility and keep genetic progress from quietly costing the farmer calves.

FMD Fight Moves Into a Political Phase

Vaccines, Section 10, court action and Cabinet pressure reshape South Africa's response

South Africa's fight against foot-and-mouth disease has shifted from a vaccine-supply emergency to a test of rollout, traceability and leadership. Earlier in 2026, the central question was whether enough vaccine could be sourced. By June, the question had changed: can doses reach animals quickly, be properly administered, and be recorded in a system farmers and markets can trust?

By late May, FMD had been reported in all provinces. Parliament noted that outbreaks had increased from 932 in March to 2 034 by 22 May, while raising concern about weak traceability, uneven provincial delivery and shortages of ear tags, syringes, vehicles, travel budgets and animal-health capacity.

Vaccine Supply Improves

Government has reported that South Africa procured 13.5 million FMD vaccine doses since February 2026.

By 28 May, just under 4.4 million animals had been vaccinated nationally.

A further 3.5 million Biogénesis Bagó doses arrived from Argentina for allocation to feedlots, red meat, dairy, stud breeders, provinces and border-region vaccination. SAHPRA also approved Dunevax's Section 21 application to import 14 million Dollvet doses from Turkey, with the first 4 million expected during June.

This marks progress, but the pressure has moved to execution. A vaccine in a shipment does not protect an animal. It must be delivered, cold-stored, administered correctly and captured in a credible traceability system.

Local Production Returns

ARC-Onderstepoort Veterinary Research has resumed local FMD vaccine production after more than two decades. The first locally produced batch of 12 900 doses was handed over in February. Current output is about 20 000 doses per week, with a target of 200 000 doses per week in 2027.

"ARC's renewed production is a strategic breakthrough, but imports remain essential while local capacity is rebuilt."

"FMD control is no longer only about getting vaccine into the country; it is about getting it properly into animals, records and systems."

Section 10 and the Court Order

The Section 10 Routine Vaccination Scheme gives livestock owners a voluntary route to participate in FMD vaccination under the Animal Diseases Act. It is not a free-for-

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all. Animals must be traceable, permanently marked and recorded. Farms must be registered with location details, and vaccination must be overseen by an authorised veterinarian or paraprofessional. Records of vaccine batches, fridge temperatures, animal movements and audits must be kept for at least five years.

The Gauteng High Court interim order has strengthened the private-sector route. Legal commentary indicates that farmers may privately procure and administer lawfully obtained FMD vaccines, even if they do not volunteer for Section 10, provided notification, reporting and disease-control protocols are followed.

Politics Enters the Picture

The crisis has also become a Cabinet accountability issue.

The DA has requested President Cyril Ramaphosa to remove John Steenhuisen as Minister of Agriculture and replace him with Willie Aucamp. Reports indicate that Aucamp's proposed mandate would include addressing FMD legal challenges and restoring industry confidence.

Formal Cabinet appointments remain the President's prerogative, but politically the message is clear: FMD is now a test of leadership, delivery and trust.

Execution Will Decide the Outcome

South Africa has made progress. Vaccine supply has improved, local production has restarted, private-sector participation has gained legal ground, and industry platforms are strengthening communication. But FMD is still moving.

The next phase must be disciplined and practical: vaccinate fast, record accurately, control movement, test quickly and communicate clearly. FMD will be beaten by delivery on farms, verified records and a vaccination system farmers can trust and markets can verify.

Written By (M.0)

What Farmers Need to Know About Section 10 and Vaccine Supply

What is Section 10?

The Section 10 Routine Vaccination Scheme is a voluntary national FMD vaccination framework under the Animal Diseases Act. It allows livestock owners to participate in vaccination, but only within a controlled system.

What animals does it apply to?

It applies to domesticated cloven-hoofed animals, including cattle, sheep, goats and pigs.

Can farmers vaccinate their own animals?

Farmers can participate in vaccination, but the process must be supervised through an authorised veterinarian or veterinary paraprofessional. It is not an uncontrolled free-for-all.

What records must be kept?

Farmers must keep vaccination registers, vaccine batch numbers, fridge temperature records, animal movement records, births, deaths, purchases, sales, disease events and audit reports.

How long must records be kept?

Records must be kept for at least five years.

Who pays?

The scheme states that vaccine and vaccination costs are borne by the animal owner, although it leaves room for future support, subsidies or cost-sharing.

What is ARC producing locally?

ARC-Onderstepoort Veterinary Research has resumed local FMD vaccine production. Current stated production is about 20 000 doses per week, with a target of about 200 000 doses per week in 2027.

Does local production solve the vaccine shortage?

Not yet. Local production is an important long-term breakthrough, but South Africa still relies heavily on imported vaccines for the immediate national campaign.

Why does traceability matter?

Traceability proves which animals were vaccinated, when they were vaccinated, where they moved and whether disease-control rules were followed. Without this proof, vaccination will not fully restore market confidence.

Statistics are mapping agriculture's next shift

Data is becoming one of farming's most important tools

South African agriculture is often judged by one headline number: its contribution to national GDP. At around 3% of nominal GDP, the sector may appear small on paper. Yet, as Statistician-General Risenga Maluleke reminds us, agriculture's real influence reaches far beyond that figure.

Farming remains deeply connected to employment, rural livelihoods, food security, export earnings, logistics, household welfare and inclusive growth. To understand where the sector is going, farmers, agribusinesses and policymakers need to look not only at rainfall, commodity prices and input costs, but also at the broader statistics reshaping South Africa.

Population movement changes food demand

Demographic shifts matter. Where people live, move and settle will influence where food demand grows, where labour is available and where infrastructure pressure increases.

Population migration between provinces is not just a social trend. It affects municipal planning, roads, storage, retail markets, processing capacity and food distribution. For agriculture, this means data on population growth and movement can help identify future pressure points and opportunities.

A growing province may require more fresh produce, stronger logistics links and better market access. A region losing people may face shrinking labour pools, weaker local demand and pressure on rural services. These are not abstract statistics; they are signals for planning.

Labour and livelihoods remain central

Labour-market data is at the centre of the discussion. Farming depends on people, skills and seasonal labour. At the same time, agriculture remains one of the few sectors able to support livelihoods across deep rural areas.

Employment trends, poverty and household income is critical. Food security is not only about producing enough food. It is also about whether households can afford it, access it and live close enough to functioning food systems.

This is where official statistics become practical. They help decision-makers see where poverty is concentrated, where jobs are being created, and where support programmes or investment may have the greatest impact.

From reports to real decisions

Maluleke's message is clear: statistics should not sit on shelves. Reports from Stats SA can help farmers, commodity groups, investors and government understand the communities they serve and the economy in which they operate.

For producers, this could mean watching provincial growth trends before expanding production, using labour data when planning mechanisation, or studying household income patterns when targeting local markets.

A data-driven farming future

In the future artificial intelligence, big data and official statistics work together to provide faster, deeper economic insight.

For agriculture, that is an important shift. The farm of the future will still need soil knowledge, water management and practical experience. But it will also need better use of data.

Statistics are no longer just a record of what happened. Used properly, they are becoming a map of where South Africa's agricultural economy may be heading next.***(M.0)***

Micronised Lime: Faster Soil Correction for a Wet-Season Planting Reset

A Wet Season Has Changed the Soil Conversation

As South African producers prepare for the July/August 2026 planting window, soil pH deserves far more than a routine glance. The past season's excessive rainfall and localised flooding have placed unusual pressure on open-field soils, and the effects may still be sitting quietly below the surface.

Heavy rainfall does not only fill dams and recharge soil moisture. It can also leach calcium, magnesium, potassium and other basic cations from the root zone. As these bases move downward, the soil can become more acidic, nutrient availability can decline, and the risk of aluminium and manganese toxicity can increase.

"After a season of excessive rain and flooding, soil pH should not be guessed. It should be measured."

Flooded soils create an additional challenge. While waterlogged, they undergo temporary chemical changes because oxygen is limited. Once they drain and re-oxygenate, underlying acidity and nutrient imbalances may become more visible. For farmers heading into the new planting season, this means one thing: last season's soil status may no longer be reliable.

What Is Micronised Lime?

Micronised lime is agricultural lime that has been ground to a much finer particle size than conventional lime. It may be calcitic, mainly supplying calcium, or dolomitic, supplying both calcium and magnesium.

The finer the particles, the greater the surface area exposed to soil moisture and acidity. In practical terms, this means micronised lime can react faster than coarser lime when it is well placed in the active root zone.

In South Africa, liming materials are regulated under Act 36 of 1947. Farmers should therefore never judge a product by marketing claims alone. Important questions include: Is it registered? What is the calcium carbonate equivalent? What is the particle size? Is it calcitic or dolomitic? What is the recommended application method? And has the recommendation been linked to proper soil analysis?

Is Micronised Lime Better Than Agricultural Lime?

Micronised lime is not auto=matically better than normal agricultural lime. ***It is different.***

"Micronised lime is not a replacement for soil science. It is a faster tool when the root zone needs attention."

Good-quality conventional agri=cultural lime remains one of the most proven and economical tools for correcting soil acidity over large areas. Where it can be spread and incorporated well before planting, it remains the backbone of long-term pH correction in grain, pasture and open-field systems.

Micronised lime, however, has a valuable role where faster reaction, lower application volume and targeted placement are needed. Some ultra-fine products can be suspended in water and applied through boom sprayers

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or irrigation systems. Granulated microfine products may also be applied with fertiliser programmes, depending on the product.

Why It Matters in Normal Rainfall Vegetable Areas Too

The value of micronised lime should not only be discussed after abnormal rainfall or flood damage. It also has an important place in normal rainfall areas, especially in commercial vegetable production.

Many vegetable crops have a relatively shallow and intensive feeding zone, particularly during early establishment. Crops such as onions, cabbages, lettuce, tomatoes, peppers, potatoes, carrots and cucurbits rely heavily on the topsoil and near-surface root environment during critical growth stages. In these systems, pH problems close to the surface can quickly affect nutrient uptake, root development and crop uniformity.

Vegetable production is also intensive. Fields often receive repeated fertiliser applications, irrigation and short-cycle crop rotations. Nitrogen fertilisers, especially ammonium-based sources, can contribute to acidification over time. Where the active feeding area is concentrated in the upper soil layer, a faster-acting liming material can be especially useful as part of a planned pH management programme

When Should Farmers Apply It?

The best time to apply any lime is before the crop is planted, based on soil test results. Conventional lime is ideally applied weeks or months ahead of planting and incorporated into the soil. Micronised lime may offer more flexibility because of its fine particle size, but it still needs moisture, soil contact and correct placement to work.

In a wet-season reset, application timing becomes even more important. If heavy rainfall has leached bases from the topsoil, farmers should test early enough to correct the root zone before seedling establishment. In vegetable systems, where early root vigour is closely linked to crop uniformity, this timing can make a meaningful difference.

The Main Advantages in Open-Field Production

Micronised lime can ***react faster*** in the treated zone, help improve calcium availability, reduce acid saturation, support better root development and improve the efficiency of fertiliser use. Correcting pH helps unlock nutrients such as phosphorus and reduces the risk of aluminium and manganese toxicity.

After a season of high rainfall, this can be especially important where nutrients have moved below the main root zone. In commercial vegetable fields, it can be just as important under normal rainfall where repeated production cycles and intensive fertilisation gradually push the topsoil toward acidity.

The Limitations Farmers Should Not Ignore

There are also limitations. Micronised lime is usually more expensive per kilogram than bulk agricultural lime. Very fine powder can be difficult to handle unless granulated or suspended correctly. Some products may not be compatible with pH-sensitive insecticides, fungicides or herbicides.

Most importantly, a few kilograms of micronised lime should not automatically be presented as a complete replacement for tonnes of conventional lime where the soil test shows a major lime requirement.

Is Micronised Lime Scientifically Proven?

The science behind micronised lime is sound, but it must be explained correctly.

Research reported in SA Grain, based on work at Stellenbosch University, tested the performance of different liming products available in South Africa. The research was done by Dawid du Toit, an MSc student in soil science, under the supervision of Dr Ailsa Hardie of the Department of Soil Science and Prof Pieter Swanepoel of the Department of Agronomy.

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The findings are important for producers. Microfine calcitic lime and hydrated lime increased soil pH the fastest under controlled conditions. This confirms the basic principle that finer lime particles react faster because they have more surface area in contact with soil moisture and acidity.

For farmers, the practical message is clear: product formulation, dispersion, placement and application rate matter. Micronised lime is scientifically supported as a faster-acting liming material when used correctly, but it should not replace soil testing or proper lime requirement calculations.

What About Established Orchards and Vineyards?

Established orchards require caution. In grapes, citrus and apples, micronised lime may be useful as a maintenance or corrective tool in the surface soil and active feeder-root zone, especially under drip or micro-irrigation. It can be applied to the wetted strip or under the tree row where roots are active and where acidity is limiting nutrient uptake.

However, it should not be sold as a quick fix for the full soil profile in an established orchard. Once trees or vines are planted, deep incorporation is no longer possible without damaging roots. If acidity exists deeper in the profile, surface-applied lime will not immediately correct the full problem.

The best approach is to use soil and leaf analysis together. If the topsoil pH is too low, or calcium and magnesium levels are inadequate, a micronised calcitic or dolomitic lime product may help support the feeder-root zone.

South African Suppliers and Role Players

South African role players include World Focus Agri, with products such as Complex Calsus and CCM; Elim Fertilisers, which markets Microlife Lime Granule; Zylem and RealIPM with NanoCal; Miserator with GreenCal and GreenDol; and larger agricultural lime suppliers such as Idwala, which markets ultrafine granulated agricultural prills.

World Focus Agri's Complex Calsus is positioned as an ultra-fine calcitic lime/calcium source, while CCM is positioned as an ultra-fine dolomitic lime. These types of products show how the liming category is moving beyond bulk correction alone, toward more technical root-zone management.

The Bottom Line for the 2026 Planting Season

For the 2026 planting season, the conclusion is practical: start with a soil test, identify the acidity problem, and choose the lime source that fits the crop, timing and depth of correction needed. The past wet season has made this more urgent, but micronised lime is not only a flood-recovery tool. It also has a strong place in normal rainfall areas where vegetable crops rely on a healthy, near-surface feeding zone.

Conventional agricultural lime remains essential for long-term correction. Micronised lime has a place where speed, precision and surface-root-zone correction matter.

Used correctly, it can help farmers enter the new season with a healthier root environment, stronger nutrient uptake and a better foundation for yield.

Written by (M.O)

The Topsoil Advantage in Vegetable Production

In open-field vegetable production, the top 10 to 20 cm of soil often carries much of the early-season pressure. This is where young roots establish, where fertiliser is placed, where irrigation cycles influence nutrient movement, and where pH imbalances can quickly affect crop uniformity.

Micronised lime is especially relevant in this zone because its fine particle size allows it to react faster where soil contact and moisture are present. For high-value vegetable crops, this can be important when farmers need quicker correction before planting or during a tight production window.

The greatest benefit is not simply raising pH. The real value lies in improving the root environment. A better-balanced topsoil pH can support calcium availability, reduce acid stress, improve phosphorus efficiency and help young plants develop stronger, more active root systems.

Micronised lime should be seen as a root-zone management tool. It works best when used with soil analysis, correct placement and a clear understanding of where the acidity problem sits.

Cotton in South Africa
From Field Crop to Fibre Value Chain

A small crop carrying a much larger industrial story

Cotton is not South Africa's largest field crop. It does not command the same planted area as maize, soya or sunflower, and it rarely dominates the agricultural headlines. Yet cotton remains one of the few crops that can move from dryland fields and irrigation schemes into gins, spinners, textile mills, oilseed processing, animal feed and export channels.

That gives cotton a significance beyond hectares. It is a crop, but it is also a fibre economy.

For the 2025/26 season, South Africa's national cotton crop is forecast at **81 431 lint bales, a 31%** increase on the previous season.

"Cotton is not only a crop measured in bales. It is a rural value chain measured in seed, labour, ginning, lint quality, spinning demand and market confidence."

The improvement is linked mainly to stronger dryland recovery, while irrigated production remains exposed to rising water, electricity, labour, chemical and mechanisation costs.

The latest production picture

While the 2025/26 national crop is forecast at **81 431 lint bales**, the detailed 2026 split between commercial farmers, smallholders, dryland hectares and irrigated hectares has not yet been publicly released. The latest detailed Cotton SA estimate for 2024/25 places total plantings at **13 081 ha**, made up of **5 535 ha under irrigation** and **7 546 ha under dryland**.

Total production was estimated at **62 320 lint bales**, with seed cotton production of **32 901 tonnes.** Of this, **25 765 tonnes** were expected from irrigated production and **7 136 tonnes** from dryland production.

The smallholder figure is more clearly reported. Cotton SA's latest detailed estimate placed smallholder participation at **2 047 farmers**, planting around **3 606 ha**, with smallholder production estimated at **2 795 lint bales**. The number of established commercial farmers for the 2025/26 season has not yet been released publicly. Based on the difference between total plantings and smallholder hectares, commercial and larger-scale plantings accounted for roughly **9 475 ha** in 2024/25, but this is a calculated indication, not a separately published official commercial-farmer table.

Where cotton is grown

Cotton is produced mainly in South Africa's warmer regions, including **Limpopo, Mpumalanga, KwaZulu-Natal, North West** and the **Northern Cape.** These areas support both dryland and irrigated systems, although the economics differ sharply.

Dryland cotton remains attractive because it can tolerate heat and periods of moisture stress better than many other field crops. That does not make it risk-free. Late planting, poor land preparation, weak crop stands and poor weed control can quickly reduce yield. In irrigated production, the yield ceiling is higher, but so is the cost base. Pumping water, maintaining

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pivots, using electricity and managing fertiliser more precisely all add to the producer's exposure.

Seed, suppliers and traits

Cotton seed is one of the most important levers in the industry. Cotton SA lists the main cultivars planted in South Africa as **DP1541 BG2RRF, DP1531 BG2RRF, DP1240 BG2RRF, Candia BG2RRF** and **PM3225 BG2RRF**. The Paymaster type is widely associated with smallholder suitability, while the DP and Candia lines are used mainly in commercial systems.

The South African varietal list shows **Bayer (Pty) Ltd** as agent for several cotton varieties, including **DP 1240 B2RF, DP 1531 B2RF, DP 1541 B2RF, DP 1652 B2RF and PM 3225 B2RF.** It also lists **Bayer CropScience** with Sicot/Candia material, **Cotton Seed Enterprises** with Candia BRF/BGRF, and the **ARC** with entries such as Gariep VT 1, Gariep VT 2 and Jassid 1.

Current planted cotton cultivars in South Africa are genetically modified and contain the Bt gene, which provides resistance to bollworm, combined with Roundup Ready Flex technology for glyphosate tolerance. Seed treatments are also used to protect young plants against early-season sucking pests such as thrips, aphids and leafhoppers, as well as seedling diseases.

"The future of cotton starts long before the boll opens. It starts with the right seed, the right cultivar and the right support system".

Fertiliser, fertigation and input pressure

Cotton is often described as hardy, but hardy does not mean hungry for neglect. A strong crop still needs balanced nutrition, especially where irrigation is used to push yields. Nitrogen, phosphorus and potassium programmes must be aligned with soil tests, yield targets, plant population and expected growth.

On irrigated farms, fertigation can play a valuable role where systems allow it. It helps producers apply nutrients more precisely through the irrigation system, reducing waste and improving timing. This is especially important when input prices are volatile. However, fertigation is not a shortcut. Poor scheduling, over-application or ignoring soil reserves can still damage margins.

The cost of fertiliser has become one of the most serious pressure points for cotton producers. South Africa imports more than 80% of its fertiliser raw materials and finished products, making local farmers highly exposed to international prices, exchange rates, shipping disruptions and geopolitical shocks. The Russia-Ukraine war disrupted fertiliser and energy markets from 2022, while the current conflict involving Iran and the wider Middle East has added pressure through fuel, freight, ammonia and shipping-risk channels.

For cotton farmers, this means every kilogram of fertiliser has to justify itself. The producer who applies fertiliser blindly is carrying unnecessary risk. The producer who uses soil tests, leaf analysis, irrigation scheduling and yield mapping is better placed to protect profit.

Pesticides: chemical, biological and organic choices

Cotton remains a pest-sensitive crop, even with Bt technology. Bollworm resistance traits reduce pressure from key caterpillar pests, but they do not remove the need for scouting. Sucking pests, including aphids, thrips, whitefly and leafhoppers, still require attention. Weed pressure must also be controlled early, because cotton is slow to establish and cannot afford a poor start.

Most commercial cotton in South Africa is conventional GM cotton, supported by chemical crop protection, seed treatments and herbicide-tolerant systems. The responsible path is not simply "spray more". It is integrated pest management: scout regularly, understand thresholds, protect beneficial insects where possible, rotate modes of action and use registered products correctly.

Organic cotton is a different production system. It is grown without synthetic pesticides or synthetic fertilisers, and organic certification does not allow genetically modified seed. Cotton SA notes that land must generally be free of synthetic chemical treatment for three years before

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organic certification can be achieved. That makes organic cotton a possible niche, but not an easy mainstream replacement for South Africa's current cotton system

Classification, prices and market access.

Cotton quality is where the crop becomes a commercial fibre. After ginning, lint is classified according to key properties such as fibre length, strength, micronaire, colour, uniformity and trash content. Cotton SA's grading facility uses High Volume Instrument testing to give buyers confidence in quality.

In the 2024/25 season, the average fibre length was reported at **1.16 HVI** length, with average micronaire of **4.21**, fibre strength of **29.36** g/tex and uniformity of **81.87.** Most samples fell into the Strict Middling, Middling and Strict Low Middling colour grades.

Prices remain highly exposed to international movement. Cotton SA's 2025 core statistics placed the 2024/25 average price at **1 027c/kg for seed cotton and 3 007c/kg for lint.** By the end of October 2025, the weekly average RSA price based on the Cotlook A Index was **R29.33/kg**, while the Dec '25 New York futures equivalent for Strict Low Middling 1 1/16 was calculated at **R24.87/kg** at an average exchange rate of **R17.22/US$.**

This is why price fluctuation is such a headache. Cotton prices are influenced by the Cotlook A Index, New York futures, exchange rates, lint quality, buyer demand, ginning costs and global textile sentiment

Buyers, spinners and the local textile question.

Seed cotton moves through ginners, merchants, lint buyers, cottonseed processors, local spinners and export markets. South Africa still has cotton spinning and textile capacity, but it is far smaller than in the past. Publicly visible textile and yarn players include names such as **Prilla and Standerton Mills**, while ginners and merchants remain central to moving lint into the market.

The larger concern is local demand. If South Africa produces cotton but loses spinning and textile capacity, the crop becomes more dependent on exports and international lint prices. If local textile demand strengthens, cotton gains a deeper domestic anchor.

The road ahead: quality against subsidised competition

South African cotton cannot outmuscle the world's largest producers on scale. It competes against countries with stronger subsidies, larger textile sectors, cheaper capital, bigger research pipelines and more aggressive export support.

That is the hard truth.

But South Africa can compete on discipline. The opportunity lies in better cultivar access, more reliable seed supply, stronger support for new entrants, practical training, improved dryland performance, precision irrigation, careful fertigation, responsible chemical use, quality classification and stronger local textile linkages.

Cotton's future will not be built only by planting more hectares. It will be built by making each hectare more reliable and by ensuring that the fibre leaving the gin has a buyer who values it.

For Nufarmer Africa readers, the message is clear: ***cotton deserves renewed attention***, not because it is easy, but because it connects farming to industry. In a country searching for rural jobs, climate-fit crops and stronger agricultural value chains, cotton still has a place — provided the chain from seed to spinner is rebuilt with purpose.

Written by (S.O)

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Cotton production snapshot

2025/26 national crop forecast: 81 431 lint bales
2024/25 total plantings: 13 081 ha
Irrigated hectares: 5 535 ha
Dryland hectares: 7 546 ha
2024/25 lint production: 62 320 bales
Seed cotton production: 32 901 tonnes
Irrigated seed cotton: 25 765 tonnes
Dryland seed cotton: 7 136 tonnes
Smallholder farmers: 2 047
Smallholder hectares: 3 606 ha
Smallholder production: 2 795 lint bales
Commercial hectares: ±9 475 ha, calculated from total minus smallholder hectares
Commercial farmer count: +- 150
Main seed agents listed: Bayer, Bayer CropScience, Cotton Seed Enterprises and ARC
Main pressures:
Seed access, input prices, fertiliser volatility, mechanisation, water, labour, global competition and textile demand

International Day for Biological Diversity 2026:

Forestry's Quiet Conservation Success Across 300,000 Hectares

As South Africa looked back on International Day for Biological Diversity on 22 May 2026, Forestry South Africa's message was both timely and important: conservation is not limited to national parks and protected reserves. Across forestry landholdings, more than 300,000 hectares of grasslands, wetlands, indigenous forests, fynbos and riverine ecosystems are being preserved, managed and monitored as part of a wider biodiversity stewardship story.

A Global Day with Local Meaning

When the world marked International Day for Biological Diversity on 22 May 2026, the theme "Acting locally for global impact" carried strong meaning for South Africa's forestry sector.

Forestry South Africa used the occasion to highlight a conservation story that deserves wider recognition. Its members collectively preserve more than 300,000 hectares of natural ecosystems within forestry landholdings. This includes upwards of 170,000 hectares of grasslands and associated wetlands, 61,000 hectares of indigenous forests, 10,000 hectares of fynbos, and extensive riverine ecosystems.

These are not forgotten pockets of land. They are living systems that require long-term management, monitoring and care.

Conservation Beyond Protected Areas

Dr Ronald Heath, Forestry South Africa's Director of Research and Protection, captured the core message clearly: biodiversity stewardship must extend beyond the boundaries of protected areas.

That point is vital. South Africa cannot protect its biodiversity only through fenced reserves. Species move. Rivers flow. Wetlands regulate water. Grasslands support life above and below the soil. Indigenous forests protect natural heritage, store carbon and shelter countless species.

Biodiversity does not recognise property lines. It depends on connected landscapes

> ***"Conservation cannot only live behind fences. It must also live inside the landscapes that feed, employ and sustain people."***

Working Forests, Living Landscapes

Forestry is often viewed through its production role: timber, pulp, paper, poles, packaging, jobs and rural economic activity. These are important contributions. But forestry landholdings are also large rural landscapes.

Within these landscapes are unplanted natural areas that form ecological corridors and habitat

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networks. When managed properly, these areas help species move, protect water systems, reduce erosion and support broader ecosystem functioning.

This is where forestry's biodiversity story becomes powerful. It shows that productive land and conservation do not have to stand on opposite sides. Revenue from planted areas can help fund the management of natural ecosystems through alien invasive plant control, ecological burning, watercourse protection and environmental monitoring.

The Hewitt's Ghost Frog and the Bigger Ecosystem

One of the strongest examples highlighted by Forestry South Africa is the conservation work linked to the critically endangered ***Hewitt's Ghost Frog*** within MTO Forestry's Longmore plantation.

The frog is rare and highly dependent on specific stream and wetland habitats. But the story is not only about one species. It is about the health of the entire ecosystem that allows such a sensitive species to survive.

Protecting the frog means protecting clean water, stream structure, surrounding vegetation and the wider wetland system. In that sense, the frog becomes a signal of something much larger.

"The survival of one rare species often tells us whether an entire ecosystem is still breathing."

Sappi's Role in Practical Biodiversity Stewardship

Sappi's contribution deserves special attention because it shows how conservation can move beyond intention and into practical action.

Its Rare, Threatened and Endangered Species Programme began with the Pepperbark tree, a medicinal species placed under severe pressure through overharvesting.

Rather than approaching conservation only through restriction, Sappi worked with partners to propagate trees, support sustainable access and reduce pressure on wild populations.

This matters because biodiversity is also about people. Medicinal plants form part of cultural traditions, rural knowledge systems and community life. Protecting these species requires science, propagation, partnership and respect for the communities connected to them.

Sappi's work shows that conservation can protect plants while supporting people. It can restore species while respecting tradition. That is the kind of stewardship South Africa needs more of.

Water Stewardship in the uMkhomazi Catchment

Sappi's partnership with WWF South Africa in the uMkhomazi catchment adds another important layer to the story.

This catchment forms part of the globally significant Maputaland-Pondoland-Albany biodiversity hotspot. It supports endangered species, wetlands, forestry, agriculture, industry and communities.

Here, biodiversity conservation is inseparable from water security. Clearing invasive alien plants, restoring rangelands, monitoring water quality and creating restoration jobs all contribute to a healthier catchment.

This is not abstract environmental language. It is practical land and water management with direct value for people, production and future resilience.

"Healthy catchments are not only environmental assets. They are agricultural, economic and community lifelines."

A Message for South Africa's Landowners

Forestry South Africa's 300,000-hectare biodiversity story carries a broader lesson for farmers, foresters and landowners.

Natural ecosystems should not be seen as obstacles to production. Wetlands, grasslands, river systems, indigenous forests and fynbos are part of the land's long-term value. They support water security, soil health, climate resilience, pollination and biodiversity.

The forestry sector still faces chal-

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lenges, as every land-based industry does. But this story shows that working landscapes can carry conservation value when they are managed with responsibility.

Stewardship That Speaks to the Future

As South Africa reflects on International Day for Biological Diversity 2026, the forestry sector's message is both hopeful and practical.

Biodiversity does not only survive in places untouched by people. With care, science, partnership and commitment, it can also survive in the landscapes where people work.

More than 300,000 hectares and counting.

Not separate from production.

Not hidden from responsibility.

But held within South Africa's forestry landscapes as part of a larger promise to the future.

Written by M.O

Why Sappi's Biodiversity Work Matters Beyond Forestry-

Sappi's biodiversity work is important because it connects conservation with practical action on the ground.

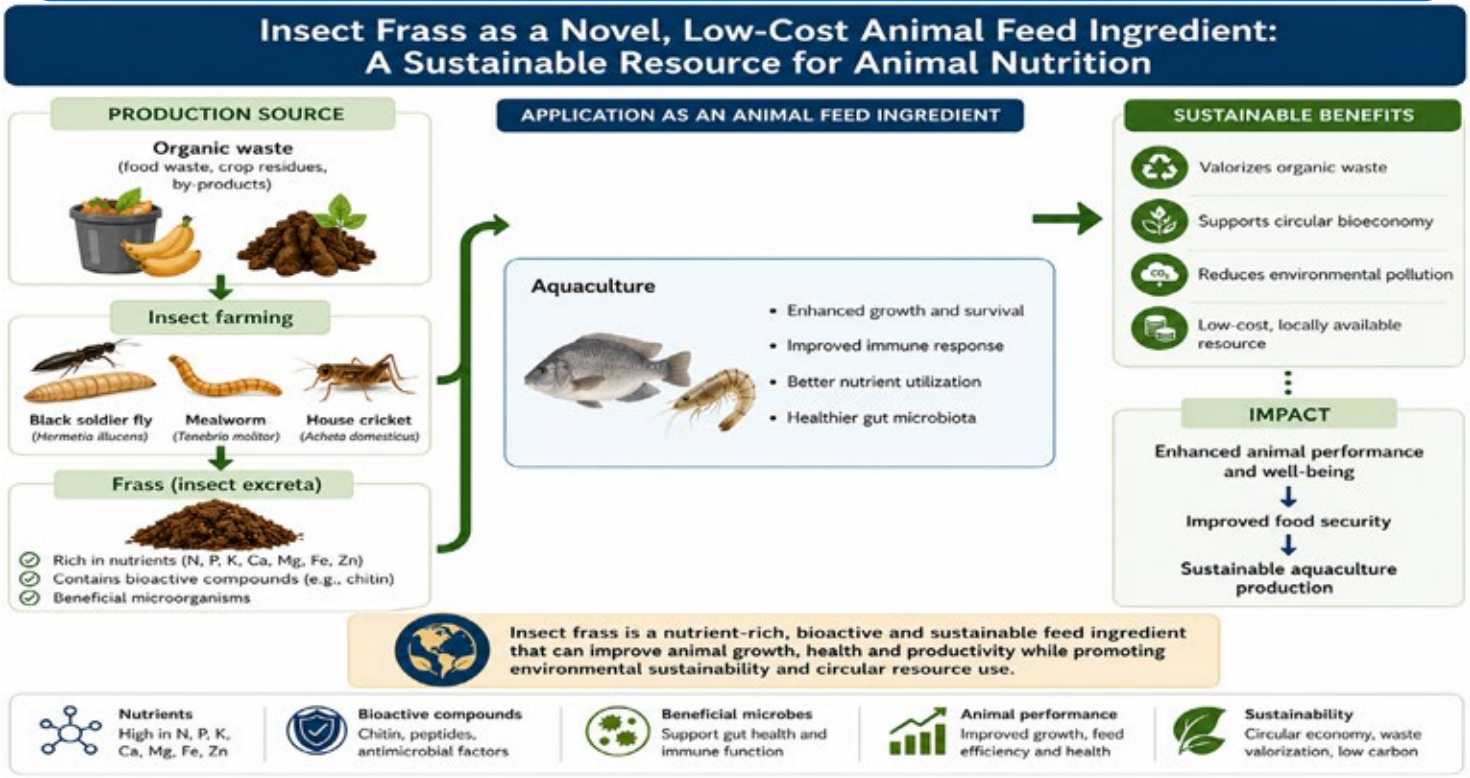
- Its Rare, Threatened and Endangered Species Programme shows how threatened plant species can be protected through propagation, science and community involvement. The Pepperbark tree is a strong example. By supporting sustainable access to propagated plants, the programme helps reduce pressure on wild populations while respecting cultural and medicinal traditions.

- Its partnership with WWF South Africa in the uMkhomazi catchment shows another side of biodiversity work: water security. Through invasive alien plant clearing, rangeland restoration, water monitoring and catchment resilience, Sappi is helping protect systems that communities, agriculture, forestry and industry all depend on.

- The wider lesson is clear: biodiversity is not a side issue. It is part of water, culture, production, rural livelihoods and long-term economic resilience.

- For South Africa's land-based industries, this kind of stewardship may become one of the defining responsibilities of the next decade.

From Waste to Better Feed: Could Insect Frass Support the Next Step in Animal Nutrition?



As international research pays closer attention to the link between feed, soil, animal health and ***nutrient density***, ARC researchers in South Africa are exploring whether insect frass could become part of a more circular and practical future for animal production.

Feed has always shaped animal production. For generations, farmers have understood this in practical terms. Good feed supports growth. Balanced feed supports fertility, condition and performance. Poor feed shows quickly in weight, health and production results.

What is changing now is the depth of the question. Around the world, researchers are no longer only asking whether animals grow efficiently. They are also asking how feed, pasture, soil and biological systems influence the nutritional quality of meat, milk, eggs and fish.

This wider view matters for African agriculture. Farmers are under pressure to produce more food, reduce waste, manage input costs and still protect the health of their animals and customers. In that context, alternative feed resources are receiving more serious attention.

"Feed is no longer only a cost on the farm. It is becoming part of the conversation about food quality, animal health and circular production."

At the ***Agricultural Research Council's Animal Production Institute*** in Irene, one such resource is being studied: insect frass.

A By-Product with New Potential

Insect frass is the material left behind during insect farming. In the ARC research insight supplied to Nufarmer Africa Magazine, frass is described as a by-product made up of insect excreta, shed exoskeletons and residual feed substrate. In the case of yellow mealworms, organic residues can be converted into insect biomass, while frass remains as a nutrient-rich by-product with possible agricultural value.

The research being conducted at ***ARC-Animal Production Institute in Irene looks at yellow mealworm frass in the context of aquaponics and animal feed systems.*** The work is important because feed remains one of the major costs in aquaponics, and because alternative ingredients may help improve nutrient utilisation and system efficiency.

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ARC's wider animal production focus includes improved animal nutrition, research on beef and dairy cattle, sheep, pigs, goats and poultry, and work aimed at enhancing the quality of meat and dairy products. This makes the frass research part of a much bigger national conversation about how South Africa can improve production systems using locally relevant science.

Why the Nutrient Density Question Matters

The current international discussion around nutrient density is not limited to one species or one farming method.

In the United States, researchers including Stephan van Vliet and colleagues have been studying how animal production systems influence the nutritional composition of animal-source foods. A 2021 review in Frontiers in Sustainable Food Systems reported that meat and milk from animals grazing plant-diverse pastures can contain a wider variety and higher amounts of phytonutrients, including terpenoids, phenols, carotenoids and antioxidants, compared with products from animals grazing less diverse pastures or fed grain-based concentrates. The same paper was careful to state that current knowledge does not yet allow direct links between livestock production practices and human health outcomes.

That careful wording is important. The science is promising, but it is not a licence for exaggerated claims.

A 2024 Scientific Reports study comparing pasture-finished cattle in Western U.S. rangelands with grain-finished cattle in a Midwest feedlot found measurable differences in the beef. Pasture-finished beef showed higher levels of phenolic antioxidants, alpha-tocopherol, niacin, choline and omega-3 fatty acids, while also showing lower levels of certain oxidative stress markers. The authors also stated clearly that the findings should not be interpreted to mean that grain-finished beef is unhealthy, and that human trials are still needed.

In 2025, another U.S. study in npj Science of Food compared soil, forage and beef samples from grass-fed systems with a paired grain-fed system. The study reported that grass-fed beef contained 3.1-fold higher phytochemical antioxidants than grain-fed beef, with higher vitamins A and E also recorded. The researchers linked these results to the soil-plant-animal-human nutrition continuum.

"The emerging lesson from nutrient-density research is simple but powerful: what animals eat can influence more than growth."

Where Frass Fits into the Bigger Picture

The ARC frass work is not the same as the U.S. pasture-based beef studies. It should not be presented as proof that frass will automatically increase nutrient density in meat, milk, eggs or fish.

What it does show is that animal nutrition research is moving in the same direction: toward biological function, circular inputs and better use of underutilised resources.

According to the ARC insight, insect frass contains nutrients and bioactive compounds. These may include chitin, lauric acid and antimicrobial peptides, which have been associated with improved gut health, immune responses and nutrient absorption in animals. The document also notes potential relevance across aquaculture and livestock sectors, including poultry production.

In aquaponics, this becomes especially interesting. Fish feed influences fish growth, water quality and nutrient availability for plants. A feed ingredient that improves nutrient utilisation could therefore affect more than one part of the system.

The ARC material notes that frass supplementation in fish diets may positively influence growth rates, feed conversion efficiency and nutrient utilisation. It may also contribute to improved plant performance in aquaponics by enhancing nutrient availability through biological processes, without negatively affecting fish health.

A Circular Opportunity for African Farmers

ARC-AP Insect breeding facility.

For Nufarmer Africa readers, the practical question is not whether frass sounds interesting. The question is whether it could eventually

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help farmers solve real problems.

Feed is expensive. Organic waste

Frozen yellowmeal worm

is often underused. Imported or conventional inputs can be costly. At the same time, farmers are being asked to produce more sustainably and with better traceability.

Insect farming offers a possible loop. Organic waste can support insect production. Insects can become a protein source for animal feed applications.

Frass can then be studied as a nutrient and bioactive input. In aquaponics, this may support both fish production and plant nutrient cycling.

This is the kind of circular bioeconomy thinking that could become more important in South Africa. However, ARC's researchers also point out that adoption of insect farming in South Africa remains limited when compared with countries such as the Netherlands and China.

That means there is still work to do. Farmers need more than excitement. They need tested products, clear guidelines, safe inclusion levels and reliable supply.

What Still Needs to Be Proven

The strongest research stories are often the ones that include their limits.

Frass is not yet a fully standardised input. Its nutrient composition can vary depending on the insect species and feeding substrate. That variation matters, because feed formulation depends on consistency.

The ARC document identifies several areas where further research is still needed. These include standardisation, optimal inclusion levels for different animal species, regulatory frameworks, long-term safety, system stability and commercial scalability. For farmers, that means frass should be watched closely, but not adopted blindly.

Insects decomposing waste.

Insect Frass.

Any future use will need proper analysis, animal-specific guidance and compliance with relevant feed regulations.

"Frass must be judged carefully, not as a miracle ingredient, but as a possible functional input in better-designed production systems."

The same caution applies to the wider nutrient-density conversation. U.S. studies are showing that production systems can influence the nutritional profile of animal-source foods, but those findings must be interpreted within their specific systems, species, environments and methods.

From Input Cost to Food Quality

For many years, animal feed discussions focused mainly on price, protein and performance.

Those factors remain essential. No farmer can ignore cost or growth. But the next chapter may be broader.

"The future of animal nutrition will belong to farmers who can combine practical feeding knowledge with better biological measurement."

Feed may increasingly be judged by how it supports animal health, nutrient utilisation, environmental

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efficiency and the quality of the final food product.

That is why ARC's work on yellow mealworm frass deserves attention. It connects waste management, insect production, aquaponics, animal nutrition and sustainability in one research pathway.

It is still early. It still needs testing. It still requires clear standards.

But it points toward an important idea for African agriculture: better food systems may not depend only on finding new resources. They may also depend on recognising the value in resources we once overlooked.

By Agnes Molebatsi, Bulelani Mazizi, Letlogonolo Selaledi, Christinah Tsolanku & Molatelo Madibana
(ARC-Animal Production Institute & University of Stellenbosch)

Frass, Feed and Nutrient Density:

What Farmers Should Know

As the conversation around nutrient density grows, farmers are being encouraged to look beyond basic feed performance. Growth rate, feed conversion and production cost still matter, but researchers are also paying closer attention to how feed inputs may influence animal health, nutrient utilisation and the quality of the final food product.

What Is Insect Frass?

Insect frass is the by-product of insect farming. In the case of yellow mealworms, it includes insect excreta, shed exoskeletons and remaining feed substrate. ARC researchers are investigating yellow mealworm frass as a possible functional input in aquaponics and animal feed systems.

Why Is It Being Studied?

Frass is being studied because it may offer more than basic nutrient value. The ARC research insight notes that insect frass can contain nutrients and bioactive compounds such as chitin, lauric acid and antimicrobial peptides. These compounds are of interest because of their possible role in gut health, immune response and nutrient absorption.

How Does This Connect to Nutrient Density?

International research, particularly from the United States, is increasingly examining how animal diets, grazing systems and feed diversity may influence the nutritional profile of meat, milk and other animal-source foods.

Frass research should not be presented as proof that it increases nutrient density in farm animals. That still needs to be tested properly. However, it fits into the same wider discussion: better inputs, better biological function and more efficient nutrient use.

Why Could This Matter for Africa?

African farmers face high feed costs, limited resources and growing pressure to reduce waste. Insect farming could help close part of that loop by converting organic residues into insect biomass and frass. This creates a possible circular system where waste is turned into useful agricultural inputs.

What Must Still Be Proven?

Frass is not yet a standardised commercial feed solution. Its nutrient profile can vary depending on the insect species and the material the insects are fed. Farmers will need clear research on safe inclusion levels, species-specific use, regulatory approval, long-term safety and commercial scalability.

The Takeaway

Frass is not a miracle ingredient. It is a research-backed opportunity worth watching. If future studies confirm its value, it could help farmers improve feed efficiency, support animal health and take part in more circular, resource-smart food production.

Bayer introduces FLiPPER®
for residue-conscious open-field growers

South African open-field farmers are producing in an environment where pest control, residue compliance and market access are now closely linked. For high-value crops such as citrus, table grapes and blueberries, growers need crop protection tools that help protect quality in the field while also supporting the requirements of local and export markets.

Bayer Crop Science South Africa has introduced FLiPPER®, a biological contact insecticide developed to help growers manage key pests while supporting residue-free production and Integrated Pest Management programmes.

A biological option for modern crop protection

FLiPPER® is derived from natural fatty acids and is olive oil-based. Bayer positions it as a biological insecticide that works in harmony with nature and fits into established IPM programmes.

For open-field producers, this is important. Orchards, vineyards and berry blocks require pest control programmes that are effective, but also practical enough to support pollinators, beneficial insects and long-term resistance management.

"FLiPPER® gives open-field growers a biological tool that supports pest control, residue management and export confidence."

Bayer describes FLiPPER® as having a low-risk profile and being gentle on people, crops, beneficial insects and pollinators.

This makes it particularly relevant for growers who are building more sustainable pest management systems without stepping away from commercial performance.

Residue confidence for export crops

One of FLiPPER®'s key advantages is its residue-free positioning. According to Bayer, the product is exempt from EU MRL testing, giving growers an added compliance advantage when supplying demanding international customers.

For South African citrus, table grape and blueberry producers, this is a valuable consideration.

Export markets are placing growing pressure on growers to demonstrate responsible crop protection practices. Residue confidence is therefore not only a technical issue, but also a market access issue.

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Flexibility close to harvest

FLiPPER® also offers a zero pre-harvest interval. This gives growers the flexibility to spray close to harvest without delaying picking schedules.

In open-field production, pest pressure can change quickly. When crops are already close to harvest, delays can affect quality, labour planning, packing programmes and market commitments.

This flexibility can be especially valuable during peak harvest periods, where growers need to protect fruit quality while keeping production and logistics moving.

How FLiPPER® works

FLiPPER® works as a contact insecticide. It penetrates the external layers of the target pest and interacts with multiple vital metabolic processes. This interferes with feeding activity and results in mortality.

The product is registered in South Africa for use on citrus, table grapes and blueberries.

It targets citrus thrips on citrus, table grapes and blueberries, cotton aphid on blueberries, and western flower thrips on table grapes.

These pests can have a direct effect on fruit quality and marketable yield. In export-focused crops, even visible feeding damage can reduce pack-out percentages and buyer confidence.

Supporting resistance management

Resistance management remains a major concern in commercial open-field farming. Repeated reliance on the same active ingredients can reduce long-term efficacy and weaken pest control programmes.

Bayer notes that FLiPPER® has no known resistance or cross-resistance, making it a useful partner in resistance management strategies.

This gives producers another option to rotate into programmes aimed at preserving efficacy while supporting broader sustainability goals.

A timely launch for South African growers

The introduction of FLiPPER® comes as growers face increasing pressure to meet production, compliance and sustainability demands. Bayer has indicated that the launch will be followed by regional events in key production areas. FLiPPER® will also feature at major industry gatherings, including the South African Table Grape Conference hosted by SASEV and SATI 5–6 August, as well as the CRI Symposium for the citrus industry. - 23–26 August.

For South African open-field producers of citrus, table grapes and blueberries, FLiPPER® offers a timely biological option that connects pest control with harvest flexibility, residue confidence and market access.

As Bayer's product message says, FLiPPER® helps growers "flip pest pressure into performance" — a fitting message for farmers competing in increasingly demanding fresh produce markets.

FLiPPER® at a glance

- ***Product type: Biological contact insecticide***
- ***Active substance: Fatty acids potassium salts, 479,8 g/ℓ***
- ***Formulation: Oil-in-water emulsion***
- ***Registration: Reg. No. L11949, Act No. 36 of 1947***
- ***Registered crops: Citrus, table grapes and blueberries***
- ***Key pests: Citrus thrips, western flower thrips and cotton aphid***
- ***Pre-harvest interval: Zero***
- ***Programme fit: IPM, residue management and resistance management***

"With a zero pre-harvest interval, FLiPPER® helps growers respond when pest pressure appears close to harvest."

Growers should always read and follow the product label before use.

www.cropscience.bayer.co.za
www.bayer.co.za.
Tel: +27 11 921 5002

FLiPPER®

Unlock easy market access, free from residue concerns.

FLIP PEST PRESSURE INTO PERFORMANCE WITH FLiPPER®

Flip pressure into performance with **FLiPPER®** – a biological insecticide that works in tandem with nature and your IPM programme to keep pests at bay. Derived from olive oil, it offers a range of natural benefits while supporting more sustainable farming practices. With a zero pre-harvest interval, it offers complete application flexibility with no delays to harvest. And, being exempt from MRL testing, it allows you to move confidently into high-value export markets. **FLiPPER®** delivers effective control where it matters most – without compromising on timing, compliance or sustainability.

HOW DOES FLiPPER® WORK?

FLiPPER® works as a contact product which means it penetrates the external layers of the target pest, interacting with multiple vital metabolic processes. This interferes with feeding activity, resulting in mortality.

ON WHICH CROPS CAN YOU USE FLiPPER®?

/// **Citrus, table grapes, blueberries:** Citrus Thrips: *Scirtothrips aurantii*
/// **Blueberries:** Cotton aphid: *Aphis gossypii*
/// **Table grapes:** Western Flower Thrips: *Frankliniella occidentalis*

WHY CHOOSE FLiPPER®?

No residue concerns
/// Biological solution with no residue worries – whenever you apply.
/// Exempt from EU MRL testing, supporting export compliance.

Zero pre-harvest interval
/// No PHI – spray close to harvest with total flexibility.
/// Simplifies harvest planning with no waiting period.

Strong fit for resistance management
/// No known resistance or cross-resistance.
/// A reliable partner in resistance management programmes.

Low-risk profile
/// Safe for people, crops, and the environment.
/// Gentle on beneficials and pollinators.
/// Ideal for IPM programmes.

BIOLOGICALS by Bayer

FLiPPER®

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Tel: +27 11 921 5002

READ THE LABEL BEFORE USE:
FLiPPER® Reg. No. L11949 (Act No. 36 of 1947). Contains Fatty acids potassium salts 479,8 g/ℓ; oil-in-water emulsion. Warning. The registration holder of **FLiPPER®** is **Bayer AG. Bayer** (Pty) Ltd. Reg. No. 1968/011192/07. Collaboration Hub, First Floor, Waterfall Circle, 9 Country Estate Drive, Waterfall City, Midrand, 2090. **FLiPPER®** is a registered trademark of De Sangosse S.A.S.

WARNING

Hazard statements:
- Causes skin irritation.
- Causes serious eye irritation.
- May cause respiratory irritation.
- Harmful to aquatic life with long-lasting effects.

Citrus After the Floods

What Growers Must Prioritise Before the Next Packing Season

South Africa's open-plan citrus orchards have had a sharp reminder this season that weather damage does not end when floodwater drains away. In the Eastern and Western Cape, severe rain and flooding disrupted orchard access, damaged roads, affected harvesting and placed new pressure on disease management at a critical point in the export season.

"After a flood, the visible damage is only the first layer. The real test is how quickly the grower restores orchard balance."

Initial industry assessments indicated that expected export volumes from flood-damaged areas could be at least 5% lower. Patensie in the Eastern Cape, together with Citrusdal and parts of the Boland in the Western Cape, were among the areas most affected. Early mandarin harvesting was particularly exposed, as the floods arrived during an important picking window.

For open-plan orchards, the risks are different from citrus under protective cover. Trees are fully exposed to heavy rainfall, wind, runoff, standing water, mud splash and rapid changes in humidity. There is no net structure to soften weather impact or reduce direct exposure. This makes orchard recovery a practical, block-by-block exercise.

Start Below the Tree: Soil and Root Recovery

The first priority after flooding is the root zone. When citrus soils stay saturated, oxygen levels drop. Feeder roots become stressed, and trees are left more vulnerable to soilborne disease pressure. Phytophthora risk should therefore be treated as part of flood recovery, not as a separate issue.

Open-plan orchards need careful inspection after heavy rain. Growers should identify low-lying blocks, compacted wheel tracks, blocked drains and areas where water stands for too long. Normal irrigation should not simply resume because the surface looks dry. Roots may still be under stress below the soil line.

Trees should be monitored for delayed signs of stress, including weak flush, leaf yellowing, excessive fruit drop, poor canopy vigour and uneven recovery across the block. In some orchards, the most serious damage will only become clear weeks after the flood event.

Drainage repairs must also become a priority before the next rainfall cycle. Water channels, ridges, berms and orchard roads should be restored where possible. In open orchards, water movement across the block is one of the main factors that determines how quickly trees recover.

Fruit Below the Floodline Needs Strict Handling

Flood-affected fruit must be managed with caution. Any fruit that touched floodwater, mud or contaminated soil should not be treated as normal export fruit. Low-hanging fruit in open orchards

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is especially vulnerable where water moved through the block or splashed soil onto the canopy.

The packhouse cannot be expected to solve every issue that begins in the orchard. Sorting must start before fruit enters bins. Harvest teams need clear instructions on what to pick, what to leave and how to separate fruit from affected blocks.

Postharvest disease risk increases when wet or compromised fruit enters the handling chain. Sanitation of bins, equipment, drench systems and packhouse surfaces remains important, but orchard-level discipline is the first line of defence.

Alternaria Brown Spot Remains a Costly Threat

While flood recovery is urgent, Alternaria Brown Spot remains one of the most challenging and economically damaging diseases in susceptible citrus cultivars.

ABS is especially important in soft citrus, where it can cause leaf lesions, fruit blemishes, premature fruit drop and reduced export pack-outs. The financial impact is not only measured in tonnes lost, but in lower marketable fruit percentages.

The challenge with ABS is timing. Growers cannot wait until symptoms are obvious before taking action. Infection risk begins early, especially during susceptible flush and fruit development stages. Warm, wet and humid conditions increase the risk, making seasons with prolonged moisture particularly difficult.

For open-plan orchards, canopy management is central. Dense trees dry more slowly after rain and dew. Poor airflow can create humid pockets inside the canopy, increasing the disease window. Pruning, skirt management and spray penetration are therefore part of ABS control, not only general orchard maintenance.

High-risk cultivars and blocks with a known ABS history should receive closer attention.

Disease decisions should be based on cultivar susceptibility, block history, weather conditions and monitoring, rather than routine applications alone.

Biological vs Chemical: The Practical Middle Ground

The pressure to produce safer, lower-residue fruit continues to shape citrus production. This has pushed more growers to consider biological inputs, soil-health products and softer disease-management strategies.

Biological products can play a useful role in rebuilding soil function, supporting root resilience and strengthening the orchard system after stress. They may be especially valuable where growers are trying to improve long-term soil biology and reduce unnecessary chemical dependency.

However, biological tools should not be presented as a complete replacement for registered chemistry in high-pressure disease situations. Where Phytophthora risk is high, where ABS-prone cultivars are under pressure, or where export fruit quality is at stake, chemical interventions may still be necessary.

"The goal is not simply to spray less. The goal is to spray smarter."

The more realistic approach is integration. Use biologicals where they strengthen the orchard. Use chemistry where disease pressure justifies it. Use cultural practices everywhere.

Residue Discipline Is Now Market Discipline

Export citrus growers are farming in an environment where chemical residues, traceability and responsible production are directly linked to market access. This does not mean citrus farmers must stop using crop protection products. It means every application must have a clear purpose.

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Spray programmes should be based on risk, not habit. Growers should consider block history, cultivar susceptibility, weather patterns, disease pressure and market requirements before applying products.

Equipment calibration, correct coverage, active ingredient rotation, preharvest interval compliance and accurate recordkeeping are now part of commercial survival. In open-plan orchards, wind and weather can easily compromise spray quality, so timing and application conditions must be taken seriously.

The Road Ahead: Priorities Before the Next Packing Season

The period between flood recovery and the next packing season should not be treated as a quiet window. This is the time to correct weak points before they become expensive problems again.

The first priority is drainage. Every affected block should be reviewed after rain, not only in dry conditions. Low points, blocked channels and compacted areas must be corrected before the next

wet cycle.

The second priority is disease mapping. Growers should record where Phytophthora symptoms, fruit drop, weak trees or ABS pressure were most visible. These records should guide pruning, biological inputs, chemical planning and cultivar-specific management.

Pruning should also be strategic. Open canopies dry faster, allow better spray penetration and reduce the humid microclimates that favour disease. This is especially important in ABS-susceptible cultivars.

Before the next packing season, growers and packhouses should agree on fruit separation, sanitation standards and rejection criteria. Orchard and packhouse teams cannot operate in isolation.

The road ahead is about preparation. Farmers who invest now in drainage, root recovery, disease records, canopy management, spray planning and packhouse discipline will enter the next packing season with fewer surprises and stronger fruit quality.

For citrus, exposure to the elements is part of the system. The strongest growers will be those who manage the whole chain: soil, roots, canopy, fruit, biology, chemistry and packhouse quality

Written By (M.O)

Post-Flood Checklist for Open Citrus Orchards

- ***Map affected blocks according to flood severity.***
- ***Inspect drainage, roads, ridges and low-lying areas.***
- ***Check root health before returning to normal irrigation.***
- ***Remove fruit that touched floodwater or mud.***
- ***Keep affected fruit separate from clean blocks.***
- ***Monitor Phytophthora risk in waterlogged soils.***
- ***Review ABS pressure by cultivar and block history.***
- ***Prune for airflow and faster canopy drying.***
- ***Use biologicals to support recovery where appropriate.***
- ***Apply registered chemistry only where risk justifies it.***

Onions: A Strategic Crop

for South Africa's Open-Field Vegetable Value Chain

From seed genetics and seedlings to irrigation, nutrition, curing, packaging and exports, onions offer one of the strongest value-chain stories in South African vegetable farming.

Onions are one of the few vegetable crops that touch almost every part of South Africa's fresh produce economy. They move through municipal fresh produce markets, supermarket shelves, informal traders, food service kitchens, processors and export channels. For growers, onions offer scale, storability and reliable demand. For seed companies and agricultural role players, they offer something just as valuable: a crop where every decision in the value chain can influence yield, quality, marketability and profit.

That makes onion cultivation a strong focus for the July/August 2026 edition of Nufarmer Africa. This is not only a planting story. It is a commercial production story connecting seed technology, cultivar selection, seedling production, irrigation, nutrition, crop protection, curing, packaging, logistics and market access.

The Seed Decision Sets the Season

Onion success starts with the correct cultivar. South Africa's production regions differ widely, and onions are highly sensitive to day length. Short-day and intermediate-day varieties must be matched to region, planting window and final market. A variety that performs well in one production area can disappoint in another if the bulbing trigger is wrong.

"In onions, seed is not only an input. It is the first market decision."

This makes onions a natural platform for seed companies. Growers do not only need seed; they need technical guidance on maturity class, bulb colour, uniformity, bolting tolerance, disease tolerance, storage ability and market preference. The South African market still favours yellow and brown onions, while red and pink types serve smaller but valuable niches.

For seed suppliers, July and August are valuable communication months. Southern production areas may still be transplanting from July into October, while other regions are reviewing cultivar performance, planning future cycles and securing seed for upcoming production windows.

Seedlings, Stand and Plant Population

Onions may be direct-sown or transplanted, but commercial growers know that uniformity is money. A poor stand affects bulb size distribution, harvesting efficiency and final pack-out. Seedling producers therefore play a central role before the crop reaches the open field.

Strong seedlings establish quickly, recover from transplant shock and support an even plant population. Medium-sized bulbs are often

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preferred locally, which means spacing and population must be planned with the buyer in mind. This creates opportunities for seedling nurseries, seed treatment companies, growing media suppliers and biological root-development products.

Unlike tomatoes, brinjals and some cucurbits, onions are not normally grafted. The equivalent "performance technology" in onions lies in genetics, seed quality, seedling strength, soil health and precision crop management.

Irrigation and the Clean Water Question

Most serious open-field vegetable growers already use advanced irrigation systems. The 2026/27 risk is therefore not simply whether growers understand irrigation. The bigger question is whether farms will have enough clean, reliable water to maintain crop quality through heat, wind and dry spells.

Onions have a relatively shallow root system and cannot be allowed to dry out during bulb formation. Water stress can reduce bulb size, create uneven crops and affect marketable yield. Poor water quality can add further risk through salinity, sodium build-up, clogged drippers and soil-structure problems.

"The next competitive edge in onion production may be cleaner, better-managed water."

This is where irrigation companies, filtration suppliers, pump specialists, fertigation advisers, water-testing laboratories and water-treatment partners have a strong story to tell. In onion production, water management is about applying the right quality water, evenly, at the right time.

Nutrition, Protection and Biological Support

Onions reward balance. Too little nutrition limits growth. Too much nitrogen can delay maturity, soften bulbs and reduce storage quality. A soil analysis-led fertility programme remains the responsible starting point, but the commercial opportunity is broader than basic fertiliser.

Precision nutrition, potassium timing, micronutrients, biological soil amendments and stress-mitigation products all have a place where they can show measurable value. Weed pressure is also a major early-season threat because young onions compete poorly. Diseases and pests must be managed through rotation, field sanitation, monitoring and registered crop protection products.

For input suppliers, onions offer a valuable demonstration crop because the results are visible: better uniformity, stronger skins, firmer bulbs, improved curing, reduced losses and higher marketable yield.

Curing, Storage and Market Timing

One of the onion's strongest advantages is storability. Correctly cured onions can be held and marketed when prices are more favourable. But storage is only an advantage when the crop has been produced, harvested and cured correctly. Thick necks, immature bulbs, disease, bruising and poor airflow can quickly turn storage into loss.

This opens the door for curing systems, crates, handling equipment, grading lines, packaging suppliers, cold-chain partners and market agents. The value of an onion crop does not stop at lifting. It continues through every handling decision until the bulb reaches the buyer.

For growers, this means onion production must be planned from the market backwards. The intended buyer influences cultivar choice, bulb size, storage requirements, packaging and timing. For role players in the value chain, this creates a strong opportunity to support growers with practical products and technical advice that improve consistency from field to shelf.

Exports Add Weight to the Opportunity

South Africa is not only producing onions for local kitchens. There is clear evidence that onions and shallots are part of the country's fresh produce export story.

"Export figures confirm that South African onions are more than a domestic staple. They are a value-chain opportunity."

The export figures come from WITS/World Bank trade data for HS 070310, which records South Africa's 2024 fresh/chilled onion and shallot exports at $33.95 million and 125.7 million kg, led by Mozambique, Angola, the United Kingdom, the Netherlands and Eswatini.

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This is an important signal for the industry. It shows that onion production is not limited to local fresh produce markets.

Regional African demand is particularly important, while overseas destinations show that quality South African onions can enter demanding supply chains when production, curing, grading and logistics are managed correctly.

For export-minded growers, the message is simple: quality starts in the field. Export is not a rescue market for poor-quality onions. It rewards consistency, skin retention, firmness, shelf life, reliable volumes and professional handling.

For seed companies and value-chain partners, the export data also strengthens the commercial argument.

A crop with both local demand and export movement creates room for better genetics, stronger technical support, improved water management, more efficient post-harvest systems and better market planning.

A Crop That Connects the Whole Chain

Onion cultivation deserves attention because it is not a single-input crop. It is a value-chain crop. The grower needs the seed company, nursery, irrigation designer, fertiliser adviser, crop protection specialist, biological supplier, water laboratory, packhouse, logistics provider and market agent.

For South Africa, onions remain a high-volume, high-relevance crop with local demand, storage potential and export opportunity. For the agricultural industry, the message is clear: better genetics, cleaner water, stronger seedlings, sharper crop management and professional post-harvest handling can turn an ordinary onion season into a more profitable one.

As growers prepare for future production windows, July and August should be used for more than planting decisions. They should be used to build partnerships across the onion value chain. In a crop where quality is created step by step, every role player has a place in the final result.

Written By (M.O)

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ports to rise strongly, with deep-sea whole maize exports projected at 1.70 million tonnes. This matters because Far East markets are typically important for yellow maize used in livestock and poultry feed.

"Regional buyers and Far East markets could become the difference between continued pressure and price recovery."

Regional demand also remains central. Southern African buyers have been important customers for South African maize, especially when weather conditions reduce harvests elsewhere in the region. If regional supplies tighten, South Africa's export role could strengthen.

For now, the maize market is not being driven by scarcity. It is being shaped by how quickly available supply can move into domestic and export channels. Stronger regional demand, renewed Far East buying and firmer global prices could help maize prices recover, but large domestic stocks mean any recovery is likely to remain demand-led rather than supply-led.

(M.O

South African Watermelon Production Moves Beyond Variety Selection

Seed, rootstock, nursery skill, bees, irrigation and timing are becoming one complete production system

As spring approaches in South Africa, watermelon growers are preparing for one of the country's most important warm-season crops. But the conversation is changing. Growers are no longer choosing seed alone. They are choosing a complete plant system — the right variety, the right rootstock, the right nursery and the right market window for their region.

South African watermelon production is becoming more technical, more regional and more precise. The days of simply asking, "Which variety must I plant?" are slowly being replaced by a better question: "Which complete system will give me the best chance of producing marketable fruit under my conditions?"

That system now includes seed genetics, grafted seedlings, rootstock selection, nursery quality, pollination, bees, irrigation, disease pressure and market timing.

"Growers are no longer choosing seed alone. They are choosing a complete plant system."

This shift is especially important as growers prepare for spring planting. In South Africa, watermelon planting normally begins when weather and soil temperatures warm sufficiently, with spring plantings commonly starting from late August onward in suitable areas. Watermelons need warmth, good soil preparation and careful establishment to perform well.

Seed Remains Important, But It Is No Longer the Whole Story

Major seed suppliers active in South Africa, including companies such as **Sakata, Starke Ayres, Syngenta, Enza Zadan SA** and others, offer growers a wide range of watermelon options. These include traditional seeded types, Crimson Sweet types, All Sweet types, seedless triploids and specialist pollinators.

Seeded varieties remain important for many local markets. They are familiar, accepted by buyers and often easier to manage than seedless crops. Seedless watermelons, however, are gaining attention where growers supply premium markets, retailers or fresh-cut channels.

But seedless production requires more precision. Triploid seedless watermelons need diploid pollinator plants because they do not provide sufficient viable pollen on

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their own. Without good pollinator placement and strong bee activity, fruit set can suffer.

This is where the watermelon crop becomes a system, not just a seed choice.

Grafted Seedlings Are Changing the Crop Foundation

Grafted watermelon seedlings are becoming increasingly important in commercial production, especially where growers face soil fatigue, Fusarium pressure, salinity concerns, weaker soils or repeated cucurbit production.

In a grafted plant, the fruiting variety is joined to a stronger rootstock. The scion delivers the fruit type, eating quality and market appeal. The rootstock supports the crop below the soil, helping the plant cope better with stress and soil-borne challenges.

This places professional nurseries at the centre of modern watermelon production. Renowned South African seedling producers such as **Hishtil South Africa, Sutherland Seedlings, Ezigro**, **P&A Seedlings** and other commercial nurseries play an important role in delivering uniform, healthy seedlings to growers at the correct planting time.

A strong seedling start matters. Poor grafting, weak recovery, uneven plants or late delivery can affect the crop before it has properly entered the field. Nursery skill has therefore become part of the grower's risk management plan.

"A strong crop begins long before planting day — it begins with the right seedling, rootstock and market plan."

Regional Adaptation Is Critical

South Africa's watermelon regions cannot be treated the same.

The Klein Karoo and Ladismith area require different thinking from Brits. The Northern Cape is different from Limpopo. A cultivar that works well in one area may not perform as expected in another if soil, heat, disease, irrigation and market distance are not considered.

In the Klein Karoo and Ladismith, growers must think carefully about heat, wind, irrigation discipline, sunburn risk and fruit transport. Strong vine cover, firm rind, good shelf life and suitable rootstock may all be important.

In the Brits area and other warmer irrigation regions, early market timing can be attractive. However, growers must also manage disease pressure, pollination and water carefully. Seedless watermelon can work in the right programme, but only where pollinator planning, bee activity and technical support are in place.

For hot, dry production areas such as parts of the Northern Cape, fruit firmness, shelf life, rind strength and efficient irrigation become

"The Klein Karoo, Ladismith and Brits cannot be treated as the same watermelon production area."

key considerations. In cooler areas, planting too early can lead to poor establishment and uneven growth.

This is why local advice from seed representatives, nursery specialists and agronomists remains essential. Regional adaptation is not a marketing phrase. It is a practical requirement for producing a reliable, marketable crop

Pollination and Bees Are Not Optional.

Watermelon yield depends heavily on pollination. Bees move pollen between flowers, helping fruit set and fruit shape. Poor pollination can result in low yield, misshapen fruit and uneven sizing.

In seedless production, bees are even more important because pollen must move from the pollinator plants to the seedless plants. Hive placement, spray timing and flowering management all become part of the production plan.

"Seedless watermelon can reward growers, but only when pollination, bees and technical management are in place."

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A grower can invest in excellent seed and strong grafted seedlings, but if pollination fails, the crop will not reach its full potential.

Irrigation and Market Timing Complete the System

Watermelon is a heat-loving crop, but it does not forgive poor water management.

Drip irrigation and fertigation allow growers to manage water and nutrients more accurately, especially in hot areas or where water use must be carefully controlled.

Market timing is just as important. Watermelon demand rises in warm weather, around holidays and during peak summer periods, but oversupply can quickly affect prices. Growers must plant with the harvest window in mind.

The modern watermelon grower is therefore not only producing fruit. He is managing timing, quality, logistics and buyer preference.

A grower supplying a municipal market may require a different fruit size and type from a grower supplying retailers. A grower targeting premium buyers may consider seedless production, while another grower may still find strong demand for traditional large seeded fruit.

A Spring Crop With a New Mindset

As South Africa moves toward spring, watermelon growers have an opportunity to plan more carefully than ever before.

The strongest crops will not come from variety choice alone. They will come from a complete production system that brings seed, rootstock, nursery skill, pollination, bees, irrigation and market timing together.

Watermelon may still look like a simple summer crop from the outside. But for the grower, it has become a crop of precision.

Written by (M.O)

Before Spring Planting — Five Questions Watermelon Growers Should Ask

Before placing watermelon seedlings in the ground this spring, growers should pause and review the full production system.

1. Is the Variety Right for My Market?

   Large seeded fruit, smaller fruit and seedless watermelon do not always serve the same buyer. Growers should know what their market wants before committing to a variety.

2. Does My Soil Need Grafted Plants?

   Repeated cucurbit production, Fusarium pressure, weaker soils or water-quality challenges may justify grafted seedlings and stronger rootstock.

3. Is My Nursery Ready on Time?

   Uniform, healthy seedlings are essential for even field establishment. Late, uneven or weak seedlings can compromise the crop from the start.

4. Have I Planned Pollination Properly?

   Seedless crops need pollinators and strong bee activity. Hive placement, flowering timing and spray management all matter.

5. Am I Planting for the Right Harvest Window?

   Market timing can determine whether a good crop becomes a profitable crop. Growers should plant with the buyer, transport route and harvest period in mind.

Watermelon production now rewards growers who plan the full system, not only the seed order.

Blocky Peppers:
Precision Crop with Premium Potential

For South African commercial and emerging farmers, open-field blocky pepper production can deliver strong returns, but only when the crop is managed professionally from seedling tray to market shelf.

Blocky sweet peppers have become a valuable part of South Africa's fresh vegetable economy.

This is not a crop for guesswork. Success starts with the right plant

"In blocky peppers, the harvest is often decided before planting — in the quality of the seedling, the strength of the root system and the timing of establishment."

Their appeal is simple: they are colourful, versatile, popular with consumers and widely used in home cooking, retail packs, food service and processing. For farmers, they offer good value per hectare, but they also

A Crop for the Right Region and Window.

Open-field blocky peppers are produced in several irrigated vegetable regions across South Africa. Important areas include Limpopo, Mpumalanga, Gauteng, KwaZulu-Natal, the North West and suitable parts of the Eastern, Western and Northern Cape. Frost-free Lowveld areas can target different seasonal windows, while Highveld and Cape producers must work more carefully around cold periods, transplant timing and market supply peaks.

The crop performs best in warm, stable conditions with good sunlight and protection from frost. Blocky peppers do not tolerate cold, waterlogged soil or erratic moisture. In open-field production, the planting window

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must match the region. Growers in warmer areas may produce earlier or later crops, while colder areas are usually restricted to spring and summer plantings.

"The domestic market buys volume, but premium buyers pay for consistency, traceability and shelf life."

Domestic Market Still Drives the Industry

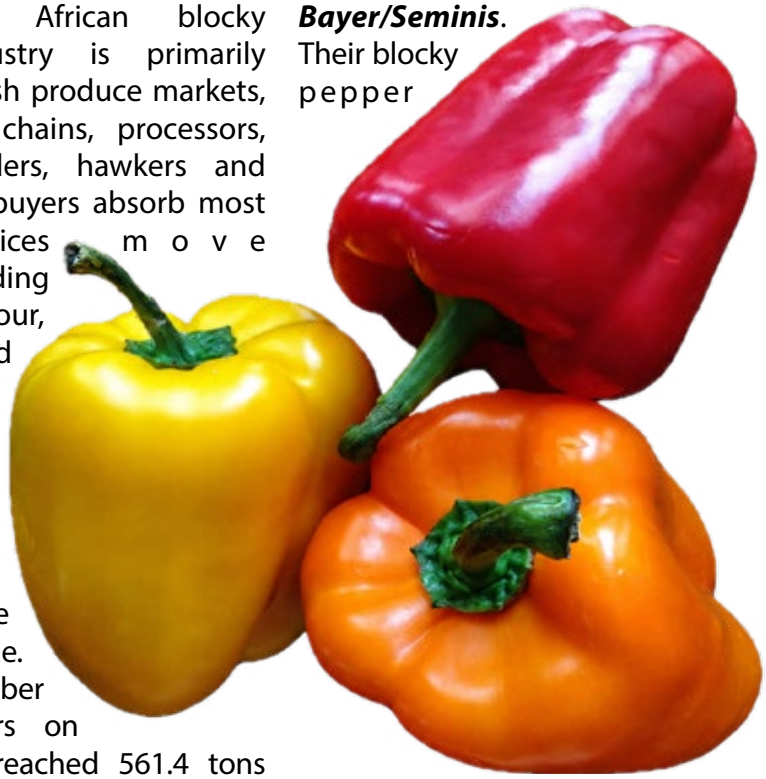
The South African blocky pepper industry is primarily domestic. Fresh produce markets, supermarket chains, processors, informal traders, hawkers and food service buyers absorb most production. Prices move sharply according to supply, colour, quality and season.

The Cape Town Fresh Produce Market gives a useful example of market value. In November 2025, peppers on that market reached 561.4 tons at an average price of R25 162.40 per ton, representing about R14.1 million in monthly turnover from peppers on one municipal market alone.

Exports exist, but they remain a more demanding channel. Fresh pepper exports fall under HS 070960, which includes fresh or chilled Capsicum and Pimenta products. For blocky peppers, export opportunity depends on uniformity, food safety, residue compliance, cold-chain control, carton quality and reliable supply programmes. Regional African markets remain important, while selected international opportunities are possible for growers and exporters that can meet strict specifications.

Seed Houses, Nurseries and the Role of Strong Seedlings

Major seed suppliers active in the sweet pepper market include ***Starke Ayres, Sakata Seed Southern Africa, Syngenta Vegetable Seeds, Enza Zaden, and Bayer/Seminis***. Their blocky pepper portfolios include green-to-red, green-to-yellow and coloured types, with different resistance packages, fruit wall thickness, plant vigour and market positioning.



However, the best genetics still depend on a strong seedling. For emerging and commercial growers, buying uniform, professionally produced seedlings is often more reliable than trying to raise plants on-farm.

A quality seedling should be compact, hardened, disease-free, uniform in size and ready to establish quickly after transplanting.

This is where specialist nurseries become important role players. Commercial vegetable growers need seedlings produced according to planting schedules, in suitable trays, with reliable delivery timing and strong technical communication between the farmer, nursery and seed representative.

Conventional or Grafted Seedlings?

Most open-field blocky pepper farmers still plant conventional seedlings because they are cost-effective and suitable for clean, well-rotated soils.

They are generally the right choice where the soil has low disease pressure, good drainage and no serious nematode or Phytophthora history.

Grafted blocky pepper seedlings are considered where production risk is higher. These include fields with repeated solanaceous crops, known nematode pressure, root disease risk, salinity stress, heavier soils, poor drainage or longer crop cycles. Grafted plants cost more, so the decision must be based on likely return: better survival, stronger root systems, improved uniformity and a higher percentage of marketable fruit.

"Grafting is not automatically better; it is better where soil pressure and crop risk justify the extra investment."

Farmers should not leave this decision until the last minute. Grafted programmes require planning, rootstock selection, seed availability and nursery lead time. The conversation must happen early between the grower, seed house and nursery.

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Soil, Irrigation and Nutrition

Blocky peppers perform best in deep, well-drained, fertile soils with good organic matter and a pH of around 6.0 to 7.0. A soil analysis before planting is essential. Lime, phosphate, potassium, calcium and trace elements should be corrected before the crop goes in.

Raised beds are recommended where drainage is uncertain. Compaction must be avoided because peppers need oxygen around the roots. Waterlogged roots lead to weak plants, yellowing, disease and poor fruit set.

Drip irrigation is the preferred system for commercial production. It allows accurate water delivery and fertigation, keeps foliage drier and helps reduce disease pressure. Peppers need consistent moisture during establishment, flowering, fruit set and fruit sizing. Stress can cause flower drop, blossom-end rot, small fruit and poor pack-out. Over-irrigation is just as damaging, causing nutrient leaching and root disease.

IPM and Crop Protection

Integrated Pest Management is essential in blocky pepper production. Key threats include thrips, whitefly, aphids, mites, bollworm, nematodes, bacterial spot, powdery mildew, Phytophthora and virus complexes. The strongest programmes begin with clean seedlings, resistant varieties, crop rotation, field hygiene, weed control and regular scouting.

Sticky traps, pest thresholds, biological options and responsible chemical rotation all form part of a professional IPM programme. Retail and export buyers are increasingly strict on residues, so spray decisions must protect both the crop and the market.

Harvest, Packing and Shelf Life

Blocky peppers are harvested by hand with a short stem attached. Green fruit must be mature and firm, while red, yellow and

orange fruit must meet colour specifications without being overripe. Bruising, cracking, sunburn and shoulder damage immediately reduce value.

Packing starts in the field. Fruit must be shaded, handled gently and moved quickly to a cool packing area. Sorting is done according to colour, size, firmness, shape and defects. Ventilated cartons or crates must protect the blocky shape without pressure damage.

Transport is part of quality management. Peppers should not stand in the sun or travel in hot, mixed loads. At approximately 7°C to 10°C with high relative humidity, good quality peppers can hold for several weeks. Once the cold chain breaks, shelf life shortens fast.

Written by (M.O)

Why Seedling Quality Matters in Blocky Peppers

1. ***For emerging farmers, the seedling is often the safest place to invest. A uniform block starts with uniform plants. Strong seedlings establish faster, flower more evenly and make irrigation and nutrition easier to manage.***
2. ***Before ordering, farmers should confirm the variety, tray type, delivery date, plant age, hardening process and whether the nursery can support the planting schedule. A weak or stretched seedling may look cheaper on paper, but it can cost far more in uneven stands, delayed harvest and lower marketable yield.***
3. ***In blocky peppers, profit is not only measured in tons. It is measured in marketable cartons, colour, firmness, shelf life and buyer confidence.***

Butternut Farming in South Africa

Spring Planning for a Crop That Rewards Discipline

As South Africa's open-field vegetable farmers move toward the spring planting season, butternut returns to the production calendar as one of the country's most reliable warm-season crops. It is not always treated with the same excitement as berries, avocados or export citrus, but it has something many growers value deeply: consistent domestic demand, reasonable storage ability, processing potential and a market that already understands the product.

The crop fits well into open-field systems because it is robust, familiar to consumers and used in many forms. It is sold fresh as whole fruit, peeled and cut into packs, frozen into cubes, and processed into soups, purées and ready-meal ingredients.

This makes it attractive not only to established commercial vegetable farmers, but also to newer growers looking for a crop with several possible routes to market.

"Butternut is not only a field crop. It is a market crop, and the market begins shaping the harvest before the seed goes into the soil"

Butternut is widely grown across South Africa wherever frost risk, soil drainage and water availability allow. The main spring planting period generally runs from August to December, although colder production areas should wait until the danger of frost has passed. In warmer and frost-free areas, the production window can be stretched, giving growers more flexibility in market timing.

A Local Industry Built on Quality and Timing

South Africa's butternut industry forms part of the wider pumpkin, squash and gourd category, which includes butternut, muscat pumpkins, Hokkaido pumpkins and other related cucurbits. Publicly available national statistics do not always separate butternut as a stand-alone crop, but the broader category gives a useful indication of industry scale. South Africa's pumpkin, squash and gourd production was estimated at close to 280,000 tonnes in 2022, with exports accounting for less than 10% of production volume.

Butternut remains one of the most important crops within this category because of its strong local demand, storage ability and usefulness in both fresh and processed markets. It is supplied to municipal fresh produce markets, retailers, informal traders, processors and, in selected cases, export programmes.

The crop is often viewed as reliable, but that does not mean the market is without risk. Prices can move sharply when supply tightens or when quality is inconsistent. This is why market planning must come before planting. A grower supplying fresh produce markets will make different variety, harvesting and packing decisions

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from a grower supplying pre-pack processors, retailers or export buyers. Fruit size, shape, skin finish, flesh colour, uniformity and shelf life all influence the final return.

Seed Choices for Open-Field Production

The seed decision is one of the most important choices in a butternut programme. South African growers have access to established vegetable seed suppliers such as ***Sakata Seed Southern Africa, Starke Ayres, Hygrotech and Seed Co,*** along with other distributors serving the cucurbit market.

Commercial variety selection should be matched to the intended buyer. Retail programmes often look for uniform fruit size, good skin finish and strong shelf life. Processors may prefer larger fruit, strong internal colour and good flesh recovery. Fresh produce markets can be more flexible, but quality, consistency and transport durability still influence price.

Among the better-known butternut varieties and commercial lines available or referenced in the South African and Southern African market are ***Sakata's Pluto F1, Quantum F1 and Titan F1; Starke Ayres varieties such as Gilda, Shiba, Krista, Arela, Melora, Paula, Lauda and Dorada; Hygrotech's Pilgrim, HSC 173, Geneva Maxi, Canesi, HSC 155 and Ultra; and Seed Co's Maxim F1.***

Availability can vary by season, region and supplier stock, so growers should confirm current seed availability and market fit with their seed representative before finalising hectares. The most profitable variety is not always the one that gives the highest theoretical yield. It is the one that delivers the best combination of marketable yield, pack-out percentage, shelf life and buyer acceptance.

The seed decision is not only an agronomic decision. It is a marketing decision made months before harvest.

Soil Preparation: Where Profit Starts

Butternut performs best in fertile, well-drained soil with good organic matter and low salinity. Sandy loam to loam soils are generally preferred, provided they can hold enough moisture without becoming waterlogged. Soil should be tested well before planting so that pH, phosphorus, potassium, calcium, magnesium and trace elements can be corrected in time.

Deep ripping may be needed where compaction layers restrict root development. Crop residues from previous plantings should be well decomposed before planting. In areas where heavy rain or poor drainage is a risk, raised beds can help protect roots from waterlogging and root diseases.

A pH of around 6.0 to 6.5 is often considered suitable for butternut production. Where soils are too acidic, lime must be applied early enough to react in the soil. Compost and well-rotted manure can improve soil structure, but they should be used carefully and tested where possible to avoid introducing weed seed, salts or uneven nutrient loads.

Irrigation and Fertigation

Butternut needs consistent moisture, especially during flowering, fruit set and fruit fill. Water stress at these stages can reduce yield and fruit size, while over-irrigation can encourage root disease and poor plant health. Drip irrigation is strongly recommended because it places water near the root zone while keeping foliage drier, which can reduce disease pressure.

Fertigation allows nutrients to be applied in smaller, more accurate doses through the irrigation system. This is particularly useful for nitrogen and potassium management. Nitrogen supports vine growth, but too much nitrogen can push excessive vegetative growth at the expense of fruit quality. Potassium becomes especially important during fruit sizing, sugar development and rind quality.

"The best butternut crops are not forced. They are guided through the season with steady water, balanced nutrition and clean field management".

A proper fertigation programme should be based on soil analysis, water quality and, for commercial growers, leaf analysis during the season. Guesswork is expensive.

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In a crop where margins can be squeezed by transport, labour and market commission, every unnecessary kilogram of fertiliser matters.

IPM and the Residue-Conscious Direction

Integrated pest management is no longer a nice idea reserved for export farms. It is becoming a practical requirement for growers who want to remain acceptable to retailers, processors and increasingly aware consumers.

Common cucurbit threats include powdery mildew, downy mildew, fusarium wilt, phytophthora root and crown rot, viruses, aphids, pumpkin fly, cucurbit beetles, cutworms and mites. Good control starts before planting with crop rotation, clean seedlings, weed management and field sanitation. Once the crop is established, scouting must be regular and recorded.

Bee protection is essential because butternuts depend on insect pollination. Sprays should be selected and timed carefully to protect pollinators, especially during flowering.

Growers should rotate chemical groups, respect withholding periods, avoid unnecessary broad-spectrum sprays and integrate biological products where they fit the pressure and production system.

The direction is clear: fewer unnecessary chemical interventions, better monitoring, cleaner records, safer residues and stronger biological balance in the field. Farmers who build this discipline early will be better positioned for retail programmes and future market requirements.

Harvesting, Curing and Storage

Butternut is usually ready for harvest about 12 to 15 weeks after planting, depending on variety, temperature and production conditions. A mature fruit has a hard rind that is difficult to puncture with a thumbnail. The skin should have developed its mature tan colour, and the stem should be firm and drying.

Harvesting must be done carefully. Fruit should be cut from the vine with a short piece of stem attached, not pulled off. Bruising, cuts and broken stems reduce shelf life and create entry points for rot. Workers should be trained to handle the fruit as a food product, not as a hard object that can be thrown around.

After harvest, curing helps harden the rind, heal minor surface wounds and improve storage performance. Fruit should be kept in a dry, ventilated area out of direct sun. Butternut does not ripen in the same way as tomatoes or bananas; the postharvest process is more about curing, stabilising quality and protecting shelf life.

Packing, Transport and Shelf Life

Packing depends on the buyer. Some markets use bags, some use bins, and retail or export channels may require more formal grading and packaging. Fruit should be sorted by size, shape, maturity and damage. Any cracked, bruised or diseased fruit should be removed before storage or transport.

Transport must protect the crop from heat, rough handling and compression damage. Although butternut has better shelf life than many vegetables, poor handling can quickly destroy value. Ventilation matters, especially when fruit is moved over long distances to markets, processors or packhouses.

For export and higher-value retail programmes, consistency is everything. A beautiful first layer and a poor-quality bottom layer will not build trust. Repeat buyers want repeat quality.

Processing, Exports and Profitability

Butternut has strong agri-processing potential. Peeled and diced butternut, frozen cubes, soup bases, purées and ready-to-cook packs can absorb fruit that may not meet whole-fruit retail specifications but still has good internal quality. This is important for reducing waste and improving total crop value.

Exports are possible where growers can meet strict specifications, volumes, residue requirements and cold-chain demands. Europe offers seasonal windows for pumpkins and squash from outside the EU, particularly during the European low season. However, export farming is not simply local farming with a passport. It requires planning, compliance, documentation and dependable logistics.

Profitability depends on yield, pack-out percentage, input costs, labour efficiency, distance to market and price timing. A high-yielding crop with poor market timing can disappoint. A moderate yield with excellent quality and a

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confirmed buyer can perform far better.

El Niño: Risk, but Also Opportunity for Prepared Growers

The expected return of El Niño conditions into the 2026/27 season adds a serious planning consideration for open-field butternut growers. For many summer rainfall production areas, El Niño can increase the risk of heat stress, dry spells and pressure on irrigation resources. That makes water security, irrigation scheduling and soil moisture retention more important before planting decisions are made.

However, for well-prepared commercial farmers, El Niño can also create opportunity. If dry conditions reduce plantings, lower yields or weaken fruit quality in some regions, growers with reliable irrigation, strong plant health, good pack-out and storage capacity may be better positioned to supply a tighter market. In vegetable crops, price opportunities often open when supply becomes uneven, but they are only useful to farmers who still have saleable product.

The opportunity should not be misunderstood as a reason to plant recklessly. Expanding hectares without secured water, labour, packaging, transport and buyer channels could increase risk rather than profit. The stronger strategy is to protect quality, plan staggered plantings where possible, strengthen storage discipline and keep communication open with buyers before the market tightens.

In an El Niño season, the advantage may not belong to the farmer with the most hectares. It may belong to the farmer with the most control.

Small and New Farmers: Start with Market Discipline

For small and new farmers, butternut can be a useful entry crop, but it should be approached carefully. It is familiar to consumers, relatively hardy, and more forgiving after harvest than many

soft vegetables. However, it still requires proper planning, reliable water and a clear route to market.

The best starting point is a manageable planting area. New growers should avoid expanding too quickly before they understand their true production costs, labour needs, grading standards and buyer requirements. A smaller, well-managed block can teach more than a large planting that becomes difficult to irrigate, scout, harvest and sell.

Before planting, new farmers should test the soil, secure water, choose a variety according to the intended market and speak to potential buyers. Municipal fresh produce markets, local traders, retailers, processors and informal outlets may all have different expectations around fruit size, packaging and delivery timing.

Records are also important from the first crop. Farmers should track seed costs, fertiliser, chemicals, labour, irrigation, packaging, transport, market commission and rejected fruit. Without these numbers, it is difficult to know whether the crop was genuinely profitable or merely produced a visible harvest.***As spring approaches, butternut offers South African farmers a familiar opportunity with modern demands.***

The crop rewards preparation, clean production, disciplined irrigation and strong market thinking. In the July/August planning window, the most successful growers will not simply ask how to grow butternut. They will ask how to grow the right butternut, for the right buyer, at the right time. ***Written by (M.O)***

Financial Trend to Watch

Butternut prices can move quickly when supply tightens. Recent Cape Town fresh produce market data has shown how sensitive the crop can be to changes in traded volume, with lower availability often placing upward pressure on prices. With El Niño risk increasing, growers should budget for higher irrigation pressure, possible yield variability and stronger price volatility rather than relying on one average market price.

For irrigated growers with secure water, efficient fertigation and good storage facilities, this may also create a marketing opportunity. If regional supply weakens, quality fruit with a longer shelf life could attract stronger interest from fresh markets, processors and retail buyers. The financial upside, however, will depend on disciplined cost control, not simply on planting more hectares.

Ostrich Production in South Africa:
A Specialist Industry Tested by Floods, Disease Risk and Export Demands

South Africa's ostrich industry remains one of the country's most distinctive livestock value chains, built around meat, leather and feathers. But in 2026, the sector is being reminded that production success depends on more than good breeding and feed. Floods in the Klein Karoo, disease surveillance, infrastructure damage and export logistics are all shaping the future of this specialist industry.

A bird that became a South African industry

Few agricultural industries carry South Africa's identity quite like ostrich farming. It is smaller than beef, poultry or pork, yet internationally significant because of the country's long production history, specialist processing capacity and established export experience.

The industry's roots reach back to the feather trade of the nineteenth century. Ostrich feathers were once the product that drove the sector, especially for European fashion markets. Over time, the commercial focus shifted. Leather became a major value driver, while meat developed into an important export product from the 1990s onwards.

Today, the modern ostrich is not farmed for one product. It is a three-product animal. Meat, leather and feathers together determine the commercial value of the bird. This is one of the features that makes ostrich production different from many conventional livestock systems. A producer cannot think only in terms of kilograms of meat. Skin quality, feather handling, animal health status, traceability and market access all matter.

"An ostrich is not a single-product animal. The income story is written across meat, leather and feathers."

The Klein Karoo remains the heart of the industry

Ostrich production is still strongly associated with the Klein Karoo and southern Cape, particularly Oudtshoorn, long known as the ostrich capital of the world. Production also takes place in other parts of the country, but the Western Cape remains central to the industry's identity, infrastructure and expertise.

This concentration is no accident. Ostriches are suited to dry, open landscapes, and the industry grew where climate, farmer experience, hatchery systems, abattoirs and export-linked processors came together. The sector also depends on specialised value-chain infrastructure. Birds must be bred, hatched, reared, transported, slaughtered, inspected, cut, packed, tanned and marketed through a tightly managed system.

That is also why the recent flooding in parts of the Klein Karoo and

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Garden Route has been such an important warning. The damage was not only about water in fields. It exposed how dependent the ostrich value chain is on rural roads, bridges, farm access, feed routes, veterinary access and transport links to processing facilities.

Floods expose a vulnerable value chain

The May 2026 floods struck a region already familiar with drought, fragile infrastructure and long transport distances. Official provincial updates confirmed widespread flooding, damage to roads and bridges, disruption to farming communities, farms cut off by damaged transport routes and ongoing recovery work in affected rural areas.

For ostrich producers, that kind of disruption can move quickly from inconvenience to crisis. Feed must reach farms. Birds must be moved safely when required. Veterinary officials and service providers need access to farms. Abattoirs depend on predictable supply. Export products ultimately need to move through road networks and onward to ports.

Reports from the Oudtshoorn area showed ostriches stranded in floodwaters, with farmers and local residents assisting in difficult rescue conditions. While the full industry loss was still being assessed at the time of writing, the images were a stark reminder that ostrich farming depends not only on animal husbandry, but also on the strength of the infrastructure around the bird.

"When roads, bridges and feed routes fail, the ostrich value chain feels it immediately — from the farm gate to the abattoir and export market."

wThe floods also raise a bigger planning question. How does a semi-arid farming region prepare for both drought and extreme rainfall? For producers, resilience now has to include more than water-saving and feed planning. It also means safer camp placement, stronger fencing design, emergency feed reserves, alternative access routes, clear animal movement protocols and better communication between farmers, municipalities, processors and veterinary authorities.

The chick phase is where skill is tested

The adult ostrich looks tough, but the most vulnerable part of production is the chick. Newly hatched ostrich chicks require intensive care, and mortality risk is highest in the early weeks and months after hatching.

Commercial production begins with eggs, usually collected and incubated under controlled conditions.

Chicks are then reared through a high-care phase before moving into grow-out systems. Housing, hygiene, temperature control, ventilation, feed quality, clean water and daily observation all become decisive.

The South African Ostrich Business Chamber notes that chicks are frail during the first three months in a crowded commercial environment, even though adult ostriches are hardy animals. That contrast is important. Ostrich farming is not casual livestock production. It is technical, management-heavy and unforgiving when early mistakes are made.

Flooding can also affect this phase indirectly. Wet conditions, damaged housing, disrupted feed delivery, poor access roads and stress on farm teams

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can all increase management pressure. In a specialised sector, small disruptions can have long commercial consequences.

"The adult ostrich looks hardy, but the profitability of the farm is often decided in the first weeks of a chick's life."

can all increase management pressure. In a specialised sector, small disruptions can have long commercial consequences.

Feed costs remain a major pressure point

Feed remains one of the major cost levers in ostrich production. In some production phases, feed can account for a large portion of direct costs, making ration planning, fodder access and feed efficiency central to profitability.

This is particularly relevant in the Klein Karoo, where lucerne has historically played an important role, but where feed ingredients and transport costs can add pressure. Drought, irrigation limits, flood damage, road closures and distance from suppliers can all influence the cost of keeping birds in good condition.

The broader agricultural environment in 2026 offers some positives, including improved rainfall in parts of the country and better grazing conditions in some livestock regions. But ostrich producers cannot rely on favourable seasons alone. A farm that loses efficiency through poor chick survival, disease risk, weak infrastructure or delayed transport can quickly lose the benefit of better feed conditions.

In the aftermath of flooding, feed logistics become even more important. Even where feed is available, damaged roads can delay delivery. Where farms are cut off, emergency planning becomes the difference between a manageable disruption and a welfare or production crisis.

"In ostrich farming, biosecurity is not paperwork. It is market access, disease control and farm survival."

Biosecurity remains non-negotiable

If one word defines modern ostrich production, it is biosecurity.

South Africa's avian influenza history has shaped the industry deeply. Previous outbreaks resulted in restrictions, surveillance pressure and major commercial losses. In 2026, official animal-health reporting still showed that avian influenza remains a controlled animal disease in South Africa, with reporting and control measures remaining critical.

The January 2026 avian influenza update recorded H5 detections on ostrich farms mostly in the Hessequa and Oudtshoorn local municipalities, with sequencing indicating low pathogenic H5N1 avian influenza. This does not carry the same meaning as a highly pathogenic event, but it reinforces a central point: surveillance, reporting, traceability and movement control remain part of the daily discipline of the industry.

Biosecurity also becomes more complicated during extreme weather. Floods can damage fences, alter bird movement, disrupt farm access and create emergency situations where normal routines are placed under pressure.

For export-linked farming, the paperwork, the veterinary controls and the physical farm systems all have to hold together.

Export markets reward discipline

South Africa's ostrich sector is heavily linked to export markets. Meat, leather and feathers serve different buyers and different value chains, from health-conscious meat consumers to luxury leather markets and feather-based products.

Ostrich meat has a clear identity as a lean red meat from a bird. Leather remains a premium product, valued for its distinctive quill pattern, strength and luxury appeal. Feathers continue to serve fashion, décor, craft and cleaning

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markets.

This diversity is a strength, but it also creates complexity. A bird's commercial value depends on how well the entire chain performs. Good meat yield does not fully compensate for poor skin quality. Strong leather demand does not remove the need for reliable animal-health status. Export confidence depends on veterinary capacity, processing standards, traceability, logistics and market trust.

That is why the flood damage matters beyond the farm boundary. If rural routes are damaged, if bridges are compromised, if birds cannot move safely, or if products face transport delays, the effects can ripple into processing and export planning.

A specialist industry with room for renewal

For new entrants, ostrich farming can look attractive because the bird offers multiple income streams. But the official and industry guidance is clear: this is not a simple livestock option. It requires registration, planning, veterinary engagement, biosecurity compliance, market alignment and patient capital.

There is also space for transformation and participation if new farmers are properly linked into existing value chains.

In a specialist export sector, mentorship, processing access and market integration are not optional extras. They are part of commercial survival.

South Africa has the history, infrastructure and technical base to remain a leading ostrich producer. The task for 2026 is to protect that advantage. Disease control must stay sharp. Feed efficiency must improve where possible. Young-bird survival must remain a priority.

Flood resilience must now be part of farm planning. And the infrastructure that connects farms to abattoirs, suppliers and harbours must be treated as part of the production system itself.

The ostrich industry has survived disease outbreaks, export shocks and market cycles.

The May floods add another challenge to that list. They also show why the sector's future will depend not only on the quality of the bird, but on the resilience of the entire value chain around it.

Written BY (M.O)

Five lessons from the 2026 ostrich production season

1. Ostrich farming is a three-product business

Meat, leather and feathers all contribute to income. Product quality across the full bird matters.

2. Flood resilience is now part of production planning

The May floods showed that ostrich farms need emergency feed plans, safe camp placement, alternative access routes and stronger communication with processors and disaster-management teams.

3. Chicks remain the most vulnerable production stage

The first three months require intensive management. Housing, hygiene, feed, water and observation are critical.

4. Biosecurity protects more than the farm

Disease reporting, traceability and movement control protect export markets, processors and the wider industry.

5. Infrastructure is part of the value chain

Roads, bridges, electricity, water systems and access to abattoirs are not background issues. They are central to getting birds, feed and export products moving.

Broiler Production and Chicken Meat Imports in South Africa

South Africa's broiler sector sits at the centre of the country's protein economy. Local producers carry the main production burden, but imports still play an important role in affordability, product balance and food security. The next phase of growth will depend on smarter production, more stable trade, stronger biosecurity and a realistic understanding of where local output can expand

Chicken remains South Africa's everyday protein

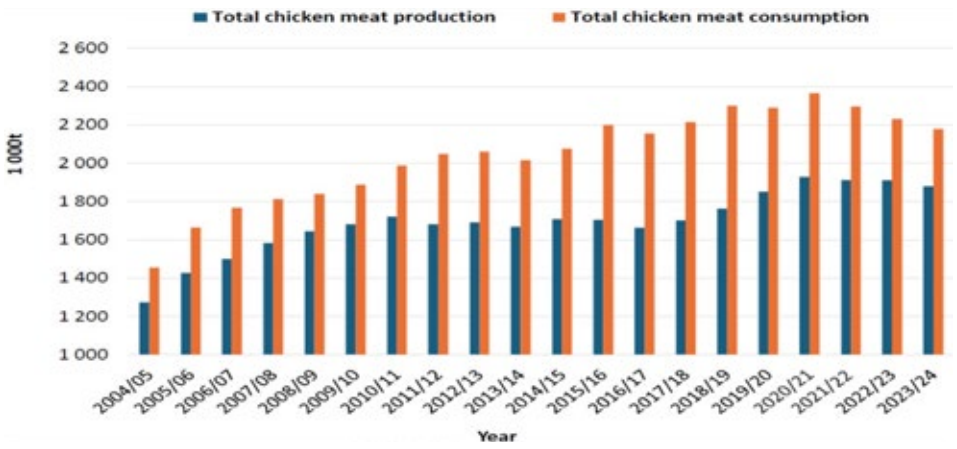
Chicken has become the practical protein of the South African household. It is relatively affordable, easy to prepare, widely distributed, accepted across communities and important to both formal retail and informal trade. That is why the broiler sector cannot be viewed as only a farming category. It is part of national food security.

The South African Poultry Association's 2023 industry profile recorded total poultry meat production at 1.863 million tonnes, while poultry meat consumption was far higher when imports and other supply channels were included. Chicken meat accounted for almost all poultry meat production, which confirms the dominance of the broiler chain inside the broader poultry sector. The same profile shows poultry meat and eggs together remain South Africa's largest animal-protein category by volume.

"Broiler production is no longer only about growing birds. It is about protecting South Africa's most accessible protein chain."

For producers, that scale is both an opportunity and a warning. Demand is not the problem. The challenge is to produce consistently, profitably and competitively in a market exposed to feed costs, electricity instability, disease pressure, trade policy and consumer affordability.

Local production carries the main load, but imports remain part of the system



The local broiler sector is sophisticated, with integrated producers, contract growers, hatcheries, feed mills, abattoirs, cold-chain systems and retail channels all linked in one high-pressure production chain. Yet South Africa has not fully closed the gap between local supply and national consumption. Imports continue to help cover shortfalls, especially in product categories where global trade pat-

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terns make certain cuts or inputs more available.

Imports, particularly from Brazil, help meet about 20% of local demand and play a role in affordability, especially where mechanically deboned meat is used in processed products for price-sensitive consumers. This is a sensitive subject because the industry must balance local farmer protection, job creation, consumer prices and food security. Too much import pressure can weaken local production. Too little supply flexibility can push prices higher and expose consumers to shortages.

That balance became clear when Brazil's temporary export disruption in 2025 affected South African import flows. According to ChickenFacts' March 2026 analysis, total chicken imports excluding MDM averaged 13,919 tonnes per month in 2025, while MDM imports averaged 17,121 tonnes per month. During the Brazil-linked disruption, volumes fell sharply in June and July before recovering. The lesson is simple: South Africa needs a stronger domestic base, but also reliable and diversified trade channels.

Feed remains the pressure point behind profitability

Feed remains one of the clearest reasons broiler farming is both attractive and unforgiving. The ARC poultry production manual notes that feed can account for up to 75% of a producer's total costs. SAPA's industry profile places feed costs at 65% to 73% of live broiler production costs in many countries, with South Africa exposed to maize and soya price movements.

"A broiler farm protects margin when every tonne of feed is given the right environment to perform."

In other words, every decision that affects feed conversion has commercial weight.

That is why the new production conversation is moving beyond feed formulation alone. The article already prepared for Nufarmer Africa on feed efficiency and smarter infrastructure makes this point well: feed efficiency begins long before the feeder line. Shed design, airflow, thermal stability, water quality and monitoring systems all influence whether birds can turn nutrients into growth efficiently.

When temperatures rise, when litter becomes wet, when air quality deteriorates or when water delivery becomes inconsistent, the bird pays first and the farmer pays next. This creates an advertising opportunity for suppliers whose products help producers protect feed conversion: climate-control companies, insulation suppliers, drinker systems, ventilation specialists, feed additives, energy backup providers and poultry-equipment companies.

Imports, exports and the hard road to competitiveness

Export growth is now a major talking point in the South African poultry conversation. In May 2026, Chris Coombes of Sovereign Foods argued in Business Report that South Africa has world-class poultry production facilities, can produce chicken at globally competitive prices, and needs stronger government-to-government support to unlock export opportunities. Export ambition is healthy, but it must be handled honestly.

South Africa still imports significant volumes of poultry products and does not yet consistently produce enough to satisfy all domestic demand at every price point. FairPlay has also pointed out that government departments have

presented conflicting export statistics, with SARS figures showing chicken exports declined from

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Egg Production and Egg Imports in South Africa

South Africa is ordinarily self-sufficient in table eggs, but the recent pressure on layer flocks has shown how quickly biological shocks can move through hatcheries, farms, retailers and consumers. Egg production is no longer only a layer-house story. It is a story about breeder security, disease control, pullet supply, feed efficiency, consumer affordability and rebuilding confidence.

The egg sector is small in price, but big in food security

"Eggs are ordinary until they are missing. Then the full value of the layer chain becomes visible."

Eggs are one of agriculture's quiet heavyweights. They are easy to cook, widely used, nutritionally dense and affordable compared with many other animal-protein products. They sit in household kitchens, bakeries, restaurants, hotels, school meals, informal food outlets and food manufacturing. When eggs are available and affordable, they support nutrition across income groups.

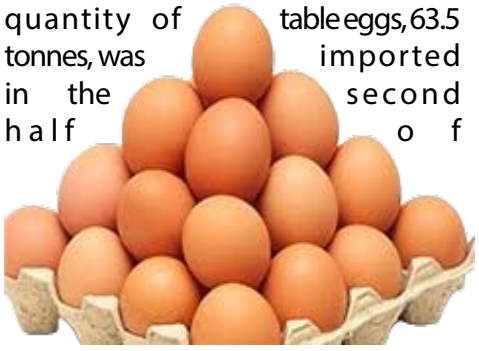
SAPA's 2023 industry profile recorded total shell egg production at 0.487 million tonnes. The profile also reported per capita egg consumption of 7.3 kg in 2023, and described eggs as a cheap source of high-quality protein compared with other animal proteins in the SADC region. That matters in a country where household food budgets are under pressure.

Yet the egg sector's importance is sometimes underestimated because eggs are so familiar. Consumers notice the industry most when shelves thin out or prices rise. Producers know that those moments are not sudden. They are usually the end result of disease, feed cost, flock replacement, transport, packaging and retailer pressure all converging at once.

South Africa is normally self-sufficient in table eggs

The important point for readers is that South Africa is not usually an egg-import dependent country. SAPA's 2023 profile states that South Africa is ordinarily self-sufficient in table eggs. That makes the import story different from the broiler story. Chicken meat imports are a recurring part of the supply balance. Egg imports, especially table egg imports, are more unusual and tend to reflect specific supply stress.

The 2023 HPAI pressure showed this clearly. SAPA reported that fertile eggs accounted for 71.5% of total egg imports in 2023, or 2,757 tonnes. These fertilised eggs were imported mainly to maintain pullet and chick supply after layer breeder flocks were affected. SAPA also noted that only a limited quantity of table eggs, 63.5 tonnes, was imported in the second half of 2023 from SADC neighbours and other origins because of shortages.



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This distinction is important for the magazine. Egg imports are not only about eggs in a carton. They can also be about fertilised eggs for incubation, breeder recovery, genetic continuity and the ability of farms to restock after disease disruption. That makes hatcheries, breeder farms and disease-control systems central to the egg production story.

HPAI changed how the industry thinks about security

Highly pathogenic avian influenza did not simply create a short-term supply problem. It changed the way the egg sector thinks about resilience. Layer farms cannot recover instantly after culling or

quarantine. Pullets must be available. Breeder systems must be secure. Hatcheries must function. Feed plans must be aligned. Retailers must manage expectation and pricing. Consumers must understand why supply cannot simply be switched back on.

The biosecurity article in Nufarmer Africa Magazine May/June 2026 edition captures the larger lesson:

"In the egg sector, a disease shock today can become a shelf shortage months later."

disease control has become a business discipline. For egg producers, this is especially true because production depends on a carefully timed flock cycle. Interruptions in breeder supply or pullet placement create delays that ripple through the egg chain weeks and months later.

This makes investment in prevention far cheaper than emergency recovery. Stronger biosecurity, water hygiene, rodent control, wild-bird exclusion, vaccination discipline, movement control and training are not optional extras. They are core production infrastructure.

Feed, housing and bird comfort remain profit drivers

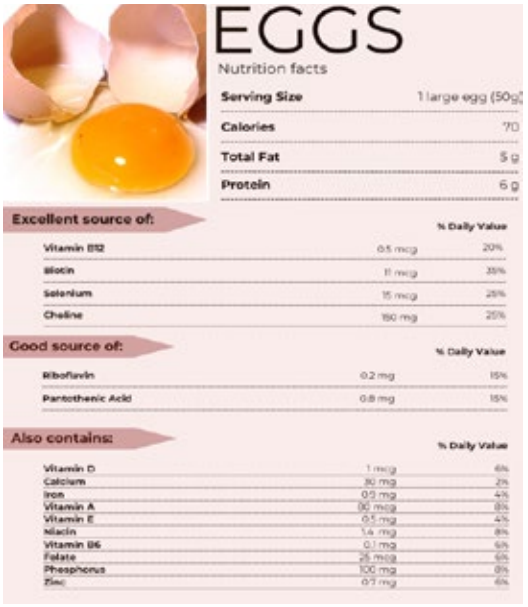
Layer profitability is also shaped by feed and housing. Birds must receive balanced nutrition, especially energy, protein, calcium, phosphorus, vitamins and trace minerals, to maintain production, shell quality and flock health. Feed cost remains a major pressure point, and poor environmental control can make every ration less effective.

The existing article in Nufarmer Africa Magazine on feed efficiency and infrastructure is relevant to egg production too. While the article is framed around poultry performance more broadly, the same principle applies in layer houses: housing is not passive. Temperature, lighting, ventilation, water quality, air quality and litter or manure management all influence bird performance.

ARC's climate-smart poultry material identifies housing design, roofs, equipment, ventilation, humidity, shade and water as practical factors in reducing heat stress. These are not abstract climate ideas. They are daily farm tools. In hot conditions, producers must protect feed intake, water intake, shell quality and bird welfare. In colder or poorly ventilated houses, dampness, ammonia and respiratory stress can undermine production.

Egg demand is tied to affordability and nutrition

The nutrition story should not be treated as a side note. South Africa's food-based dietary guidance recognises that fish, chicken, lean



meat or eggs can be eaten daily as part of a healthy diet. Eggs provide high-quality protein and important nutrients, including choline and vitamin B12, and they remain a practical food for households that need nutrient value without complicated preparation.

This gives the egg industry a strong consumer-facing message. Eggs are not simply a breakfast product. They are a food-security tool, a bakery ingredient, a school-lunch option, a low-waste protein and an important product for

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Egg Imports: Please Understand

- ***South Africa is ordinarily self-sufficient in table eggs. When egg imports rise, the reason may not be ordinary consumer eggs.***
- ***In 2023, most egg imports were fertilised eggs for incubation, used to help restore production after HPAI-related disruption.***
- ***Small volumes of table eggs were imported during shortages, but the bigger story was breeder and pullet recovery.***

elderly consumers, children and working families. For Nufarmer Africa, this opens the door to advertisers beyond the farm gate, including packaging companies, retail partners, nutrition advocates, animal-health suppliers and value-added egg-product manufacturers.

The opportunity is rebuilding confidence

The egg sector now has a chance to tell a stronger story. It is a story of nutrition, affordability, technology, disease discipline and supply-chain planning. Producers want better performance. Retailers want stable shelves. Consumers want affordable eggs. Suppliers want to prove that their products reduce risk and improve output.

Written by (M.O)

"The future egg producer will not only manage hens. They will manage timing, risk, confidence and continuity."

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Prices and market signals

Over the past five years, elite Ankole animals have fetched remarkable prices. The bull Sebastiaan reportedly sold for R3 million in 2021. Other high-value sales have included bulls and females above R1 million, a 3-in-1 cow-and-calf lot at R1.8 million, semen straws selling at premium prices and young bull calves reaching several hundred thousand rand.

These prices reflect rarity, elite genetics and buyer confidence. However, they should not be interpreted as average commercial values. The top of the market is driven by pedigree, phenotype, horn quality, fertility, scarcity and reputation.

Where we are and the road ahead

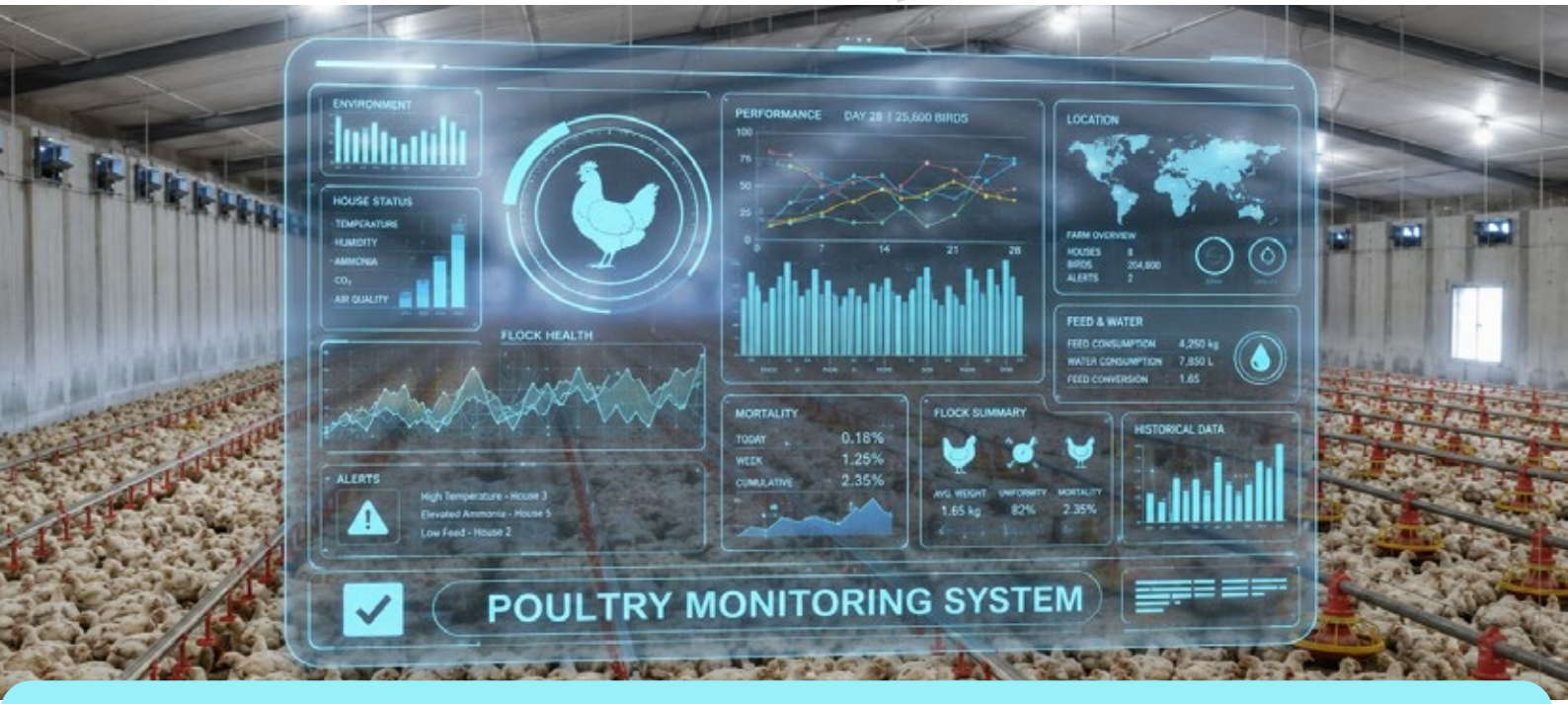
South Africa's Ankole industry is moving from excitement into structure. The breed now has formal recognition, society oversight, herd-book rules, inspection systems, DNA requirements and recording through national platforms.

The road ahead will depend on responsible breeders. The priority should be genetic diversity, fertility, sound structure, honest records and practical production traits. If the breed becomes only a status symbol, its long-term value will weaken. If it is developed scientifically, Ankole could become one of South Africa's most important rare African cattle genetic resources.

Written by (M.O)

Ankole Cattle in South Africa — Quick Facts

Origin:	***East Africa, especially Uganda.***
Local recognition:	***Recognised as a breed in South Africa in 2019.***
Recording:	***Registered animals are recorded through the Society's herd book and INTERGIS.***
SA Stud Book:	***Ankole appears on SA Stud Book's breed list.***
Estimated numbers:	***Fewer than 2,000 registered animals in South Africa.***
Main traits:	***Large horns, heat tolerance, fertility, longevity, strong mothering ability and veld adaptability.***
Main risk:	***A small gene pool, making inbreeding management essential.***
Best buying advice:	***Buy verified genetics, not just impressive horns.***
Future opportunity:	***Climate-resilient African cattle genetics for specialist and long-term breeding systems.***



The Way Forward for Poultry Farmers

The future of South African poultry will not be won by production volume alone. Profitability will depend on disciplined systems, better feed conversion, stronger biosecurity, climate-smart infrastructure, reliable energy, smarter market access and a clear consumer message around chicken meat and eggs as nutrient-dense foods.

Profitability now depends on systems, not luck

South African poultry farmers are operating in an environment where very little can be left to chance. Feed costs move. Disease pressure remains. Electricity interruptions can damage production. Heat stress affects bird performance. Imports influence pricing. Consumers remain price-sensitive. Retailers want consistency. Export ambitions demand higher standards.

This means the way forward is not simply "produce more chickens" or "produce more eggs". It is to produce better, with less waste, fewer shocks and stronger planning. The producer who survives the next phase will be the producer who understands that every part of the system is connected: genetics, feed, water, air, housing, biosecurity, staff behaviour, energy, vaccination, market access and cash flow.

That is why the two previous Nufarmer Africa poultry articles are strong foundations for this third feature. One shows that feed efficiency is shaped by climate control, water, air quality and infrastructure. The other shows that biosecurity is now a business strategy. Together, they point to the same conclusion: the profitable farm is the disciplined farm.

"The future poultry farmer will be measured less by how many birds are placed and more by how consistently those birds perform."

Feed efficiency is the first profit lever

Feed remains the largest cost driver in poultry production. For broilers, small improvements in conversion can make a meaningful difference across thousands or millions of birds. For layers, nutrition influences production, shell quality and flock performance. But feed efficiency is not only a nutrition department issue.

Birds cannot use feed efficiently

when they are too hot, short of clean water, exposed to poor air quality, stressed by poor litter conditions or challenged by disease. This is why climate control and infrastructure must be treated as profit tools. A ration only performs when the bird is in the right condition to use it.

ARC's climate-smart poultry

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material supports this practical view by listing housing design, roofs, equipment, ventilation, humidity, shade and water as factors in reducing heat stress. In plain farming language, the shed is part of the production system. The producer who invests in stable housing, reliable ventilation and good water delivery is not buying luxury. They are protecting the feed bill.

Biosecurity must become daily discipline

Biosecurity is another profit lever, even though it is often only noticed when something goes wrong. The published Nufarmer Africa Magazine article on biosecurity says it clearly: biosecurity is no longer a box-ticking exercise. It is tied to continuity, confidence and competitiveness.

For broiler farmers, disease disruption can interrupt placement, processing schedules and customer supply. For layer farmers, disease disruption can affect breeder supply, pullet availability and months of egg output. For hatcheries and integrated businesses, a weak point in one area can unsettle the whole value chain.

The way forward is system-based prevention. That means controlling people, birds, water, equipment, litter, vehicles, rodents and wild birds. It also means designing farms so that the correct behaviour is easy to follow. A disinfectant footbath is useful, but it is not a system. A visitor book is useful, but it is not a system. The strongest farms will make prevention routine.

"Biosecurity is not what a farm says it does. It is what happens on the worst, busiest and most tired day of the week."

Chicken meat and eggs have a strong nutrition story

The poultry industry should also speak more confidently about nutrition. South Africa's food-based dietary guidance states that fish, chicken, lean meat or eggs can be eaten daily. Chicken and eggs provide high-quality protein, and eggs provide important nutrients such as choline. Chicken meat is widely used because it is versatile, familiar and relatively affordable.

This does not mean marketing should become exaggerated. The message should stay factual. Chicken meat and eggs are nutrient-dense foods that help households access quality protein. In a country where affordability matters, this is a powerful point. The poultry sector is not only selling a commodity. It is supplying food that supports families, schoolchildren, workers, elderly people and food-service businesses.

Production success will require better infrastructure

South African producers cannot control every market force, but they can improve how prepared they are. Infrastructure is central to that preparation. Reliable power, backup systems, climate control, water systems, data monitoring and housing design all help reduce avoidable losses.

This is especially important in a changing climate. Heat events, humidity, storm damage and unstable water or power supply can all affect production. Smarter sheds do not remove risk, but they give producers better control. Monitoring systems can alert managers earlier. Ventilation

systems can stabilise air quality. Water systems can support intake. Better insulation can reduce temperature swings. Energy backup can prevent catastrophic losses during outages.

The key is not technology for show. The key is practical technology that protects performance.

Producers do not need suppliers to

"Poultry's next chapter belongs to the farmers and suppliers who can turn pressure into performance."

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sell gadgets. They need suppliers to solve bottlenecks.

The way forward is collaborative

No single role player can solve South Africa's poultry challenge alone. Farmers need input suppliers, processors, veterinarians, feed companies, financiers, researchers, trade bodies, government departments, exporters and retailers to move in the same direction. Government support is especially important for export agreements, disease management, infrastructure and fair trade administration.

At the same time, producers must be honest about what they can control. Farms that manage feed, water, housing, health and biosecurity well will be better positioned than those waiting for perfect conditions. The poultry sector will remain under pressure, but it also has one of the clearest growth stories in agriculture: people need chicken meat and eggs, and demand is likely to stay strong.

Written By (M.O)

Five Priorities for Poultry Profitability

1. Protect feed conversion through better housing, water, ventilation and flock comfort.

2. Treat biosecurity as daily operating discipline, not a once-a-year audit exercise.

3. Plan energy resilience around the real cost of power interruption.

4. Use data and monitoring to detect problems earlier.

5. Build the consumer message around affordable, nutrient-dense protein.

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50,229 tonnes in 2019 to 41,607 tonnes in 2025. That does not remove the opportunity, but it does show that export growth will require more than optimism.

The practical route forward lies in compartmentalisation, regionalisation, stronger disease control, investment in processing standards, product-market matching and production systems that can deliver reliable quality at competitive cost. Export markets reward consistency. They do not reward wishful thinking.

Broiler Market Pressure Points

- Feed cost: The single biggest production cost and a major driver of margin pressure.
- Climate control: Heat stress and poor ventilation reduce performance and feed conversion.
- Biosecurity: Disease events disrupt output, supply contracts and confidence.
- Imports: Important for affordability, but politically and commercially sensitive.
- Exports: A long-term growth opportunity that depends on market access, disease control and product consistency.

Biosecurity is now an economic requirement

Disease pressure remains one of the biggest threats to production continuity. The second poultry article already prepared for Nufarmer Africa correctly frames biosecurity as a business strategy rather than a veterinary afterthought. Avian influenza does not only affect bird health. It affects contracts, cash flow, bird placement, labour planning, customer confidence and restocking timelines.

The strongest broiler businesses will be those that make biosecurity practical, repeatable and visible. That includes controlled access, clean and dirty zones, visitor management, water hygiene, rodent and wild-bird control, equipment sanitation, staff training and fast response protocols. For advertisers, this opens a broad and serious supplier category: disinfectants, protective clothing, wash-down systems, water treatment, access-control systems, pest control and farm-management technology.

Written By (M.O)

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For dryland producers, it influences cultivar choice, planting area, planting date, soil moisture conservation and crop insurance decisions.

For livestock farmers, it affects stocking rates, grazing plans, supplementary feed procurement and water-point maintenance.

For irrigation farmers, it affects dam monitoring, water allocation planning, pump efficiency, scheduling, filtration and fertigation.

For input suppliers, it affects fertilizer, seed, chemical and fuel availability.

For consumers, it may eventually affect the price of bread, maize meal, cooking oil, meat, milk, eggs, fruit and vegetables.

The country does not need panic. It needs clear-eyed preparation.

The first pressure point: rainfed summer crops

Rainfed production is the most exposed part of South African agriculture in a hot, dry summer scenario.

Maize remains the key indicator crop because of its role in human food, livestock feed, poultry feed and broader food-price formation. A poor maize season does not only affect maize farmers. It moves through feedlots, dairies, poultry houses, egg producers, processors and consumers.

If rainfall is delayed at planting, farmers may face difficult choices between planting into marginal soil moisture, waiting for better conditions, switching cultivars, reducing hectares or moving into lower-risk crops. If rain arrives but fails during pollination and grain fill, yield potential can fall sharply. Hot days during reproductive stages can also reduce crop performance even where rainfall is not completely absent.

Sunflower can tolerate drier conditions better than maize in many areas, but it is not immune to heat and moisture stress. In a risk season, sunflower may become more attractive in some production regions because it is less input-intensive and can handle difficult conditions better than maize. That, however, may also alter oilseed supply dynamics and local processing expectations.

Sorghum deserves closer attention in this conversation. In a hotter, more water-constrained production environment, sorghum's drought tolerance and role in feed, food and industrial value chains could become more relevant. It is often treated as a secondary crop in public discussion, but seasons like 2026/27 may remind the industry why climate-resilient grains matter.

Cotton, particularly under irrigation, faces a different challenge. Water availability, heat units, pest pressure and input costs all influence the economics. Where cotton competes with food crops for land, water and working capital, producers will weigh expected prices against risk very carefully.

Soya beans, dry beans and groundnuts also face moisture and heat sensitivity at critical stages. In a drier season, crop rotation plans may come under pressure as farmers prioritise the crops they believe offer the best risk-adjusted return.

Wheat and the winter rainfall question

The Western Cape and other winter crop areas deserve their own place in the discussion.

A developing El Niño is mainly being watched for its effect on the summer rainfall season, but the south-western winter rainfall region has already been flagged for below-normal winter rainfall risk. That matters for wheat, barley, canola, grazing, dam recharge and irrigation confidence going into summer.

If winter rainfall underperforms, the consequences are not limited to winter crops. Lower dam recovery can affect fruit, vegetables and

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irrigation allocations later in the year. It may also create a tighter water-management environment before summer heat has fully arrived.

Wheat is especially important because South Africa already relies on imports to supplement local production in many seasons. Any local production pressure must be read against global wheat market conditions. If other major wheat-producing regions also face drought, heat or input-cost problems, South Africa may be exposed to higher import costs at the same time as local consumers are under pressure.

That is where climate risk becomes a food-security issue. A dry winter in the south-western Cape and a dry summer across summer rainfall areas would put pressure on both sides of the production calendar.

Irrigation does not remove risk — it changes the risk

South Africa's fruit and vegetable sectors are often described as more protected from El Niño because many commercial farms operate under irrigation. That is partly true, but it can be misleading.

Irrigation does not create water. It only distributes available water more efficiently.

Advanced irrigation systems, automated scheduling, soil-moisture probes, filtration, fertigation and precision application give producers powerful tools. They can reduce waste, protect quality and maintain production under stress. But even the best irrigation system becomes vulnerable when water allocations are reduced, boreholes weaken, dams fall, canals are restricted, power costs rise or water quality deteriorates.

For open-field vegetable production, the risk is therefore not simply "will it rain?" The better question is: will growers have enough good-quality water, at the right pressure, at the right time, at a cost that still allows profitable production?

Vegetables have narrow quality windows. Heat stress can affect germination, transplant establishment, leaf quality, fruit set, bulb development, sizing and shelf life. Crops such as onions, potatoes, tomatoes, peppers, brassicas, carrots and leafy greens all respond differently, but all require disciplined water management.

Fruit producers face similar concerns. Citrus, table grapes, deciduous fruit, subtropical fruit and nuts all depend on water availability, heat management and long-term orchard health. A poor water season can affect not only the current harvest, but also tree reserves, fruit size, pack-out percentages and next season's potential.

In export fruit industries, quality is not negotiable. If El Niño conditions increase sunburn risk, size variability or water stress, producers may still harvest fruit, but export-grade volumes could be affected.

Livestock: the veld tells the truth first

For livestock farmers, El Niño risk often becomes visible in the veld before it appears in formal production figures.

If rainfall is delayed or below normal, grazing recovery slows. Stocking rates come under pressure. Water points become more important. Farmers may need to purchase supplementary feed earlier than planned. Breeding decisions, weaning weights and animal condition can all be affected.

Beef producers could face difficult marketing decisions if grazing weakens. Some may reduce herd numbers earlier to protect the core breeding herd. Others may hold animals longer if prices are favourable, but that depends on feed and water availability.

Small-stock producers face similar risks. Sheep and goat farmers in drier regions already understand how quickly veld conditions can change. Heat, poor grazing and water stress can affect lambing

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and kidding percentages, animal health and parasite dynamics.

The dairy sector is also exposed. Dairy cows are sensitive to heat stress, and milk production can decline when animals struggle to regulate body temperature. Higher feed costs compound the problem. If maize, soya and roughage prices rise, dairy margins can tighten quickly.

This is why El Niño is not only a crop farmer's problem. ***It is a protein-sector problem.***

Poultry and eggs: the indirect hit can be severe

Poultry and egg production may not depend on rainfall in the same direct way as maize or grazing, but they are deeply exposed to feed and energy costs.

Broiler and layer operations rely heavily on maize and soya-based feed. If dryland crop yields decline, feed raw material prices can rise. If diesel and electricity costs rise at the same time, producers are squeezed from multiple sides.

Heat also has direct production effects. High temperatures can affect feed intake, growth rates, egg production, egg size, shell quality and mortality risk. Producers with modern climate-controlled housing are better positioned, but they are also more exposed to electricity reliability and cooling costs.

For consumers, poultry and eggs are important affordable protein sources. If feed costs rise significantly, it becomes harder to shield households from price increases. This is especially sensitive in South Africa, where many consumers are already under pressure.

The water tug of war

The most important national issue in the El Niño discussion is water allocation.

South Africa is a water-scarce country. Agriculture is the largest water user, while households, municipalities, mines, industry, power generation and environmental systems all compete for the same limited resource. In a wet cycle, these tensions are easier to manage. In a dry cycle, they become political, economic and social.

Agriculture needs water to produce food. Industry needs water to sustain jobs and economic activity. Municipalities need water to keep households supplied. Power generation and mining require reliable water for strategic operations. Ecosystems need water to keep rivers, wetlands and catchments functioning.

This is the tug of war that El Niño may intensify.

It would be a mistake to frame agriculture as simply "using too much water". Food production is not optional. The better question is whether South Africa is using, storing, protecting and allocating water wisely enough.

That includes reducing municipal water losses, improving infrastructure maintenance, protecting strategic water source areas, investing in irrigation efficiency, monitoring abstraction, improving water-quality management and ensuring that farmers have clear, timely information on restrictions and allocations.

Water security is not only about rainfall. It is about governance.

Input costs: drought risk meets diesel and fertilizer pressure

The 2026/27 season also arrives at a time when global input markets are already unstable.

Energy, fertilizer and transport costs have been affected by geopolitical conflict, including the continued effects of the Russia-Ukraine war and instability linked to the Middle East and Iran. Fertilizer markets are particularly sensitive because nitrogen fertilizer production depends heavily on natural gas, while global shipping routes and energy prices influence landed costs.

For South African farmers, this matters before the first seed is planted.

A farmer facing a high-risk rainfall outlook may be reluctant to apply full fertilizer programmes if yield potential is uncertain. Yet under-fertilising can also reduce yield if rainfall turns out better than expected. This is one of the

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cruel management dilemmas in a drought-risk season: farmers must make expensive decisions before the weather outcome is known.

Diesel costs affect land preparation, planting, harvesting, irrigation pumping, transport and logistics. Electricity costs affect irrigation, cooling, packing, poultry housing, dairy systems and processing. Chemicals, seed, spare parts and packaging also move through cost structures influenced by exchange rates and shipping conditions.

In other words, El Niño does not arrive alone. It arrives into an already expensive production environment.

Global production and regional demand

South Africa's food system is also connected to regional and global production.

If El Niño affects production in other African countries, South African produce may be in higher regional demand. That can create opportunities for exporters, traders and producers with marketable surplus. Maize, fruit, vegetables, meat, poultry products and processed foods could all see stronger demand under certain conditions.

But export opportunity and domestic affordability can pull in opposite directions.

If regional buyers need more South African food at the same time that local yields are under pressure, domestic prices can rise. That may benefit some producers in the short term, but it can strain consumers, especially low-income households.

The same dynamic applies globally. If major grain, oilseed or fruit-producing countries experience drought, heatwaves, floods or input shortages, international prices can move higher. South Africa then faces a complex environment: local weather risk, higher import parity prices, stronger export demand and more expensive inputs.

Food security is not only about whether there is food in the country. It is also about whether households can afford it.

A season for better decisions

There is still time to prepare.

For dryland farmers, the coming months should be used to review soil moisture, cultivar options, planting windows, crop insurance, working capital and risk exposure. Precision in planting decisions will matter. Conservative budgeting may be wiser than chasing maximum hectares in a high-risk season.

For irrigation farmers, the priority is water efficiency and system reliability. Pumps, filters, pipes, pivots, drip systems, scheduling tools and storage capacity should be checked before the season begins. Water quality should be monitored, especially where boreholes, rivers or dams are under stress.

For livestock producers, veld assessments, stocking rates, feed reserves and water infrastructure should be reviewed early. Waiting until grazing has already failed usually leaves fewer and more expensive options.

For poultry, egg and dairy producers, feed procurement, heat mitigation, ventilation, cooling and energy backup systems should be stress-tested before summer peaks.

For agribusinesses and input suppliers, the opportunity is to support farmers with practical, region-specific advice rather than generic sales messaging. Seed companies, irrigation specialists, animal nutrition companies, fertilizer suppliers, chemical companies, financial institutions and insurers all have a role to play.

For government and water authorities, the priority should be clear communication, infrastructure maintenance, fair allocation, early warning and practical coordination with producer organisations.

The Nufarmer Africa view

The 2026/27 El Niño risk should not be reported as a guaranteed disaster. But it should also not be treated as a mild seasonal footnote.

The current signal is strong enough to justify a definite statement:

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South African agriculture must prepare for a hotter, drier and more volatile production season.

The country enters this period with some advantages. Recent good seasons have supported crop supplies. Many dams are in a better position than during previous drought years. Commercial farmers have access to better technology than ever before. South Africa has strong producer organisations, sophisticated value chains and experience in managing climate variability.

But those advantages should not lead to complacency.

A difficult El Niño season would test the full food system. It would test dryland production. It would test irrigation planning. It would test livestock resilience. It would test feed markets. It would test consumer affordability. Most of all, it would test South Africa's ability to manage water as a shared national resource.

The right response is not fear. It is preparation.

The agricultural sector cannot control the Pacific Ocean. It can, however, control how early it plans, how carefully it manages water, how honestly it communicates risk and how strongly the value chain works together.

If the rain holds back in 2026/27, the farmers who planned early will not be untouched. But they will be better positioned. And in a season shaped by heat, water and cost pressure, that may make all the difference.

Written by (M.O)

Biological Thinking Takes Root in Open-Field Vegetable Production

From transplant to postharvest, South African growers are looking more closely at the living systems that influence crop performance

South African vegetable production has always been judged in the field first. A crop must establish evenly, withstand stress, carry fruit properly and reach the market in a condition that satisfies buyers. For open-field growers, that challenge is often sharper. Seedlings move from the relative protection of the nursery into variable soil, wind, heat, water pressure and disease conditions.

At the recent **Woolworths Vision Zero Grower** Day in South Africa, technical discussions pointed to a growing interest in biological crop establishment and microbiome-based postharvest disease management. While the wider programme included integrated pest management and resistance monitoring, presentations by Soiltech and its laboratory division, Vermitech, brought attention back to a practical question: how much crop success is decided by the biological balance around the plant?

The significance for open-field production lies in this reality: Biological systems are not being discussed only as alternatives to chemical products. They are being positioned as tools to help crops establish stronger, recover faster and carry quality further into the supply chain.

The transplant window is a turning point

Nico van Vuuren of Soiltech focused on biological transplant establishment, using work with a pepper grower as an example. His central point was clear: the early establishment phase can influence the rest of the crop.

When a seedling is transplanted, roots are disturbed. Some root tissue may be damaged during handling and planting. Water and nutrient uptake can slow down, and the plant may temporarily pause its growth. This is commonly described as transplant shock.

In an open-field situation, transplant shock can be costly. A plant that struggles early may not root deeply enough, may remain uneven in the stand and may become more vulnerable to disease pressure. The impact is not always dramatic at first glance. It may appear later as weaker growth, uneven flowering, inconsistent fruit set or a crop that cannot recover quickly after stress.

Van Vuuren explained that damaged root tissue can create an entry point for pathogens. At the same time, the root zone is trying to re-establish biological stability.

"The seedling does not need a sterile root zone. It needs a living, balanced, protective root zone."

This is where the difference between broad suppression and biological colonisation becomes important.

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A living root zone, not an empty one

Chemical protection strategies often focus on suppressing pathogens in the root zone. That has its place in crop protection programmes, but Van Vuuren cautioned that the young plant does not benefit from a root zone stripped of biological activity.

The biological establishment approach described by Soiltech is based on beneficial organisms colonising the root surface and wounded areas. These organisms compete for space and resources, while producing enzymes and metabolites that may support recovery and reduce pathogen establishment.

"Biology does not merely block the pathogen. It suppresses, colonises, stimulates and stabilises."

In practical farming language, the idea is not to leave the young plant alone during its most vulnerable stage. The aim is to help surround the root with organisms that support balance rather than breakdown.

Van Vuuren also referred to microbial metabolites and plant-associated mechanisms such as ACC deaminase activity, which can reduce stress responses and support faster recovery after transplanting.

For open-field growers, this is especially relevant where crops face heat, wind, irrigation variation and soil-borne disease pressure shortly after planting. A stronger start does not remove risk, but it can give the crop a better platform.

Pepper establishment shows the direction

The field observations presented during the Soiltech talk showed consistent establishment performance in pepper crops treated with biological transplant systems. This included high survival rates under adverse field conditions and continued vegetative and reproductive development.

The important point is not that one product or one programme solves every production challenge. Rather, the work highlights the value of looking at establishment as a biological process.

Open-field vegetable production depends heavily on uniformity. A block that establishes unevenly is difficult to manage. Irrigation, fertiliser applications, pest control and harvest timing all become more complicated. Where biological establishment can help protect early root activity and plant recovery, it may have value beyond the transplant stage itself.

Postharvest disease starts before the box

Franziske Ehlers of Vermitech extended the discussion beyond planting and into postharvest quality. Her work looked at disease dynamics in tomatoes and peppers, where fruit decay can reduce shelf life, lead to quality-control rejections and cause economic losses for growers.

In peppers, Fusarium species were identified as dominant pathogens. Other decay organisms, including Rhizopus and Penicillium, were also linked to postharvest breakdown. In tomatoes, Geotrichum and Cladosporium were identified as primary pathogens associated with sour rot and black mould symptoms.

These findings matter to open-field farmers because postharvest quality is not created only in the packhouse. Fruit carries the history of the field with it. Stress, wounds, handling, disease pressure and microbial balance all influence how produce behaves after harvest.

Ehlers explained that pathogens were not the only organisms isolated. Vermitech also found bacteria and fungi with potential beneficial properties, including plant growth-promoting rhizobacteria such as Serratia nematodiphila.

The crop as a biological unit

A key concept in the Vermitech presentation was the holobiont. This describes the plant and its associated microorganisms as one integrated biological unit. On the fruit surface, pathogens, spoilage organisms, environmental microbes and beneficial organisms interact continuously.

When the balance is disturbed, opportunistic organisms can dominate. That can accelerate fruit breakdown. For growers, this does not replace basic postharvest

"Postharvest decay is not only a packhouse problem. It is linked to the biological condition of the crop."

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discipline. Careful harvesting, clean containers, sound hygiene and proper handling remain essential. But it does add another layer to the discussion. If fruit quality is influenced by microbial balance, then disease management should not begin only after symptoms appear.

Laboratory antagonism assays presented by Vermitech evaluated volatile and non-volatile metabolite activity, direct inhibition and spore suppression effects of selected biological organisms against postharvest pathogens. Results varied by organism strain and pathogen combination, which Ehlers noted is expected in living systems.

That strain-specific result is important. It reinforces the need for proper testing, local diagnostics and realistic expectations.

What open-field growers should take from this

Biological crop establishment and microbiome-based postharvest management are not quick fixes. They require timing, compatibility and technical support. They must also be fitted into existing crop protection, nutrition and irrigation programmes.

For South African vegetable growers, the message from the Woolworths Vision Zero Grower Day was practical: the living system around the plant is becoming more important in commercial decision-making.

From the root zone at transplanting to the microbial community on harvested fruit, biology is now part of the production conversation.

Written by (M.O)

Practical Points for Open-Field Vegetable Growers

Start at transplanting

Protect the young plant during the first establishment phase, when root damage and stress can affect the rest of the crop.

Avoid thinking sterile

A productive root zone should be biologically balanced, not biologically empty.

Use diagnostics where possible

Postharvest disease organisms differ by crop and situation. Laboratory work can help identify the real problem.

Look beyond yield

Measure survival, uniformity, root development, fruit quality, shelf life and rejection rates.

Treat biology as a programme

Biological tools work best when combined with sound irrigation, nutrition, hygiene, scouting and handling practices.

Keep expectations realistic

Living systems are strain specific. Results depend on the crop, pathogen, environment and application strategy.

Efficiency After Harvest: Where Sustainability Becomes Profit

Bühler's sustainability message carries practical meaning for South African farmers, processors and the wider food value chain

Across South Africa's agricultural sector, sustainability is increasingly judged by one practical question: does it improve performance? In its 03 June 2026 press release, "How African food processors can improve profitability through sustainability," Bühler argues that sustainability is no longer only about environmental responsibility. It is becoming central to operational efficiency, profitability, resilience and long-term competitiveness.

Full press release published in https://nufarmerafrica.com.

For Nufarmer Africa readers, this matters because the farmer's return is not protected in the field alone. Grain, oilseeds, feed crops, vegetables, fruit and raw materials all move into a chain of drying, storage, handling, milling, sorting, processing and distribution. At each stage, energy, water, waste and yield losses influence the final value of the crop.

The hidden cost of post-harvest loss

Bühler's press release highlights pressures facing African food and feed processors: volatile energy prices, water concerns, post-harvest losses and more demanding buyer expectations around traceability, carbon footprint and resource use. These issues do not sit only at factory level. They move through the agricultural value chain.

When grain is poorly dried or stored, quality is lost. When feed processing is inefficient, costs move into livestock production. When raw material is wasted, the farmer's investment in seed, fertiliser, crop protection, water, labour, land and logistics is also wasted.

Every tonne lost after harvest represents value already created on the farm but never fully converted into income. This is why Bühler's message deserves attention from South African agriculture.

Bühler's 50/50/50 commitment

At the centre of Bühler's sustainability strategy is its "50/50/50" commitment. The company's goal is to have solutions ready that can reduce energy consumption, waste and water use by 50% across customer value chains.

According to Bühler, its 2025 lifecycle assessment work across

"Sustainability becomes practical when it protects yield, lowers waste and strengthens the farmer's margin."

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15 industrial value chains in food, feed and advanced materials found that reductions of at least 50% were achievable in one or more key environmental dimensions in 11 of those value chains. In every assessed value chain, more than 35% savings were achievable in at least one category.

For farmers and processors, the lesson is clear. Improvement starts by identifying where resources are being lost. Lower energy use can reduce operating costs. Better yield recovery can reduce raw material loss. Reduced waste can improve commercial performance.

Why measurement must come first

One of the strongest points in Bühler's statement is the importance of reliable baseline data. Without accurate information on energy consumption, water use, waste generation and yield loss, it becomes difficult to identify where improvements are possible or justify investment.

This applies directly to farmers. If post-harvest losses are not measured, they become accepted as normal. If energy use is not tracked, inefficiency hides inside the monthly bill. If water use is not understood across the full chain, savings may be missed.

Digitalisation and data-driven optimisation are therefore practical business tools. Bühler notes that even modest monitoring systems can provide valuable operational visibility.

Once inefficiencies are visible, targeted interventions become easier to plan.

"A more efficient processor can become a stronger market partner for the farmer."

Training, service and partnerships

Bühler also stresses that sustainability in food processing is not only about technology. Operator knowledge and process understanding remain essential. The same equipment can deliver very different results depending on how it is operated, maintained and monitored.

For agriculture, this underlines the importance of training, service support and long-term partnerships. No single business can solve sustainability challenges across the value chain on its own. Farmers, processors, technology providers, financiers, government and industry bodies all have a role to play.

The opportunity for South African agriculture

Bühler's message is ultimately positive. Sustainability does not have to be treated as a cost burden or public relations exercise. Done properly, it can support stronger margins, better resource use and improved resilience.

A more resource-efficient processing sector can strengthen food security, improve export readiness and support long-term competitiveness. Most importantly, it can help ensure that the value created on the farm is not lost before it reaches the market.

Jay O'Nien, Sustainability Officer at Bühler Group

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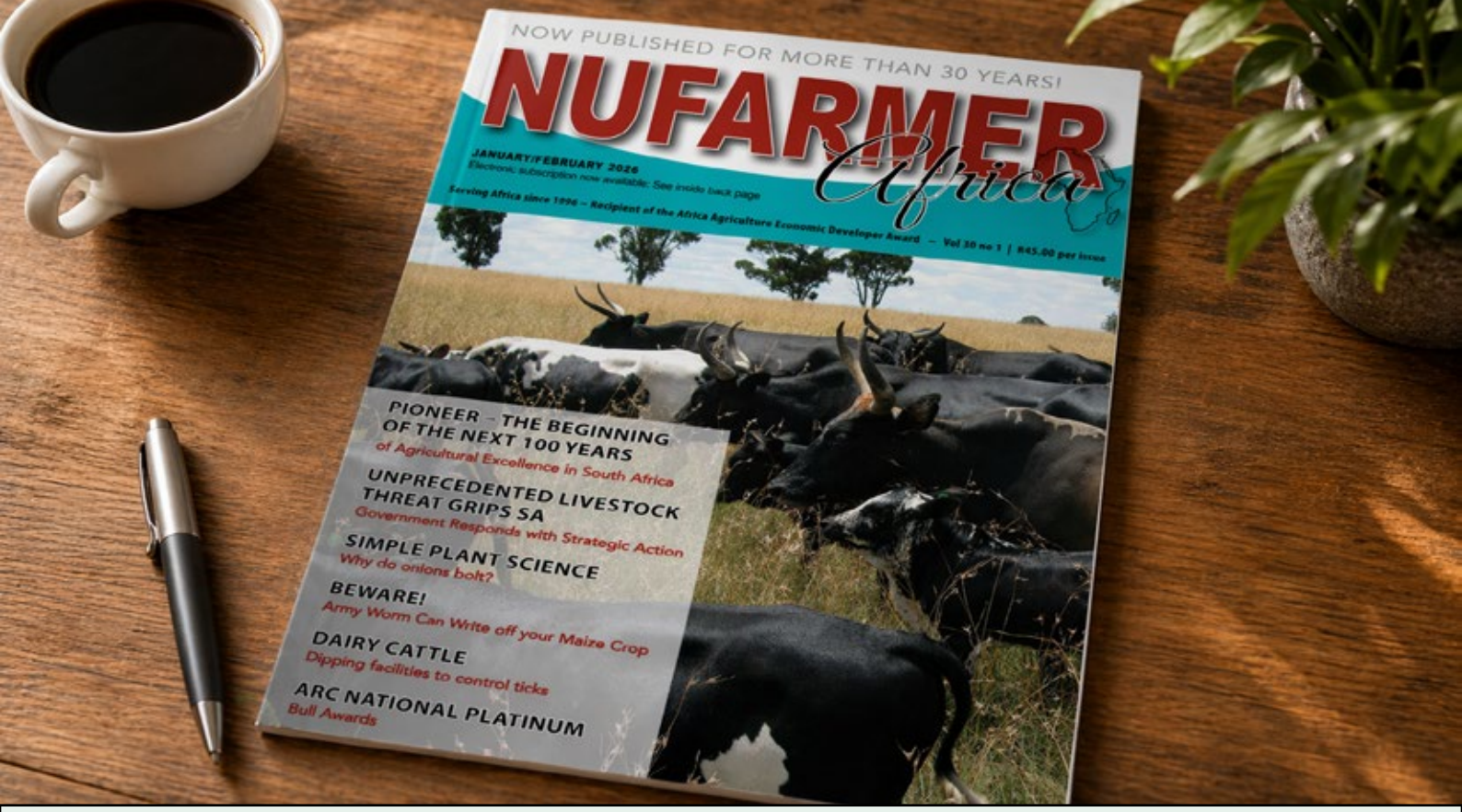
Who is Bühler South Africa, and what does it mean for SA farmers?

- ***Bühler has operated in South Africa since 1972, with Johannesburg serving as its regional headquarters for Southern Africa. From this local base, Bühler supports sales and service, project execution, manufacturing and logistics.***
- ***For South African farmers, this local presence matters because crop value depends heavily on what happens after harvest. Bühler Johannesburg is positioned as a central contact point for solutions from grain to consumer goods processing and advanced material processing. Its services include after-sales support, spare and wear parts, roll re-fluting, die refurbishment, training and around-the-clock engineering support aimed at reducing downtime.***
- ***In practical terms, Bühler South Africa brings global food and feed processing knowledge closer to local value chains. That can support better storage, handling, milling, feed production and processing systems that help protect the value farmers create in the field.***



Why Advertising in Nufarmer Africa Magazine Is No Longer Optional

A Strategic Business Imperative for Agricultural Brands

Agriculture is changing fast. Farmers are under pressure to produce more, reduce risk, protect margins and adopt better technology. At the same time, agribusinesses are fighting harder than ever to stay visible in a crowded market.

> ***"Visibility is no longer a marketing extra. In modern agriculture, it is a business advantage."***

This is where advertising changes from a "nice-to-have" into a serious business decision.

For companies that supply farmers, producers, growers, input buyers, exporters and agricultural decision-makers, visibility is not decoration. It is market position. It is trust. It is the difference between being remembered when buying decisions are made, or being forgotten completely.

Nufarmer Africa Magazine has spent more than 30 years earning that trust. It is not a new platform chasing attention. It is an established agricultural voice with a proven record, a loyal readership and a strong digital presence across the African agricultural sector.

TRUST CANNOT BE BOUGHT OVERNIGHT

Thirty Years of Agricultural Credibility

In agriculture, trust matters. Farmers do not easily change suppliers. Producers do not gamble with inputs, equipment, nutrition, genetics, machinery, biosecurity or technology. They look for companies that appear stable, knowledgeable and committed to the industry.

Nufarmer Africa Magazine gives advertisers that environment.

For more than three decades, the magazine has served the agricultural community with reliable information, technical insight and industry news. That consistency creates credibility. When a brand advertises in a trusted publication, it benefits from the trust already built with readers.

That is powerful.

A once-off social media post may disappear in a day. A random digital advert may be ignored in seconds. But a brand placed inside a respected agricultural publication enters a space where readers are already paying attention.

REACH THAT MATTERS

Targeting the Right Agricultural Audience

Mass exposure is not always valuable. The real question is not "How many people saw the advert?" The better question is: "Did the right

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people see it?"

Nufarmer Africa Magazine connects advertisers with progressive farmers, agribusinesses, input suppliers, industry bodies and decision-makers across Sub-Saharan Africa. Its audience is invested in productivity, sustainability, innovation and practical agricultural development.

The publication's 2026 rate card also reports strong social media impact, with more than 185,000 readers measured over 28 days and 1.1 million over the 60-day period through Meta data.

"The value of advertising lies not only in being seen, but in being seen by the right agricultural audience."

That means advertisers are not only appearing in a magazine. They are entering a wider media ecosystem that includes digital visibility, social reach and website traffic.

ADVERTISING IS NO LONGER JUST ABOUT SELLING

It Is About Owning Mindshare

Many agricultural businesses make the mistake of advertising only when they want immediate sales. But strong brands do not wait until the market is ready to buy. They

stay visible long before that moment.

Visibility creates familiarity.

Familiarity creates confidence.

Confidence creates enquiries, conversations and commercial opportunity.

When farmers repeatedly see a company in a credible industry publication, that company begins to feel established. It becomes part of the agricultural conversation. It becomes easier to trust.

This is especially important in sectors such as animal health, seed, feed, mechanisation, irrigation, crop protection, genetics, technology, finance, insurance, training and infrastructure. These are not impulse purchases. They are decisions based on confidence.

EDITORIAL VALUE ADDS MORE WEIGHT

More Than an Advert on a Page

One of the strongest advantages in the 2026 advertising offer is the editorial value attached to selected bookings. Full-page and half-page advertisers receive one page of free editorial with paid bookings, while full-page bookings are also featured on Nufarmer Africa's social media platforms.

"An advert creates awareness. A strong editorial builds authority."

That matters because readers often engage more deeply with editorial content than with straight advertising.

A well-written editorial can explain a company's value, educate the

market, introduce products, unpack technical benefits and build authority around a brand. It gives advertisers space to tell the real story behind their offering.

Even better, all editorials include backlinks to the client's website,

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Why Nufarmer Africa Works for Advertisers

- **Established Authority**
  Published for more than 30 years, Nufarmer Africa has long-standing credibility in the agricultural sector.
- **Targeted Agricultural Reach**
  The magazine reaches farmers, agribusinesses, suppliers, industry bodies and decision-makers across Sub-Saharan Africa.
- **Strong Digital Impact**
  More than 185,000 readers measured over 28 days and 1.1 million over the 60-day period through Meta data.
- **Editorial Support**
  Paid full-page and half-page bookings include one page of free editorial.
- **Website Traffic Opportunity**
  Editorials include backlinks to the advertiser's website, helping readers click through directly.
- **Campaign Flexibility**
  Advertisers can choose from full-page, half-page, third-page, quarter-page and eighth-page placements.
- **Long-Term Brand Building**
  Six editions per year allow advertisers to build consistent visibility across the agricultural calendar

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helping readers click through directly to the advertiser.

That turns awareness into action.

CONSISTENCY WINS

One Advert Is Visibility. Repeated Presence Is Strategy.

Nufarmer Africa publishes six editions per year: Jan/Feb, Mar/Apr, May/Jun, Jul/Aug, Sep/Oct and Nov/Dec.

This gives advertisers the opportunity to build a consistent presence throughout the year. And consistency is where real brand equity is built.

A single advert can create awareness. But repeated placement builds recognition. It tells the market that your business is serious, stable and invested in agriculture for the long term.

Contract discounts also support ongoing campaigns, with 5% off for three consecutive bookings and 10% off for six consecutive bookings.

For brands planning growth, this is not simply media spend. It is strategic positioning.

THE COST OF SILENCE

If You Are Not Visible, Someone Else Is

In a competitive agricultural market, silence is risky.

If your competitors are appearing in trusted agricultural media and you are not, they are shaping the conversation. They are becoming familiar. They are earning recognition before the sales conversation even begins.

That is why advertising in Nufarmer Africa Magazine is no longer optional for serious agricultural brands.

It places your business where farmers, suppliers, innovators and decision-makers are already looking. It gives your brand credibility, reach, repetition and a direct pathway to engagement."

Final Word

Be Seen Where Agriculture Pays Attention

Agriculture rewards trust. It rewards consistency. It rewards brands that show up, add value and stay present in the market.

> ***"In agriculture, the brands that stay visible are the brands that stay trusted."***

Nufarmer Africa Magazine offers advertisers more than space. It offers authority, targeted reach, editorial support, digital visibility and access to an engaged agricultural audience.

For companies that want to grow in the agricultural sector, the message is clear:

Do not wait for the market to find you. Be visible where the market already is.

Staff Writer

ADVERTISING RATES 2026

JANUARY 2026 TO DECEMBER 2026 | Published for more than 30 years!

CONTACT & PUBLICATION REACH

Advertising Bookings	Publication Reach
Marion Oosthuizen Cell: 071 6399 300 Email: marion@nufarmerafrica.com **www.nufarmerafrica.com**	**Social Media Impact:** : Readers measured over 28 days Meta Data: 185 000 plus readers **Publication Frequency:** Jan/Feb, Mar/Apr, May/Jun, Jul/Aug, Sep/Oct, Nov/Dec

ADVERTISING RATES

Ad Size	Dimensions	Rate ex VAT.	Editorial
Full Page	Full page 210 x 297 mm	R20 763,00	Free*
1/2 Page	1/2 Page (Horizontal or Vertical)	R13 200,00	Free*
1/3 Page	1/3 Page (Horizontal)	R7 800,00	-
1/4 Page	1/4 Page (Horizontal)	R6 000,00	-
1/8 Page	1/8 Page (Horizontal)	R5 000,00	-

Rates are VAT Excluded | *1 Page FREE editorial with paid Full Page or Half Page bookings | Full Page bookings featured on Nufarmer Africa Social Media

TECHNICAL SPECIFICATIONS & KEY INFORMATION

Technical Specifications	Additional Information
Full Page: 297 x 210 mm **1/2 Page Vertical:** 297 x 105 mm **1/2 Page Horizontal:** 150 x 210 mm **Third Page:** 99 x 210 mm **Quarter Page:** 150 x 105 mm **Bleed:** 10 mm all around **File Format:** PDF or JPG, Full Colour	**Agency Commission:** 16.5% (Prices do NOT include agency commission. Agents: Add commission to rates.) **Contract Discounts:** 3 Consecutive bookings less 5% 6 Consecutive bookings less 10% **Example:** Booking 6 Full pages = save R12 300.00 All editorials have back-links to the clients website which means readers will click trough to the advertisers website.

CLOSING DATES FOR 2026

Edition	Closing Date for Bookings	Closing Date for Material / Editorial
JANUARY / FEBRUARY	28 November 2025	12 December 2025
MARCH / APRIL	30 January 2026	13 February 2026
MAY / JUNE	27 April 2026	27 April 2026
JULY / AUGUST	23 June 2026	23 June 2026
SEPTEMBER / OCTOBER	23 August 2026	23 August 2026
NOVEMBER / DECEMBER	23 October 2026	23 October 2026

TARGET AUDIENCE

Nufarmer Africa Magazine is a trusted voice in the continent's agricultural sector, connecting advertisers with progressive farmers, agribusinesses, input suppliers, industry bodies, and key decision-makers driving agricultural development across Sub-Saharan Africa. It offers focused access to a diverse, high-value audience invested in productivity, sustainability, and innovation across both commercial and emerging farming sectors. With strong editorial credibility and industry insight, the publication serves as a platform where technology adoption, value chain growth, and market expansion converge, while also addressing critical issues such as biosecurity—highlighting the importance of protecting farms against pests, diseases, and cross-border risks to ensure resilient and sustainable food production.

Why Every Farmer Should Attend
the Undercover Farming Western Cape Conference
Strategic Business Decission to Future Proof Your Income

South African farming is changing fast. Heat, wind, water pressure, input costs and unpredictable seasons are no longer occasional challenges. They are now part of everyday production planning. For many farmers, the real question is no longer whether conditions will change, but whether their farming system is strong enough to survive the change.

That is why the Undercover Farming Western Cape Conference, taking place on 21 and 22 October 2026 at Allee Bleue in Groot Drakenstein, Franschhoek, should be seen as more than another agricultural event. It is a practical business opportunity for farmers who want to protect production, improve income and keep their farming legacy alive.

Undercover farming is often misunderstood as something only linked to expensive greenhouse production. That is no longer true. Protected farming includes greenhouses, tunnels, shade-net systems, controlled irrigation, climate-smart structures, improved crop monitoring and more resilient production methods. It is just as relevant to vegetable growers, fruit producers, emerging farmers and commercial operations that want better control over risk.

"Undercover farming is not only about growing under plastic. It is about farming with more control, less risk and greater confidence."

The official Undercover Farming conference platform has already positioned these events around urgent themes such as profitability, climate resilience, smart irrigation, seed innovation, integrated pest management and practical technology adoption. These are not abstract talking points. They are the pressure points that determine whether farms remain profitable in a difficult production environment.

Climate Change Has Made Protection a Business Decision

Farmers cannot control the weather, but they can control how exposed their crops are to it. Shade-net farming, tunnels and greenhouse systems help reduce the direct impact of harsh sun, wind, hail, pests and water loss. In the Western Cape, where water efficiency and crop quality are central to long-term farming success, this kind of thinking is becoming essential.

"The farmers who protect production today are the farmers who will still be producing tomorrow."

Undercover farming can help farmers produce more consistently, improve crop quality and reduce avoidable losses. It also allows better management of

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irrigation, fertigation, pest control and harvesting cycles. That means fewer surprises and stronger planning.

It Is About Income, Not Just Infrastructure

The biggest mistake is seeing undercover farming only as a capital expense. It should be viewed as a production strategy. When correctly planned, protected farming can support higher yields, better market timing, improved quality, reduced waste and stronger margins.

For farmers supplying retailers, packhouses, fresh markets or export channels, consistency matters. Buyers want reliable volume and quality. Undercover systems can help farmers meet those expectations more often, ***especially when open-field conditions become unstable.***

The conference gives farmers access to practical insights, suppliers, technology providers and other producers who are already working with these systems. That kind of knowledge can prevent costly mistakes and help farmers make better investment decisions.

Not Only for Large Commercial Farmers

This conference is also important for small-scale and emerging farmers. Shade-net systems and smaller tunnel structures can offer a more accessible entry point into protected production. For farmers working with limited land, these systems can help maximise output from smaller spaces.

The Undercover Farming platform highlights that protected production is relevant across the farming spectrum, from commercial growers to small-scale and urban farmers. This makes the Western Cape Conference especially valuable for anyone looking to expand, diversify or stabilise income.

What Farmers Can Expect to Learn

Delegates can expect discussions around more resilient production systems, water-saving irrigation, crop protection, technology, seed choices, climate control and practical ways to improve profitability. These topics matter because they all connect to one thing: ***keeping farms productive despite rising pressure.***

The value of attending is not only in listening to speakers. It is in asking questions, comparing systems, meeting suppliers and seeing where the industry is moving before being forced to adapt too late.

Final Word

Every generation of farmers has had to adapt. Today, adaptation means more than working harder. It means farming smarter, protecting production and investing in systems that can withstand uncertainty.

For farmers who want to stay competitive, reduce risk and protect the future of their farms, the Undercover Farming Western Cape Conference is not optional. It is a strategic step toward a more secure farming future.

Staff Writer

Why Attend?

Event: Undercover Farming Western Cape Conference

Date: 21–22 October 2026

Venue: Allee Bleue, Groot Drakenstein, Franschhoek

Who should attend:

- **Greenhouse growers,**
- **shade-net farmers,**
- **fruit and vegetable producers,**
- **emerging farmers,**
- **commercial farmers,**
- **suppliers and**
- **agribusiness decision-makers.**

Main reason to attend:

To learn how protected farming systems can reduce climate risk, improve consistency and support long-term farm income.

Every Farmer Should Follow
Undercover Farming Magazine
The recognized mouthpiece for Farming under Protection in Southern Africa

In today's fast-moving agricultural environment, access to reliable, practical information is no longer optional—it is essential. As the **official, elected** *mouthpiece of the farming-under-protection industry in South Africa*, ***Undercover Farming Magazine*** has been at the forefront of greenhouse and shade-net agriculture since its inception. It is a trusted platform that reflects the realities, challenges, and opportunities within this highly specialised sector.

By clicking, liking, and following ***Undercover Farming Magazine*** on:***https://www.facebook.com/UndercoverFarming*** farmers gain immediate access to credible insights, expert-driven content, and the latest developments shaping protected agriculture across Southern Africa. This is where innovation meets practicality—where farmers can learn what is working on the ground, not just in theory.

From greenhouse and shade-net production systems to water-use efficiency, pest management, climate-smart solutions, and profitability strategies, the platform delivers information that can be directly applied to improve farm performance. It also keeps farmers informed about upcoming conferences, technical sessions, and supplier innovations that are driving the industry forward.

Importantly, Undercover Farming is not limited to large-scale greenhouse operations. It speaks to a wide audience, including commercial producers, emerging farmers, and those looking to transition into more controlled and resilient farming systems.

Farmers can also access the full publication **free of charge** by visiting: https://undercoverfarmingexpo.com/publications/

Undercover Farming is more than a magazine

In a time where climate pressure, input costs, and market demands are constantly shifting, staying connected to a credible, industry-led platform is a strategic advantage.

Undercover Farming is more than a magazine—it is a vital knowledge hub helping farmers protect production, improve income, and secure the future of their operations.

Staff Writer

Undercover Farming Expo & Conference: Western Cape 2026

21 & 22 October 2026

Allee Bleue Estate,
Groot Drakenstein, CapeTown, South Africa

BOOK TODAY!

UNDERCOVER
FARMING CONFERENCE
WESTERN CAPE

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Cell: +27 82 832 1604
www.undercoverfarmingexpo.co.za