CAPITAL HARVEST

Scan for Capital Harvest

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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 2018, the German Aerospace Center set up a greenhouse in Antarctica to research food production. In August this year, staff reported an unexpectedly rich harvest: 268 kg of food produced on only 12.5 square metres in under 10 months. This includes 67 kg of cucumbers, 117 kg of lettuce and 50 kg of tomatoes. Scientists were surprised that the facility needed much less energy than expected – average power consumption was 0.8 kilowatts per square metre of cultivated area. Based on their experiences, a new design concept for a space greenhouse has been developed. This greenhouse is compact so that it can be launched aboard a Falcon 9 rocket. It is expandable and large enough to provide sufficient food for astronauts on the moon or Mars. In 30 square metres, it will grow 90 kg of fresh food per month, which corresponds to half a kilogram of fresh vegetables per day per astronaut if six astronauts are present. The concept may be combined with a biofilter system, which produces fertilizer for plant cultivation from astronauts' biowaste.

As previously reported, investment in cold storage is a growth area in the real estate market world-wide. The Asia Pacific region is an example of a market with strong demand for high-quality industrial logistics assets. Sustained growth in this market is predicted, as online sales of groceries are set to increase and retailers continue to look for ways to curb food waste. Cold storage operators can be divided into four main types: (1) cold storage and logistics specialists handle agricultural produce in cold storage facilities that often come equipped with food processing capabilities; (2) end-users and owner-occupiers include leading grocery, food manufacturing and pharmaceutical companies that often manage their cold chains in-house as they have special requirements in terms of layout and equipment; (3) third-party logistics firms that have set up specialised business units catering to rising demand for distribution and delivery service along the cold chain; and (4) developers and investors.

Like SA, Vietnam has a state-owned agricultural bank. The bank, called Agribank, is one of 93 state-owned firms that the government plans to privatise by the end of 2020. A 35% stake in the bank will be sold, as it is believed that privatisation will improve performance and earn money for the government. Agribank was previously known as the Vietnam Bank for Agriculture and Rural Development and is the country's biggest bank by assets. Assets total $56 billion and the bank predicts a profit of $429 million this year.

The central government of Australia has set aside funds to train dogs to detect citrus canker. Citrus canker is a serious bacterial disease that affects all citrus varieties, causing fruit to drop before it ripens. The dogs should be fully trained by mid-2020. In addition, the Australian government has already set aside $7.5 million for other programmes to respond to citrus canker, which is present in the north of the country. The government regards the citrus industry as an important job creator.

Also in Australia, two pig farmers from Western Australia received prison sentences of two and three years respectively, for illegally importing wild pig semen from Denmark. They hid the semen in shampoo bottles and were convicted of biosecurity breaches that put Australia's pork industry at risk, as it could lead to the spread of disease. The pork producer that they worked for, GD Pork, is already in liquidation and was fined 500 000 Australian dollars. With the illegally imported semen at least 199 sows were inseminated, resulting in the birth of more than 2 000 piglets.

In Brazil, about half a billion bees died in four of the southern states in the first months of this year. Most dead bees showed traces of the insecticide Fipronil, classified as a possible human carcinogen by the US Environmental Protection Agency. Brazilian president Bolsonaro, who took office in January and was elected with strong support from agribusiness, is permitting the sale of a record number of pesticides. Glyphosate, which is banned in many countries, is Brazil's best-selling pesticide. The country's health ministry reported 15 018 cases of agricultural pesticide poisoning in 2018, but expects there were many more.

According to a survey, the majority of farmers in the US's Midwest say that 2019 is their hardest year ever. The survey indicated that young farmers are experiencing more stress than older, established farmers. Grain prices have been depressed for some time, export markets were lost due to trade disputes, and the weather wreaked havoc in the region. US farm debt is expected to increase by 3.9% this year. Last year US farm debt-to-income was at its highest level since 1984. This August the department of agriculture had to remove its staff from the annual crop tour of the Midwest after an employee was threatened.

The planting of cover crops is not a new practice, but has gained renewed popularity as part of the modern concept of 'regenerative farming', which includes no-till farming. Cover crops are increasingly seen as an effective weapon against climate change by reducing soil run-off, retaining water during drought and converting carbon dioxide into organic material. In the US, from 2012 to 2017, the area under cover crops increased by 50%. Cover crops are an expense in that seeds have to be purchased, but they lead to savings in soil chemicals. Since 2017, California's state government has been paying farmers to adopt regenerative farming practices.

The US tech-hub of Silicon Valley is located in Santa Clara County, California. Farmland is threatened by urban development, because farmers can sell their land to real estate developers at impressive prices. Over the last 30 years, Santa Clara County has lost 8 500 hectares of farmland to development. The county, with the help of the state of California, is now purchasing farmers' development rights at market rates, to ensure that farmers don't sell to developers and that agriculture is sustained in the area. The programme is partially funded by greenhouse gas taxes. Because Silicon Valley is one of the US's priciest real estate markets, it costs the county up to $500 million to preserve 5 hectares of farmland. Suffolk County in New York has already successfully preserved farmland in a similar manner.

In California's Santa Barbara County, traditional wine estates are increasingly making way for cannabis production. Recreational marijuana was legalised in the state in 2016, resulting in wine farmers complaining of a bad odour caused by large numbers of cannabis plants growing near vineyards. Vintners say the smell of the plants drives away wine tasters, and unsightly greenhouses litter the once green landscape. In addition, wine farms feel forced to switch to organic farming, as they fear being sued by wealthy cannabis producers if pesticides come into contact with the organic cannabis crops. Wine makers are also concerned about cannabis affecting the flavour of grapes. Some cannabis farmers have voluntarily installed odour-limiting systems to keep the peace with their neighbours, and local authorities are contemplating placing a limit on cannabis production in the area.

In Kenya, maize, rice and soy crops are increasingly making way for a legal stimulant believed to relieve fatigue, muguka. Farmers report making up to five times more money when they switch to muguka. Muguka is a variety of khat, which produces a mild high when chewed. It is weather-tolerant and uses about half as much water as maize. Kenyan authorities are concerned that food shortages will occur if too many farmers switch to muguka. Academics have warned farmers that consumer tastes change and muguka may not remain popular, while some activists say it is an addictive drug that should be banned. Kenyan environmentalists are already troubled by the illegal cultivation of bhang, an edible and illegal form of cannabis, in forests. Further deforestation is likely to occur as more producers want to grow muguka. While some in government are moving to distribute macadamia and avocado seeds to farmers to help them diversify their crops, muguka farmers would rather see Kenya investing in industrial processing to further develop the muguka market.

Namibia has a new Chinese-built port terminal which has doubled its container capacity. The 40-hectare platform is built on land reclaimed from the sea at Walvis Bay. It cost R4.2-billion and was built by state-owned China Harbour Engineering Company with funds from the Namibian government and the African Development Bank. The terminal increases the capacity of the port from 350 000 containers per year to 750 000, with the potential to handle over a million in future. The terminal will help to serve Zambia, Angola, the DRC, Botswana, and Zimbabwe. In 2018 Walvis Bay handled about 3 000 vessels and 6 million tonnes of cargo.

Namibian table grape farmers hope to start exporting to China in about 18 months, because negotiations between the two governments are in an advanced stage. The plan is to send 5% to 10% of Namibian export grapes to China. Namibia presently exports to destinations such as the UK, the EU and South East Asia. Namibia's harvest runs from early November until Christmas, when there are few grapes on the global market. The grapes are not threatened by rain, hail or frost and receive water from the Orange River. For the entry of SA grapes, China requires pre-cooling for 72 hours and cold treatment at 0.8°C or below for 20 days during shipping in order to control fruit fly.

The Grape Company was one of the first companies to be granted an export license after deregulation of SA's export sector. Over the past 22 years, most of the company's growth has come from new table grape plantings by existing shareholders and growers. The company sources grapes from Mpumalanga, the Northern Cape, the Olifants River, the Berg River and the Hex River regions. This means supply usually lasts from November until April. The Grape Company's upliftment project is a non-profit organisation called The Grape Community. It provides early childhood schooling for the children of farmworkers, as well as orphanages.

Despite the Cape drought having been mostly broken, the agricultural sector remains cautious. The north western parts of the province, as well as the Karoo, are still experiencing drought. Production levels will likely be similar to last year or lower. In addition, winter grains in the Eden and Hessequa districts did not receive enough rain. The wine industry remains sceptical about its volumes, while irrigation dams in many parts of the province have not returned to pre-drought levels. Labour rights groups are concerned that the drought encouraged farmers to move towards more casual instead of permanent labourers, rendering a bleak future for many farm workers.

SA blueberry producers are working to gain access to Asian markets such as China and South Korea. China presently imports mainly from Chile and Peru, two countries that SA can confidently compete with (SA's transit times to China will be shorter). The industry is labour intensive and employs three to four workers per hectare. SA's blueberry production is expected to reach a record high of 17 000 tonnes in 2019, up from

11 300 tonnes in 2018. By 2023 the industry expects production to reach 50 000 tonnes. Around 70% of SA's blueberries are exported. The value of blueberry exports grew from R133 million in 2013 to just over R1 billion in 2018. The optimal gap for SA blueberries in Europe and UK is September and October. Competition becomes tighter when Chile enters the market in November, but selling opportunities can linger until as late as January. One SA exporter, BerryWorld, is forecasting a supply of over 7 500 tons from August to January – a 40% increase over last year. BerryWorld says global blueberry sales keep growing and consumers are demanding better flavour, size and shelf life. Another exporter, Delecta Fruit, enters its second blueberry export season this year. It added blueberries to its exports after requests from its existing UK retail clients. Delecta has seen interest in blueberry cultivation from farmers in the Western Cape, as well as from those in the traditional citrus areas of the Eastern Cape, Northern Cape and Zimbabwe. Farmers are attracted to blueberries due to the high return on investment. Despite a high initial capital outlay, blueberries usually break even in three to four years.

Due to its perceived health benefits, demand for honey is high at a time when bee colonies are decreasing. SA has 1 500 registered beekeepers that produce around 2 000 tons of honey, while local consumption is 5 000 tons. This has led to questionably parties selling honey in the country, often made with sugar, maize and rice syrups. In the EU, honey is on the list of the top 10 foods most at risk of food fraud. A bee hive costs at least R1 300 and may take up to two years to produce honey. A beekeeper needs 600 hives, each hosting 25 000 bees and producing 10kg of honey per year, to be commercially viable. In SA some of the main threats are droughts, pesticides, bee predators and theft by humans.

Citrogold recently complained to the SA Advertising Regulatory Board that Tango mandarins falsely claimed to be bee-friendly, while this was not backed by scientific evidence. The same pesticides are applied to Tango as to most other citrus products. The board agreed with Citrogold that Tango mandarins should not be called 'bee-friendly'. Tango is produced by Eurosemillas SA and marketed by Stargrow. Neither of the two companies are members of the advertising board – therefore the ruling is not binding on them and the packaging claiming bee-friendliness is still in use. There is no legal definition in SA of what constitutes a bee-friendly product.

Today one in every 10 oranges eaten around the world comes from SA. Citrus, grapes and top fruits, in particular, have strengthened their market position in the past decade. SA is the world's third-largest citrus exporter, after Spain and Turkey. Citrus is the country's biggest and most important fruit export in terms of both value and volume. Oranges make up the bulk of citrus exports. The biggest challenge for the export industry is to find new markets outside the low-growth markets of the EU and the UK. About 76% of SA citrus is exported, with 32% going to the EU and 10% to the UK. About 25% of stone fruit is exported, with 40% going to the EU and 31% to the UK. A large proportion of new lemon trees are expected to begin producing fruit in the next few years.
As from September, the port of Vigo is the entry point for SA citrus arriving in Spain. Shipments of at least 40 000 tonnes per year are expected to depart from Cape Town and Walvis Bay on ships belonging to the MACS shipping company. The containers are transported to the nearby Vigo Fresh Port facilities, where they do not need to pass through the Border Inspection Post, as they pass directly through the control of the inspectors on the ship. Spanish producers are angered by this arrangement, and have called for a safeguard clause to be included in the free trade agreement between the EU and SA.

Batlhako Temo Services has become the first black-owned citrus orchard in the North West Province to enter the export market. This year it started exporting to the Middle East and Taiwan. In 2012 a 61.5 hectare-farm was leased from the agriculture department by the co-op, and two years later citrus was introduced. The farm now has 16 000 citrus trees. It has received provincial funds to improve the irrigation system and other structures. Batlhako Temo employs 10 permanent workers, including an experienced farm manager.

Cape Crops is exporting fruit and vegetables from Cape Town to 23 countries. Owner Uzair Essack is 23 years old and started the business only three years ago. Cape Crops pays farmers a fixed price in cash before the produce leaves the farm gate (traditionally they would get paid 60 to 90 days later). The payment terms ensures that the company gets a cash discount and first choice of the produce. Weekly WhatsApp broadcasts to export customers show the available produce and prices. In turn, farmers get WhatsApp messages to keep them updated on what customers are looking for. To keep overheads low, Cape Crops uses Cube Work Space's shared offices – the company needs little space, because marketers are on the road most of the time. The Middle East makes up 50% of the company's export market. While most export revenues are received in advance, about 30% of transactions have to be funded by Cape Crops. Uzair does not apply for loans – instead, he uses a small group of repeat-investors to fund specific deals. They know exactly what each return will be, and get paid back in 60 days. Cape Crops plans to further expand exports to Africa and the Middle East.

SA's capability to manage its water resources has declined over the past two decades. When water is scarce, small-scale farmers suffer the most. This has the potential to jeopardise SA's land reform plans. Liquor industry players Vinpro and Salba have participated in the consultation process regarding land reform from the onset. Vinpro says it wants to develop partnership models, facilitate blended financing and establish market access to provide support to land beneficiaries.

Schoonbee Landgoed of Groblersdal in Limpopo has partnered with black-owned Thebe Investment Corporation in a project referred to as project CHANGE. It is intended as a model for partnership between commercial farmers and black institutional investors, while empowering local communities and supporting new entrants. Schoonbee contributed two recently developed, income-generating farms. Thebe has contributed equity towards the acquisition of just under 400 hectares of additional land with recognised water rights for further citrus and grape development. Packhouses will be constructed as well as three primary healthcare and educational facilities for the surrounding communities. Debt finance is provided by the Land Bank. Because dividends are not expected within the first seven years, the partners will not receive short-term financial gains. In the long run it is hoped that 70% of CHANGE's volumes will be exported to 60 countries. Project CHANGE is already in operation. All the citrus orchards have been planted and 68% of the vineyards have been developed. Packhouses will be completed by the end of 2020, while the first training and primary healthcare centre will be completed by mid-2020.

Banking and Capital Markets

Absa Corporate and Investment Bank has announced plans to expand its agriculture loan book in Africa. Countries such as Ghana, Kenya, Tanzania, Uganda and Zambia will be targeted. In SA Absa also wants to grow its book, but the weak economy is reducing the demand for agricultural machinery and implements such as tractors and combine harvesters. In July 2019, tractor sales figures were 30% lower than in July 2018. The political environment, exchange rates and harvest volumes all contributed to the decline, while farmers generally remain cash-strapped.

In August the National Credit Amendment Bill was signed into law, allowing over-indebted consumers to have payments suspended, in part or full, for as many as 24 months, or even scrapped if their financial situation has worsened. The bill provides for the extinguishing of debt for consumers who earn a gross monthly income of no more than R7 500, have unsecured debt amounting to R50 000, and who have been found to be critically indebted by the National Credit Regulator. The bill is opposed by the banking industry and other suppliers of consumer credit. Banks say the likely result is that increased risks will be priced in, or low-income customers will be avoided. Treasury estimates that the debt-relief proposals could result in a debt write-off of R13.2 billion to R20 billion.

The finance industry continues to fight the illicit transfer of as much as $2 trillion in global funds each year. This has resulted in high internal spending on compliance, a cost which banks are eager to reduce. Increasingly artificial intelligence (AI) is employed to replace surveillance staff. HSBC last year started using AI to screen transactions, and the two biggest Nordic banks are in the process of doing so. The technology is, however, not fully developed. AI is mostly confined to simple know-your-customer applications that are far from ready to replace humans. Banks and tech companies need to overcome a number of obstacles for AI to succeed, including the fact that uniform, current data is often not available and the unwillingness of different agencies and enterprises to share information.

Sefa says its operations in KZN resulted in black-owned businesses receiving over R18 million in the year to 31 March, while youth-owned enterprises received over R6 million and township-based enterprises over R16 million. Entrepreneurs in the productive sectors of the economy also received more than R16 million. These figures all related to direct lending and exclude wholesale lending through Sefa's head office. In KZN Sefa uses the Finfind app to make finance accessible to those who can't physically visit the office.

A tough economic environment, both locally and globally, has resulted in the IDC falling short of performance levels achieved in previous years. In the year ended 31 March, the IDC approved less funding (R13.1 billion) than in the previous year (R16.7 billion), and fewer jobs were created or saved by the funding. Many of the corporation's business partners have put investment projects on hold, slowing down their borrowing plans. The IDC has spent 93% of its five-year target of R23 billion in funding for black industrialists by 2021. The audit report was unqualified, but did report R5.7 million in irregular expenditure. Fruitless and wasteful expenditure recorded for the period was R443 768, lower than in 2018. The IDC reported disciplining one executive for not declaring a conflict of interest.

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Substantial vegetable harvest in Antarctica

As the climate in Antarctica is still as inhospitable as ever, the German Aerospace Center (DLR) chose that region to set up the EDEN-ISS greenhouse there in 2018. There, food production of the future is being researched in the immediate vicinity of the German Antarctic Neumayer III Station. In the meantime, the winter crew from the Alfred Wegener Institute (AWI), including DLR researcher Dr Paul Zabel, has spent a year surrounded by constant ice. The team presented the results on 23 August: There was an unexpectedly rich harvest.

Zabel: “In just nine and a half months, we produced a total of 268 kilograms of food on just 12.5 square meters, including 67 kilograms of cucumbers, 117 kilograms of lettuce and 50 kilograms of tomatoes.”

Before his trip, by the way, Zabel had been smart enough to look into artificial vegetable cultivation in Dutch greenhouses. Zabel adds: “The taste of the fresh vegetables and their smell left a lasting impression on the winter crew and had a visibly positive effect on the team’s mood throughout the long period of isolation.”

Additionally, the scientists were surprised that they needed much less energy than they had initially expected. The average power consumption during the analog Antarctic mission was 0.8 kilowatts per square meter of cultivated area. It was consequently less than half as much as previously assumed for aerospace greenhouses, which were estimated at 2.1 kilowatts per square meter.

“This is an important aspect for a subsequent space venture and gives us confidence about the future of this idea”, said Project Manager Dr. Daniel Schubert from the DLR Institute of Space Systems. Aside from that, he stresses the potential and useful addition to space food that can be supplied by the earth.

Based on the results and experiences of the EDEN-ISS project, a new design concept for a space greenhouse has now been developed. This greenhouse is fairly compact in its design so that it can be launched aboard a Falcon 9 rocket. At the same time, it is expandable and large enough to provide sufficient food for the astronauts on the moon or on Mars. “The area used for cultivation is around 30 square meters, almost three times the size of the Antarctic greenhouse container. Using this system, around 90 kilograms of fresh food could be grown per month, which corresponds to half a kilogram of fresh vegetables per day and per astronaut if six astronauts are present,” Schubert explains.

The concept may also be combined with a biofilter system (C.R.O.P.). Its purpose is to produce a fertilizer solution for plant cultivation that is able to be utilized from biowaste and urine directly. This makes the greenhouse concept almost a fully bio-regenerative life support system for future habitats.

FreshPlaza, 26 August 2019

Cold is now officially hot across the Asia Pacific

Growing investor interest in cold storage real estate has been brewing for some time. This appetite is part of a larger push into less competitive areas of industrial real estate. The shift in demographic and consumer behaviour is also playing a major role in fanning the interest.

There is a robust demand for high quality industrial and logistics assets in Asia Pacific in recent years. Irrespective of asset type, the driver has frequently come from strong domestic consumption.

Coupled with the juggernaut of e-commerce, the associated industry expansion and the ongoing development of modern logistics facilities into an institutional investment product, cold storage has carved out a substantial niche with the promise of sustainable growth for the foreseeable future.

It is not a new concept in Asia Pacific, but the investment opportunity cold storage offers hasn't been fully realised. Until recently, that is. As a result, the pickup in interest has led to investors seeking investment opportunities at all stages of the supply chain, with temperature-controlled warehouses, or cold storage, rapidly emerging as an area of focus.

Part of this pickup can also be explained by investors' deeper understanding of cold storage facilities. Increasingly, the latter have been decoupled from other warehouse facilities in industrial and logistical portfolios.

The reason? Cold storage facilities are far more complex than conventional dry warehouses. Irrespective of location, they must be equipped with various structural and mechanical installations to maintain temperature and humidity within a pre-defined range.

Investors also better understand the operators of cold storage facilities. Based on their operational model and scope of services, cold storage players can be divided into four main types.

Cold storage and logistics specialists handle agricultural produce in cold storage facilities that often come equipped with food processing capabilities. For example, kiwi fruit in New Zealand are collected and shipped from orchards to specialised cold storage companies, where they are then sorted, washed, packaged, labelled and boxed for export. This category also includes cold chain providers for restaurant chains.

End-users and owner-occupiers include leading grocery, FMCG and pharmaceutical companies. These firms frequently opt to manage their cold chain in-house as they have special requirements in terms of layout and equipment.

Third-party logistics (3PLs) firms have set up specialised business units catering to rising demand for distribution and delivery service along the cold chain.

Developers and investors are the primary owners of cold storage facilities. Recently, a number of new players have entered the cold storage business, including China Vanke, which purchased Swire Cold Chain Logistics with a portfolio of seven cold storage warehouses in Chengdu, Guangzhou, Langfeng, Ningbo, Shanghai and Xiamen last year.

Demand for cold storage facilities in Asia Pacific is being powered by several factors.

Particularly in Asia, a growing middle-class population is driving the fortunes of cold storage. This is especially true when considering robust demand for high quality groceries sourced from home and abroad continues to swell.

Asia Pacific grocery imports were valued at US$373 billion in 2018, with imports of high-value items growing especially rapidly. Imports of berry fruits including strawberries and blackberries to Asia Pacific recorded a CAGR of 7.5 per cent between 2013 and 2018.

As a result, growing consumption is being facilitated by the expansion of omnichannel distribution. However, online grocery shopping is still at a nascent stage, with less than 5 per cent of grocery spending in most Asia Pacific markets occurring online in 2018. This ratio is expected to increase on the back of rapid improvement in delivery speed, especially in Korea and China.

Also, working in the market's favour, is online grocery retailing. Aggregate online grocery sales in Asia Pacific are forecast to surge from US$80.7 billion in 2018 to US$260 billion in 2023.

Investors also see the potential of cold storage facilities in maintaining the integrity of food. Cold storage can significantly reduce food loss and wastage during transportation, storage and handling by extending the shelf-life of temperature-sensitive products. For example, post-harvest tomatoes stay fresh for just three days at a temperature of 35 degrees Celsius, compared to 14 days at a temperature of 15 degrees Celsius.

Added to the mix, reducing food loss and wastage can play a key role in improving retailers' bottom line. Food losses in China amounted to US$15 billion in 2017, primarily due to inadequate cold chain facilities. The total volume of food losses was around 20 per cent of groceries distributed, a ratio three times higher than that in advanced economies. Proper handling and storage of food products can also reduce the risk of cross-contamination.

FreshPlaza, 13 August 2019

Vietnam aims to sell stakes in nearly 100 state firms by end of 2020

Vietnam plans to speed up its privatisation programme by selling stakes in nearly 100 state-owned firms by the end of 2020, including Agribank, the government said late on Thursday.
The Southeast Asian country has been selling stakes in state firms in recent years to improve their performance and to fill the government's coffers, but the pace has been slower than scheduled recently.
The government now plans to sell stakes in 93 firms by the end of next year, it said in a statement. They will include up to 35% stakes in Agribank - the country's biggest bank by assets which was formally known as the Vietnam Bank for Agriculture and Rural Development - as well as in Vietnam National Coal–Mineral Industries Holding Corp, the country's largest coal miner, and in Vietnam Northern Food Corp.
Agribank, which has total assets of nearly $56 billion, said last week it targets pretax profit of 10 trillion dong ($429 million) this year, up 32.9 percent from last year.
The government said it will also sell up to 50 percent stakes in mobile telecom carrier MobiFone and as well as in Vietnam Posts and Telecommunications Group and Vietnam National Chemical Group.
It also plans to sell up to 100 percent of Vietnam Paper Corp. by the end of next year and two power-generating units of Vietnam Electricity Group, it said.

Reuters, 16 August 2019

Government funded program trains dogs to detect citrus canker

Citrus Australia has welcomed a Federal Government-funded Australian first project to develop a scent lure to help detector dogs detect citrus canker. The project was announced by Minister for Agriculture Bridget McKenzie and Member for Mallee Anne Webster at the Mildura Fruit Company today.
Citrus canker is a serious bacterial disease that affects all citrus varieties causing fruit to fall to the ground before it ripens.
“Visiting Mildura today underlines how important it is for us to protect this job producing critical sector from the threat exotic diseases like citrus canker pose,” Minister McKenzie said.
“With a current incursion in the north of Australia on its way to being eradicated it’s a reminder that we need to stay vigilant because these threats are ever present. That’s why I have approved the use of the Immediate Assistance Fund to develop scent lures for citrus canker, a first ever for a plant pathogen in Australia. By mid-2020 detector dogs will be trained with the scent lures and used to ensure we really do get rid of this disease in the north,” Minister McKenzie continued.
The funding for the project is in addition to the $7.5 million the Federal Government has committed to the National Citrus Canker Response Program.
Citrus Australia CEO Nathan Hancock welcomed today’s announcement, saying: “The purpose of the dogs is to back up the great work the NT and WA Governments are doing in surveillance in citrus canker-affected regions of the NT and northern WA.”
Hancock continued: "The dogs will provide assurance on top of ongoing work in those regions, providing growers with confidence there won’t be another incursion in the short term, and giving our trading partners confidence we remain on top of this incursion. While we welcome this additional support, biosecurity remains the responsibility of everybody in Australia. Bringing material in from other countries puts backyard trees and the entire citrus industry at risk.”
Dr. Webster said the Murray Valley was the second largest citrus growing district in Australia, comprising 6580 hectares of citrus production.“Preventing the spread of citrus canker is vital to protecting our valuable industry,” Dr Webster said, “returning to country of freedom status will benefit all affected industries, including citrus growers in the Murray Valley, by negating potential trade impacts.”

FreshPlaza, 19 August 2019

Australian farmers nabbed for smuggling pig semen in shampoo bottles

Two pig farmers in Western Australia who illegally imported wild pig semen from Denmark using shampoo bottles have been sentenced to three and two years in prison, respectively.
Torben Soerensen and Henning Laue, employees of the Australia-based pig farm GD Pork, were jailed on Tuesday for biosecurity breaches carried out between May 2009 and March 2017, Australian Agriculture Minister Bridget McKenzie said on Wednesday.
The pair's illegal act put the country's pork industry "at serious risk," she said.
The duo had pleaded guilty to multiple charges of aiding the illegal importation of boar semen over several years. Soerensen, GD Pork's managing director, was sentenced to three years in prison, while Laue, the production manager, was sentenced to two years.
The company, which is currently in liquidation, was fined 500,000 Australian dollars (340,000 US dollars).
The pig semen was brought into the country by Danish investors and used in the company's artificial breeding program. With the imported semen, at least 199 sows were inseminated, resulting in the spawning of more than 2,000 piglets, Australian broadcaster ABC reported.
Mackenzie said GD Pork had imported the semen illegally to get an unfair advantage over competitors with new genetic diversity.
The case shows "a disturbing disregard for the laws that protect the livelihoods of Australia's 2,700 pork producers" and the penalties send "a clear message that breaches of Australia's biosecurity rules will not be tolerated."
"Boar semen can potentially contain a number of exotic diseases, including Porcine Reproductive and Respiratory Syndrome (PRRSV), which could devastate Australian breeding herds," she said.

DPA, 14 August 2019

Pesticides have wiped out 500-million Brazilian bees, just in 2019

Death came swiftly for Aldo Machado's honey bees. Less than 48 hours after the first apis mellifera showed signs of sickness, tens of thousands lay dead, their bodies piled in mounds.
"As soon as the healthy bees began clearing the dying bees out of the hives, they became contaminated," said Machado, vice-president of Brazil's Rio Grande do Sul beekeeping association. "They started dying en masse."
About half a billion bees died in four of Brazil's southern states in the first months of the year. The die-off highlighted questions about the ocean of pesticides used in the country's agriculture and whether chemicals are washing through the human food supply — even as the government considers permitting more. Most dead bees showed traces of Fipronil, an insecticide proscribed in the EU and classified as a possible human carcinogen by the US Environmental Protection Agency.
Since president Jair Bolsonaro took office in January, Brazil has permitted sales of a record 290 pesticides, up 27% over the same period in 2018, and a bill in congress would relax standards even further. Manufacturers of newly permitted substances include Brazilian companies such as Cropchem and Ouro Fino, as well as global players including Arysta Lifescience, Nufarm and Adama Agricultural Solutions. Giants such as Syngenta, Monsanto, BASF and Sumitomo also won new registrations.
The fertile nation is awash in chemicals. Brazil's pesticide use increased 770% from 1990 to 2016, according to the UN Food and Agriculture Organisation (FAO). The agriculture ministry says that Brazil ranks 44th in the world in the use of pesticides per hectare and that, as a tropical country, it is "incorrect" to compare its practices with those of temperate regions.
Still, in its latest food-safety report, Brazil's health watchdog Anvisa found that 20% of samples contained pesticide residues above permitted levels or contained unauthorised pesticides. It didn't even test for glyphosate, Brazil's best-selling pesticide, which is banned in most countries.
The silent hives, critics say, are a warning.
"The death of all these bees is a sign that we're being poisoned," said Carlos Alberto Bastos, president of the apiculturist association of Brazil's federal district.

Agriculture is the biggest contributor to Brazil's growth, composing about 18% of the economy. Its power — from pop culture to politics — is unmatched. Major producers sponsor technology sharing groups, as well as a nationwide "little Ag" school program and is arguably the most influential grouping in congress.
Like US president Donald Trump, Bolsonaro was elected with strong support from agribusiness and has expressed disdain for environmental concerns. "This is your government," Bolsonaro promised legislators from the agriculture caucus, and his administration has allowed the industry-wide leeway to use whatever chemicals it likes.
About 40% of Brazil's pesticides are "highly or extreme highly toxic", according to Greenpeace, and 32% aren't allowed in the EU. Meanwhile, approvals are being expedited without the government hiring enough people to evaluate them, said Marina Lacorte, a coordinator at Greenpeace Brazil.
"There isn't another explanation for it, other than politics," she said.
Easing pesticide approvals was a campaign commitment for Bolsonaro. The agriculture sector has complained for years about slowness.
"Registrations are the biggest barrier," said Flavio Hirata, an agrochemical specialist at Allier Brasil consultancy. "The world's largest pesticide market can't be limited to a few companies."
Roughly half of the approvals are ingredients, not final products, said Andreza Martinez, manager for regulation at Sindiveg, a group representing pesticide producers. Varying chemicals is important as pests develop resistance to formulas, she said.
"It brings more tools to farmers, but that doesn't mean an increase in the use of products in the field," she said.
The variety, however, alarms toxicologists. "The higher the number of products, the lower our chances of safety, because you can't control them all," said Silvia Cazenave, a professor of toxicology at the Pontifical Catholic University of Campinas.
Brazil's health ministry reported 15,018 cases of agricultural pesticide poisoning in 2018, but acknowledged that this is likely an underestimate.
One victim was Andresa Batista, a mother of three. In March 2018, she went to work picking soybeans on one of the plantations on the plains surrounding the capital, Brasilia. Soon, she started feeling dizzy and nauseated — and then she passed out.
More than 40 farmhands fell ill that day, according to Batista, so many that they were divided into three groups and taken to different hospitals. The first medical team to attend Batista also became unwell, prompting the hospital to destroy her clothes, including her underwear. Still, Batista and most of the others were cleared to work again two days later. Almost as soon as they started, they collapsed.
Over a year later, Batista still can't work. She has difficulty eating without vomiting, can't go to the toilet without medicine, can't go in the sun without her skin swelling and she's lost about 30% of her vision. Doctors can't give her a prognosis due to uncertainty about the type of pesticide that poisoned her.
"That day, our lives ended," she said. "We're not the same people we were before."
Court documents show that Dupont Brazil, the company that managed the field, agreed to pay damages of 50,000 reais ($13,000) to one of Batista's coworkers that day. Batista said the company paid her 40,000 reais in an out-of-court settlement. Dupont's press office said it could not comment on the case due to legal restrictions.
The government said all case of poisoning must be investigated and that it would introduce a decree to strengthen the oversight and training process for pesticide handling.
Despite such stories, congress may accelerate approvals yet further, rebranding pesticides as "agricultural defences" and substituting the requirement to identify potential harm with a simple risk analysis.
Brazil's national cancer institute argued the measure would allow pesticides with "carcinogenic characteristics, endangering the population." But Alceu Moreira, head of the lower house's agriculture caucus, is certain it will become law.
"There's this need to create this international narrative that harms the image of Brazilian agriculture, as if we were using excessive levels of pesticides," he said. "We're not."
Brazilians may disagree. Carrefour Brasil, a supermarket chain, plans to increase its offering of organic products by 85% in 2019. Tatiana Carvalho, a 31-year old who runs a small organic delivery service in Brasilia, says sales have increased constantly since she started four years ago, despite the country's sharp recession.

She attributes her success to two things: greater consumer awareness and the government's decision to authorise ever more pesticides.

Bruce Douglas & Tatiana Freitas, *Bloomberg*, 19 August 2019

Crazy midwest weather spurs hardest year ever for U.S. farms

Crazy weather that disrupted U.S. Midwest plantings is adding to farmer stress, with growers ranking 2019 as their hardest year ever.
A survey conducted by Farm Futures showed that 53% of respondents said 2019 is the most difficult year they've faced as farmers -- that includes 49% of baby boomers and mature growers, who lived through the 1980s farm crisis, according to the poll of 711 growers carried out from July 21 to Aug. 3. Results of the survey are being released at the Farm Progress Show in Decatur, Illinois, Wednesday.
Growers already suffering from years of depressed prices are now contending with the loss of export markets as President Donald Trump's trade war with top soybean buyer China drags on. Farm debt is expected to rise 3.9% this year to $427 billion, according to the U.S. Department of Agriculture. And last year, farm debt-to-income was at the highest level since 1984.
"American farmers are under as much or more stress than during the farm crisis, exacerbated by 2019's extreme weather patterns," said Holly Spangler, executive editor at Farm Progress and editor of *Prairie Farmer.*
Tensions escalated last week during the annual Pro Farmer Midwest Crop Tour, with the USDA removing its staff from the tour after a government employee was threatened. The threat came from someone not involved in the tour. At a heated meeting in Grand Island, Nebraska, growers questioned the tour organizers and the USDA about the government's methodology in determining planted area and yields.
Two-thirds of the farmers polled agreed that weather disruptions are making financial pressures worse. The survey also found that younger producers are more likely to be stressed than baby boomers or mature farmers as they usually own less land and are less financially secure.
Stress was also correlated with growers ability to plant.
Farmers with higher stress reported they weren't able to sow a greater percentage of their acres than the average grower. American producers were unable to seed a record 11.2 million acres of corn and 4.35 million acres of soybeans, according to the USDA Farm Service Agency's August report.

Isis Almeida, *Bloomberg*, 28 August 2019

U.S. farmers plant crops you won't eat in climate change fight

In a tough year for farmers, North Dakota's Dennis Haugen is a standout. And he may have climate change to thank for it.
Haugen planted more radishes than ever this year on his Hannaford fields, he said by telephone. But not a single one will ever grace a dinner table. Instead, the radishes will remain as roots buried in the soil while Haugen harvests seeds from the delicate white flowers that grow above ground.
After non-stop rains and floods limited spring plantings across the nation's farm belt, Haugen scored his best year ever for his cover crop seeds, getting five times more for his efforts than in 2018. "I've hit my own personal home run,'' he said.
Cover crops have always been a part of agriculture. But recently they've gained a fancy new name, regenerative farming, and increasingly they're being marketed as a low-tech, but effective weapon against an aggressive and unpredictable foe: climate change. They reduce soil runoff from heavy rains and flooding, retain water during stubborn periods of drought and -- looking to the future -- they suck up greenhouse gases.

“Farmers can potentially perform a service for all of us, that service is to sequest carbon and reverse climate change," said David Perry, chief executive officer of Boston-based Indigo Ag, a closely held maker of microbial and digital farm technologies.

Like most plants, cover crops convert carbon dioxide into organic material within the soil through the process of photosynthesis. Indigo is offering a payback program for farmers who regularly put land under cover crops, or use no-tillage and other regenerative practices. They're measuring the carbon content of fields for growers, and paying them $15 to $20 a ton for the carbon they can identify.

“Whether we're consumers or governments, we should be willing to pay farmers to do that,” Perry said.

From 2012 to 2017, cover crop acreage increased 50% nationally, according to the latest U.S. Department of Agriculture census. “The biggest yield differences were reported after the drought year of 2012, with average reported yield increases of 9.6% in corn and 11.6% in soybeans,” according to the USDA report.

That could be helpful at a time when “increased weather variability in the Midwest is expected to alter soil water availability and temperature, which could decrease yield between 15-20%,” according to a report by the USDA's Regional Climate Hubs. Flooding this spring prevented farmers from planting corn on a record 11.21 million acres, USDA data showed Monday.

Illinois farmer Steve Stierwalt started using cover crops four years ago. Last year, they were about half the crops he planted. He hasn't seen higher yields yet, he said, but he sees the crop primarily as "armor" for the soil, protecting it “against more intense weather -- either too much rain or not enough rain. Cover crops have made a difference that way,” he said.

While buying the seeds, and spending the time to put cover plants in the ground is an additional expense, it reduces the need to add chemicals like nitrogen into the soil, and helps protect croplands against wild weather, according to Stierwalt. That can lead to higher revenue per acre for farmers, he said.

While some companies are supporting regenerative farming, the initiatives from government are limited. The five-year, $867 billion U.S. farm bill passed by Congress and signed by President Trump last year has a $25 million climate-friendly soil pilot program rewarding farmers using different methods of carbon farming.

There's also been questions raised about exactly how cover crops should be used. A study by the National Center for Atmospheric Research suggests that despite their ecological benefits, cover crops may contribute to raising winter temperatures in North America.

Karen Stillerman, a senior analyst at the Union of Concerned Scientists, says that there's still a lot to learn on the topic so future research and technical assistance for farmers should ”seek to minimize any negative localized effects with strategies such as planting shorter cover crops and mowing or grazing cover crops before snowfall.”

The farm belt focus on individual commodity crops like corn is leading to lower prices and limiting grower options, Stillerman said. It's one of the reasons behind a 33% decrease in the net farm income from 2013 to 2018, she said.

A 2018 survey by the Union of Concerned Scientists finds that 75% of the surveyed farmers believe it's important for farm policies to offer incentives for reducing runoff and soil loss, improving water quality, and increasing resilience to floods and droughts.

“We are looking for action at the federal level,” Stillerman said in a telephone interview. Growers need incentives to help them “farm in ways that builds a healthy soil and regenerates resources,” she said.

California was the first state to implement a healthy soil program in 2017 which incentivizes farmers to adopt regenerative farming practices. The program offers funding for farmers worth $28 million for 2019/2020, which nearly doubled from the prior year.

”It's critical to be able to address a climate crisis to have state investment in agricultural solutions,” Jeanne Merrill, policy director at the California Climate & Agriculture Network, said by phone. ”Healthy soil is one important strategy for farmers to be able to become more resilient in the face of greater weather extremes and to be part of the reducing of greenhouse gas emissions."

Denitsa Tsekova & Michael Hirtzer, *Bloomberg*, 15 August 2019

Conserving Silicon Valley farmland from Big Tech's sprawl

With a swipe of his harvesting knife, Sam Thorpe frees a handful of spinach from its roots in the soil. "In the winter it's so sweet it's like candy," he says, examining the small yield in his palm.

For the past four years, Thorpe and his family have built a reputation among Silicon Valley restaurateurs and farmers markets for the rich, organic produce they grow as Spade & Plow. But as the business grows, the land itself is shrinking. A few months ago the owner reduced Spade & Plow's plot from 13ha to just 6.5.

The same owner also just sold another farmland parcel to developers, leading Thorpe and his family to think hard before planting any long-term crops. "Even though the property we're farming on doesn't face immediate threat of development, we're still feeling the [pressure]," said Thorpe.

To help farmers like him, Santa Clara County — home of tech haven Silicon Valley — is purchasing local farmland at market rates to ensure its future in agriculture, a process known as the agricultural easement. The new initiative, so far involving just a handful of landowners, is part of a larger county-wide agricultural preservation programme partially funded by greenhouse gas taxes from the state.

Similar easements have helped preserve more than 2-million hectares nationwide. Sacramento County, home to California's capital, has included agricultural easements in its general plan since at least the early 1990s.

Thorpe and his family have wanted to purchase farmland in Silicon Valley since they started in 2015. "We're really looking for something long term, and we wouldn't be able to afford something in the area without an agricultural easement," he says.

County officials say it could take up to $500m to preserve up to 5ha of farmland in one of the country's priciest real estate markets.

"We're talking about Silicon Valley," noted Keali'i Bright, a deputy director at the California department of conservation, addressing the area's vast wealth. "Development pressures are extremely high, and anybody could develop their farm or ranch pretty quickly," he said of the area best known as home to major tech companies such as Apple and Facebook.

Santa Clara Valley agriculture still supports 8,100 jobs, adding $830m annually to the region's economy. But in 30 years, the county has lost more than 8,500ha of farmland to non-agricultural uses such as buildings and housing.

Jenny Li, whose family has farmed here for 40 years, has struggled to find land that is both high-quality and affordable. Once the lease on her family's 8ha farm ends in February, the future is uncertain.

"Is [the landowner] going to increase the rent? Or is he deciding to just sell it?" Li wonders. "If that is the case, we don't know if the business will continue."

The Sustainable Agricultural Lands Conservation programe — the state initiative helping fund Santa Clara County's effort — has provided grant money to protect 36,700ha of fertile land since starting in 2014.

Potential benefits of the programme extend beyond land preservation and include cutting greenhouse gas emissions.

"You protect farmland and that prevents sprawl, and the prevention of sprawl takes more cars off the road or at least has them driving less," says Michael Meehan, a Santa Clara County planner.

By purchasing the rights to farmland and designating it for agricultural use, its development potential drops, along with its value. Meehan likens it to constructing an apartment building and designating it for affordable housing.

Officials expect the benefits to reach all farmers, not just those who participate, by virtue of deregulation of agricultural employee housing and incentives for carbon neutral farming, plus other eco-conscious services.

David Cortese, a member of the Santa Clara County board of supervisors, says start-up funds are in place, but with about $20m needed each year the future is uncertain. One model they may look at is taking a few cents from each dollar of property tax, the county's main revenue source, to fund a trust — a move voters would need to approve.

"You literally take $20m right off the top of property tax," Cortese says.

Tom Daniels, a land management professor at the University of Pennsylvania, says Santa Clara County is on the right path. Its efforts are in line with what Suffolk County in New York did to preserve nearly 8,000ha of

farmland, he adds, that is, partner with local governments and NGOs such as land trusts, which can collect private donations.
Despite the steep tab to preserve Santa Clara County land, “you also have an awful lot of wealth there,” Daniels says.
Federal officials are also keen on the programme.
“There’s only so many conservation dollars to go around and, really ,if we can focus that in specific areas to kind of build these agricultural reserves, you’re better off in the long run,” says Dean Kwasny, a US department of agriculture easement specialist. “The last thing we want to see is that we purchase 100ha in [a county and] it ends up being developed all around it.”
Chris Borello, who, with his family, owns a cherry grove in Morgan Hill and other properties, is both hopeful and sceptical about the programme, for which he is applying.
He does not think the market rate is the appropriate price. “If the county as a whole says ‘agricultural land is important to us and we want to keep farmers here and we want to buy their development rights’, then they need to pony up and pay an amount that motivates people,” says Borello, whose family recently sold 48ha of farmland to housing developers
The county should factor in what he could make selling to a developer, he says, adding, “This is really a business I enjoy doing, but I need to be profitable.”
Cortese says the county is willing to negotiate with landowners.
If funds come through and negotiations succeed, the promise of Silicon Valley that first attracted Avery Ruzicka, head baker at Manresa Bread and a James Beard award finalist, could be preserved. Ruzicka is launching a series of dining events at her locations in the county to showcase the produce of Spade & Plow and other local organic farmers, “to say, ‘look at this, this is incredible’.”
“Look at this beautiful bounty,” Ruzicka enthuses, adding, “This is not necessarily what you’d find in the rest of the country.”

Johnny Magdaleno, *Thomson Reuters Foundation*, 10 August 2019

Growing pains for cannabis sector in famed California wine region

A bitter war has erupted between pot growers and vintners in one of California’s famed wine regions where cannabis farms are proliferating, leading critics to denounce a “green rush” they fear could prove disastrous.
The battle, which began shaping up after California voters legalised recreational marijuana in November 2016, has pitted wine growers in Santa Barbara County and residents of the picturesque beach town of Carpinteria against a new neighbour they say literally stinks and threatens their livelihood and way of life.
“I think this is the single greatest threat to the wine industry that I have seen in my 25 years here,” said Stephen Janes, GM at Pence Vineyards, located in the Santa Rita Hills.
At issue is the vast expansion of the cannabis market in the county in the past two years, thanks partly to loose licensing regulations at the local level that opened the door to a rush of growers keen to cash in on the lucrative crop.
Almost overnight, critics say, millions of flowering cannabis plants popped up in the Santa Ynez and Santa Maria valleys, a vast wine-growing area made famous internationally by the movie Sideways.
Further south in Carpinteria, greenhouses once used to grow flowers and located near residential areas have been repurposed to grow weed, much to the chagrin of some local residents irate over the pungent and pervasive odour that emanates from the plants.
“I have to wear a mask now when I go out to my garden, and my grandchildren won’t visit anymore because of the smell,” said Joan Esposito, who has lived in the town for 36 years.
In the Santa Rita Hills area, known for its Pinot Noir production and located about two hours north of Los Angeles, white plastic hoop houses for pot growing extend in places as far as the eye can see and sit near vineyards and avocado farms.

“It’s not like any farming neighbour we’ve ever had, and this is all happening very quickly,” said Kathy Joseph, owner of Fiddlehead Cellars and Fiddlestix Vineyard. “No-one anticipated the visual impact, nobody in the region had ever experienced cannabis in this quantity.
“In many ways, cannabis is ruling the roost right now."
Vintners, avocado growers and other farmers say they are having to adapt their farming practices — including by using organic pesticides often less effective than conventional ones — lest the newcomers sue them for inadvertently contaminating their high-value crop.
Wine growers add that they, in turn, fear that their grapes could be contaminated by particles from pot plants.
“This has turned into a living nightmare,” said Joseph, whose neighbour has filed a complaint against her over fears that the pesticides she uses on her vines may have contaminated his cannabis.
“I have committed over 40 years to making wine ... and as wine growers we operate under strict controls,” she said. “But this year, I am probably going to lose my crop of Chardonnay, worth $50,000, because I had to switch to a pesticide that was not as effective for mildew.”
Members of the Santa Barbara County Board of Supervisors, which is responsible for setting policies on cannabis, acknowledged that the county should have anticipated the unintended consequences of pot farms on existing agriculture and residents in the region.
“I am very concerned about the impacts of outdoor cannabis operations concentrated in the Santa Ynez Valley and am working vigorously to protect existing vineyards and agricultural operations from the negative impacts of this new industry,” said board member Joan Hartmann.
She said the county had limited cannabis cultivation in the region to under 800ha and was exploring ways to defuse the escalating conflict.
Graham Farrar, CEO of Glass House Farms in Carpinteria and president of the local Cannabis Association for Responsible Producers, said pot growers have gone out of their way to be good neighbours, installing odour-control systems and injecting much-needed tax dollars into the community.
“The community supports cannabis and the average individual walking down the street either doesn’t care, supports cannabis in concept or the farmers specifically,” he said.
He also dismissed complaints about odour, saying that while there may still be an occasional whiff of the skunk-like smell, it was hardly overwhelming.
“I think that many of the people who talk about the odour don’t like it because it reminds them that there is cannabis growing there and they think cannabis is a moral failing and society would be better without it,” Farrar said.
His argument, however, does not sit well with everyone.
“For an industry that has been here for 40-45 years and contributes $1.8bn to the local economy, to have another industry come in and cause us to change our ways, affect our grape growing, I don’t think is right or fair,” Janes said.
He said he and other vintners were not opposed to marijuana but are pushing for stricter controls to preserve their livelihood and not have the smell of cannabis compete with the aroma of wine in tasting rooms.
Some locals, like Maureen Foley Claffey, are not waiting to see how the conflict plays out. She is packing her bags and moving her family out of the Carpinteria neighbourhood where she grew up.
“It's like having 500 liquor stores within three blocks,” she said, referring to the pot farms. “This has pitted neighbour against neighbour, and I have lost friends over this,” Claffey said. “And now I’m losing my family home.”

AFP, 11 August 2019

Farmers in Kenya grow lucrative stimulant muguka, abandoning traditional crops

At this time of year, Albert Njeru's farm would usually be blanketed with shoulder-high rows of maize.
But not anymore. Now the fields of grain are gone, replaced by a hectare of bushy green muguka leaves, a potent legal stimulant that relieves fatigue.

"Muguka gives me a lot of money. Farming maize or beans used to give me losses," the farmer said at his home in Kanyuambora, central Kenya.

As drought and erratic weather wreak havoc across rural Kenya, a growing number of farmers are abandoning traditional crops such as maize and rice for the more lucrative muguka.

Njeru can make 30,000 Kenyan shillings ($290) in just one week selling muguka — five times more than he used to make selling maize or beans.

"It is green gold," he said.

A variety of khat, which produces a mild high when chewed, muguka is fast-growing, making it less vulnerable to large swings in weather conditions, and uses about half as much water as maize, Njeru explained.

The strain grown in Embu County, home to Njeru's farm, is strong and so consumers can buy less than with the other popular variety, miraa, which is grown further north in Meru.

That is good news for muguka producers such as Njeru, who said he was struggling to cultivate enough to keep up with demand.

But it is bad news for food supplies, said agriculture experts and local politicians, who warned of a potential food crop shortage as farmers clear their fields of staples to make way for muguka. "Farmers are not interested in growing maize anymore. They want money in their pockets. Muguka is giving them that and a lot more, since they can use the profits to buy more nutritious food," said Martin Mwangi, a member of Embu County's assembly.

"But the long-term consequences could lead to food insecurity due to reduced production."

He pointed to neighbouring Kirinyaga County, where farmers are known for growing Kenya's highest-quality rice.

"Water used for irrigating rice is now being diverted into muguka fields," he cautioned.

There is no official record of how many farmers have switched from growing food crops to muguka, said Mwangi. Nor is there data on how much land is being used for muguka, according to Kenya's Agriculture and Food Authority (AFA).

But Francis Kimori, chair of the Mbeere Muguka Farmers Sacco, a savings and credit co-operative, estimated that four out of every five households around the Mount Kenya region, including in Embu County, are farming the stimulant in some quantity.

Many have upgraded from mud huts to modern stone houses, he told the *Thomson Reuters Foundation.*

"It is changing livelihoods," he added.

Factors such as failing rains and new pests, linked to climate change, have likely played a role in muguka's popularity at the expense of time-honoured crops such as maize, said Dickson Kibata, a technical officer at the AFA.

Yet despite the extra income muguka brings, Kibata warned against relying solely on the narcotic plant.

"Cash-crop farming cannot be the silver bullet that will pull farmers out of poverty, because consumption patterns keep changing," he said by phone.

"My advice to muguka farmers is to mix it with food crop farming to ensure the family food basket is secure, even as they look for money."

Environmentalists and lawmakers have also voiced concerns over the impact of the stimulant cultivation boom on forests.

Every few months, the Atiriri Bururi ma Chuka community conservation group in Tharaka Nithi County reports several locals illegally growing an edible form of cannabis known as bhang in local forests, said its chairman Ngai M'Uboro.

He expects it is only a matter of time before he and his colleagues start uncovering muguka farming in the area.

"If the forest is already suffering because of grazing and bhang, it will not be long before we see muguka growing in the forest," he said.

Muguka's potency is also making the authorities uncomfortable. In 2018, legislators in Mombasa and Kwale counties lobbied unsuccessfully for a sales and consumption ban on muguka over fears of addiction among young people.

The National Authority for the Campaign Against Alcohol and Drug Abuse supported the move, citing social and health worries.

"Muguka is worse than hard drugs because of its highly addictive nature. It is ruining homes, the country's youth and should be banned," said CEO Victor Okioma.
Yet, even with all the risks attached to muguka, many Kenyan farmers are hoping it will save their livelihoods.
Along a 300km stretch of cropland from the edges of the capital Nairobi to the lowlands opening into northern Kenya, maize farmers have been struggling with drought.
Purity Muthoni, a farmer from Kiriani village in central Kenya, said she would not hesitate to switch to muguka if she could. But the weather and soils where she lives, about 150km from Njeru, are not suitable for growing the plant, she said.
Noting the risks of depending on one crop as a source of income, the Embu County government last year said it would start distributing macadamia and avocado seeds to farmers to help them diversify their cash crops.
But Njeru is not convinced any other crop can earn him the same returns he gets from muguka.
If local leaders really wanted to help farmers, he said, they should find ways to add value to the plant by enhancing their access to industrial processing and retail opportunities.
"I will be very happy the day I see packaged muguka being sold in supermarkets as a quality-assured product," he said.

Kagondu Njagi, *Thomson Reuters Foundation*, 12 August 2019

Namibia inaugurates R4.2bn Chinese-built port terminal

Namibia has inaugurated a new Chinese-built port terminal which doubles its container capacity and is also intended to give tourism a boost.
The 40-hectare platform, reclaimed from the sea at Walvis Bay, some 400 kilometres west of Windhoek, is to become a strategic gateway to emerging markets of southern and west Africa.
The terminal was built by state-owned China Harbour Engineering Company with funds from the Namibian government and the African Development Bank.
The cost of the installation is R4.2bn.
"The completion of the container terminal expansion puts us on a firm trajectory towards realising our dream of transforming Namibia into an international logistics hub," President Hage Geingob said at Friday's inauguration ceremony.
A 'State of Logistics' report released by the Walvis Bay Corridor Group last year said the new terminal would increase the capacity of the port to 750 000 containers per year from 350 000, with the potential to go over a million in the future.
Geingob said "Zambia, Angola, Democratic Republic of Congo, Botswana, and Zimbabwe are among the main land linked, now sea-linked markets for seaborne transit cargo by volume going through the port of Walvis Bay".
The terminal also includes a dedicated cruise liner berth and a marina breakwater which "strengthens our capacity to attract tourists to our shores", he said.
According to a 2018 finance ministry report Walvis Bay has been handling around 3,000 vessels and six million tonnes of cargo every year.

AFP, 5 August 2019

Namibian grapes to grace Chinese market

Namibia will start grape exports to China in about 18 months, Namibia grape growers and an export association said on Monday.

Speaking in an interview, Deputy Chairperson Kobus Bothma said the association is busy with the process of finalizing its discussions. "As we stand, the Ministry of Agriculture, Water and Forestry is ready to finalize the draft agreement.

Negotiations between the two governments are well advanced. After everything has been submitted then we will look forward to having a Chinese delegation visit the farms and the production units," he said.

Namibia stated that it is looking to export five to ten percent of the 75 million cartons of its total export volume to China.

"We are looking forward to starting exports next season. We are hoping to grow the market once we start exporting to China," he said. Namibia currently exports grapes to Britain and European Union markets.

Kaula Nhongo, *IOL*, 20 August 2019

Capespan excited by future access for Namibian grapes to China

The process to allow Namibian grapes into China during the 2020/21 season is progressing well, with the submission of protocols and agreements to Chinese authorities. A Chinese delegation could visit grape facilities in Namibia before the deal is finalised, but nothing has yet been confirmed.

The Chinese market is becoming more important for Southern African grapes as a whole, says Capespan South Africa, which has production units in both countries. Namibia has until now had access to other markets in South East Asia.

“The Namibian Grape Growers Association doesn’t foresee that the market will already be open during the coming season, but is hopeful for the following season,” the company said in a statement. “It will bring a good opportunity not only for Namibia to place their excellent table grape product in a growing market, but also for the Chinese consumer who will be able to enjoy more of Southern Africa’s fruit.”

“Namibian grapes form an important part of our basket and the region produces outstanding quality. All of Capespan’s farms have invested in the planting of new varieties and we’re in a position to supply out clients with worldclass product.”

Capespan South Africa does, however, caution that finalisation of the agreement at a bilateral level between the governments of Namibia and China is a time-consuming process. Finalisation had last year been expected in time for the upcoming grape export season.

The Namibian table grape industry produces 7.5 million 4.5kg equivalent cartons, with strong growth every year and roughly 2,500ha under table grapes in the country. The Namibian Grape Growers Association has said that the industry would initially allocate 5% to 10% of its industry’s volumes to China.

Namibia’s harvest starts in early November until Christmas, when there are few grapes on the global market. Under the desert conditions when it barely ever rains, hail or frost poses no risk, and water supply is constant from the Orange River.

For the entry of South African grapes, China requires pre-cooling for 72 hours and during shipment cold treatment at 0.8°C or below for 20 days in order to control fruit fly.

Carolize Jansen, *FreshPlaza*, 23 August 2019

Continuity at The Grape Company ensures innovation

The Grape Company was one of the first companies to be granted an export license after deregulation of the South African export sector.

“Our vision has been to focus on delivering quality table grapes to our customers over the world. We are very proud to say that the biggest part of our growth over the past 22 years was through new plantings by existing shareholders and growers. We pride ourselves on a special group of growers of whom most have been our partners for more than 17 years,” says Marietjie Franzsen, commercial manager at The Grape Company, which is going to be exhibiting at Asia Fruit Logistica.

The company, with grower shareholding over the total window, has production units from all of the table grape growing regions in South Africa, starting the season in Mpumalanga and Northern Cape, then moving to the Olifants River, the Berg River and the Hex River regions.
“From all the areas we have around forty different production units which gives us the ability to be flexible and commit to our programmes because we can supply out of all areas. We can supply continually from November up until April (depending on weather and season). All our units have their own packhouse onsite to make sure that all fruit gets under regulated temperatures as soon as possible which is also a factor in our quality.”
“The right partners, quality and innovation are the main pillars on which we build our business. We are continuously investing in all major breeding programmes (for example Sunworld, IFG, SNFL and so forth). We also have some special cultivars and trial blocks of new varieties in all major production areas which we evaluate every year.”
She notes that growth over the past few years occurred mainly in new plantings of Autumn Crisp, Sweet Globe, Sweet Celebration and other cultivars.
“We have our Grape Company brand, of which we are very proud, that we use as our generic brand all over the world. We are looking to grow our presence in the Asian market as well as new direct sustainable supply into supermarkets all over the Asian continent.”
The Grape Company started a non-profit organisation ten years ago called The Grape Community, which has evolved into a self-sustainable company. Current projects include early childhood development schools for the children of farmworkers as well as orphanages in the major table grape areas.

Carolize Jansen, *FreshPlaza*, 28 August 2019

Agriculture sector cautiously optimistic but still feeling Cape drought

With one of the wettest seasons in a long time and the province’s dams filling up faster than expected, the agricultural sector isn’t doing the rain dance yet, warning that the impact of the recent drought on jobs and crop yields are still being felt.
According to The Crop Estimates Committee’s (CEC) sixth report for South Africa’s 2018/2019, released at the end of July, the summer season grain and oilseed production is a mixed bag, with maize and sunflower seed figures rising, and those of soya bean and sorghum decreasing.
Chris van Zyl, of the commercial farmers union TLU SA (Transvaal Agricultural Union of South Africa), yesterday cautioned that the north western parts of the province, as well as the Karoo, have been less fortunate as far as the rains are concerned and farmers are not completely in the clear yet.
He said: “This means we can expect that in those regions, production levels similar to last year, or even less, in the serious drought stricken areas.”
Allowing for a ray of hope, Van Zyl added: “It seems as if the levels of optimism are noticeably higher than a year ago.”
This cautious optimism was backed by Jannie Strydom, chief executive of Agri Western Cape, who said: “For the most part the winter grain crops are looking good at the moment, but the Eden and Hessequa districts need much more rain.
“Though catchment dams are filling up, irrigation dam levels remain low, so the Agri sector of the province is not out of the woods yet.”
Agriculture MEC Ivan Meyer said: “It is too early to start looking at the impact of the current rainy season. Water restrictions are still at 10% for most municipalities and the agriculture sector.”
Even in the internationally famous South African wine industry, caution is the watchword. Wines of South Africa (WOSA) communications manager Maryna Calow said: ”So far, if we compare year-on-year moving annual total, from July last year to June, the figures are down, however, we can directly relate this to our harvest and yield.”
Calow said that, in 2018, the grape harvest was down roughly 14%.
The industry had anticipated a slight rise in yield for 2019, but instead their figures dropped by about 5%.

Meanwhile, the situation remains grim for farm workers, especially those who were laid off during the prolonged drought.
Meyer said: “Most farmers have had to restructure debt and find themselves in a situation of having to get back to full production and that any proposed intervention will have to boost the farmers cash-flow, which will result in increased spending on inputs and, more importantly, re-employ labour in the area.”
Regarding reported job losses in the industry during the 2017 drought, Van Zyl said: “As matters currently stand, significant job losses have not been reported to us by our members in the region.”
Colette Solomon, director of the NGO Women on Farms, said: “The general trend in farming is towards the casualisation of labour and, especially, women farm labourers.”
Solomon said: “The drought was a blip but it exacerbated the situation of casual women farm labourers.
“While good rains might mean a slight increase in availability of work for these women, these structural trends in agriculture will continue and women labourers will be worse off in the long run.”
According to Solomon casualisation of labour works in favour of the farmers but not the farm workers.

Mwangi Githahu, *Cape Argus*, 14 August 2019

Booming blueberry industry eyes Asian markets

SA’s booming blueberry industry is looking to gain access to the Asian markets, saying this will create an additional 12,000 jobs in the sector.
The industry is labour intensive and employs three to four workers per hectare. SA does not have access to key markets such as China and South Korea at a time when blueberry imports are growing phenomenally in Asia. This is because SA has not yet complied with the region's export protocols for the fruit.
“If we gained access to the Chinese market, for example, we could create an additional 12,000 jobs in South Africa, increasing the industry’s projected employment numbers from 14,000 in 2023 to 26,000,” said Jean Kotzé, the chair of the South African Berry Producers Association.
Data compiled by the association shows that SA’s blueberry production is expected to reach a record high of 17,000 tonnes in 2019, up from 11,300 tonnes in 2018.
This will mean an exponential increase in jobs created from 1,000 in 2014 to 8,000 in 2019, said Kotzé. By 2023, the industry expects production to reach 50,000 tonnes which will translate into 14,000 jobs.
“Amid the doom and gloom of South Africa’s recently released unemployment figures, this is a very good story to tell. But the story can be so much better if South Africa’s blueberry industry can gain access to core export markets in the Far East,” said Kotzé.
Kotzé said the potential to grow the export markets is huge. At present, approximately 70% of blueberries produced locally are destined for export markets. The value of blueberry exports grew from R133m in 2013 to just over R1bn in 2018.
In China blueberry imports grew from 2,400 tonnes in 2013 to more than 12,000 tonnes in 2017. It imports berries mainly from Chile and Peru.
“SA should be competing directly with these countries, especially because we grow high-quality blueberry varieties that are preferred by the international markets,” said Kotzé.
“We also have shorter transit times to markets in the East compared to our competitors, and the ability to expand production throughout SA due to the versatility of blueberry crops, which can be grown virtually anywhere.
“Given access to these markets, South African blueberries will be a formidable competitor,” he said.
Kotzé said the association is aware that export protocols for other fruits have taken as long as 12 to 17 years. At this rate the South African blueberry industry will gain access to the Chinese market only in 2045.
“For the sake of the many unemployed agricultural workers in SA, we cannot afford to wait that long. The only way for SA to take advantage of the job-creating potential of berries is if the government and industry work closely together to overcome the hurdles impeding access to markets in the Far East.”
Kotzé said the association had therefore written to agriculture, land reform & rural development minister Thoko Didiza to request a meeting to find solutions to these obstacles.

“We are confident that she will do whatever it takes to help us create thousands of jobs in this exciting emerging sector,” said Kotzé.

Bekezela Phakathi, *Business Day*, 21 August 2019

A 40% growth forecast for South African berries

BerryWorld will be attending Asia Fruit Logistica, a key event for the company. Here, the company will showcase a significant growth in shopper penetration, thanks to their award winning exclusive MBO varieties. BerryWorld South Africa will be marking 25 years in soft fruit and display their exciting brand re-design along with their strategy for sustainable growth.
Forecasting a total seasonal supply of more than 7,500 tons across the August to January window, this will represent a growth of over 40% on last year for BerryWorld South Africa. “We are expanding our production and our customer base and continuing to develop our IP and systems through dedicated R&D work,” said Jason Richardson, Managing Director of BerryWorld South Africa. “We recently held our Annual Grower Day event in Stellenbosch, an event which brings our BerryWorld team together with all our growers, in order to align, plan and prepare for the upcoming season and the long-term future of the business. Our MBO varieties continue to excite us and some have already been awarded Superior taste awards by the International Taste Institution,” continued Jason.
According to Chloe Butler, Head of Insights at BerryWorld UK, even mature markets like the UK present opportunities to drive penetration. “Kantar data for the UK shows that in the 12w/e 31st December 2018 (peak of the South African season), market penetration on blueberries was 24.8%. By comparison the summer average was 36% (April to June 2019), demonstrating that there is significant head room to encourage summer blueberry shoppers to continue to buy in the winter."
The MBO varietal offer gives BerryWorld the opportunity to bridge the typical gap between end of Polish and UK, bringing South African supply into Europe as early as possible to continue to maintain high levels of market penetration.
International markets are evolving at different paces, but one thing remains constant, blueberry sales are growing and consumers are demanding better flavor, size and shelf life in all territories. In the last 52 weeks we have seen £40m retail growth on blueberries in the UK, purely from consumers shopping more regularly, highlighting just how crucial great tasting varieties are in driving market growth.
Alongside BerryWorld Group, the South African business also celebrates 25 years in the soft fruit industry, which will coincide with a new look brand at Fruit Logistic Asia. Stefan Viljoen, BerryWorld, South Africa’s Sales Manager said; “As part of the global roll out of the newly designed BerryWorld brand, we have now launched in Singapore and Malaysia. It’s been fantastic to celebrate our 25th anniversary year with a new brand and I’m excited seeing it come alive across the globe."
The rebrand project has involved collaborative work between growers and staff which centred on product quality, design and packaging specifications with the united goal of being a sustainable, commercially viable brand which delivers for both growers and consumers alike.
BerryWorld South Africa will be exhibiting at Fruit Logistica Asia from the 4th September to 6th September at stand 5E02 in hall 5.

FreshPlaza, 27 August 2019

Delecta starts exports as South African blueberry industry opens up

Well-known fruit exporter and marketer Delecta Fruit enters its second blueberry export season this year, following the opening up of the young South African berry industry.
This opportunity came as a result of the growing global demand for blueberries, and the introduction of new varieties outside the ambit of the tightly controlled marketing system of existing blueberry companies.

According to Rossouw Lambrechts, commercial coordinator at Delecta, the optimal gap for South African blueberries in Europe and UK is during September and October. The competition becomes tighter when Chile enters the market in November, but the opportunity continues up to December and even into January.
Delecta is one of the selected marketers of the varieties offered by TopFruit. Although a royalty fee is paid, the marketing strategy of the output is not prescribed. Fall Creek Nursery's recent arrival in South Africa will also be a source of new genetics available to growers.
Delecta's foray into blueberries comes at the request of its UK retail clients, who prefer to receive the full spectrum of fruit from their existing suppliers. "There is strong demand for blueberries, but it's still important to note that shelf life, eating quality and bloom are essential qualities for buyers overseas. They prefer lighter-coloured fruit that are still covered by bloom, looks fresh and tells them it hasn't been handled much," says Lambrechts.
"We see similarities between the blueberry market and other commodities, where the drive for growth is linked to better variety or genetics. With good genetics becoming more freely available to farmers, the commodity is bound to grow," he continues.
"It's been a good learning curve for us, especially in terms of packaging, cooling and shipping. The interest from growers in the Western Cape and traditionally citrus growing areas in the Eastern Cape, Northern Cape and Zimbabwe, has been unbelievable. We're getting enquiries from all over Southern Africa, especially with the introduction of genetics that give growers more flexibility."
He notes that producers are attracted to blueberries due to the high return on investment. "The establishment costs require very high capital outlay, but thereafter growers can reach break-even point after about three or four years due to the high return on investment and demand for blueberries. We are seeing great possibilities for exporting blueberries from South Africa. Once the Chinese market has opened up, the possibilities will increase even further."

Carolize Jansen, *FreshPlaza*, 29 August 2019

When it comes to honey, local truly is lekker

It's almost spring, so our thoughts will soon turn to … allergies.
A simple remedy punted by those in favour of alternative treatments is to consume raw honey made locally because the traces of pollen from the flowers on which bees forage could help some of us counter seasonal allergies by desensitising us to local pollens. But, like most remedies classified as "alternative", the remedy is merely anecdotal, according to the Mayo Clinic website. However, honey does have anti-inflammatory properties, which is probably why it is so often punted as an antidote to a number of ills.
As more people around the world adopt better eating habits and seek out "natural" cosmetics and remedies, demand for honey and other products from bee hives are at a high. Bee colonies are decreasing and the decline has been blamed on excessive pesticide use on crops, among other things. This has led to a threat of fake or adulterated honey.
Even though about 1,500 beekeepers have registered with the department of agriculture over the years, South African Bee Industry Organisation (Sabio) chair Mike Miles says it is almost impossible to keep tabs on each one. Nor has it been easy to get exact figures on the volumes of honey being produced locally as beekeepers are not required to disclose their production figures and there are many hobbyist and small-scale beekeepers in addition to large commercial beekeepers.
And because adulterated honey and dodgy imports are not easy to trace, honey producers say that the only guarantee of quality is to "know your beekeeper". There are currently no laboratories recognised under the SA National Accreditation System able to do what's commonly referred to as C4 sugar level tests to work out the adulteration (added sugar) of honey.
In 2017, of a sample of eight honeys that were sent abroad for C4 tests, six were found to have C4 sugar levels in excess of the international limit of 7%. The lack of a national body to enforce standards means consumers are at risk of being duped by adulterated products.

Miles says Sabio has lobbied the government to form an Apicultural Advisory Council that would include representatives of all aspects of the beekeeping industry, and although the department has shown support for the idea, implementation is slow.

Given that domestic honey production is estimated at about 2,000 tons but consumption is as high as 5,000 tons, it means that most honey sold in SA is imported, says Wandile Sihlobo of the Agricultural Business Chamber.

And it's a global issue. The EU in 2014 included honey on its list of top 10 foods most at risk of food fraud, a practice famously documented in the Netflix documentary series Rotten which exposed the global dimension of how sugar, maize and rice syrups are used to "cut" honey, much like drug dealers do with their wares.

Even though SA honey sellers are obliged to identify the country of origin on the packaging, no tests are done locally to verify the authenticity of the contents. In this context, the provenance of honeys makes a huge difference, argue artisanal beekeepers.

The answer is to be your own honey quality controller, argue beekeepers. Now an increasing number of artisanal beekeepers in SA are aiming to change consumer tastes and entrench higher quality standards.

But beekeeping requires patience and can be precarious. A hive (which costs a minimum of R1,300) may take up to two years to produce honey and droughts, pesticides, bee predators and theft by humans are added hurdles. One hive is a hobby – to be commercially viable would require up to 600 hives, with each hosting a colony of up to 25,000 bees that in a good year would produce 10kg of honey.

The Urban Apiary team of Ata Mkhwanazi, Karen Dunn and Rob Brine has a network of hives in Johannesburg gardens stretching from Melville to Houghton and offers advisory services relating to hives and honey. Bees tend to forage in a 3km radius, so Johannesburg gardens offer diverse and fertile grounds.

Dunn says that one of the biggest gaps in the local industry is the lack of marketing support.

Perhaps the best example of marketing genius is that of the Manuka honey, made by bees that pollinate the Manuka trees of New Zealand and Australia.

The healing properties of Manuka honey are well documented because, compared to other honeys, it has high concentrations of an antibacterial component called methylglyoxal (MG), in addition to hydrogen peroxide.

Dunn, who studied zoology and psychology and has a background in marketing, says the existence of a rating system called the Unique Manuka Factor, puts Manuka honey in a league of its own and gives consumers a guide as to what to expect in terms of MG concentrations, and therefore the potential to heal.

"In SA we have incredible botanical biodiversity, but we haven't done the necessary research and development needed to support marketing claims for premium South African honeys."

Mulalo Tshikalange's foray into beekeeping and making honey-based cosmetics was fortuitous — she was using honey as a daily cleanser when she started researching food-based skincare. Her research led her to Thembalezwe Mntambo, an urban garden enthusiast who helped her set up her first hives. They are now business partners and have close to 100 hives located in areas stretching from The Wilds in Houghton, to the Magaliesberg, East Rand and all the way to Limpopo and are now proud purveyors of artisanal honey, body butters, soaps and lip balms under the label Nyoc — an anglicised play on the word "nyosi" which means bee.

Tshikalange, a former HR practitioner, had used raw honey to treat her eczema, a condition that tends to be aggravated by parabens and other synthetic ingredients in soaps and cosmetics. Honey's antimicrobial and anti-inflammatory properties proved to be an effective treatment and soon she was mixing balms for friends and family, using only wax from their hives, essential oils and other natural ingredients. The immediate relief she got from honey was in sharp contrast to the expensive, yet ineffective synthetic products she had tried before turning to this ancient remedy.

Urban gardens are attractive spots for hives, says Tshikalange, as they tend to have a wide variety of flowers and plants but lower concentrations of pesticides compared with commercial farming areas.

Most compelling of all, is that these urban hives provide another dimension to the locavore movement growing around the world — for consumers who are keen on reducing their ecological footprint, honey produced close to home, or better yet in the back garden, is a no-brainer.

Interesting honey facts:

- Honey is created when bees ingest nectar and pollen from plants and flowers and secrete enzymes to process the liquid. The same bit of liquid is passed between up to eight bees, with each adding enzymes.
- Bees seal the cells of the honeycomb with wax only when the honey is "ripe," first removing excess moisture by fanning the air with their wings.
- The enzymes (proteins) denature when heated. Hive temperatures range from 36°C-38°C, so to retain the medicinal benefits of honey, it should be kept at that temperature or below. When honey crystallises, "bath" the bottle in water at a temperature comfortable for you to take a bath in.
- "Natural" honey is collected from the comb and strained to remove the wax and propolis, whereas the honey sold by retailers are usually filtered multiple times and may be pasteurised to ensure a longer shelf life.
- Honey bees are nature's most efficient pollinators and hives enable more abundant fruit and flower yields, even in suburban gardens.

The medicinal properties of honey have been recorded on Egyptian papyrus as far back as 3,500 years ago.

- Natural honey has been found to inhibit the growth of microorganisms, and promote the healing of wounds and burns. It also has anti-oxidant and anti-inflammatory properties.
- Propolis, which is made by bees from plant sap, is used in cosmetics, tinctures and homeopathic treatments to treat a range of disorders, including but not limited to allergies, dermatological, oral, gastrointestinal and gynaecological problems.
- While royal jelly produced by worker bees has been touted as a superfood, be wary of any product claiming to contain it. A beekeeper estimates that harvesting even a teaspoon will destroy at least 500 undeveloped bees who, as newly-hatched larvae, consume it for a limited time, while the queen bee consumes it exclusively.

Sharon Chetty, *Business Day*, 19 August 2019

Ambiguity around citrus claims of bee-friendliness

The South African Advertising Regulatory Board (ARB)'s ruling in favour of the complainant on the purported bee-friendliness of a seedless citrus cultivar has highlighted the ambiguity around claims of bee-friendliness in the citrus industry.

A complaint was lodged by Citrogold that the marketing claim around Tango mandarins' bee-friendliness was not based on scientific evidence nor could it be verified. In their response. Stargrow Marketing and Eurosemillas SA (owner of the Tango brand) posited that the cultivar's parthenocarpy (seedlessness) made it unnecessary to prevent cross-pollination through killing pollinating insects during flowering, according to the ARB ruling.

"While the Complainant [Citrogold] made several references to the fact that the Tango product is sprayed with insecticides harmful to bees, the Advertiser [Stargrow Marking and Eurosemillas SA] in its response does nothing to refute this assertion," the ARB ruling continues. The advertising body took issue with the claim by the advertisers that their use of phytoregulators is "reduced", but not eliminated. "The product may therefore cause less harm to bees than seeded varieties, but this does not equate to being 'bee-friendly' as the consumer would understand it."

However, neither Stargrow Marketing in South Africa nor Eurosemillas SA, owner of the Tango brand, is a member of the Advertising Regulatory Board and therefore the ARB's ruling is not binding on them and the packaging is still in use. Stargrow Marketing could not be reached for comment, despite various attempts.

"The reason we approached the advertising authorities is because we know that growers of Tango are applying the same sort of chemicals as growers of other cultivars of soft citrus like clementines and Nadorcotts," explains Dr Viresh Ramburan, executive director of Citrogold.

"We were open to hear their arguments on which standards they use to qualify that their product is bee-friendly. We didn't think they had such standards in place and it seems that we were right. Claiming that

Tango fruit is bee-friendly without any qualification or standard in this regards is misleading to consumers and seeks to obtain an unfair advantage in the market for their product."
Bee industry experts have pointed out that there is no legal definition of what constitutes a bee-friendly product.

Carolize Jansen, *FreshPlaza*, 13 August 2019

South African oranges storm world markets

South Africa's flourishing fruit industry has increasingly made up a bigger proportion of the international trade, said the Bureau for Food and Agricultural Policy in its latest agricultural outlook for the period 2018 to 2028. One in every 10 oranges eaten around the world now comes from South Africa.
Citrus, grapes and top fruits, in particular, have strengthened their market position in the past decade. Citrus' market share has risen from 4% in 2001 to more than 10% last year, followed by table grapes (5% to 7%) and top fruits (3% to 6%).
Citrus is South Africa's biggest and most important fruit export, according to value and volume. By the year 2028 the country could be exporting 25% more cartons than last year, said the bureau. But to sustain this growth, new and diversified markets need to be found.
The EU and UK are far and away the most important export markets for locally grown fruit, but the dependence on these markets leaves South Africa vulnerable because the populations in both markets are growing at less than 1.5% a year. The report said these are also regions where there are no food shortages.
South Africa is the world's third-largest citrus exporter, after Spain and Turkey. Oranges make up the bulk of the exports. About 76% of the citrus that South Africa produces is exported, with 32% going to the EU and 10% to the UK.
About 25% of stone fruit (such as peaches and prunes), is exported, with 40% of the fruit going to the EU and 31% to the UK.
In fruits that are seeing production increases, such as lemons, limes and soft citrus, new markets need to be found where demand and buying power is expected to increase. Many of South Africa's competitors in the southern hemisphere are already a step ahead of us in some of these profitable markets and South Africa cannot afford to drag its feet, said the bureau.
A large proportion of new lemon trees are expected to begin producing fruit in the next few years. In 2009 a total of 4 449 hectares were cultivated. By last year this had risen to 14 470ha.
The US, EU, UK and Russia are the biggest importers of lemons and therefore South Africa's competitors are geographically more ideally located to serve these markets, said the report.

FreshPlaza, 26 August 2019

Spain: The port of Vigo will be the entry point for South African citrus fruits

The port of Vigo will become the entry terminal to Spain for South African citrus fruits, which will start arriving in September. According to the South African producers' association, shipments of at least 40,000 tonnes per year are expected to depart from Cape Town (South Africa) and Walvis Bay (Namibia) on ships belonging to the MACS shipping company. The containers will be transported to the nearby Vigo Fresh Port facilities, where they will not need to pass through the Border Inspection Post (PIF) at the Guixar quay first, as they would pass directly through the control of the inspectors on this ship.
The news has not been well received by the citrus sector of Castellón. The president of the Plataforma per la Dignitat del Llaurador, César Estañol, stated that this agreement shows that world citriculture is changing rapidly with the consolidation of countries in the southern hemisphere as reference producers. Faced with this reality, he said, "we only have the political solutions, which for now do not arrive. In this sense, the sector has been asking for months for the application of the safeguard clause included in the free trade agreement between the European Union and South Africa.

For his part, the general secretary of the Llauradors Union, Carles Peris, regretted that if shipments begin to arrive in September "there will be an overlap with Castellon's clementines campaign". In addition, he said he fears that a precedent will be set, since ports such as Bilbao and Algeciras are also interested in expanding the flow of agricultural products received from third countries.

FreshPlaza, 20 August 2019

Northwest South Africa: Agriculture and rural development lets citrus growers enter export market

South Africa’s Batlhako Temo Services have successfully entered the export market, making them the first black owned citrus orchard in the North West province to enter the global market. The company will see its products going to Middle East areas as well as Taiwan.
Having started the project in 2012 on a farm leased from the now Department of Agriculture, Rural Development and Land Reform, enterprise partner Issac Moilwa says the journey has not been easy. After the first difficult two years which saw the passing away of two members and a loss on production, the remaining members decided to introduce citrus.
The 61,5 hectare farm currently has 16,000 citrus trees. Although in around 2014 until 2017, the production was in teething stage, their dream was slowly gaining momentum. The North West Department of Agriculture and Rural Development assisted the business on two occasions with at least R800,000 (€47,000) of each of those years. With the funds, the cooperative improved their irrigation system and structure their office space and other logistics.
To date the company has employed 10 workers permanent and over 70 seasonal. The seasonal workers are divided into the local and export market workers. Their workforce includes a seasoned farm manager whom the cooperative commissioned to create a structure for the company and take it to international platforms. Their journey was faced with challenges however they did not despair."
“We were ready to export in 2018 but we could not get a pack house so our products ended in the local markets including SIR Fruit and Magalies Citrus Company. We were determined to break through and as such we did manage to get a pack house. So far we have managed to deliver seven containers and we hope to deliver more the end of the harvest season.”
North West MEC for Agriculture and Rural Development, Desbo Mohono, remain impressed by the orchard after visiting in the past few weeks. She has encouraged the team to work even harder and grow their global market. Mohono said she would wish to see many farmers tapping on the same knowledge and expanding their territories.

FreshPlaza, 29 August 2019

Fruit export company goes global

Turning the export fruit and vegetable industry on its head is Rondebosch resident Uzair Essack, a finalist in the 2019 Entrepreneur of the Year competition.
In just three years, the 27-year-old B Com student has built a global export business called Cape Crops with a customer base in 23 countries.
The entrepreneur says he didn’t just wake up one morning and decided to sell fruit.
“One business led to another until I eventually was airfreighting pineapples to Saudi Arabia. I saw the potential and decided to grow the business in which money literally grows on trees,” says Essack.
Utilising tech-savvy and innovative marketing strategies, Essack has engineered a fresh approach to the traditional fruit and vegetable sales model.
Upfront payment is one of these strategies. All his farmers are paid a fixed price, upfront in cash before the produce leaves the farm gate.
“I want the farmer to focus on producing the freshest and highest quality produce and not have to worry about when he’ll get paid, which is traditionally 60 to 90 days later.

"I get a cash discount, which immediately makes me more competitive and I get first choice of the produce."
Technology is another huge factor in the success of Cape Crops. Essack is one of the only fruit exporters to use social media to communicate with his customers.
His weekly WhatsApp broadcasts and e-newsletters showcase what produce he has available and at what price. He also uses these platforms to let his farmers know what produce his customers are looking for.
This has proved to be extremely successful and cost-effective.
He also believes in formulating tailor-made marketing strategies.
Essack has spent time in many of the countries that he exports to in order to understand each market's culture and values.
Doing so allows him to implement specific marketing strategies for that individual market.
"I have a Lebanese staff member who deals with our Middle Eastern customers. He is fluent in Arabic and English and has helped us to overcome the language barrier. The Middle East now represents 50% of our business, which shows that this model works."
To keep overheads to a minimum, Cape Crops shares office space using Cube Work Space.
"My sales agents are on the road visiting farmers, so this works for me," says Essack.
The huge growth in his business, he believes, can also be attributed to having a small team which allows agility when it comes to decision-making and implementing new ideas.
"I'm already three years ahead of my competitors and confident that our success will continue."
Essack is not a fan of loans and uses a small group of investors to fund deals where customers do not pay him upfront.
"About 30% of the deals I do require funding. This works on a deal to deal basis where they know exactly what the return will be, and they get paid back in 60 days."
His plans for the future includes to continue growing his business, with a focus on Africa and the Middle East, and to offer new produce to local consumers.
The 2019 awards ceremony for the Entrepreneur of the Year will take place at the Hyatt Regency Hotel, Rosebank, on Wednesday 4 September.
Sponsored by Sanlam and Business/Partners, the competition recognises and honours successful South African entrepreneurs in the small and medium enterprises (SMEs) sector.
"Being nominated as a finalist means everything to me as it gives me the opportunity to further inspire my brothers and sisters.
"I come from a difficult place but through sheer determination, perseverance and belief in my Creator, I've managed to set myself up for a bright future.
"I want to show people that anything is possible if you work hard and believe," says Essack.
The competition, now in its 31st year, celebrates excellence in entrepreneurship, serving as an inspiration to others to succeed in the world of business.
Finalists stand the chance to win prizes worth R2 million in total, which includes cash prizes of R500 000.
Finalists and winners are able to expand their networks and receive invaluable exposure for their businesses as a result of the competition.

People's Post, 27 August 2019

"The small-scale farmers are the most vulnerable"

Over the past two decades South Africa's capability to manage its water resources has declined.
Professor Mike Muller, an adjunct professor from the University of the Witwatersrand was at the Agri SA Water Symposium that was recently held in Somerset West. Muller said that water management was complicated and there was no one size fits all. "It is critical to implement legislation to protect water security. What use is a water license, when the dams and rivers are empty." He used an example of boreholes that supplied a Karoo town with water, but due to bad management the pumps broke down and as a result these towns now get water delivered once a week from a jo-jo tank on a truck.

Population growth and climate change will complicate water management further, he said. Muller pointed out that good water management has to address several socio-political issues. “Water has value and will be measured in social terms, meaning jobs, economic inclusion, and growth. Whatever we do for water in the future, it must address the needs of all people, including small scale farmers.”
The competition for water in South Africa will only increase, he said. “Commercial agriculture is just one sector in need of good water management and in the future will have to do more with less. Agriculture should focus on more efficient production practices, intensified farming, and making sure there are markets that will buy products.”
Mr Anil Singh, DDG Department of Water and Sanitation, said that water resource management on a local level is critical. In the meantime the Department is taking decisive action to curb pollution, Singh said. “We have a water quality strategy and are looking to implement it. Again, we need to look at local governments and what the failures are in the system, to prevent pollution.”
Prof Andries Jordaan, a research fellow at the University of the Free State said that food and water security, especially in the rural areas, are dependent on the local government and the community, not on the national government. “When we run out of water the most vulnerable in our communities, including small-scale farmers, will suffer the most. This will result in land reform failure and we simply cannot have that. We need water heroes.”
Dr Ivan Meyer, MEC for Agriculture in the Western Cape, said that the agricultural sector is of fundamental importance and plays an integral part in the Western Cape economy. “Agriculture in the Western Cape generates a total income of R21 billion a year and provides for 17% of the total employment in the Western Cape and 26,7% of agri-workers in South Africa. The Western Cape contributes 45% to South Africa’s agricultural exports. Reason enough to grow and protect this industry. We need to protect our resources, we need to protect agriculture, at all costs.”

FreshPlaza, 28 August 2019

Wine industry body remains committed towards land expropriation without compensation

Wine industry body Vinpro said while it objected to certain principles included in the report by the Presidential Advisory Panel on Land Reform, it supported the process through which the wine industry can provide further input over the next eight months.
The panel of experts endorsed the proposed policy shift towards using the provisions of the Constitution to expropriate land without compensation (EWC).
Their majority view was that it is an inescapable fact that Section 25 of the Constitution is compensation-centric.
“In other words, the notion and origin of “expropriation” draws from global examples where it is inextricably linked with some form of compensation,” the panel said.
The panel had therefore offered a proposal for a constitutional amendment that clarified that EWC may be necessary in limited circumstances, but certainly in order to elevate the objectives of land reform.
The state was already empowered under Section 25 of the Constitution to expropriate land for land reform purposes, but was required to pay “just and equitable compensation”. Whether, and when, such compensation could be set at zero had been the subject of debate over the past 18 months.
Vinpro managing director Rico Basson said they and their industry partner SA Liquor Brand owners Association (Salba) have participated in consultation processes regarding land reform from the onset, and will continue to emphasise their position on behalf of the wine industry in the next eight months.
Basson said that the wine industry remained committed to transformation and would continue to assist new entrants.
It would do this by developing workable partnership models, facilitating blended financing models for these businesses, helping establish market access and ensuring that the necessary systems are implemented to provide technical, financial and other support to land beneficiaries.
"The industry provided jobs to approximately 300 000 people throughout the value chain, of which 30 000 are at farm level,” said Basson.

Siyavuya Mzantsi, *Cape Times*, 12 August 2019

A blueprint for transforming South Africa's agricultural sector through CHANGE

A significantly transformative and replicable broad-based initiative within the agricultural sector has recently come on-stream via the conclusion of a transaction between citrus and grape farmer, Schoonbee Landgoed, and pioneering black-owned company, Thebe Investment Corporation. Known as Project CHANGE, this initiative has the potential to provide an innovative, long-term model for partnering between established white commercial farmers and black institutional investors, while empowering local communities and supporting new entrant (including small holder) farmers in achieving financial viability.

Project CHANGE is an initiative focused on the commercial production, packaging, marketing and sales of table grapes and citrus. Grounded in the spirit and principles of the National Development Plan, the goal is to become a market-leading, black-owned "profit-for-purpose" farming initiative that is able to service local and international markets with premium products, while at the same time empowering the communities involved in the project through job creation and the provision of education, training, and healthcare services.

The project consists of two recently developed farms with existing income contributed by Schoonbee Landgoed, and Thebe Investment Corporation's equity contribution towards the acquisition of just under 400 hectares of additional land with recognised water rights for further citrus and grape development. Packhouses will also be constructed as well as three primary healthcare and educational facilities for the surrounding communities.

It is anticipated that over 1,200 new jobs will be directly created through Project CHANGE with an estimated impact on 8,000 jobs throughout the complete value chain in the country.

Project CHANGE is the brainchild of Schoonbee Landgoed, an established citrus and grape farmer and exporter situated in the Loskop Valley of Groblersdal in the Limpopo Province. The family-run business has been operating in the area for the past 75 years and has recently embarked on a transformation process moving from a family-based business to a corporatised business based on shared value principles. This notion strongly resonated with Thebe Investment Corporation which themselves adopt a long-term investment outlook that combines a passion for community enablement without compromising on sound commercial principles. It was through this shared vision that Project CHANGE emerged.

Co-owner Gert Schoonbee says, "Over the last two years we have been working intensively to develop a profit-for-purpose concept that has the objective of creating shared value, during which time we consulted with various stakeholders in the surrounding communities. We concluded that the social impact could be maximised in our area by providing dignity to people through addressing three specific social needs. The first is to provide employment for people living in the Loskop Valley and surrounds. Secondly, we want to support worker and wider community health by providing primary healthcare facilities and services. Thirdly, in order to unlock human capability and break the systemic cycle of poverty, we are providing education and training opportunities to our workers, their children and budding entrepreneurs in the surrounding communities. Essentially, while citrus and grapes may be the core business of Project CHANGE, the core purpose is to affect change in agriculture through empowerment and upliftment."

Mokgethi Tshabalala, Thebe Investment Corporation's general manager for agro-processing, says that addressing the primary healthcare and education needs of the community have been "baked" into the forecast commercial model and will not only depend on dividends which are anticipated to only flow after the first seven years. This is due to the capital-intensive nature of Project CHANGE. In addition to this, the size of the 16,000+ strong worker base and immediate community would result in a minimal dividend per family.

Both Thebe Investment Corporation and Schoonbee Landgoed realise that this model which was adopted for Project CHANGE may put pressure on the short-term financial returns to the shareholders, but they believe it ensures long-term sustainability for all stakeholders. The partnership is, therefore, a deliberate shift away from a singular focus on the wealth of shareholders to the long-term health of the company

when looking at its wellbeing through the different lenses of financial, social and environmental perspectives.
From a business perspective, Project CHANGE will have access to the local and international retail markets that Schoonbee Landgoed currently services. Around 70% of CHANGE's volumes will be earmarked for export to 60 countries.
Joint management of Project CHANGE will harness Schoonbee Landgoed's skills, market and cultivar access, packing facilities and partnerships while leveraging Thebe's track record in investment management and community engagement. A joined transformation plan between Project CHANGE and Schoonbee Landgoed will drive diversity with a specific focus on gender, race and youth.
Project CHANGE has been made possible through a partnership between Schoonbee Landgoed and strategic equity partner, Thebe Investment Corporation, as well as debt financing provided by the Land Bank. Says Schoonbee, "In Thebe Investment Corporation we found an institutional investor who shares the ethos of long-term sustainability which overrides the potential influence of and dependence on a single individual. This perfectly mirrors the values of Schoonbee Landgoed."
Thebe Investment Corporation's mandate is to align with government's key priorities in the National Development Plan which includes, amongst others, the support and development of black-owned farms and small-hold farmers so as to strengthen commercial viability and aggregate them into the mainstream supply chain. To achieve this, a primary agricultural conduit is required which not only has access to an existing off-take network of its own but who can also assist new entrants with ensuring the quality and consistency of supply that is required by the off-takers. Project CHANGE will result in such a conduit.
Tshabalala says that Thebe seeks to be the key partner and enabler in the food sector for the development and expansion of both the domestic and export markets across the value chain, whilst developing communities remains part of the bottom line. "Project CHANGE will provide a powerful working example of this. It will leverage off Schoonbee's and Thebe's institutional knowledge and decades of farming experience, community empowerment and investment management. We firmly believe that although agriculture is diverse, the principles where successful commercial farmers partner with institutional black investors and share the created value of the enterprise with their workers and communities have great potential for replication."
Project CHANGE is already up and running. All the citrus orchards have been planted and 68% of the vineyards have been developed. The necessary packhouses will be built by the end of 2020. The first training and primary healthcare centre will be completed by mid-2020.
Investment banking firm Bravura, which specialises in corporate finance and structured solutions services and is now in its twentieth year, acted as the corporate advisor to Schoonbee Landgoed and CHANGE. Thebe Investment Corporation (Pty) Ltd contributed equity for the establishment of additional citrus and grape developments, and senior debt and mezzanine funding was raised from the Land Bank to fund the developments.

Farmers' Review Africa, 20 August 2019

Banking & Capital Markets

Absa to expand its agriculture loan book in Africa

Absa Corporate and Investment Bank (CIB) yesterday said that it planned to expand its agriculture loan book to countries such as Ghana, Kenya, Tanzania, Uganda and Zambia, due to good long-term growth prospects in the rest of the continent.
Absa CIB agriculture head Roux Wildenboer said the lender wanted to grow its footprint in both its domestic market and the rest of the continent due to strong demand.

“Agricultural debt is relatively higher than it was in recent history and the ability of agricultural businesses to borrow to reinvest has been curtailed, which has a snowball-effect on investment in the sector,” Wildenboer said.
“This is seen as a cyclical phenomenon, and even though on aggregate borrowing is not as strong as it used to be, there are still businesses which are growing aggressively.
"This is the reason why Absa is optimistic about prospects in the agricultural sector.”
However, Absa CIB warned that the big concern in South Africa was the economic performance of the economy, which had stymied demand for agricultural machinery and implements, particularly the sale of tractors and combine harvesters in the past two years.
Data from the South African Agricultural Machinery Association (Saama) showed that July tractor sales plunged 30 percent year-on-year in the month from 525 units to 368 units, while year-to-date combine harvester sales were almost 13 percent down on last year.
Saama chairperson Greg Cadman said two main factors were holding sales back.
“Firstly, uncertainty in the market caused by the current political environment, exchange rates and final crop harvests. Secondly, farmers are very wary about their cash-flow situation,” Cadman added.
“The current industry perspective is that sales should pick up towards the end of the year. Nevertheless, it is likely that tractor sales in the 2019 calendar year will be at a level between 15 and 20 percent below the 6 700 units sold last year.”
South Africa’s agricultural sector is facing uncertain times over the mooted land expropriation without compensation policy.
Last year, the National Assembly adopted a motion to amend Section 25 of the Constitution to allow expropriation without compensation.
The Presidential Advisory Panel on Land Reform’s report released last month also endorsed expropriation without compensation, especially abandoned land; land held purely for speculative purposes and land held by state entities that wasn’t being utilised, among other qualifications.
Wildenboer said the lender saw potential for further growth and commercial success in the agricultural sector in South Africa, but that the government would need to reassure investors that the proposed land reform programme implementation would not affect investor confidence.
“Notwithstanding some headwinds in certain areas, Absa CIB sees agriculture as a vibrant and strategic market.
"It is the bank’s intention to increase its involvement across the continent in the agricultural sector, and appetite to embark on this strategy has been reaffirmed,” Wildenboer added.

Kabelo Khumalo, *Business Report*, 7 August 2019

Banks worried over new S. African law giving clients debt relief

South African banks are concerned that some of their customers will get away with not having to repay their debt.
President Cyril Ramaphosa earlier this week signed the National Credit Amendment Bill into law, setting the groundwork for over-indebted consumers to have payments suspended, in part or full, for as many as 24 months, or even scrapped if their financial situation has been found to have worsened.
The bill was opposed by the banking industry, clothing retailers who provide credit and the opposition Democratic Alliance as it would drive up the cost of loans for low-income earners, restrict lending and encourage bad behavior from borrowers.
“It’s disappointing that after our petition, the president made no attempt to interact with the industry and understand our concerns,” Cas Coovadia, the managing director of the Banking Association of South Africa, said on Friday. “This is an issue of serious concern.”
The association did an economic impact assessment and engaged the Department of Trade and Industry, which is spearheading the bill, and found that banks will either have to price in higher risks or avoid lending to low-income customers altogether.

"This could have serious economic implications," Coovadia said. "We will await the gazetting of the bill and details around its implementation. We will sit down and consider our other options."
South Africa's National Treasury estimates that the debt-relief proposals could result in the write-off of 13.2 billion rand to 20 billion rand ($1.3 billion) of debt under provisions of the bill, Johannesburg-based newspaper *Business Day* reported. The bill provides for the extinguishing of the debt for consumers who earn a gross monthly income of no more than 7,500 rand, have unsecured debt amounting to 50,000 rand, and who have been found to be critically indebted by the National Credit Regulator.
The six-member FTSE/JSE Africa Banks Index fell 0.7% by 12:09 p.m. in Johannesburg on Friday, led lower by Capitec Bank Holdings Ltd., the nation's largest unsecured-credit provider, which was down 2.3%.

Roxanne Henderson, *Bloomberg*, 16 August 2019

The one job in banking the robots can't take

When HSBC thwarted a $500 million central-bank heist, sophisticated computer software didn't raise the alarm. The funds flowed undetected from Angola's reserves to a dormant company's account in London. It was a teller at a suburban bank branch who became suspicious, declined a request to transfer $2 million, and triggered a review that uncovered the scam, according to one account of the episode.
That was two years ago, and the finance industry's battle to stop the illicit transfer of as much as $2 trillion a year around the globe hasn't become any easier. At least a half-dozen lenders in Europe have found themselves at the centre of fresh allegations of dirty money schemes in the past year. The wave of scandals — at Denmark's Danske Bank, Deutsche Bank, and others — is undermining confidence in the industry well beyond the individual institutions involved.
Financial-services executives have had little choice but to significantly step up regulatory efforts; more than 1 in 10 now spend in excess of 10% of their annual budgets on compliance, according to financial adviser Duff & Phelps. Banks are eager to find ways to bring that spending down — management, employees, and shareholders never want to spend on what are effectively internal cops. Today there's a sense that growth may be peaking. About two-thirds of institutions considered systemically important on a global level, a leading indicator for the industry, expect the size of their compliance teams to remain unchanged or shrink, according to a *Thomson Reuters* Regulatory Intelligence report. The largest companies want to adapt their teams to grow or scale back as necessary, the report said.
That's led to buzz that banks are deploying artificial intelligence to replace surveillance staff. HSBC last year started using AI to screen transactions, and the two biggest Nordic banks have said they're replacing compliance staff with algorithms. Online banking startups such as Revolut, which rely on computerised efficiency to compete with established lenders, are finding compliance a challenge they need to address.
So far, machines are confined to simple know-your-customer (KYC) applications and are far from ready to replace humans, says Tom Kirchmaier, a visiting fellow at the London School of Economics' Centre for Economic Performance. He's not optimistic that a major advance is afoot, either. "There's a lot of talk but no action," he says.
Take ING Groep, which last year paid €775 million ($869 million) to settle an investigation by a Dutch prosecutor into alleged money laundering and other corrupt practices. Even though the bank uses machine learning to filter out false alerts on potential bad actors, the lender has had to ramp up the number of individuals handling KYC procedures.
It's tripled compliance personnel in the Netherlands over eight years; staff dedicated to KYC account for 5% of total employees.
Banks and tech companies need to overcome a number of obstacles for AI to succeed in tackling money laundering. For starters, they need better customer data, which is often neither current nor consistent, especially when a bank spans multiple jurisdictions. Enhancing the quality and frequency of data gathering is a crucial first step.
Banks are also constrained in their ability to detect bad behaviour, with or without computers, because competitors and national law enforcement agencies won't share data. Across Europe, for example, regulation and enforcement are split along national borders. Lenders would benefit from a common

European anti-money-laundering regulator, data sharing among banks, and a more open dialogue with bank supervisors, Citigroup analysts wrote in a note to clients in June.
When banks do share information, it's often unhelpful. They tend to over-report suspicious activity to the relevant agencies to shed responsibility, but enforcement authorities typically don't provide their findings to the financial companies. What's more, banks, wanting to shield bigger clients from unnecessary scrutiny, often under-report activity they should be flagging, according to the LSE's Kirchmaier. That leads to potentially suspicious transactions being classified as normal. The algorithms learn to replicate those types of decisions.
In short, the historical dataset available to train the machines is misleading, complicating their ability to learn detection.
Criminals, by contrast, are constantly adapting their ways, finding new routes for their cash when existing ones are blocked off. Catching tomorrow's money launderers requires anticipating where they'll move next. Will they trade gold or crypto assets? When parameters change even slightly, AI struggles to stay ahead of the criminals.
Trust in financial services after the 2008 crisis is taking a very long time to rebuild. Banks are wary that they risk teaching machines to stereotype customers based on where they come from or where they do business. "Ethical concerns associated with AI are rightfully restraining banks' full embrace of machine learning," says Alexon Bell, chief product officer at Quantexa, a London-based data analytics company that counts HSBC among its customers.
Regulators, frustrated with the slow speed of change, have encouraged banks to deploy more technology. In December the US Treasury Department's Financial Crimes Enforcement Network, jointly with the Federal Reserve and other US agencies, called on banks to try new approaches to meet anti-money-laundering requirements, including AI, and have offered leniency if the tools uncover deficiencies in existing systems.
One thing seems clear: Compliance spending at banks may be shifting away from employing humans to adopting new software. But for now, those living and breathing internal cops are here to stay.

Elisa Martinuzzi, *Bloomberg*, 25 August 2019

Sefa set to boost entrepreneurs

The KwaZulu-Natal (KZN) Small Enterprises Finance Agency (Sefa) is targeting the manufacturing and franchise sector this year as it widens its wings within the province and boosts entrepreneurs.
The development finance institution's regional manager, Thula Mkhwanazi, says they have a focused drive on township-owned businesses as well as investments in productive sectors – provided they are backed by good contracts from reliable off-takers.
"In the current financial year, we would like to grow our portfolio on the manufacturing and franchise sectors. We continue to pursue relations with providers of markets both in the private and public sectors. Businesses owned by women and the youth will also be at the core of what we would want to achieve in the current financial year," says Mkhwanazi.
The institution said in its previous financial year, which ended on 31 March, the organisation had exceeded its targets in approval at 133 percent (R38 655 839) and disbursements at 113 percent (R23 200 056). The regional office funded black-owned enterprises to the tune of (R18 221 150), youth-owned enterprises (R6 164 847), and township-based enterprises (R16 448 869) – facilitating 266 jobs in the process.
Entrepreneurs in the productive sectors of the economy received R16 181 775. The above figures were for direct lending only and exclude the wholesale handled by Sefa's head office.
Sefa KZN says it has also launched a new fund earmarked for military veterans. Mkhwanazi describes it as a brilliant initiative for military veterans who are in business and those thatwho aspire to get into business, provided they have financially viable business cases. He says there have been many enquiries, but the uptake has been low.
"I am anticipating that the uptake will improve as the fund gains momentum and is marketed broader."
Mkhwanazi is of the view that the best way for Sefa in KZN to respond to the Fourth Industrial Revolution (4IR) is to adopt it within the broader South African environment.

“Through our partnership with Finfind we have created platforms that make Sefa more accessible without necessarily physically visiting the office. Through the Finfind platform you can access Sefa from all corners of KZN.”
He says the cost of data and connectivity in the outer lying areas remains a challenge. They continue to try to incorporate technology as much as possible into their operations in order to be more effective and efficient, he says.
But University of KwaZulu-Natal’s graduate school of business and leadership entrepreneurship expert, Dr Macdonald Kanyangale, says that reaching out to small businesses should not just be a matter of geography.
“There are terms and conditions which may inhibit entrepreneurs even while services are right on their doorsteps. It is also about the support they provide to enable these entrepreneurs to repay the loans they received,” says Kanyangale.
He says that traditional banks are closing physical branches as they guide people to operate via digital means, which are cheaper and reduces the overheads of the institutions.
He says development finance institutions can increase their digital presence as many people tend to gravitate to these platforms, thereby, reducing their operating expenses.
Kanyangale says digital platforms would benefit poor people as they require low distribution channels.

Given Majola, *Business Report*, 25 August 2019

Tough economy dries up Industrial Development Corporation funding

A tough economic environment has resulted in the Industrial Development Corporation falling short of performance levels achieved in previous years, according to its CEO Tshokolo Nchocho.
The IDC, a national development finance institution, on Tuesday released its financial results for the year ended March 31, 2019.
During the 12-month period the IDC approved R13.1bn in funding, compared to R16.7bn approved in 2018.
It disbursed a total of R11.8bn, compared to the R15.4bn reported in 2018, according to a note from Nchocho.
The funding is expected to "create and save" over 19 000 jobs, some 10 000 fewer jobs than projected in 2018.
"Challenging trading and operating conditions in key sectors such as manufacturing and mining, which are crucial for the IDC in terms of our developmental mandate, in the main accounted for much of the corporation's decelerating financing activity," Nchocho said.
Weak domestic demand and difficult global trading conditions, due to US protectionism and international trade tensions, combined with policy uncertainty, interruptions to electricity supply and low investment confidence negatively impacted investment spending in key sectors of the economy, he said.
"Many of the corporation's business partners seem to have put their investment projects on hold, slowing down their borrowing plans," Nchocho said.
Some 46% or R6bn of the funding approved was for black industrialists. The IDC has spent 93% of its five-year target of R23bn in funding for black industrialists by 2021.
A total of R3bn was approved for women entrepreneurs, with the IDC meeting its five-year target of R4.5bn funding for women entrepreneurs in 2018.
Further to the financial results, the IDC received an unqualified audit opinion from the Auditor General. However, it reported irregular expenditure of R5.7m, higher than the R1.2m reported in 2018. The bulk of the irregular expenditure (more than R5.4m) went towards costs related to business support, and the rest was spent on sponsorship.
Fruitless and wasteful expenditure recorded for the period was R443 768, lower than the R2.6m reported in 2018. This is expenditure that could have been avoided if care had been taken. The fruitless and wasteful expenditure listed in the financial statement notes of the IDC include travel cancellation costs, duplicate payments, cancellation payments for training and payments for security services.

The corporation remained profitable, reporting a net profit of R720m. However, this was is down from R3.2bn reported the year before. Its net cash position was R9.76bn, higher than the R6.137bn reported in 2018. Total assets of R144.6m exceed total liabilities of R49.3m.

The IDC in its report said it had identified a matter of potential conflict of interest in relation to an executive. The executive, through a disciplinary inquiry, was found to have failed in declaring a conflict of interest with regard to a close family relationship in one of the IDC funded business partners.

The IDC did not name the executive but said the board took steps to address the matter in line with the corporation's internal policies.

"The board is in the process of closing out the irregularity. The finalisation of the irregularity depends on the recommended sanctions from the chairperson of the disciplinary inquiry," the IDC's financial report read. The board has said this is part of a continuous process of "strengthening" the IDC's culture and governance.

Lameez Omarjee, *Fin24*, 13 August 2019
