



Scan for Capital Harvest

December 2018

This is a monthly environmental scanning document with extracts from a range of press articles deemed to be of possible strategic importance to Capital Harvest. The articles are arranged according to a framework of topics. For each article its title, author (where available) and source are stated.

Editorial

Agriculture

In 1992 scientists studied a giant honey mushroom, which grows deep underground in a forest in the US state of Michigan, and found it to be one of the largest organisms on earth. At the time it was estimated that the mushroom was 1 500 years old, that its underground fibres (mostly tendrils wrapped around tree roots) weighed 100 000kg, and that it occupied 15 hectares. When the same team of scientists recently returned for a more in-depth study, they found that the mushroom was both older and larger than previously estimated. It is now thought to be 2 500 years old, weigh 400 000kg and occupy 70 hectares. The lead researcher says the estimates are conservative, and actual figures could be higher. Even so, another honey mushroom growing in the US state of Oregon is even larger. The title of World's Largest Organism may belong to the Pando aspen in Utah in the US, a forest originating from a single underground parent clone that is thought to weigh up to 6 million kg.

Two global agricultural trading houses, ADM and Cargill, have applied for approval in the US to create a joint digital network designed to let farmers manage their crop and market data online. North American farmers will be able to access their transactions, contracts, cargo weight and payments online. They will also be able to sell grains at a time of their choosing, see break-even levels and judge risk. Although ADM and Cargill say that each farmer will only see their own data, many farmers regard the scheme as a way for big business to get hold of their detailed farm-level information. While the tool has great potential to enable farmers to increase profits, some North American farmers feel they should be further compensated for sharing their data, which is classified as intellectual property.

German scientists have discovered how to determine the gender of a chick while it is still an embryo. This has resulted in the first "no-kill" eggs entering the market. Each year, 4 billion to 6 billion male chicks are killed around the world, because they cannot lay eggs and grow too slowly to efficiently

produce meat. The new patented process, called Seleggt, can determine gender nine days after an egg is fertilised. Only female eggs are then hatched. The process takes only one second per egg. Although other similar technologies exist, only Seleggt has thus far managed to produce commercial eggs in this way.

A German farmer who suffered his poorest harvest in three decades due to drought, has sued the German government for failure to meet climate protection targets. He is supported by two other farmers and Greenpeace. Germany committed to reducing greenhouse gas emissions by 40% by 2020 (compared with 1990 levels), but has admitted that it now expects to achieve a reduction of only 32% by 2020. The shortfall of 8 percentage points is equivalent to about 100 million tonnes of carbon dioxide. In 2018 Germany saw its worst drought since 1911, even temporarily halting water traffic on rivers such as the Rhine. Germany's environment ministry, the respondent in the case, has agreed that the farmer has every right to focus attention on the fight against climate change.

In the neighbouring Netherlands, agricultural revenues were 11% lower in 2018 compared with 2017. Agricultural income in the country has been under pressure for two decades now, due to low prices, rising global supply and increased costs. In 2018 the Netherlands saw extreme drought and exceptionally high temperatures throughout the country. This took its toll on many products including livestock, vegetables, grains and the country's very large cut flower and plants sector. Apple and pear trees were irrigated, leaving them comparatively less affected.

African farms are getting smaller – over 80% of farms in densely populated countries are now smaller than one hectare. These units are too small to farm profitably. There has, however, recently been an increase in the number of medium-sized farms (five to 50 hectares). In Tanzania and Zambia, where there is enough undeveloped land, medium-sized farms now account for roughly 40% of marketed agricultural produce. In many cases the farms are owned by African professionals, entrepreneurs and retired civil servants. The area of land acquired by these medium-scale African farmers since 2000 far exceeds that acquired by foreign investors. Three factors may have contributed to the increase: demand for food, high global food prices and improved conditions for private trade. The increase in medium-sized farms is also impacting positively on small-scale farms by stimulating local economies and attracting services required by farmers.

A three-day long Cannabis Expo was held in Pretoria in December, attended by roughly 20 000 people. The focus was on the cannabis industry, health and cannabis agriculture. A similar exhibition is planned for Cape Town in April, and will likely be three times larger. Several companies use the exhibitions to attract investors to their ventures. Despite the fact that carrying cannabis is legal in SA, owners of private spaces are allowed to impose restrictions, and the organisers ban visitors from bringing cannabis to the events. Many players in this new industry are reluctant to share their business strategies, as they prepare for what is expected to be a flood of business following the full legalisation of dagga. Specialist fertiliser companies, consultants, legal firms and packaging-design companies are all joining the exhibitions, positioning themselves to get a head start in the industry.

The last quarter of 2018 saw SA's Agbiz/IDC Agribusiness Confidence Index weaken to its lowest level in nine years. Uncertainty about land reform and drought were the two main factors driving the index down. In the Western Cape, the after-effects of the drought will linger for the next two or three years, while in some parts (notably the Klein Karoo) the drought has not yet been broken.

The Philippi Horticultural Area (PHA) is an important vegetable farming area outside Cape Town, but many farmers are leaving the area due to crime. The PHA suffers from large-scale unemployment and is increasingly infiltrated by gangs from Hanover Park. The provincial government is now looking into the use of drones to aid law enforcement.

In June 2020 Cape Town will host the 21st Agritech Africa conference and exhibition. Up to 800 international delegates are expected, and it is estimated the event will boost the Cape's economy by R15.3 million. The exhibition aims to showcase technologies and create partnerships between farmers; industry; research and development centres; NGOs; government organisations and innovators. The key themes will be progressive farming and the conservation and management of water. The organisers hope to showcase SA agriculture in a way that will attract importers from Africa, India and the Middle East.

Bee farming is one of the fastest-growing niche industries in the country, and the honey bee is the main pollinator of many agricultural crops (birds, bats and butterflies are other important pollinators). Bees are crucial for crops like apples, tomatoes and citrus. Although crops like potatoes, rice and wheat can survive in the absence of bees, their yields improve when there are more bees around. The demand for bees to pollinate crops is growing in SA. The recommended industry rate is R802 to rent one bee colony for 21 days. In late 2018, accidental poisoning by a pesticide used on wine grapes, *fipronil*, killed hundreds of bee colonies in Constantia. One bee farmer lost 100 hives and up to 1.5 million bees. Another leading cause of bee deaths world-wide, is American foulbrood disease. A new edible vaccine has been developed in Finland that protects bees against the disease. The technology may in future be used to combat fungal diseases and other bacterial infections. However, the vaccine is still years away from being commercially available, facing multiple regulatory hurdles.

Rooibos is exclusively farmed in the Cederberg, Clanwilliam and Sandveld areas of the Western Cape. About half of the annual crop of 14 000 tonnes is consumed locally, while the balance is exported to more than 30 countries. The five biggest export markets are Germany, the USA, Japan, the UK and The Netherlands. The present interest in Rooibos is fuelled by an increased health-consciousness among consumers. Rooibos is marketed as a hot or cold drink, while also being included in beauty products, nutraceuticals, alcoholic drinks, confectionery, yoghurt and cereal. The area planted under Rooibos in SA is at a record high of 57 000 hectares – almost double that of a decade ago. More farmers, especially in the Swartland, have cleared existing farmland to make way for Rooibos. It is a hardy, dryland crop which is generally less affected by drought when compared to other rain-dependent crops. Its low-maintenance nature makes it ideal for emerging farmers. The plant needs water after planting, which is only done once every three to four years. The first harvest is after 18 months, and production continues until the plant is up to four years old. The 2018 crops was smaller due to the drought, but 2019 is seeing a rebound.

SA is seeing some maize farmers turn to cotton for higher profits, as cotton prices are comparatively favourable. Drought and large local supplies are making maize less attractive. The turn of SA farmers from maize to cotton has been a trend since mid-2017.

According to SATI the Olifants River table grape region suffered the most in the 2017/2018 drought, when volumes were 60% lower than the previous season. In 2018/2019, rain during harvest time caused some grape splitting in the region. In general, Western Cape table grape growers say their vineyards haven't fully recovered from the years of drought.

In a case heard by the High Court in Pretoria in December after five years of litigation, Italian trading company Oranfizer accused Limpopo's Fruitone citrus company of supplying it with a shipment of square oranges back in 2012. Oranfizer claimed R1.3 million in damages. In 2012, Fruitone packed a shipment of oranges in a way that caused it to arrive in Sicily looking squashed and flat, with some having split open. The damaged oranges that were not split open, suffered from increased oxidation and decay due to squashing. The problem was reportedly with the stacking of the cartons in the pallets.

During the 2017/2018 growing season an unknown, damaging disease of squash was observed in several plantations in the Northern Cape. In these plantations 50% to 80% of the squash fruits had lesions or internal rotting. After extensive testing, it was reported that a new disease had been found and recorded: soft rot caused by *Pseudomonas syringae* pv. *syringae*.

In 2014 a devastating pest, the blueberry bud mite (*Acalitus vaccinii*) was detected in Mpumalanga. It was the first detection outside of North America. The mite is capable of destroying an entire blueberry crop. Since then, high infestation levels have been found in SA. At one site in Mpumalanga damage ranged from 30% to 90%. The mite has not yet been found in the Western Cape, SA's main blueberry cultivation area. But experts warn that it is virtually impossible to contain the pest as the mites are dispersed by wind, and that blueberry farmers should be vigilant for any signs of the mite.

SARS and Agri Inspec have both launched investigations into a large volume of imported garlic on the SA market during August and September 2018, which may have been imported illegally. The oversupply reduced the price of garlic to the detriment of local producers, just at the time when their garlic was ready to go to the market. The oversupply was suspicious as officially reported garlic imports were 45% lower than in August/September 2017. It is suspected that 107 tonnes imported in September were under-declared, and possibly not irradiated as required for garlic from certain origins. Just over half (56%) of the garlic consumed in SA is usually imported, while SA exports garlic to neighbouring countries. The commonly held suspicion is that smugglers may have bribed harbour officials to circumvent the high import levies that are payable on garlic shipments from China.

As previously reported, Lesotho passed legislation in 2018 outlawing trade in wool and mohair without a license. A new auction venue, the Lesotho Wool Centre, was opened to trade in wool and mohair produced in that country. BKB says 4.5 million kilograms of wool usually came from Lesotho each year, a loss which is sorely felt on the SA market. In response, BKB registered a company in Lesotho, but it was met with difficult business conditions due to policy uncertainty. In SA economies of scale have now been lost due to the large reduction in volume, causing the unit costs of marketing wool to increase. SA wool producers are concerned about their counterparts in Lesotho who are suffering under the new legislation, and who had challenged it in court in 2018 in an effort to prevent the implementation thereof. SA's National Wool Growers' Association has also questioned whether the Lesotho wool is undergoing testing by an internationally recognised body such as SA's Wool Testing Bureau.

Capespan announced in December that its procurement and marketing operation in SA has been certified under the IFS Broker requirements. It is now one of 12 SA exporters to obtain the certification. The goal of IFS Broker is to ensure the safety and quality of products between production and distribution. Capespan Europe as an importer also holds IFS Broker certification, covering supply regions outside of SA.

Senwes attributed its subdued financial results for the six months ended 31 October to political uncertainty. In particular, agricultural equipment sales had been slow. Senwes predicted that its second semester (up to 31 March 2019) would be even more challenging due to late rain and low capital spending.

TWK Investments, active in agriculture and forestry, reported increased earnings for the full year to end August. TWK's divisions are timber, retail and mechanisation, financial services, grain and vehicles and tyres. The grain division's 2018 results were positively impacted by high carry-forward stock from the previous year's record maize harvest. The group – which was once an agricultural co-op just like Kaap Agri and Senwes – operates in Mpumalanga, KZN, Eastern Cape, Western Cape, Free State, Limpopo and Gauteng. It listed on ZAR X in July 2017. TWK is considering the acquisition

of an additional 11 000 hectares of timber forest. This follows the implementation in 2018 of a collaboration agreement with Royal Silulu Holdings, which aims to develop about 25 000 hectares of new plantations and other agricultural farming activities in Swaziland. The financial services division reported an increase in revenue of 7.3% from R139.1 million to R149.3 million, partly due to the addition of two new books to its portfolio.

IBM and agri-tech start-up Hello Tractor have developed an AI and blockchain-driven platform for Africa's farmers. The two companies will pilot the product in 2019 through an ongoing partnership, co-financed by IBM. The cloud-based service, called Digital Wallet, will support Hello Tractor's business of connecting small-scale farmers to equipment and data analytics for better crop production. Digital Wallet uses a digital ledger and machine learning to capture, track, and share data. Weather-sensing is used to help farmers determine crops and inputs, choose when to plant and to optimise and predict crop yields.

Banking and Capital Markets

In December the World Bank Board approved a \$50 million project to increase the availability of agricultural technologies in Angola and Lesotho. It will form part of the Agriculture Productivity Program for Southern Africa (APPSA), involving three other countries in the region: Malawi, Mozambique and Zambia. While agricultural productivity has increased in Southern Africa, Angola and Lesotho's average yields are below the regional average. This project aims to help narrow the gap.

In December SA's cabinet approved the appointment of former Land Bank boss Tshokolo Nchocho as the CEO of the IDC. The previous CEO, Geoffrey Qhena, retired after 20 years of service. For the past 13 years Qhena been in the role of CEO. Nchocho has worked in leadership roles at two large development finance institutions, namely the DBSA and the Land Bank (where he served as CEO since 2015). He holds a BCom degree from the University of the North; a Master of Business Leadership from Unisa; a Master's degree in Development Finance from the University of London; and an advanced management programme qualification from the Harvard Business School.

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Land Bank boss to head up IDC

Agriculture

One of Earth's largest living things even bigger than previously thought, scientists find

A giant honey mushroom considered a contender for the largest organism on the planet is both much larger and much older than previously thought.

Scientists first studied the enormous fungus, which lives deep underground in a Michigan forest, in 1992.

Then they estimated it was 1,500 years old, and the extensive mass of underground fibres and mushrooms that formed it weighed 100,000kg and stretched 15 hectares.

Returning to the site, the same team used more rigorous testing to estimate the fungus was in fact closer to 2,500 years old.

They also discovered that it weighed 400,000kg and stretched over 70 hectares.

This makes the enormous honey mushroom, which mostly consists of an underground network of tendrils wrapped around tree roots, heavier than three blue whales.

"I view these estimates as the lower bound... The fungus could actually be much older," said Professor James Anderson, a biologist at the University of Toronto who undertook both studies.

Their findings were published in the journal *Proceedings of the Royal Society B*.

While the Michigan fungus is large, it is outclassed by another honey mushroom from Oregon that is even larger.

There is also the Pando aspen in Utah, a forest originating from a single underground parent clone that is thought to weigh up to 6 million kg.

Josh Gabbatiss, *The Independent*, 19 December 2018

Farmers wary of 'ulterior motive' in traders' push to go digital

Facing competition from hi-tech startups, two of the world's biggest trading houses are seeking US approval to create a joint digital network designed to let farmers manage their data online.

That may be the easy part. The tough part: Persuading wary growers to use it.

Agribusiness giants Archer-Daniels-Midland Company and Cargill are asking regulators to approve a joint venture called GrainBridge to help farmers gather and aggregate information on crops and markets. The push comes as startups like Indigo Ag, Grainster and the Farmers Business Network have begun offering digital access to growers to help them pinpoint opportunities in specialised crop markets.

Technology is needed, said Jon Bertsch, who grows soybeans, corn and wheat on about 2 500 acres in Hillsboro, North Dakota. But farmers always wonder if "there is an ulterior motive," he said by phone. "They want all of our data. Them getting it should be at a premium."

As a first step. Omaha-based GrainBridge aims to give mainstream growers access to their trading house transactions, along with their contracts, precise cargo weight and payment information. Ultimately, growers in the US and Canada will be able to sell grains on their own schedules, see break-even levels and ascertain risk, the companies have said.

The two companies didn't disclose terms of the joint venture, but said in a statement they could close on it "in the next few months."

"The competitive landscape is changing, and ADM and Cargill see that," said Nick Horob, who owns Harvest Profit, a Fargo, North Dakota-based farm management technology company. "They realize that they need to get a tool in farmers hands that they really like."

Details on planting, yields and production are "intellectual property," Horob said. "There is definitely some concern."

Tim Boring, who grows corn, soybeans, wheat and barley near Lansing, Michigan, said the offering may be helpful to farmers seeking a higher comfort level on hedging and locking in profits. Still, "you don't necessarily know how it could go wrong" when proprietary farm data is placed on a system run by big companies.

Cargill and ADM's initiative is "an indicator to me that there's real potential in this space, and they want to be in it somehow," Boring said, adding that such programs only work "long-term if everybody gets something out of it. For the big boys, they're not in it just for positive PR."

The farmer has got to wonder "how do I make sure I'm getting something out of it too," Boring said. "There's so much uncertainty. Farmers don't even know how much their data is worth."

In a joint response to Bloomberg, Chicago-based ADM and Minneapolis-based Cargill said "GrainBridge will provide a more complete view to farmers of their total grain sales and account information. The technology will be designed to aggregate information for the farmer," and won't be shared.

"Only a farmer will see his or her own account information," the companies said. "Neither Cargill nor ADM, nor any other partner or participant, will have access to any customer's information that they are not providing themselves."

Those concerns may be unwarranted because the large companies already have a wave of people watching the market in granular detail around the clock, said Craig Dobbins, an agricultural economics professor at Purdue University in West Lafayette, Indiana.

"The whole digitisation process has some really earth-shaking potential," Dobbins said. If there is a new, proven way for farmers to make more money, "they would be quite willing to share data. The foxes have the data already."

Bertsch, meanwhile, says he'll give the new system a close look. It could be "huge," he said. "It's not like back in the day where, two or three days later, dad or grandpa drives over to the elevator to try and market the crop."

Now, Bertsch said, we can see "a tweet make a difference in 10 minutes."

Mario Parker, *Bloomberg*, 27 December 2018

The world's first no-kill eggs have gone on sale after scientists found a way to determine a chick's sex before it hatches

The first no-kill eggs in the world have gone on sale in Germany after scientists discovered how to tell a chick's sex while it is still an embryo.

Humans have long relied on chickens for meat and eggs, but male chicks are not used for either purpose. They grow too slowly for people to invest in feeding them long enough to produce meat, and they are unable to lay eggs. For these reasons, between 4 billion and 6 billion male chicks are killed around the world each year.

As *The Guardian* reported, male chicks are either suffocated or fed alive into high-speed grinders that turn the chicks into reptile food.

"Seleggt," the new process patented by German scientists, could put an end to this slaughter. According to *The Guardian*, the technology can figure out a chick's sex only nine days after an egg is fertilised, ensuring that only female eggs hatch after 21 days of incubation.

"If you can determine the sex of a hatching egg you can entirely dispense with the culling of live male chicks," Seleggt managing director Ludger Breloh told *The Guardian*.

Breloh told *The Guardian* that the new method draws on a discovery made by Almuth Einspanier, a professor at the Leipzig University. Einspanier created a chemical marker that can detect a hormone

that's only abundant in female chick eggs. The marker, when mixed with fluid from a chick egg nine days after fertilisation, turns white in females and blue in males.

According to *The Guardian*, Breloh worked with the Dutch technology company HatchTech to make Einspanier's process appropriate for hatcheries to use on a regular basis. The end result uses a laser beam to burn a tiny hole in an egg shell, after which air pressure is used to extract a drop of fluid.

This process, which allows hatcheries to collect fluid without touching the eggs, takes only one second per egg, *The Guardian* reported.

Seleggt's first eggs, which are labeled "respeggt," hit grocery stores in Berlin in November.

"Today, female hens are laying eggs in farms in Germany that have been bred without killing any male chicks," Breloh told *The Guardian*.

Rewe Group intends to begin selling these eggs all over Germany in 2019, and Seleggt plans on equipping independent hatcheries with the new technology the following year. Grocery stores will be required to pay a few more cents per box of eggs in return for permission to sell the "respeggt" product.

The German breakthrough is not the only effort underway to end the culling of male chicks, though it appears to be the first commercially viable technology. A number of companies have previously said they are closing in on presenting technology that could determine the sex of a chick before it hatches.

United Egg Producers, for example, announced in June 2016 that it would end the culling of male chicks by 2020, *HuffPost* reported. And, according to *The Washington Post*, Egg Farmers of Ontario said in 2016 that it had already patented a process to sort eggs by their sex.

But despite a growing interest in putting an end to the killing of male chicks, only Seleggt managed to commercialise its technology as of December.

Peter Kotecki, *Business Insider US*, 29 December 2018

German farmers sue government over missed climate targets

Dismayed by the German government's failure to meet climate protection targets, dairy farmer Heiner Luetke Schwienhorst has filed a lawsuit against Berlin to force it into action.

"Some describe this as a fight between David and Goliath. To me, that's besides the point," said Schwienhorst, who suffered his poorest harvest in three decades after a record drought.

"The attitude of political representatives, the way they trivialise climate targets by giving up what they have set, is something that we need to bring to political accountability. That is important," he told *AFP*.

Together with two other farmers and Greenpeace, Schwienhorst has launched a challenge against the German government for having "given up" trying to achieve cuts in greenhouse gas emissions set out under its own climate target, as well as under European law.

A dairy farmer near Hamburg and a livestock farmer on the North Sea island of Pellworm have joined the first such lawsuit to seek "climate protection, not monetary compensation".

Berlin had pledged to take action to slash greenhouse gas emissions in Germany by 40% by 2020 compared to 1990 levels.

But in its latest annual climate protection report published in June, the government admitted that it was now expecting to achieve 32% in reductions compared to 1990.

The shortfall of 8 percentage points is equivalent to about 100 million tonnes of carbon dioxide.

"It was clear in the climate protection report that the government is not planning to take further measures in order to reach the target. Instead, it has simply given up," said Anike Peters of Greenpeace.

"We're saying we're not going to accept this. Because it's not about a lack of technical possibilities to reach the target, rather it's about a lack of political will.

With the help of lawyer Roda Verheyen, the plaintiffs lodged their case at the administrative court in Berlin at the end of October.

The court now needs to decide if there is any merit to the case.

Verheyen is no stranger to such climate cases.

In another high profile case in Germany, she helped bring to court a challenge by a Peruvian farmer against energy giant RWE over climate change damage in the Andes.

While the initial ruling went against them, the case is now at the appeals court.

Verheyen said that in her latest case, the issue is whether the government can be held liable for failing to implement climate protection measures, as the targets it set are not written into law.

"Here the plaintiff families say, yes. Do what you've promised, government, implement the 2020 climate protection goal."

The environment ministry, which is taking the lead in responding to the case, said the plaintiffs had every right to bring the issue to court "to seek public attention" and increase the pressure for better climate protection.

"Although Germany's climate protection efforts have made progress, they have not yet reached our goals," ministry spokesman Andreas Kuebler told *AFP*. "That's why we're focusing on getting ahead in climate protection.

"We are united in the same goal," Kuebler said. It was up to the court to decide whether the legal action was justified.

For Schwienhorst, who has run the dairy farm in Vetschau, eastern Germany, for 30 years, the impact of a warming Earth is apparent.

Compared to the 1990s, the period of vegetation growth in a year has lengthened, while maximum temperatures have also pushed above 35 degrees Celsius (95 degrees Fahrenheit).

"The change in the last decades is already impressive. But what happened this summer is simply frightening," he said, referring to a record drought unseen in Germany since 1911.

The dry spell has stretched from late spring, even halting water traffic across the country, including on the Rhine, one of Europe's busiest commercial arteries.

"We are still now in the phase when rain isn't expected. I'm speechless," said Schwienhorst. That those who dismiss such weather phenomena as one-offs are "impertinent", he added.

The climate also has a direct impact on his livelihood.

A summer with temperatures above 35 degrees Celsius put the cows under great stress, and the drought meant his poorest harvest in the last three decades.

Schwienhorst pointed to the barn, which was far from full. This year's cereal crop - for human consumption - was 35% below the previous year.

His losses in livestock feed crop were even more serious: up to 50%, forcing him to buy 400 bales of hay.

Crucially, the farm has been forced to use up a rolling four-month reserve of feed for the cows by the summer.

"There's still hope that this weather will turn, that after this dry phase a wet phase will come. But looking at the trend, change is happening. That is indisputable.

AFP, 8 December 2018

The Netherlands: Lower farm income due to dry summer

Revenues in the agricultural sector have dropped this year. In comparison with 2017, agricultural income declined by almost 11 percent. While 2017 was a good year for farmers, with agricultural income exceeding the 1995 level for the second time in more than two decades, income has now declined across a broad front. Agricultural income per annual work unit fell below that level again in 2018.

Agricultural income has been under pressure throughout the past two decades. This is related to price developments of agricultural products, rising supply on the world market and increased input costs of such products as animal feeds and natural gas. Between 1995 and 2018, total agricultural output rose by 25 percent, coinciding with a 5-percent decline in total agricultural income.

In 2018, total agricultural output volume was 1.4 percent down on the previous year. The lower level of sales in arable farming and horticulture was partly due to poor harvests as a result of extreme drought and exceptionally high temperatures throughout the Netherlands. Output declined in the livestock sector as well. Slightly increased output prices compensated somewhat for the lower production value, resulting in final agricultural output at only around 1 percent below the level of 2017. The lower production value had a downward effect on revenues, partly exacerbated by a 3-percent rise in the value of consumption over the same period.

In the Netherlands, output in arable farming is greatly affected by the largest sector, that of flowers and plants. Their production value, which is good for almost half of the total production value in the plant sector, was at similar levels as one year previously. Relatively poor results were seen in cut flower production, whereas plant production improved year-on-year. Arable farmers had lower yields this year as a result of extreme drought and exceptionally high temperatures around the country. Fewer potatoes were harvested in comparison with 2017. Harvest yields of onions and cut maize were far below 2017 levels. The short supply drove up the prices of most plant products to much higher levels year-on-year.

In horticulture, greenhouse vegetables suffered from the drought as well. Not only did yields fall below expectations, but the quality of the vegetables was poorer as well. Apple and pear harvests were not as much affected by the drought in general as the trees were given extra water.

FreshPlaza, 24 December 2018

Medium-scale farms are on the rise in Africa. Why this is good news

Driven by population growth and growing land scarcity, most African farm households are witnessing the gradual sub-division of their land. Over time farms are getting smaller and smaller. Today, over 80% of farms in relatively densely populated countries – like Kenya, Ethiopia, Malawi and Rwanda are smaller than one hectare. Because they're so small, few can generate enough income to keep farmers above the poverty line and most of them increasingly rely on off-farm incomes.

But, from about ten years ago, we have started to see evidence of a major rise in the number of medium-scale, African-owned farms.

Along with many colleagues, we set out to understand who these people are. We randomly selected farms operating between five to 50 hectares, and interviewed the farmers. We found that the rapid rise of these medium-scale farms was being driven by a diverse group of people including urban-based professionals, influential rural people, and successful smallholder farmers who acquired more land and grew their operations.

Within the past decade, the amount of agricultural produce that these farms contribute to countries' national output has risen rapidly. In some countries, like Tanzania and Zambia, medium-sized farms now account for roughly 40% of the country's marketed agricultural produce.

This isn't uniformly true across Africa. In land-constrained, densely populated areas like Kenya and Rwanda, small-scale farms still account for most of the agricultural output. Medium-scale farms are on the rise mainly where there is substantial, undeveloped land.

While much remains unknown and the story is still unfolding, we believe that medium-scale farms are an important driver of rural transformation in much of Africa – with mostly positive results.

For about ten years there's been a prolonged surge in global food prices. This ushered in major, and much publicised, investment in African farmland by foreign investors. What happened largely under the radar were huge farmland investments by African professionals, entrepreneurs and civil servants.

The amount of land acquired by these medium-scale African farmers since 2000 far exceeds the amount acquired by foreign investors.

They are relatively wealthy and influential, often professionals, entrepreneurs or retired civil servants. Many accumulated wealth from non-farm jobs, invested in land and became either part-time or full time farmers.

Many are based in rural areas and have political or social influence with local traditional authorities. Others are urban "telephone farmers" who retain jobs in the cities, hire managers to attend to their farms and occasionally visit on weekends.

In some countries, we also find that many current medium-scale farmers started out as small-scale farmers who successfully expanded their operations.

Medium-scale farmers bring new sources of capital and know-how to African agriculture. They have in some countries become a politically powerful group that are well represented in farm lobbies and national agricultural strategies. They have solidified African governments' commitments to support agriculture.

They get their land from traditional chiefs or by purchasing land from others, including small-scale farm households. Displaced smallholders, especially young people, tend to move off farm in search of other sources of employment.

We identified three reasons for the recent growth of African medium-scale farms.

First, rapid population growth, urbanisation and rising incomes have contributed to massive growth in demand for food in African countries. Africans with the resources to respond to this demand are doing so.

Second, many Africans with money and resources found farming to be a lucrative investment opportunity – especially during this sustained period of high global food prices since the mid-2000s.

Third, policy reforms in the 1990s removed major barriers to private trade and improved the conditions for private investment in African agri-food systems. One example of this was the removal of restrictions on private movement of food commodities across district borders. The effects of these reforms exploded after world food prices suddenly skyrocketed. They enabled thousands of small, medium and large-scale private firms to rapidly respond to profitable incentives.

With the rise of the medium-scale farms, we expected to find that smallholders were being marginalised. But we've changed our views on this in light of various pieces of evidence.

First, medium-scale farms are providing access to markets and services for nearby smallholder farms. For example, many medium-scale farms have attracted tractor rental providers, who now provide mechanisation services to smallholders. This allows them to farm their land with much less labour input, freeing up opportunities to work in off-farm pursuits.

Second, large trading firms are setting up buying depots in areas where there's a high concentration of medium-scale farms. This improves market access for smallholders too.

We also found that the medium-scale farms are good for the local economy. They inject cash into the local economy through their expenditures, stimulating off-farm employment opportunities for many rural people who were formerly dependent on subsistence farming.

Medium-scale farms have also contributed to sub-Saharan Africa's 4.6% annual rate of agricultural production growth between 2000 and 2015. This is the highest of any region in the world over this period.

While there are a lot of positives, these changes are uprooting the traditional social fabric and creating new power structures. The rise of land markets is creating a new class of landless workers

who are dependent on the local non-farm economy for their livelihoods. Policy makers will need guidance on how to minimise these hardships — protecting those who are most vulnerable as the processes of economic transformation gradually raise living standards for the majority of the population.

Thomas Jayne & Milu Muyanga, *Moneyweb*, 26 December 2018

The dagga business is booming already – even though nobody is officially selling any yet

Next week, The Cannabis Expo will open in Menlyn, Pretoria, for three days of "industry, health, and agriculture" exhibits.

Early ticket sales, at R150 a pop, point to a visitor attendance of around 20,000 people, organiser Silas Howarth told *Business Insider South Africa*, double what exhibitors had been promised. And exhibition space is long sold out while a waiting list for spots that open up due cancellations continues to grow. A similar exhibition in Cape Town in April is likely to be three times the size of the Gauteng event.

"It's been insane," says Howarth. "It's getting to the point where we're quite quickly turning away certain types of exhibitors."

Interest in the expo has been big even though the organisers have been very clear: no actual marijuana will be allowed on the premises. As best legal experts can tell it remains illegal to trade in dagga, or in seeds, following a historic Constitutional Court ruling that effectively legalised cultivation and possession in personal spaces.

Exhibition visitors are liable to be searched on entry – they may have the right to carry cannabis on their person, but the owners of private spaces can still impose restrictions.

"This is an ordinary exhibition, just like any other exhibition," where organisers could ban legal alcohol or guns, says Howarth. "That is what people in the industry have been fighting for, for cannabis to be treated like anything else."

Many industry players are playing their cards very close to their chests as they prepare for what is expected to be a flood of business following full legalisation of dagga. Even so, it is clear that a great deal of frantic preparation is underway.

Several organisations at the Cannabis Expo will be seeking investors to fund rapid expansion and one, the White Lion Seed Company, will be launching a brand for a company that can not yet sell its primary wares, cannabis seeds.

Specialist fertiliser companies are gearing up, consultants are offering advice, legal firms are positioning themselves as experts, and even packaging-design companies are putting themselves in line for business that is already trickling in, ahead of an expected flood.

One headline exhibitor, Cape Town based Hydroponic.co.za business has been selling home hobbyists equipment to grow better vegetables since 1994. It is in just hiring another staffer, after adding two new employees recently.

"We don't know what people are using it for," Megan Hinde, manager for the shop with a strong online presence, told *Business Insider South Africa*. "We don't ask."

But equipment is certainly flying off the shelves, more so than seems likely to have been caused by the breaking of the Western Cape drought and an uptick in interest in hydroponic vegetables.

"People often phone and ask advice, but even then sometimes you don't know what they are growing; tomatoes grow very similarly to cannabis plants," she says. "If lighting is involved it is a little bit of a clue, but people also want to grow vegetables all year round."

Hydroponics suppliers that would not speak on the record about their current trade or plans hinted at everything from massive import orders to local manufacturing.

SA agribusiness confidence index at lowest in nine years

Confidence in South Africa's agribusiness sector has waned in recent months, with a quarterly index sponsored by advocacy group Agbiz and the Industrial Development Corporation falling to its lowest in nine years.

After declining to 48 points in the third quarter of 2018 from 54 in the previous quarter, the Agbiz/IDC Agribusiness Confidence Index weakened further to 42 in the last quarter of the year, the lowest point since the fourth quarter of 2009.

"The results, which are below the neutral 50-point mark, imply that agribusinesses are downbeat about business conditions in South Africa," the Agricultural Business Chamber (Agbiz) said.

It said the drier weather conditions which were cited by some respondents as a key challenge could soon change as the South African Weather Service had indicated on November 30 that there was a good chance for above-normal rainfall in the summer crop areas between December 2018 and February 2019.

"Having said that, we doubt that there will be a meaningful improvement in confidence in the near term if there is still no clarity regarding the land reform policy in South Africa," said Wandile Sihlobo, head of agribusiness research at Agbiz.

"Any reckless move in policy which might undermine property rights could dent investment and long-run growth prospects in the sector."

Critics say the government's plans to amend the Constitution to allow for land expropriation will undermine investor confidence in general and hurt the agriculture sector in particular. The government says the plans are a necessary tool to drive land reforms as ownership remains skewed in favour of whites whose ancestors forced black people off their land centuries ago.

The Agbiz/IDC survey was conducted in November and comprised agribusinesses operating in all agricultural subsectors across South Africa.

It reflects the perceptions of at least 25 agribusiness decisionmakers on the 10 most important aspects influencing a business in the agricultural sector, namely turnover, net operating income, market share, employment, capital investment, export volumes, economic growth, general agricultural conditions, debtor provision for bad debt and financing cost.

The survey is used by agribusiness executives, policymakers and economists to understand the perceptions of the agribusiness sector, and also serves as a leading indicator of the value of the agricultural output while providing a basis for agribusinesses to support their business decisions.

African News Agency, 4 December 2018

#EveryDropCounts: Drought cost Cape agriculture sector R5.9 billion

Agriculture in the Western Cape suffered a loss of R5.9 billion in revenue, and about 27 000 seasonal workers had to go without jobs due to severe drought, coupled by a weak economy.

The worst was not over because the effect of the drought was still being felt, Agri Western Cape chairperson Carl Opperman said.

"We can still feel the effects of this drought in the next two to three years.

"When the drought expands we can still feel its effect. But there has been some improvement in the sector, and although we have seen losses, there are also some positive gains."

Opperman encouraged South Africans to buy local produce to support local farmers.

He said one of the major challenges, apart from the drought, was the debate around the expropriation of land without compensation.

“The situation is a death trap and the timing is not on our side. Every Constitution needs an expropriation clause. There is no Constitution that does not have such a clause. What needs to be said is that the government has failed to bring proper land reform.

“It is the government that failed all those who elected them to serve.

“So now why should farmers’ land be taken away?

“The state is sitting with large portions of land, yet they are failing to bring about change. We cannot be blamed for that. Only the state can.”

Jacque du Preez, general manager for trade and markets at deciduous fruits industry body Hortgro, said the expected exports for stone fruits were marginally less.

“Our focus at this stage is on the 2018/19 season. Nectarines and plums are 3% less compared with last year.

“Several of the earlier varieties’ volumes ended lower, as expected.

“One of the main reasons, especially with peaches and nectarines, was the heatwave in October. This led to lower production. There was also rain in some of the production areas.

“This led to fruits having little marks, so could not be exported.”

Du Preez said with some pome fruits it was too early to make predictions. The expected exports for apples were 11% less.

“Most producers are in a better water situation, except for those in the Klein Karoo towns of Ladismith and Calitzdorp. There has been little rain in that region. Producers in other regions, such as Ceres, Berg Rivier and Stellenbosch, have good water supply which should be enough to get through the season and they will be able to grow fruits,” Du Preez said.

MEC of Economic Opportunities Beverley Schäfer said the government would continue with augmenting water schemes.

“We will invest in our water systems to ensure farmers and consumers have enough supply. This has been a difficult time for farmers, but we will continue to support where we can.

“Due to an improved water situation, things are looking much better.”

Jason Felix, *Cape Argus*, 5 December 2018

Cape's 'breadbasket' under threat as criminals make it too risky to farm

The Philippi Horticultural Area (PHA), known as the ‘breadbasket’ of the province because of the many farms producing vegetables, is under threat because of criminals.

Many farmers have packed it in. They said criminals had made it too risky to farm.

On Monday, Community Safety MEC Alan Winde, Social Development MEC Albert Fritz and ward councillor Elton Jansen visited Schaapkraal to meet farmers and farmworkers.

A resident, Edwina Adonis, said crime in the area had escalated to a point where it had instilled fear among residents.

“Young children use drugs because they see it from elders and end up in gangsterism. This area is full of gangsters who come from Hanover Park. All we ask is assistance from the City of Cape Town.”

Adonis pleaded with Winde to assist them in fighting gang violence.

A farmer, Gunther Engelke, said their lives were at risk.

“People do not want to farm anymore because of the scourge of crime and violence that we are faced with on our farms.”

Spokesperson for the PHA Nazeer Sunday said the meeting came after 10 years of lobbying, demanding, picketing, networking and working hard to put the plight of farmers in the area on the agenda.

“The PHA farmlands are the unpolished jewel of the city and it is important to make it visible to ordinary citizens who do not always know where their food comes from. A large part of the PHA community is struggling with high unemployment and this directly relates to social ills, such as crime, substance abuse and domestic abuse. We desperately need social development, cultural and skills development programmes in our area.”

Sunday said crime was a complex challenge and although certain short-term actions were identified, the longer-term solution lay in addressing the root causes - poverty, unemployment and inequality.

“It is for this reason the PHA campaign reiterates its position that the PHA is a valuable resource that must be protected. As one participant at the meeting said: ‘It is time for new thinking’. We believe small-scale farming will not only ensure food and water security for the broader Cape Town, but will create the number of types of jobs that are so badly needed.”

Sunday said crime affected all who live in the PHA and surrounding areas, not just the farmers.

He said it was unfortunate that Winde felt some white farmers’ rights were being violated because they wanted to pursue cashing in on the property boom created by speculators, developers and mining companies.

Sunday said protecting the PHA for agriculture did not take away anyone’s rights because the land had been zoned agriculture for nearly 150 years.

Winde made a commitment to investigate the use of drones and establish a temporary law-enforcement station and community forums to deal with the underlying causes of crime.

Residents welcomed the commitment.

Highlands Estate resident Shameema Kippie said they hoped these plans would result in better policing of illegal dumping, illegal land use and land uses that contributed to the degradation of the area and resulted in crime.

Sisonke Mlamla, *Cape Argus*, 11 December 2018

R15m economic boost expected as Mother City set to host Agritech Africa 2020

Cape Town and the Western Cape Convention Bureau, together with the support of the South African National Convention Bureau, are proud to announce that the Mother City will play host to Agritech Africa 2020, organised by Kenes Exhibitions.

“Earmarked to become an annual congress for the Western Cape, it is the first time that an agriculture conference and exhibition of this scale will be hosted in the province,” said Wesgro chief executive Tim Harris. “With Agri-processing earmarked as a key economic enabler under the provincial policy, Project Khulisa, we are thrilled to be playing host for the first Africa based event, building our local knowledge economy in the important sector.”

Celebrating 21 years, the conference will take place from June 17 to 19, 2020 at the Cape Town International Convention Centre. Expecting up to 800 international delegates the conference is expected to boost the Cape’s economy by R15.3 million.

In addition to this, several thousand local visitors are predicted to attend, which will further benefit the local Cape economy.

1. The conference – headed by International and local experts;
2. The exhibition – a platform to showcase the technologies and create partnerships between progressive farmers, industry, research & development centres, NGOs, government organisations and innovators; and
3. B2B meetings.

A key theme to be explored at the event is progressive farming development as well as water conservation, preservation and management in agriculture.

Kenes Exhibitions - initiating and organizing frequent world-class agriculture and water technology events in India, Israel, Italy and Latin America - General Manager, Prema Zilberman, said: "We are excited about our new initiative called Agritech Africa in 2020. The event will showcase leading South African agriculture and Food Processing technologies and host delegations from other parts of Africa. The strengths of South African agriculture and Food Processing industries will be given primary focus with the objective to attract importers from around Africa, India and the Middle East." Despite economic and natural challenges, the exhibition industry continues to play a pivotal role in creating academic stimulus, bringing unsurmountable knowledge sharing, job creation and economic benefit to host destinations.

Cape Town and the Western Cape Convention bureau in partnership with the South African Tourism National Convention Bureau and the City of Cape Town, are engaged in several initiatives to help bring the Western Cape to the forefront of the global exhibitions industry.

South African Tourism chief executive, Sisa Ntshona said: "The Business Events and MICE industry forms a vital part of our strategy in attracting visitors to South Africa. In collaborating with the Western Cape Convention Bureau, we are delighted that a conference of this nature will make its way to South Africa as we position ourselves as an excellent destination for Business Events. It's also exciting to see South Africa showcase to the world, our capabilities in the agritech environment."

Minister of Economic Opportunities in the Western Cape, Beverly Schäfer, concluded: "The conference will provide an economic boost to two of our province's key sectors, agriculture and tourism. The Western Cape is embracing the fourth industrial revolution in Agriculture and I am especially pleased to see that the role of technology in water savings will be a focus area during this conference. With 800 delegates, this event will play an important knowledge sharing role and will contribute towards business tourism and job creation in the events space in the Western Cape."

Business Report, 12 December 2018

Beekeepers reeling as one million bees die in Cape Town

Cape honey bees produce more than just honey and have an incalculable value for a number of spin-off industries and businesses.

In addition, bee farming is one of the fastest-growing niche industries in the country.

The operations manager at Bloomable, Nicholas James, says more should be done to protect local bees and ensure food security after recent accidental poisoning killed hundreds of colonies in Constantia.

"While some flowers and plants can self-pollinate, most require the help of bees to transfer pollen from one plant to another. Honey bees move from fruit tree blossoms to flower gardens and wildflowers, pollinating food and garden plants.

"The honey bee is considered the main pollinator of many agricultural crops, which is why they're a vital part of ensuring food security. They also help us nurture an environment that promotes biodiversity and give you the ability to have a healthy and productive garden," he said.

James has 17 years of experience in the florist and service industries and said the loss of bees could have a knock-on effect for the flower industry.

"Although bees are by far the very best pollinators around, birds, bats and butterflies also contribute to the vital task of nurturing our ecosystem in similar ways. I am not a scientist or an ecologist, but research does indicate that dramatic loss of bee populations will have an effect on many industries, specifically agriculture."

Beekeeper Brendan Ashley-Cooper lost 100 hives, and between one million and 1.5 million of his bees died. He said this would impact honey production to a degree, and some families would have to go without honey this Christmas.

The chairperson of the Western Cape Bee Industry Association (WCBA), Tlou Masehela, said the importance of bees was massive.

“For agriculture, in particular, the demand continues to increase in terms of commercial crop pollination. At the same time, the capacity to sustain a healthy bee population is decreasing rapidly because we are losing good forage sites,” Masehela said.

He said no concrete figures for how much revenue was generated by the industry had been calculated, but he stressed the importance of taking note that bees had just come out of pollination and most beekeepers were now targeting honey flow for the summer months.

“It is a very critical period for revenue when it comes to honey production. For those hives that were in pollination, it’s more about a recovery process for the bees. Going back to financial figures for pollination, this differs from beekeeper to beekeeper, the number of pollinations carried out and the type of crop,” he said.

The WCBA recommended a pollination tariff of R802 per pollination unit (one bee colony for a maximum of 21 days).

Weekend Argus previously reported wine farmers were using the pesticide fipronil on their crops, which infected the bees. Fipronil disrupts the insects’ central nervous system and causes hyperexcitation of the contaminated insects’ nerves and muscles, thereby killing them.

Luke Folb, *Weekend Argus*, 9 December 2018

World’s first honey bee vaccine seeks to save dying pollinators

A growing number of honey bees die each year due to pesticides, vanishing habitats, poor nutrition and climate change, with potentially disastrous consequences for agriculture and natural diversity.

Now, scientists at the University of Helsinki have developed the first edible vaccine against microbial infections, hoping to save at least some of the pollinators.

“We might be right now at a tipping point, without even realizing it,” Dalia Freitak, the lead scientist on the project, said in an interview on Wednesday. “We’ve been taking the pollination services for granted for so long. These insects are not there, they are disappearing.”

The first vaccine inoculates bees against American foulbrood, a globally spread disease that can kill entire colonies and whose spores can remain viable for more than 50 years. The technology may in future be used to combat fungal diseases and other bacterial infections.

The vaccine is administered via an edible sugar patty that’s suspended in the hive for the queen to consume over seven to 10 days. After she ingests the pathogens, she is able to spark an immune response in her offspring, eventually generating an inoculated hive.

The vaccine still needs a lot of work before it can become commercially available. Scientists must ensure it’s safe for the environment, the bees themselves and humans who consume the honey. Regulatory hurdles will take years to clear. It’s also too early to estimate how much beekeepers will have to shell out to buy inoculated hives, Freitak said.

While yields for potatoes, rice, wheat, and other crops that don’t need pollination may also benefit from more bees, vitamin-rich fruits such as apples, tomatoes and citrus won’t deliver a crop without them, Freitak said.

“The problem really touches all of us,” she said. “We have to start tackling it from all sides.”

Kati Pohjanpalo, *Bloomberg*, 6 December 2018

SA's Rooibos tea enjoys a rosy outlook from international markets

Rooibos, which is exclusively farmed in the Cederberg and Sandveld areas of the Western Cape, is fast becoming one of the most attractive agricultural products to invest in, the South African Rooibos Council (SARC) said on Monday.

The SARC said that South Africa holds a competitive advantage in a number of fruit and beverage sectors, including Rooibos, which if fully exploited, could place the country amid the top export producers of high-value agricultural products.

About half, or rather 6,000 and 7,000 tonnes of Rooibos is consumed locally, while the balance is exported to more than 30 countries, including Germany, the Netherlands, Japan, the UK and US.

Nicie Vorster, spokesperson for the SARC, said the world was increasingly counting on agriculture to produce more nutritious food, and Rooibos fitted the mould.

"Major Rooibos markets view the tea as a premium healthy lifestyle product and promote it in its pure and unblended form, which health-conscious consumers want more of. The increased emphasis on health and well-being globally is fuelling a revival and preference for experiences and products that promote wellness," Vorster said.

"It's not only Rooibos' health benefits that makes it highly sought-after, but also its versatility. Apart from enjoying it as a hot or cold beverage – whether plain or flavoured, Rooibos is used in multiple other applications, ranging from beauty products and nutraceuticals to alcoholic drinks, confectionary and everyday foodstuffs, such as yoghurt and cereal. Every year, we are seeing new and exciting innovations in the Rooibos category as entrepreneurs and branders experiment with the product."

Vorster said the current area planted under Rooibos is at a record high of 57,000 hectares – almost double that of a decade ago as more farmers, especially those in the Swartland region, have cleared existing farmland to make way for Rooibos. He said the increasing agricultural footprint of Rooibos demonstrated the growing demand – both locally and internationally – for the homegrown brew.

The sector is also attracting more growers, Vorster said, especially grain farmers who are looking to diversify, since Rooibos is a hardy, dry land crop which is generally less affected by drought when compared to other rain dependent crops.

Vorster said Rooibos farmers took various steps to proactively manage supply in the face of the severe drought that plagued the Western Cape over the past few years, by implementing more sustainable farming practices, removing water-thirsty alien invasive plants in the vicinity of fields and limiting pest and disease outbreaks.

"Even though Rooibos farmers are accustomed to periods of drought, since the region is considered a semi-desert, harvests are not immune to the effects of climate change. Yet, based purely on the average rainfall for the past year, we should see an improvement in crop size in 2019," Vorster said.

The Rooibos industry currently employs an estimated 8,000 farmworkers and additional employment is created in upstream activities, such as processing, packaging and retailing.

Siphelele Dlodla, *African News Agency*, 10 December 2018

SA's Rooibos industry flourishing

NOMPU SIZIBA: Rooibos, which is found in the Western Cape, is said to be fast becoming one of the most attractive agricultural products to invest in. This is as health enthusiasts embrace it as an alternative to more traditional tea. According to an industry body, there is huge growth potential for the industry.

Well, to share his insights, I'm joined on the line by Nicie Vorster, the spokesperson for the South African Rooibos Council. Nicie, you seem to suggest that Rooibos tea is increasingly becoming more sexy. Tell us why there appears to be an increasing appetite for it.

NICIE VORSTER: Yes, what you are saying is absolutely correct. It's growing in popularity, not only domestically but also globally – and from a different perspective. So on one hand, because of the health benefits. As we do more research, we find more and more health benefits from Rooibos. But then, on the other hand, young people want more choice. And Rooibos seems able to fill that gap, and it's really being used in many different ways – like cappuccino to food, to iced tea. And then even as an ingredient in cooking and aiding in the taste of sauces.

NOMPU SIZIBA: Very versatile indeed. Is South Africa the only place in the world that grows Rooibos? And, if that's the case, what are bodies like yours doing to make the most of our comparative and/or competitive advantage? And what markets are we currently penetrating so far?

NICIE VORSTER: Yes, South Africa is definitely the only place where Rooibos can be grown. It's grown in the Western Cape, in the Cederberg, Clanwilliam, Sandveld region. So the Rooibos Council is there to protect the brand of Rooibos; and the industry has also done a lot of work to try and protect the brand.

So in 2014 we were getting it recognised by the European Union as a geographic indicator, which means you can only call it Rooibos if it is grown in the Rooibos-growing area in the Western Cape. That puts it on the same footing as Champagne from France, as you would know.

So we are definitely doing a lot of work to try and create the brand, and a lot of the money from the Rooibos Council is spent on research. Exports are growing. We export to more than 30 countries, but the five biggest export markets for South African Rooibos are Germany, the USA, Japan, the UK and then The Netherlands.

NOMPU SIZIBA: Very impressive. Is Rooibos tea farming quite simple? Can it be done by small and large farmers alike? And to what degree are you seeing emerging farmers getting into that space?

NICIE VORSTER: We are encouraging it. It's still not where we would like it to be from an emerging farmer perspective. But it is relatively simple from the perspective of it being quite a hardy crop. Climate does play a role. But, compared to other agricultural commodities like wheat and maize, the grains where you need a certain amount of rain at certain times, Rooibos tea can carry on for quite a while without rain. It just obviously needs rain when you plant it, but thereafter it's really quite a hardy crop. And you also only plant it once every three to four years, because the plant survives. It's a brilliant crop that you start harvesting after 18 months, and then up to four years you can still get a crop from it.

NOMPU SIZIBA: How did the various harvests perform during the drought period in the Western Cape?

NICIE VORSTER: We definitely saw a decline in production. I would say 2013 was the last relatively good crop. Thereafter we could see every year that the drought started to play a role – and unfortunately supply and demand then also affected the price of Rooibos. But the outlook, at least for next year, is more positive. The Western Cape, as most people would know, has had a more than normal season this year, so we are quite positive that the crop next year will be bigger, and for us to be able to fill the demand that we have.

NOMPU SIZIBA: That's great. So what other sectors does the Rooibos industry filter into, where jobs are created?

NICIE VORSTER: Honestly, upstream and downstream the whole value chain of this is a creator of jobs. So in the primary sector, on the farming side, the work we don't show, the estimated number of 8 000 farm workers would be involved in Rooibos. And then you have the multiplier effect on that. And then downstream you get processing of Rooibos, to get it into the right format. Then you obviously get the packet branders of Rooibos, which ultimately put the product on the shelf. So there is a whole value chain that lives off the production of Rooibos. And the more we see it grown the bigger it can become a contributor to GDP and job creation in South Africa.

NOMPU SIZIBA: Well, this is some good news for a change, especially in the agricultural sector, an area where perhaps we'll see a boost. You say you are positive for next year, which is great.

NICIE VORSTER: Yes, we are really hoping for the best. Hopefully all the work we are doing on further research will also yield further benefits in terms of us being able to prove the real goodness of the product.

Nompu Siziba, *Moneyweb*, 12 December 2018

Farmers in South Africa look to cotton as corn profits squeezed

Some corn farmers in South Africa are starting to switch to cotton as profits are squeezed in the country's traditional grain crop.

South Africa's cotton production is forecast to more than double this year, according to the local industry group. Output is rising thanks to favorable prices compared to other products and renewed interest by farmers to produce the crop, Cotton South Africa said in a report this week.

The shift fits with a broader push in South African agriculture toward niche, high-value products for export. The country is Africa's top corn producer but profitability has been squeezed as a record crop in 2016-17 that boosted stocks was followed by another good harvest this year. Farmers are coming under pressure because of dry conditions when they should be planting corn for the new season, said Jacques Taylor, the head of sub-Saharan Africa at equipment-maker Deere & Co.

"We have seen over the past 18 months to two years farmers starting to experiment with cotton with great success," Taylor said in an interview at Bloomberg's Johannesburg office. "Cotton is more profitable and I think that it will take away hectares from corn production."

Felix Njini, *Bloomberg*, 6 December 2018

Table grape harvest on track as conditions remain unchanged

According to the South African Table Grape Industry (SATI), the crop estimate for the 2018/2019 season remained unchanged since conditions had not changed significantly enough to issue a second crop estimate.

The South African table grape season kicked off in the Northern Production regions, mainly Limpopo, and although the harvest in the earliest maturing parts of the region started slightly late this season, packing was well underway.

According to SATI, the region had already harvested half of the expected crop at the time of writing this article, and producers remained optimistic that they would reach the crop estimate of between 6,7 million and 7,5 million cartons.

In the Orange River region the harvest was beginning to return to normal weekly pack volumes at the time of writing this article, as favourable weather conditions remained. The area expected crop volumes to be between 18,5 million and 20,5 million cartons.

In the Olifants River region, the smallest of the production regions, packing started recently. According to SATI, this region was affected the most by last year's drought and heatwave conditions. However, it was expected that the prospects for a return to a normal crop were much better since the area received good winter rain, with dams reaching full capacity. The estimated crop for the region was between 3,5 million and 4,1 million cartons.

The two later maturing regions, the Berg River and Hex River Valley areas, had not yet started harvesting at the time of writing this article.

Jeandré van der Walt, *Farmer's Weekly*, 21 December 2018

Rain during first week of Olifants River harvest causes grape splitting

Rain over the Boland last Friday was welcomed by table grape growers in the Hex River, Berg River and Piketberg regions where harvesting hasn't yet started, but in the Olifants River where the harvest kicked off late last week, it was a mixed blessing.

Rain in the area this time of the year is not usual and the rain coming during the harvest did cause some splitting on early cultivars.

Reports vary on the damage. Some growers say that damage on their farms is not major, ranging from less than 10% to about 20%, limited to early cultivars like Prime, Starlight and Flame.

Some Olifants River growers could decide to cut their blocks of Flame for raisins this season, not because of splitting, but because of good demand and a strong market. (Prices for sundried Flame and Thompson raisins are at record levels at the moment.)

In the Piketberg area there were also some minor occurrences of splitting on Flame, a variety that has been losing popularity with the industry.

The water supply in the Clanwilliam – Trawal area looks far better than last year, to the tremendous relief of grape growers.

It was a difficult flowering period with the heat wave and hot winds experienced by the Western Cape in October and growers can see that their vineyards still haven't fully recovered from the years of drought.

As one viticulturalist succinctly puts it: "The drought is still inside the vines."

Last year grape volumes were down by around 60% in the Olifants River region due to drought.

Carolize Jansen, *FreshPlaza*, 14 December 2018

Italian plaintiff: R1.3 mln payout after South African oranges arrived square

One of the largest players in the Italian citrus trading market ordered and bought round oranges from a Limpopo orange company. Square oranges instead arrived in Sicily, Italy. This is how a judge described the damages claim which came before him in the Gauteng High Court, Pretoria.

The Italian company Oranfrizer instituted a claim against Fruitone Ltd, a farming operation in Zebediela, Limpopo, amounting to about R1.3 million (€80,000).

Apparently due to how the Limpopo company packed the fruit prior to shipping, the round, orange fruit, no longer appeared round when the shipments landed in Sicily, as it was nearly all squashed and flat.

Judge Norman Davis remarked that what was actually to be a simple case, resulted in five years of litigation between the parties and a host of experts on the subject of packing and quality control, which were called to testify.

Representatives of the Italian company came to South Africa in 2011 with the view to buy oranges for resale in Italy. They signed a deal with Fruitone that they would buy oranges from them and which had to be shipped to Italy. The Italian company at first bought different varieties of oranges as samples and to explore the relationship between the parties. All went well at first and perfectly round oranges arrive in Italy.

Things went wrong the following year when Fruitone sent four shipments of navel oranges to Italy; the oranges in these shipments were below par. A control officer immediately identified problems regarding the stacking of the cartons of oranges in the pallets.

Judge Davis was told that a large number of oranges had in fact been so compressed or crushed that they had split open. According to *iol.co.za*, the Italian quality controller testified that even if an orange had not split, the cells and flesh inside suffered damage and became liable to oxidation and decay.

On Thursday 20 December, *Freshplaza* asked Oranfrizer for a comment, but received none at this time.

FreshPlaza, 20 December 2018

First report of soft rot of squash fruits in South Africa

During the 2017/18 growing season, a new and damaging disease of squash was observed in several commercial plantations in the Northern Cape Province of South Africa. Soft, water-soaked lesions, 3 to 6cm in diameter, were present on the rind of fruits (Fig. 1a, b). Many fruits were rotting inside (Fig. 1c). A total of 50 to 80% of fruits were affected per field.

Soft rot of numerous crops is usually caused by *Pectobacterium* and *Dickeya* species of bacteria. However, from all diseased fruits, an almost pure culture of fluorescent bacteria was isolated on Milk-Tween and King's B media. Isolates were identified as *Pseudomonas syringae* based on the LOPAT tests. Several pathovars of *Pseudomonas syringae* have been reported to cause foliar blights and fruit spots. Usually, the outbreaks of foliar diseases on cucurbits are assumed to be caused by *P. syringae* v. *lachrymans*.

Squash fruits showing the rot symptoms were collected from four fields in the Northern Cape. Isolations were done from the soft, water soaked lesions. Tissue from lesion margins of infected fruits was removed with a sterile scalpel and macerated in 1ml of sterile distilled water for 15 minutes at 25°C. Plant extracts were streaked onto NA, CVP and Milk-Tween media.

Bacterial growth on plates was evaluated after four days of incubation at 25°C. Suspected colonies were purified by streaking onto King's B. Production of fluorescent pigment on King's B agar medium, Gram stain reaction, production of levan, oxidase activity, ability to cause potato rot, arginine utilisation and production of a hypersensitive reaction on tobacco (LOPAT tests) were determined for each bacterial strain.

Gram negative bacteria fluorescent under UV light on Milk-Tween medium were consistently isolated from diseased tissues. They were Levan-positive, oxidase, potato rot, and arginine dihydrolase negative. All induced HR reaction in tobacco leaves and were tentatively identified as *P. syringae*.

Genomic DNA of four strains isolated from squash fruits was extracted with the Wizard Genomic DNA purification Kit (Promega, Madison, USA) according to the manufacturer's instructions. The primers used for PCR amplification and sequencing of the *cts* and *gyrB* genes were developed by Hwang et al. (2005, *App Environ Microbiol* 71:5182-81). PCR amplification was done as reported by Morris et al. (2008, *Int Soc MicrobiolEcol* 2:321-34).

Sequencing was performed by Inqaba Biotechnology (Pretoria, South Africa). The *cts* and *gyrB* nucleotide sequences obtained in this study were aligned with sequences of eleven *Pseudomonas syringae/savastanoi* reference strains from the Plant Associated and Environmental Microbes Database using the MAFFT 7 online alignment tool. Phylogenetic trees were constructed with the neighbour-joining method and evolutionary distances calculated according to the method of Kimura. Bootstrap analysis of the data, based on 1 000 permutations was used to assess the stability of relationships. The trees were viewed and edited using MEGA 7.

A BLAST search of the EMBL/GenBank database conducted with the sequences revealed a high degree of sequence identity (97 – 99%) with previously determined sequences of *P. syringae* v. *syringae*. Figure 2 shows the phylogenetic relationship derived from a neighbour-joining analysis of the pairwise comparison among the *gyrB* and *cts* sequences of four strains from this study with ten sequences of described pathovars of *P. syringae*. *Pseudomonas chicorii* was used as an outgroup taxon. Phylogenetic trees constructed for two genes were identical. Four strains isolated from rotting squash fruits grouped with *P. syringae* v. *syringae*.

Pathogenicity screening of four strains was performed on the store-bought squash fruits. A sterile needle was dipped into a bacterial colony of the strain growing on King's B and then inserted under

the epidermis of a fruit. Three fruits were used per strain. Pathogenicity tests were repeated. Three fruits were used for the negative control treatment (sterile water). Inoculated fruits were placed in a sterile plastic box, incubated at 25°C and observed daily for the development of symptoms. Bacteria were re-isolated from the developing lesions on King's B and confirmed by colony morphology on King's B, fluorescence under UV light and LOPAT tests.

Four strains induced water soaked spots when inoculated directly into squash fruits three days after inoculation. As the disease progressed, the spots enlarged, became soft and rot spread inside the fruits two weeks after inoculation. Fruits inoculated with sterile water did not develop any symptoms. From all symptomatic fruits, fluorescent *P. syringae* was isolated and confirmed by LOPAT, thus fulfilling Koch's postulates.

A new disease on squash in South Africa is reported, soft rot of fruits, caused by *Pseudomonas syringae* pv. *syringae*. Koch's postulates were confirmed using four strains, which were subjected to further taxonomic investigations. Morphological and biochemical characterisation using the Gram-stain, colony morphology, fluorescence and LOPAT tests showed that the four strains from squash had similar biochemical characteristics and resembled those of *P. syringae*. The *gyrB* and *cts* sequences of all isolates were 98 to 99% homologous to that of *P. syringae* pv. *syringae* and all clustered with *P. syringae* pv. *syringae* in neighbour-joining phylogenetic trees. We conclude that the bacteria associated with the soft rot of squash fruits in South Africa are *P. syringae* pv. *Syringae*.

Agriorbit, 13 December 2018

North American pest threatens SA's blueberry industry

A devastating pest, the blueberry bud mite (*Acalitus vaccinii*) has been detected in Mpumalanga. According to Dr Charnie Craemer, senior researcher at the Agricultural Research Council's Plant Health and Protection Institute, this pest was first detected in Mpumalanga in 2014, which was the first known occurrence outside its native range in North America.

"If [the mites] reach high infestation levels they are capable of destroying an entire crop. They live in the flower buds of host plants, and the infested buds develop reddish rosette-like galls. This damage reduces flower and berry formation, and may drastically reduce yields," Craemer explained.

She said to date, high infestation levels had been found in South Africa. "At one of the study sites in Mpumalanga, levels of damage ranged from 30% to 90%."

So far, the pest had not yet been found in the Western Cape, the country's main blueberry cultivation area.

However, Craemer cautioned that it would be virtually impossible to contain the pest as the mites were dispersed by wind, and the possibility of an infestation in the Western Cape could thus not be ruled out.

The mites could also be spread on plant material and to a lesser extent by insects, she added.

Craemer advised producers to regularly scout for symptoms, especially if mite infestations were suspected.

She added that it was vital to secure the services of a skilled taxonomist to correctly identify the organism responsible for the damage, so appropriate action could be taken.

Jeandré du Preez, *Farmer's Weekly*, 14 December 2018

Suspected illegal garlic imports under investigation in South Africa

Investigations have been launched into the appearance of a large amount of imported garlic on the South African market during August and September which, it is suspected, was imported illegally. The

oversupply dragged down the garlic market to abnormally low levels, to the detriment of domestic producers.

Both the South African Revenue Service (Sars) as well as an independent agency Agri Inspec are looking into whether approximately 107 tonnes imported during September 2018 were either under-declared in terms of value or the volume of the consignments of garlic. It will also ascertain whether the applicable import levies were applied and whether the garlic was irradiated as required for garlic from certain origins.

There is an import tariff of R3,25 (0.2 euros) per kg on imported garlic (excluding garlic from the European Union and Southern Africa) as well as an additional anti-dumping tariff of R19,25 (1.18 euros) per kg on Chinese garlic after previous occurrences of garlic dumping some years ago.

South Africa is a net importer of garlic, but a strong producer too: just over half (56%) of the garlic consumed in South Africa is imported. The country exports garlic to neighbouring countries.

The impact of this oversupply of imported garlic on the domestic market was significant. Prices have been unusually low and even now, the market still hasn't recovered.

Traditionally domestic garlic supply is low from June to August and imports are highest during August and September, although, according to trade figures, official imports were 45% lower during this past August than a year before.

Bertus van Heerden, managing director of Agri Inspec, says that their investigation was started five weeks ago at the behest of the South African Garlic Growers' Association. "The tragedy was that just when local farmers were ready to enter the market with their garlic, these huge consignments hit the market and for several weeks very little local garlic could get sold."

A trader on the fresh produce market says that prices are far below the levels of last year and, particularly, the year before, at around R30 (1.84 euros)/kg for large, white garlic. (At one large retailer, garlic is currently traded at R120 (7.36 euros) per kg.)

According to this trader, the prices for Chinese garlic are currently higher. "It looks beautiful but it's rubbish," he says of irradiated Chinese garlic. "I sell a lot of it but really, South African and Spanish garlic are much better quality. Spanish garlic looks more like our local garlic."

He points out that the high import levies on Chinese garlic can run to R600,000 (36,800 euros) per container, which pushes up the retail price on the market from R120 (7.36 euros) to R300 (18.4 euros) per 10kg box. "If a smuggler pays off some people at Durban or Cape Town port for R200,000 (12,280 euros) they're still smiling all the way to the bank," he postulates. He says he has little doubt that the garlic oversupply of this season has been the result of smuggling.

Carolize Jansen, *FreshPlaza*, 12 December 2018

Mitigating the impact of Lesotho's wool woes on SA industry

General manager of wool and mohair at BKB, Isak Staats, said the Lesotho clip usually amounted to about 4,5 million kilogram per year, and in the past, producers would have already delivered between 2 million kilogram and 2,7 million kilogram by this time of the year.

In addition to the financial impact, Staats said economies of scale would also be affected across the board. "Your unit costs just become that much more expensive."

The Agricultural Marketing (Wool and Mohair Licensing) Regulations of 2018, which were gazetted in Lesotho earlier this year, states that no one is permitted to trade in wool and mohair without a licence obtained from the Ministry of Small Business, Cooperatives and Marketing in that country.

A new auction venue, the Lesotho Wool Centre, has since been officially opened in Thaba-Bosiu.

Staats said BKB would continue to monitor the situation in Lesotho and provide support to clients where possible, but he said the reality was that Lesotho was a sovereign nation and BKB could not interfere in that country's internal matters. He said while BKB had registered a company in Lesotho, it remained very difficult to try and conduct any business there as there was no policy certainty.

The company would also be looking into ways to make operations in South Africa more cost-effective. "Even if some of [the Lesotho clip] does come back to South Africa I don't think it will ever [return to what it was before] so this is a long-term change," he said.

The general manager of South Africa's National Wool Growers' Association, Leon de Beer, expressed the organisations concern about the plight of producers in Lesotho. He also questioned whether wool offered for sale in Lesotho would undergo the necessary testing by an internationally recognised body such as South Africa's Wool Testing Bureau.

Staats said he could say "without a doubt" that the Lesotho wool was not being tested. This was also confirmed in a court application brought by wool producers in Lesotho earlier this year to prevent the introduction of the regulations.

Sabrina Dean, *Farmer's Weekly*, 28 December 2018

Capespan strengthens food safety promise

Capespan has announced the certification of its procurement and marketing operation in South Africa under the IFS Broker requirements.

"We are one of only 12 exporters from South Africa to have this certification and I am incredibly proud that our product meets the highest level of quality standards" says Tonie Fuchs, Capepan's managing director.

The goal of IFS Broker is to ensure the safety and quality of products filling the gap between production and distribution. The results of IFS audits also enable the various stores and retailers to implement suitable plans for action and improvement to offer consumers the highest levels of food safety and build consumer loyalty in return. As a supplier, the IFS Broker certification confirms Capespan's reputation as a supplier of safe and high quality products.

"At Capespan we believe that we win when our customers win and this certification shows our commitment to making our retail customers successful", says Fuchs.

Capespan works closely with its grower customers, packhouses and supply chain partners to ensure that HACCP principles are applied across the supply chain. Further to meeting the highest product quality standards, Capespan recently reviewed its business structures and is refocusing its core business.

Fuchs says service delivery, simplicity and transparency are their promise to both their grower and market customers. Our main objective is to work closely with our customers by managing the supply chain as efficiently and cost effectively as possible. Our sole purpose is to provide a service to meet our customer's needs.

Capespan Europe as an importer also holds IFS Broker certification, covering supply regions outside South Africa.

FreshPlaza, 13 December 2018

Subdued interim results for Senwes

The land debate and political uncertainty have negatively affected business confidence in the agricultural industry and this was reflected in the decline in producers' investment and spending in the industry, according to Corné Kruger, chief financial officer of the Senwes Group.

Kruger said Senwes had not escaped this and the impact was clearly visible in spending on agricultural equipment.

“Add to this a build-up of maize surpluses over the past two seasons and below-average pre-season rainfall, and it is evident that material challenges will have to be faced in the current season,” he said.

The Senwes Group’s interim financial results for the six months ended 31 October 2018 reflected this, with profit after tax at R156 million, which was 6,8% higher than the previous year. Normalised headline earnings increased 0,7% to 98,5cents per share. An interim dividend of 30 cents per share was declared compared with 27 cents in 2017.

Kruger added that the positive cash flow of R152 million was generated from operating activities after the payment of a final dividend of R47 million for the 2018 financial year, and the payment of financing costs amounting to R99 million.

According to Kruger, the second semester of the year will probably be even more challenging due to the late rain, as well as lower than expected capital spending.

Annelie Coleman, *Farmer’s Weekly*, 16 December 2018

TWK's diversified business provides good rise in earnings

TWK Investments (TWK) has credited its diversified business model for reporting an increase in earnings for the year to end August, with basic earnings per share up by 18percent to 434cents a share, up from 367c compared to last year.

TWK is a diversified agriculture and forestry company listed on the the ZARX exchange on June last year.

The group operates different divisions, which are timber, retail and mechanisation, financial services, grain and vehicles and tyres.

TWK said on Friday that despite ongoing change, with numerous local and international political shocks, uncertain economic and financial conditions, extreme grain price fluctuations and gruelling droughts in certain parts of the country, revenue increased by 9.6percent to R7.68billion, up from R7bn compared to last year.

The group said that growth was achieved both organically and through acquisitions. This was supported by TWK’s diversified business model.

Chief executive André Myburgh said it had been satisfying to see the level of growth across all its businesses which is testimony that the business strategy does deliver results.

“This, together with improved efficiencies, resulted in a slight increase of 1.7percent in operating profit to R331.7million, which equated to an operating profit margin of 4.3percent. Profit before taxation increased by 5.5percent to R216.3m, up from R205m,” Myburgh said.

Net asset value per share increased by 9percent to R35.98 a share.

The group declared a dividend of 75c a share, up by 25percent compared to last year’s 65c.

Eddie Fivaz, chief financial officer, said: “The company strives for a healthy balance between borrowed and own capital and the payment of future dividends will depend on the board’s continued evaluation of TWK’s earnings, after provision is made for long-term growth, cash resources, own needs and other factors.”

The group operates in Mpumalanga, KwaZulu-Natal, Eastern Cape, Western Cape, Free State, Limpopo and Gauteng.

With the drought having negatively impacted the agricultural sector in the country, the group’s grain division bucked the trend by reporting 34.7percent increase in earnings before interest, tax, depreciation and amortisation to R27.2m. However, revenue in the division declined by 5.2percent to R979.9m.

The group said the grain division’s results were positively impacted by the high carry-forward stock due to the previous year’s record maize harvest.

Myburgh said South African agriculture was known for fluctuating agricultural conditions and severe droughts. “However, TWK’s business model and operations have a number of risk mitigating levers to soften challenges and risks,” he said.

He added that through its strong cash flow generation and financial position, they were well-positioned to capitalise on new opportunities.

The cash generated from operations during the period increased by a healthy 45percent to R350m.

Sandile Mchunu, *Business Report*, 3 December 2018

There is life in agri yet

TWK Investments is that company that you have never heard of but which operates comfortably and profitably in its chosen niche. When the Financial Services Board (now the Financial Sector Conduct Authority) banned over-the-counter trading in 2015, TWK was forced to come out of the woods – so to speak – when it listed on ZAR X in July 2017.

The diversified agriculture and forestry company is not unlike Kaap Agri or Senwes in that it was once an agricultural co-operative that has commercialised its operations and is now run by a professional management team.

Results for the year to the end of August 2018 indicate that it is profitable and cash-generative.

While it has been a tough year, with local and international political shocks, uncertain economic and financial conditions, extreme grain price fluctuations and gruelling droughts in certain parts of the country, revenue increased by 9.6% to R7.7 billion. The growth was achieved both organically and through acquisitions, supported by TWK’s increasing focus on diversifying its business model – from pure agri into Toyota and Isuzu motor dealerships and filling stations for instance. This, together with improved efficiencies, resulted in a slight increase of 1.7% in operating profit to R331.7 million which equated to an operating profit margin of 4.3%. Profit before taxation increased by 5.5% to R216.3 million and basic earnings per share increased by 18% to 434 cents.

The timber division, which along with the retail and mechanisation division, is one of the biggest contributors to earnings, had a good year. Revenue increased by 13.3% to R2.7 billion. Despite lower-than-expected sales in the local market, higher volumes were exported to international markets. Earnings before interest, taxes, depreciation and amortisation (Ebitda) remained stable at R188.5 million – though Ebitda would have improved slightly had the average rand/US dollar exchange rate not strengthened.

“There is a growing demand for our wood chips in the export market – in Japan and China in particular, and we expect export volumes to increase in the coming year,” says CFO Eddie Fivaz.

The company is considering the acquisition of another 11 000 hectares of timber forest. Land claims and expropriation without compensation are not a pressing concern. “We are not too negative,” says Fivaz. “There is a big demand for our export product and we would like to secure a bigger supply of timber.” This follows the implementation of a collaboration agreement this year between TWK’s Shiselweni Forestry Company and Royal Silulu Holdings, which aims to develop about 25 000 hectares of new plantations and other agricultural farming activities in Swaziland.

The retail and mechanisation division, which operates 27 retail outlets in Mpumalanga, KwaZulu-Natal and Swaziland, grew revenue by 10.9% from R2.6 billion to R2.8 billion, largely attributable to organic growth and improved market conditions. Ebitda increased by 24.8% from R58.6 million to R73.1 million.

TWK also specialises in the storage, processing and marketing of grain, maize and soybeans. This was the only division to show negative revenue growth. Revenue decreased by 5.2% to R979.9 million;

however, Ebitda increased by 34.7% to R27.2 million thanks to high stock levels from last season's bumper maize crop.

The financial services division reported an increase in revenue of 7.3% from R139.1 million to R149.3 million, partly due to the addition of two new books to its portfolio (in the process growing its footprint, with about 7% in hectares insured).

The motors and tyres division experienced extremely difficult economic conditions, which had a significant impact. New vehicle sales fell and the company lost key accounts in the transport and tyre industry, mainly due to bad debts and liquidations. However, strong sales from the filling stations supported the results. Revenue increased by 13% to R995.5 million and Ebitda by 38.3% to R23.8 million from R17.2 million.

At year-end, the group's financial position was stronger with total assets having increased by 16.9% from R3 459.5 million to R4.7 billion and net cash by 55.4% to R172.9 million. Return on equity increased from 12.5% to 13.5% against a goal of 17.6%.

The net asset value per share increased by 8.8% to R35.98 at August 31, 2018 compared to R33.06 at August 31, 2017 and the company declared a 75c dividend, 25% more than last year. "We strive for a healthy balance between borrowed and own capital, and the payment of future dividends will depend on the board's continued evaluation of TWK's earnings, after provision is made for long-term growth, cash resources, own needs, and other factors," Fivaz says.

"This is a fantastic little company that no one knows about and no one follows," says independent analyst Anthony Clark. "It is fantastically wealthy, has an enormous asset base and is conservatively run."

Management is focused on unlocking further value for shareholders. "We are on the lookout for mergers and acquisitions to capitalise on competence, buying power and synergy," says Fivaz. "We are also focusing on the business of emerging farmers, the development of credit products tailored to customer needs, and plan to increase the fuel station footprint, among other plans."

The company is trading on a price-earnings ratio of 4x.

"I think there is a lot of value to be unlocked," he adds.

Sasha Planting, *Moneyweb*, 4 December 2018

IBM Africa and Hello Tractor pilot AI/blockchain agri-tech platform

IBM Research and agri-tech start-up Hello Tractor have developed an AI and blockchain-driven platform for Africa's farmers. The two companies will pilot the product in 2019 through an ongoing partnership, co-financed by IBM.

The cloud-based service –dubbed 'Digital Wallet' in beta- aims to support Hello Tractor's business of connecting small-scale farmers to equipment and data analytics for better crop production. The start-up joined IBM Research to demo the new service at Startup Battlefield Africa in Lagos.

Available to Hello Tractor clients, the online platform will use a digital ledger and machine learning to capture, track, and share data, while "creating end-to-end trust and transparency across the agribusiness value chain," according to an IBM release.

Digital Wallet will draw on remote and IoT-based weather-sensing methods and AI to help farmers determine crops and inputs, choose when to plant and optimize and predict crop yields.

According to an article on techcrunch.com, the cloud-based dashboard also employs a blockchain ledger to improve multiple points of Hello Tractor's business.

FreshPlaza, 21 December 2018

Banking & Capital Markets

World Bank injects \$50 million to improve Southern Africa agriculture

This week, the World Bank Board approved a \$50 million project to increase the availability of agricultural technologies in Angola and Lesotho. According to a World Bank press release, this will be done under the ongoing WB financed Agriculture Productivity Program for Southern Africa (APPSA) involving three other countries in the region, Malawi, Mozambique and Zambia.

APPSA's focus on agriculture technology addresses the need to improve the competitiveness and resilience of African agriculture using regional integration as a key mechanism to achieve higher rates of growth and poverty reduction. While agricultural productivity has increased in Southern Africa, Angola and Lesotho's average yields are below the regional average. This project is expected to help narrow these gaps with additional investment in technology adaptation and dissemination, the WB said.

"This project will help researchers, farmers, extension agents, input distributors and other end users in Angola and Lesotho to strengthen linkages between themselves and other participating countries," said Mark Cackler, World Bank Agriculture Practice Manager. This is in line with the World Bank's twin goal to reduce extreme poverty and promote shared prosperity".

FreshPlaza, 21 December 2018

Land Bank boss Tshokolo Nchocho to head up IDC

The appointment of Land Bank boss Tshokolo Nchocho as the next CEO of the Industrial Development Corporation has been approved by Cabinet.

This after current IDC head Geoffrey Qhena announced his upcoming retirement in late August after 13 years at the helm. Nchocho is expected to take up the post in early 2019, after Qhena steps down in late December.

The IDC provides funding for industrial development and in 2017 approved R16.7bn in new investments.

Minister of Economic Development Ebrahim Patel said in a statement he was looking forward to working with Nchocho, noting he had worked in leadership roles at two of South Africa's other large development finance institutions, namely the Development Bank of Southern Africa and the Land Bank.

He said Qhena was leaving the IDC in "sound financial health".

According to the ministry of Economic Development, Nchocho holds a B.Com from the University of the North, a Master of Business Leadership from Unisa and a Masters degree in Development Finance from the University of London. He has also completed an Advanced Management Programme from Harvard Business School.

Fin24, 6 December 2018

Land Bank boss to head up IDC

The Cabinet has approved the appointment of Land Bank boss Tshokolo Nchocho as the new CEO of the Industrial Development Corporation (IDC).

Nchocho, who was recommended to the Cabinet by the IDC board, will replace Geoffrey Qhena who has been with the corporation for nearly 20 years, 13 of them as CEO.

Qhena announced his resignation as head of the corporation, which has an asset base of R137bn, in August. He is leaving the organisation at the end of December.

The IDC board said on Thursday it was finalising the date when Nchocho would take up his new position.

Nchocho has strong academic qualifications and extensive experience in development finance and banking.

He has been at the helm of the Land Bank as CEO since 2015. He holds a BCom degree from the University of the North; a Master of Business Leadership from Unisa; a Master's degree in Development Finance from the University of London; and an advanced management programme qualification from the Harvard Business School.

"His experience in development finance and banking stretches over a 28-year period, including a lengthy period at the Development Bank of Southern Africa and as the CEO of the Land Bank," the statement said.

The board noted that under Qhena's watch, investment in green energy increased significantly and the IDC introduced its black industrialists' programme. Over the past five years the IDC's investment commitments totalled R72bn, an increase of 30% compared to the previous corresponding period.

These investments attracted a large level of private-sector investments, bringing the investment level to R176bn and creating or saving 105,822 direct jobs, the board said.

Linda Ensor, *Business Day*, 6 December 2018



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