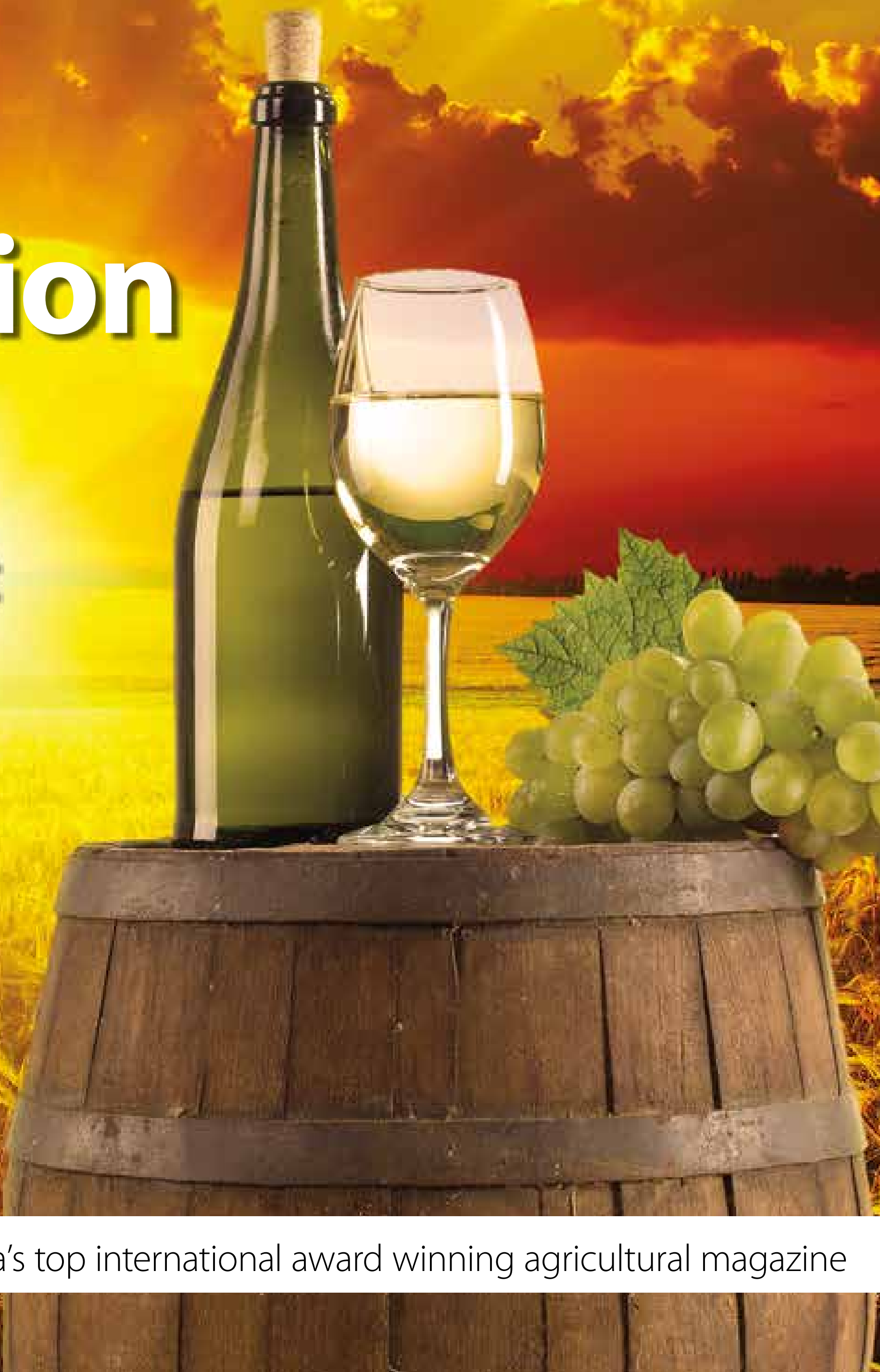
Issue 43 • November/December 2019

HarvestSA

Securing South Africa's Food Resources



Nation in conversation

Grain, grapes and growth at Nampo Cape

Risk management

The role of crop insurance

Good for ewes

Feeding during pregnancy

New life for soil

Carbon offset advantages

RSA R29.95
ISSN 2305-0551
9 772305 055108 43

South Africa's top international award winning agricultural magazine

CREDITS

Editor	Greg Penfold
Art Director	Brent Meder
Layout & Design	Monique Petersen
Project Manager	Terrence Damster
Advertising Executives	Terrence Damster, Wendy Bresler, Gordon Campbell, Luan Erasmus
Distribution Manager	Edward MacDonald
Circulation	Lee-Ann Lawrence
Subscriptions	Lee-Ann Lawrence (leeann@capemedia.co.za) Local price: R172.00 International price: R469.00
Client Liaison	Phumza Mbodlana
Accountant	Chevonne Ismail
Accounts Department	Brigitte Eberbach
Debtors Department	Nadeema Abdullah
Managing Director	Robert Arendse, robert@capemedia.co.za
Financial Director	Andrew Brading, andrewb@capemedia.co.za
Printers	FA Print

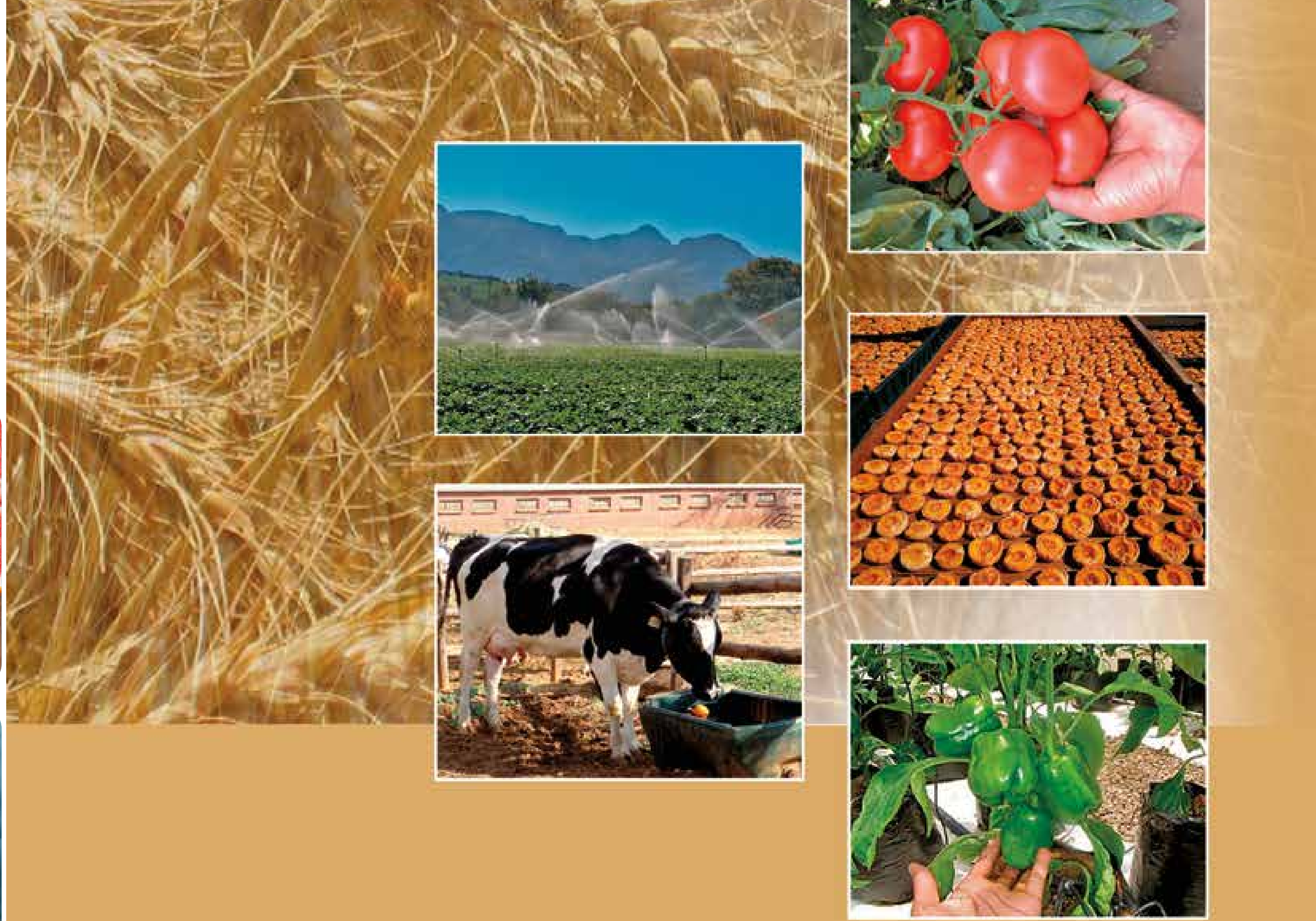
On the cover

CAPE MEDIA HOUSE
28 Main Road Rondebosch 7700 • Tel: 021.681.7000 • Fax: 021.685.4448
E-mail: info@capemedia.co.za
www.capemedia.co.za
CAPE MEDIA is wholly owned by KAQALA MEDIA (Pty) Ltd

CONTENTS

www.harvestsa.co.za

CAPE MEDIA



EDS NOTE

GREG PENFOLD
greg@capemedia.co.za

Climate of change

South African farmers have much to be concerned about, but at least catastrophic bush fires are not among the list of woes at present. Let us spare a thought for farmers in Australia. Already struggling under the burden of a drought that is proving as devastating as the drought in South Africa, Australian farmers are entering uncharted territory as unprecedented bush fires blaze across a thousand-kilometre front. Of course, as is typical of true farmers worldwide, they are soldiering on. However, it must be asked whether the climate denialist stance adopted by the Australian government is not making things worse. Does it make sense, for instance, to award a massive water-intensive coal mining contract in an environmentally sensitive region of the world's driest continent?

South Africa has had its fair share of nonsensical decisions of this kind, including the notorious decision of former Ministers Molewa and Zwane, under the Protected Areas Act, to grant Atha-Africa Ventures (Pty) Ltd (Atha) permission to mine in the Mabola Protected Environment. Fortunately, it seems that ministers and judges are reading the Constitution with a little more attention these days, as the judgment was set aside. Coal remains high on the government's agenda, even though the main export markets for SA coal are transitioning away, but hopefully the advantages of a just transition away from coal will become clearer.

The advantages for agriculture are certainly becoming clearer.

Not only are consumers driving demand for more sustainably produced food worldwide, but the transition is creating unsuspected parallel opportunities. One of the most interesting is the possibilitiy of generating ancillary income by delivering carbon offsets to large emitters obliged to pay carbon tax. This is one positive incentive among many to stack up against the negative or risk-based incentives driving more water-wise and soil-friendly practices.

Access nutrition

The Agricultural Research Council secures national food security

The United Nations through the Millennium Development goals describes poverty as the inability to feed the nation with quality nutritious food. The United Nations aims to eradicate poverty and malnutrition by 2030. Poverty is the most expensive exercise economically and socially. It is depriving the people quality health care, education and living standards.

In 2006, the United Nations said, "Children living in poverty experience deprivation of material, spiritual and emotional resources needed to survive, develop and thrive, leaving them unable to enjoy the rights and achieve their full potential as members of society." Children are the future of any country, yet they find themselves at the forefront of poverty and hunger.

The Food Agricultural Organisation has a goal to feed 2.9 billion people by 2050. Sub-Saharan Africa is among the fastest growing regions, between 2004 and 2014, with an average growth rate of 5.8%. The World Bank has forecast that by 2030 one in every 2 people in Africa will be living in poverty.

As the world celebrates World Food Day on 16 October 2018, the above scenario paints a grim picture for policy makers, political leadership and the agricultural sector. It requires concerted efforts to change the policy direction of ending poverty and hunger. There is a need for unified proactive efforts to push back the frontiers of poverty.

In an effort to eradicate poverty and hunger, the African Union through its 2003 Maputo Declaration emphasised the need for African countries to utilise their own strength, ability, resources and political leadership to generate development and growth. The then African Union chairperson and Nigerian President Dr Olesegun Obasanjo said, "Improving agricultural performance is at the heart of improved economic development, growth and its role in the poverty eradication and in the restoration of human dignity can never overemphasised."

Agriculture is the best-placed sector to effect food production and consumption of nutritious food needed for healthy, productive and active lives.

Access to adequate and affordable nutritious food is the primary function of the sector.

The Agricultural Research Council has a history spanning over 100 years to assist the agricultural sector and supports government programmes to end poverty and malnutrition, especially as pertains to the development of women and children. Through its awareness programme, the Agricultural Research Council has been encouraging communities to start planting and eating orange sweet potatoes.

> By accessing improved technologies provided by the ARC, small-holder farmers can play a significant role in increasing food availability close to where it is most-needed

This benefit of this staple may be particularly true for children. In several studies from across Africa, sweet potatoes were found to contain between 100-1,600 micrograms (RAE) of vitamin A in every 3.5 ounces—enough, on average, to meet 35% of all vitamin A needs, and in many cases enough to meet over 90% of vitamin A needs (from this single food alone).

With the increase of fuel prices and ever-changing climatic conditions, the Agricultural Research Council through its research and development is at the forefront of supporting national programmes and policies. The Agricultural Research Council is also creating awareness about using indigenous crops and livestock. Indigenous crops are adapted to grow under extreme local climatic conditions where other crops are difficult to grow. There exists an enormous opportunity for the production and consumption of indigenous foods beyond rural areas.

Indigenous crops such as Bambara and cowpea are a good source of fibre, calcium and Vitamin B, E and K. Indigenous foods have the ability to provide adequate nutrition needed to keep the nation healthy. Proper marketing and re-introduction of indigenous food can also have much impact in reducing hunger and poverty. Indigenous food is traditionally produced by small-holder farmers.

South Africa is proud of its widely diverse cultural groups; however, only a few communities have maintained some of the indigenous animals that have survived the harsh conditions throughout the years such as Nguni cattle. Farming with indigenous animal has its advantages because of the indigenous knowledge passed from generation to generation. The Agricultural Research Council through its research and development has been instrumental in increasing food supply and reducing hunger.

The Agricultural Research Council is a premier science institution with a national footprint that conducts research with partners, develops human capital and fosters innovation in support of the agricultural sector. The ARC provides diagnostic, laboratory, analytical, agricultural engineering services, post-harvest technology development, agrochemical evaluation, consultation and advisory services, food processing technology services as well as various surveys and training interventions. For more information, visit the ARC website at www.arc.agric.za or call (012) 427 9770 or download the ARC Hub App at archub.agric.za, also available on Android and IOS.

South African small-holder farmers currently lag behind other regions in terms of farm productivity levels, with depressed crop and livestock yields and limited use of irrigation and other inputs. By accessing improved technologies provided by the Agricultural Research Council – much of which is simple and relatively low in cost – small-holder farmers can play a significant role in increasing food availability close to where it is most-needed, raise rural incomes and expand employment opportunities, as well as in contribute to growth in exports.

Small-holder farmers require improved on-farm support services and pilot projects targeted at poorer communities and a supportive policy environment. Through its small-holder farmer development programme, the Agricultural Research Council is assisting the small holder to utilise the scientific methods that can improve the quality of their produce.

The Agricultural Research Council acknowledges the role agriculture, farming and food security can play in breaking the cycle of poverty. The Agricultural Research Council is committed to continuing to support farmers through its extensive research and technology transfer.

Grain, grapes and growth

Nation In Conversation puts Western Cape agriculture in the spotlight

Jannie de Villiers, CEO of Grain SA; Francois Strydom, CEO of Senwes; Dr John Purchase, CEO of Agbiz; Leona Archary, Head of Agriculture at Bigen Africa; Theo Vorster, Galileo Capital and Dr Ivan Meyer, Western Cape Minister of Agriculture

The second edition of Grain SA's Nampo Cape agricultural show took place from 4-6 September in Bredasdorp. The show was a tremendous success, attracting great interest from the industry and the public alike. An important role was played by agri talk-show Nation In Conversation, which hosted a number of sessions in which key stakeholders in the agriculture value chain got together to have serious discussions about the state of agriculture in South Africa. We present the highlights below.

Creating a growing economy in South Africa

The first Nation in Conversation session, facilitated by Theo Vorster, made it clear that the Western Cape is better able to support its agricultural sector than is the case in much of the rest of the country.

The panelists – Jannie de Villiers, CEO of Grain SA; Francois Strydom, CEO of Senwes; Dr John Purchase, CEO of Agbiz; Leona Archary, Head of Agriculture at Bigen Africa; and Dr Ivan Meyer, Western Cape Minister of Agriculture – all agreed that the crisis in which the country's agricultural industry finds itself cannot purely be blamed on the weather.

Meyer stated that agriculture is a priority for the Western Cape government; government must pay attention to the communities so as to better understand their needs and challenges.Calling for the protection of the industry, Strydom pointed out that South Africa produces 38 major commodities, of which 24 are net export products, making the country an immensely important agricultural producer. Strydom urged people to put aside their differences and stand united during the time of crisis.For Purchase, the Western Cape exists almost independently from the rest of the country.

Archary said that although the planned agricultural development agency does not intend to interfere with working systems, in roughly 80% of cases support to emerging farmers is inadequate.

Access to finance is critical. The planned agricultural development agency could be pivotal in this regard.

Agriculture accounts for 10% of the Western Cape's gross domestic product, or R43 billion a year, and employs more than 31 000 people in the province–a critical factor in ensuring rural stability.

Agricultural success through transformation

At the second session of Nation in Conversation, facilitator Theo Vorster spoke with Kosie van Zyl, shareholder and mentor of Agri Dwala, Gavin Jaars, director of Agri Dwala, Rupert Koopman, a CapeNature botanist, Alfreda Mars, a commercial grain farmer and member of Grain SA, and Joyene Isaacs, the head of the Western Cape's Department of Agriculture.

A passion for agriculture and partners is a prerequisite for sucessful transformation projects, said Isaacs: "We should not be ashamed to say that agriculture wants to make money." Isaacs added that agriculture cannot simply play a social role. The government cannot do everything for everyone, so partnerships with the private sector are essential. Emerging commercial grain farmer and Grain SA member Alfreda Mars agreed, adding that she had good support from private companies. She emphasised that long-term planning is extremely important and further training is just as important. "Business plans are not written to last just a month. You don't get a bad farm. You have to make it work," says Mars.

Kosie van Zyl is one of the mentors of the successful Agri Dwala empowerment scheme in Napier, where he acts as a partner of the directors of Agri Dwala, Gavin Jaars, who has achieved great success since 2015.

"We are very happy with the Department of Agriculture in the Western Cape. There are counsellors who work after hours. That is why agriculture in the Western Cape is progressing," said Van Zyl, adding that continuous training and skills-enhancing courses are crucial to any farming success.

Agri Dwala Operational decisions are made weekly at Agri Dwala, while the board plans three to five yearsd ahead, said Jaars, adding, "Talk to your neighbours."

Nature botanist Rupert Koopman is involved in the conservation of rare plant species. In most cases, these plants are on private land, making cooperation with farmers and rural development essential.

Whereas in the past it was "farmer against nature", Koopman says that revival farming is growing in the Western Cape. "The ideal would be if nature could be left completely at peace, but that is not practically possible," said Koopman. "We get new insect species all the time, and we don't know exactly what their role is."

Van Zyl recommended that farmers should aim for business plans that are profitable and be flexible. "Get the right people involved. For me, it's about the success of the people, how he better educates his children, how he treats his wife better. The social impact is worth much more than money in the bank."

Agribusinesses can help a lot of emerging farmers, said Mars: "A positive attitude is essential to success. The Western Cape department is truly supportive. Run your business right."

Agriculture is becoming more inclusive, but it is imperative to engage the youth, Isaacs affirned: "How do we get children to think positively about agriculture? Then we will be inclusive. We need to get young people interested.

Our capacity, investments and knowledge must be transferred." Isaacs concluded, "We are moving in the right direction, we must duplicate successes."

Focus on grain

The morning session of Nation in conversation on Thursday, 5 September, at NAMPO Cape van Bredasdorp Park in the Western Cape, attracted great interest, with a packed audience attending the session.

Host Theo Vorster led a fascinating discussion with his panellists: Dr Dirk Strydom, Grain SA Economist; Gert Claassen, Western Cape producer; Richard Krige, National Barley Committee Chair; Cobus Bester, Western Cape producer; Willem Botes, Stellenbosch University's Faculty of Agri-sciences.

Commodities are in a super-production cycle at present, indicating lower prices, said Strydom, who predicted that prices will move sideways for the foreseeable future. Vorster emphasised that producers cannot rely on price increases and should rather focus on other elements.

This year's rainfall had reached about 50% of the long-term average in Western Cape winter grain areas, said Krige.

"Twenty years ago, this rainfall would have resulted in a total catastrophe. However, there is currently no total crop failure, thanks to new practices and technology."

Swartland farmer Claassen said the northern regions were being hit harder: "Genetics has helped a lot lately. Harvests are resistant in terms of our rainfall. Although we are somewhat concerned about the heat forecast, the Western Cape wheat farmer is at the forefront of fine management. With good rain we can foresee close to an average harvest."

In Bester's area of the Swartland, below average rainfall presented a challenge. "Climate change or the drought cycle makes it difficult and we will have to adapt quickly. We will have to look at profit margins, especially in marginal areas."

Although Overberg Agri's data showing that the rainy season in this area has shortened by three weeks in the past decade compared to the previous 80 years' average, Bester said the cultivars he plants should be able to adapt thanks to good root systems. Botes added that researchers and breeders have focused for too long on what goes on above ground; the new focus is on well-developed root systems in the development of new cultivars.

(from left) Theo Vorster, Kosie van Zyl, Gavin Jaars, Rupert Koopman, Alfreda Mars, and Joyene Isaacs

Sometimes the best advice is to listen to the older generation of experienced farmers in your area who have withstood many drought cycles.

Despite the last decade putting the local wheat industry in a cost squeeze, Strydom reported that several initiatives to assist the industry are in place, including a review of pricing structures, regulations on new cultivars, systems to encourage seed growers to engage in technology, and a revised rating system that could soon be signed by the Minister of Agriculture.

Tillage is one factor that Western Cape farmers can control. Revival agriculture is widely accepted and implemented, and growers say a crop rotation system that includes legumes is essential.

Krige said a livestock component is also essential to keep cash flow going during a drought, although available feed and groundwater resources remained a concern for summer.

Bester said a great way to hedge risk is to build up humus and carbon in your soil. Smaller farmers should not over-capitalise on expensive technology because there comes a point where the increase in yield is not enough to cover the costs.

Researchers and industry organisations are conducting trials to investigate the viability of alternative legumes. Some of the crops include lentils, chickpeas and oats.

Security issues in rural areas

Not only are safety and security issues in rural areas becoming increasingly prominent but they have gone beyond stock theft and farm attacks, with rural communities also affected by traffic disruptions and attacks on trucks.

These issues were discussed by host Theo Vorster and his guests: Jannie Strydom, CEO of Agri Western Cape; Reinhard Geldenhuys, Overberg Disaster Management; Pieter Albertyn, Western Cape producer; Uys van der Westhuizen, Rural Safety Expert; and Gary McKay, CEO of Fidelity.

Rural crime is costing the country and the South African economy R7.7 billion annually, of which R1.1 billion comprises stock theft, reported Van der Westhuizen. Unemployment is a massive problem, but there are plans in place: "The rural security plan includes strategies that cover everything. The policing plan also has considerable strategies. The problem is that, while many plans are in place, the operational side of things is lacking. We need to put that which is on paper into action on the ground."

For Geldenhuys, combating crime effectively requires the sharing of resources and information and collaboration between the various structures. In that respect, the Overberg Security Forum is focused on preventing resource fragmentation of resources; role-players come from the entire spectrum, including cworrectional and social services.

Albertyn called for a proactive approach -- too many communities are reactive and only work together when crisis hits.

Surprisingly, according to McKay, seven out of ten farmers lack adequate security. Because various communities don't talk to each other, when crime is effectively combated in one area, it just moves to another.

(from left) Jannie Strydom– Agri Western Cape CEO; Reinard Geldenhuys – Overberg Disaster Management; Theo Vorster - Galileo Capital CEO; Pieter Albertyn – Western Cape Producer; Uys van der Westhuizen – Rural Safety Expert; Gary McKay – Fidelity Operations Executive.

Fidelity's role through Agri SA's rural safety initiative is to look at the overall situation so that everyone can work together. Many farmers in the Western Cape seem quite indifferent, while those in the Eastern Cape, Northern Cape, and northern provinces are well prepared.

The Eyes and Ears project involves farm workers in gathering information on potential crime. McKay said that people are empowered with information and training and stated that it is essential that people must receive training on how to treat a crime scene, and what their rights and responsibilities are in an emergency situation.

Strydom pointed out that organised agriculture focuses not only on producers' safety, but also on that of farm workers and the entire rural community.

"Everyone has to live in a safe environment. Every crime is too much crime, every murder is too much murder." Rural security is critical:

"Agriculture's multiplying effect in the Platteland is huge. Producers will not invest in the Platteland if they feel unsafe." Strydom encouraged all producers to get involved. The Agri Securitas fund has funds available to help communities improve their safety, as there are costs involved.

Challenges and opportunties in the wine industry

The final session of Nation in Conversation focused on wine. The facilitator, Galileo Capital's Theo Vorster, spoke with Rico Basson, Vinpro managing director; Professor Nick Vink, an agricultural economist at Stellenbosch University; Daneel Rossouw of Nedbank Agriculture in the Western Cape; Anton Smuts, a Robertson winemaker and chairman of Vinpro; and Phillip Retief of Van Loveren and Vice-President of Vinpro.

Basson stated that South Africa has about 95000 hectares of vineyards. International overproduction and low prices have put the wine industry under a lot of pressure over the past decade; many vineyards have been replaced with more profitable citrus and nuts. Severe droughts has led to a 15% drop in wine production -- equivalent to 150 million litres less wine produced. However, the price of wine has increased by 30-40% in the last two years. "Today we are in a better place. We are seeing plantings for the first time in ten years, and there are indications of more plantings," said Basson.

Rossouw said that wine earns a lot of foreign currency and is a great job creation. The return on capital in the wine industry is around 2%, but the wine industry is not unique in agriculture as far as this is concerned. There is strong competition for land and water in the Western Cape.

Although the average consumer is under economic pressure, there are alway opportunities, said Retief. Some 50% of all production is exported and the remainder consumed locally, which makes the local market very important.

"In the past we have focused too much on each other as wine producers. Beer and other drinks have a large market share that we should rather compete with."

The variation in the wine market is very large, from a five-litre box of wine for R150 to one glass of wine for R150: "The innovators are going to prove their strength in the long run."

Smuts said that it now makes sense to farm with wine grapes again, adding that it is important to reinvest in the wine industry, which is currently undergoing some consolidation. "We need to complement each other and improve value. We must participate in the entire value chain. There is cream we aren't getting to. Don't just deliver your grapes. Be involved right up to the international store shelf."

According to Prof Vink, the pressure on the wine industry is not unique to SA, with a quarter of all wine farmers having left the industry over the last decade or switched to other crops. This is despite plantings in China that have grown from almost nothing to 600 000 ha at this time.

"The consumer market is moving towards quality. The days of strong demand for cheap wine are over. People drink beer when they are looking for a cheap drink," said Vink.

Theo Vorster, Galileo Capital; Rico Basson MD Vinpro; Prof NIck Vink, Stellenbosch University; Daneel Rossouw, Nedbank Agriculture; Anton Smuts, wine farmer and chair of Vinpro; Phillip Retief, Van Loveren and vice chair of Vinpro.

"Australia has had a drought in their wine regions for ten years now.

California's drought has been going on for about nine years, so we've actually come off quite lightly to date."

According to Basson, 60% of wine is exported in bulk containers and 40% bottled with a brand. "We supply 2% to 3% of the world's wine. To put that into perspective, South Africa sells one million bottles of wine every day of the year. We are very competitive on many levels, but we are far from the biggest markets. The question is how much wine is marketed under a South African brand name?"

For Rossouw, a brand definitely puts a producer in a better position when financiers get involved: "Premium brands are strictly operated according to business principles."

Water will always be a limiting factor, said Retief: "There isn't enough water and farmers have to consider where they will get their best return over time."

The industry is highly adaptable and the drought period saw great strides in efficiency, said Basson, adding that the wine industry is moving more towards the east. Some producers are also planting drought-resistant Greek cultivars and drought-resistant rootstocks. The rest of Africa is a huge opportunity on South Africa's doorstep. Basson pointed out that only 5% of South Africa's wine exports go to the rest of Africa, providing a great opportunity.

With regard to policy uncertainty, Prof Vink said the problem is that policy-makers are also uncertain. "Our economy has been on the turn for the past two years and everyone is waiting for it."

"When consumers' disposable income starts to increase, the wine industry can easily persuade consumers to indulge in its products.

South African wine does not have a marketing problem, said Retief: "Our marketing is good, but our prices are still too low. Buyers tend to play us against each other. If you have few, sell at a higher price. We actually need a deficit to fix the price points."

Basson concluded by saying that wine will become a little more expensive, but remember that you are supporting a proudly South African product of work.

This article has been edited from content provided by Nation In Conversation. Please visit www.nationingesprek.co.za or www.nationinconversation.co.za for the full discussions.

PREGNANCY DISEASES IN EWES

How to handle ketosis and hypocalcemia

During a ewe's gestational and early lactation stages, she will have increasing nutrient requirements, particularly an increase in energy, protein and certain vitamins and minerals. If there is a shortage or an imbalance in her feed, she may develop pregnancy disorders.

Pregnancy disease

Pregnancy toxaemia is also referred to as ketosis and is a metabolic disorder commonly found in pregnant ewes. In late gestation, a ewe's energy requirement may be higher than the energy that is provided by her diet. During late gestation, a ewe may be unable to eat as much as she should, due to the decreased abdominal space; most of this space is taken up by the growing foetuses. Due to a reduction in glucose available to be used as energy, fat mobilization starts taking place, as fats may be broken down into ketone bodies to be converted into energy.

Should the level of ketone bodies become too high, it may result in hyperketonemia.

Signs: Ewes that experience pregnancy toxaemia display signs of weakness, dehydration, kidney failure and nervous system damage in the form of blindness or tremors. She may separate herself from the flock and display signs of depression, will not eat, and may lie on her side. If left untreated, the ewe will die.

In severe cases the foetus may die in-utero, and the ewe may have to be assisted with the removal of the lamb.

Cause: This disorder is particularly prevalent in a ewe that is pregnant with twins, as it is particularly taxing on her body.

Ewes that are in poor condition or overfat during this stage are most at risk.

It is also found in ewes that feed on young green pasture that is high in water but low in nutrients and dry matter.

Prevention: Proper management and feeding strategies are the key to ensuring this disorder does not occur. This includes ensuring that the ewes have access to good quality feed at all times, and that they do not become stressed and stop eating.

These stressors may include extreme weather conditions, transporting or yarding, or suddenly changing the feed. Grain poisoning should be avoided at all costs, and grains should slowly be introduced to the feed. For ewes on young green pasture, a good quality supplementary feed should be supplied.It may be necessary to identify ewes pregnant with twins and separate them from the rest of the flock. These ewes should be monitored and fed good quality feed to ensure that their nutrient requirements are met so that they do not deplete their glucose stores.

Treatment: An early prognosis of the disorder is necessary to ensure that the ewe is treated as effectively as possible. Inject glucose every 6-12 hours to ensure that her glucose levels are stable.

The injection may be substituted for a glucose drench or oral administration of glycerol.

Good quality feed should be easily available to her at all times.

A vet may consider performing an emergency caesarean or inducing labour in order to safely produce the lambs.

This disorder is easy to avoid if the farm manager provides the proper level of nutrition and management.

Hypocalcemia

Hypocalcemia, also referred to as milk fever, is a common disorder among pregnant ewes. During pregnancy and early lactation, the ewe must provide the growing lamb with all of its calcium requirements, as the milk she produces is the only source of sustenance that it will receive.

During pregnancy a ewe's bone calcium will be mobilised to ensure that the bones of the growing in-utero lamb is provided with enough calcium to develop strong bones. The demand on the bone stores may increase up to 70% during early lactation.

Should the ewe receive an inadequate supply of calcium, she will develop a higher risk of developing milk fever with the next pregnancy.

Signs: Unlike pregnancy toxemia, this disorder progresses rapidly; affected ewes may die within 6-24 hours of developing the disorder. Affected ewes will have a stiff-legged gait and display difficulty walking. Muscle tremors may be present, and the ewe will show signs of struggling when approached.

Affected ewes may be staggery and weak, often displaying signs of being unable to support their own bodyweight.

If left untreated, the ewe may lie down and show signs of depression and drowsiness. Watery discharge from the nose is not uncommon.

Causes: This metabolic disorder is caused by a lack of calcium in the bloodstream and will present itself in late gestation and early lactation, just like pregnancy toxemia.

Ewes that graze on poor quality veld, or that are fed an unbalanced diet, are at risk of this disorder.

The risk of developing milk fever increases as the age of the ewe increases.

The risk of developing milk fever increases if the ewe is pregnant with twins or triplets.

Prevention: Pregnant and lactating ewes should be fed a diet or lick supplement that contains an adequate amount of calcium. If the veld that pregnant ewes are being fed on does not contain enough calcium, then their diet should be supplemented with an effective calcium source. Pregnant ewes should not be kept from feed for long periods of time, such as in a holding yard or during transportation. The diets of these pregnant or lactating ewes should not be changed without an adequate adaptation period.

Ewes should be kept in an environment (such as out of extreme cold and rain) so that shivering and increased maintenance levels do not occur.

Treatment: Affected ewes should be diagnosed and treated as fast as possible. A subcutaneous injection of a calcium solution should be administered by a vet or animal health technician and the ewe closely monitored to check for signs of recovery. Ewes that are treated for hypocalcaemia tend to make fast recoveries, anywhere from a few minutes to about an hour after treatment.

Should you have any concern of your ewe developing this disorders, please contact your Technical Advisor.

Dr Vlok Ferreira, National Technical Manager, Ruminants for RCL Foods

Citrus takes its rightful place

SA Citrus Growers' Association launches World Citrus Organisation with other citrus producing countries

On 22 October the newly-founded World Citrus Organisation (WCO) was officially launched at Fruit Attraction, Madrid. With this official presentation, citrus fruits are finally placed at the same level of coordination worldwide as other fruit categories, such as pears and apples, kiwis, avocado or red fruits, which already have their own global platforms. The WCO will act as the global platform for dialogue and action between the citrus producing countries worldwide. The core aim of the WCO is to facilitate member countries to better face common challenges and seize opportunities for the collective benefit of the citrus sector, in a spirit of cooperation and transparency.

Led by AILIMPO, the Spanish Lemon and Grapefruit Interbranch Association, and the Citrus Growers' Association of Southern Africa (CGA), sector representatives from Argentina, Chile, Italy, Morocco, Peru, Spain, and South Africa decided to join forces to create a global citrus platform where together they may address the many multifaceted changes experienced by the citrus market over recent years. Other countries that were unable to attend the meeting have also committed to the project, and the remaining global producers are invited to join the organization.

The primary objective of the WCO is to facilitate collective action in the citrus sector, for both fresh and processed categories. Most recently the sector has been faced with an extensive array of significant issues of global concern including growth in production, overlapping of seasons, changing climate conditions resulting in varied quality and biosecurity challenges, increased competition within the citrus category and between other fruit categories and food products as well as stagnating fruit consumption. The WCO will facilitate member countries to better face these common challenges and identify opportunities for the collective benefit of the citrus sector.

Specifically, the WCO's mission is to:

- Discuss common issues affecting citrus producing countries.
- Exchange information on production and market trends, preparing for the horizon 2030
- Foster dialogue on policy issues of common concern.
- Identify and promote Research and Innovation projects specific to the citrus sector.
- Liaise with public and private stakeholders on citrus-related matters to highlight the importance of citrus producers and the need for a fair return
- Promote the global consumption of citrus.

With South African citrus exports due to increase by 25% in the next five years, and similar expansion expected by other citrus-producing countries, this organisation will put citrus fruit in its rightful place in the consumers mind – as a nutritious, healthy option. Stimulating demand will help to grow the category and claw back some market share lost to other fruit sectors.

Freshfel Europe, the European Fresh Produce Association, whose Secretariat is based in Brussels, Belgium, will coordinate and administer the WCO. The next meeting, where the formalities for the foundation and future structure of the organisation will be formalized, will take place at FruitLogistica in Berlin.

Justin Chadwick, CEO,
Citrus Growers Association (CGA)

ADVERTORIAL

IN CONVERSATION WITH JOHN HUDSON, AGRICULTURAL HEAD AT NEDBANK

Nedbank again sponsored the ground-breaking Nation in Conversation dialogue held at Nampo Cape in Bredasdorp in September. Shortly afterwards, we sat down with John Hudson, Head of Agriculture at Nedbank Business Banking, to explore the issues faced by the agricultural sector.

HARVEST SA: Why does Nedbank sponsor Nation in Conversation?

JOHN HUDSON: Nation in Conversation is widely regarded as the 'voice' of the producer and its key partners in the agriculture food chain. At Nedbank, we believe that these dialogues provide a critical platform for industry leaders, government officials and key roleplayers to debate the future of the agrisector, highlighting its importance in ensuring food security and the economy.

HSA: What do you believe is the most pressing issue faced by the agricultural sector in South Africa in 2019?

JH: Transformation, without a doubt. Agriculture is thelifeblood of the rural economy and all roleplayers in the sector need to continually invest resources and capital in our rural areas and the food value chain. As a bank, Nedbank recognises the need to be part of the land reform solution while contributing to food security, employment and economic growth. As such, we are engaging with all stakeholders and supporting various initiatives to unlock funding in our rural areas. Partnerships are the key to taking us forward and achieving an inclusive, vibrant and globally competitive agriculture sector.

HSA: Another hot topic in 2019, amid climate strikes and record-breaking weather conditions, is sustainability. What is Nedbank's position on sustainability in agriculture, and what is the bank doing to contribute positively?

JH: Sustainability has become a much-overused term, but the fact remains that agricultural has a major impact on our natural resources The Sustainable Development Goals (SDGs) have been developed as the blueprint for achieving a better and more sustainable future for all. SDGs with direct relevance for this sector are SDG 2: zero hunger, SDG 6: clean water and sanitation, SDG 7: affordable and clean energy and SDG 12: responsible consumption and production. And one can add to this improved soil health and regenerative agriculture, which are vitally important in building a climate-resilient farming business.

As part of our focus on responsible food production, Nedbank has launched shade net financing for tree crops. This will help achieve greater water and energy efficiency while reducing the impact of sun burn and hail damage to reach the end goal of improved yields, better fruit quality and higher export percentages.

The recognition of our work in the dairy industry at the recent MPO Nedbank Sustainability Awards also reflects our commitment to driving sustainability. And, of course, our ongoing partnership with WWF SA is core to our sustainability work and in building a climate-resilient sector while maintaining biodiversity.

HSA: Are there any other factors that are driving change in the agricultural sector?

JH: The adoption of technology by farmers is resulting in a more efficient and productive agricultural sector. This is helping to mitigate declining margins and retain our competitiveness. A fine example is the South African aerial data analytics specialist Aerobotics, with whom Nedbank is partnering.

HSA: As a global competitor, how important is market access?

JH: All commercially produced agricultural goods need a market and therefore it is of vital importance. The strength and growth of our local economy is critical for local food demand; however, accessing and growing international markets are paramount for agricultural exports. Our citrus industry stands to grow export volumes by 25% over the next three to five years, for which we will need to find a market. Another challenge is getting the product to market, where factors such as logistics, infrastructure and trade agreements should be considered.

John Hudson
Agricultural Head
Nedbank Business Banking

see money differently

NEDBANK

SPONGE 5916

Unnatural conditions

Little rain and warm weather result in challenging circumstances for winter grains

Grain producers in the Western Cape suffered damage due to unnatural dry weather conditions this year. The season kicked off well but turned sharply since June. With little rain and warm weather, the crops dwindled. According to the 3rd crop estimate, wheat production dropped from 1.86 million tonnes in 2018 to 1.69 million tonnes in 2019. Although more hectares were planted in the Western Cape, year-on-year production decreased by 208 000 tons.

This is the third season out of five production years that did not go well due to climatic conditions. Domestic production also appeared very promising at the start of the season but dry and warm conditions in August and September dampened yields and also reflected in the downward adjustment within the crop forecast. The fall in yields put financial pressure on producers due to prices not allow for this at import parity levels. The pressure is further increased given the already high debt levels. Grain SA is very concerned about the financial position of producers due to the impact of the drought.

In terms of barley production there is great concern as a large quantity of the harvested barley is not obtaining malt grading and must therefore be marketed and utilised as feed. This is a direct result of weather conditions which affected quality. If malting barley intake falls below current specifications, it is problematic for producers who will receive far lower prices for barley.A highlight of the season is the new wheat grading specifications which were implemented by industry. Within the wheat market, a large amount of grain delivered falls within the new super grade specification due to high protein levels, which as a result earn producers 2% above SAFEX wheat prices. It does offer some support in the dry season and Grain SA is grateful that producers can take advantage of this.

> The new wheat grading specifications which were implemented by industry enabled super grade producers to earn 2% above SAFEX wheat prices

The summer rainfall region's planting date for summer crops has kicked off to the east of the country without any significant rainfall to support it. Producers hope and trust that the rain will come on time to experience a good season with sufficient production.

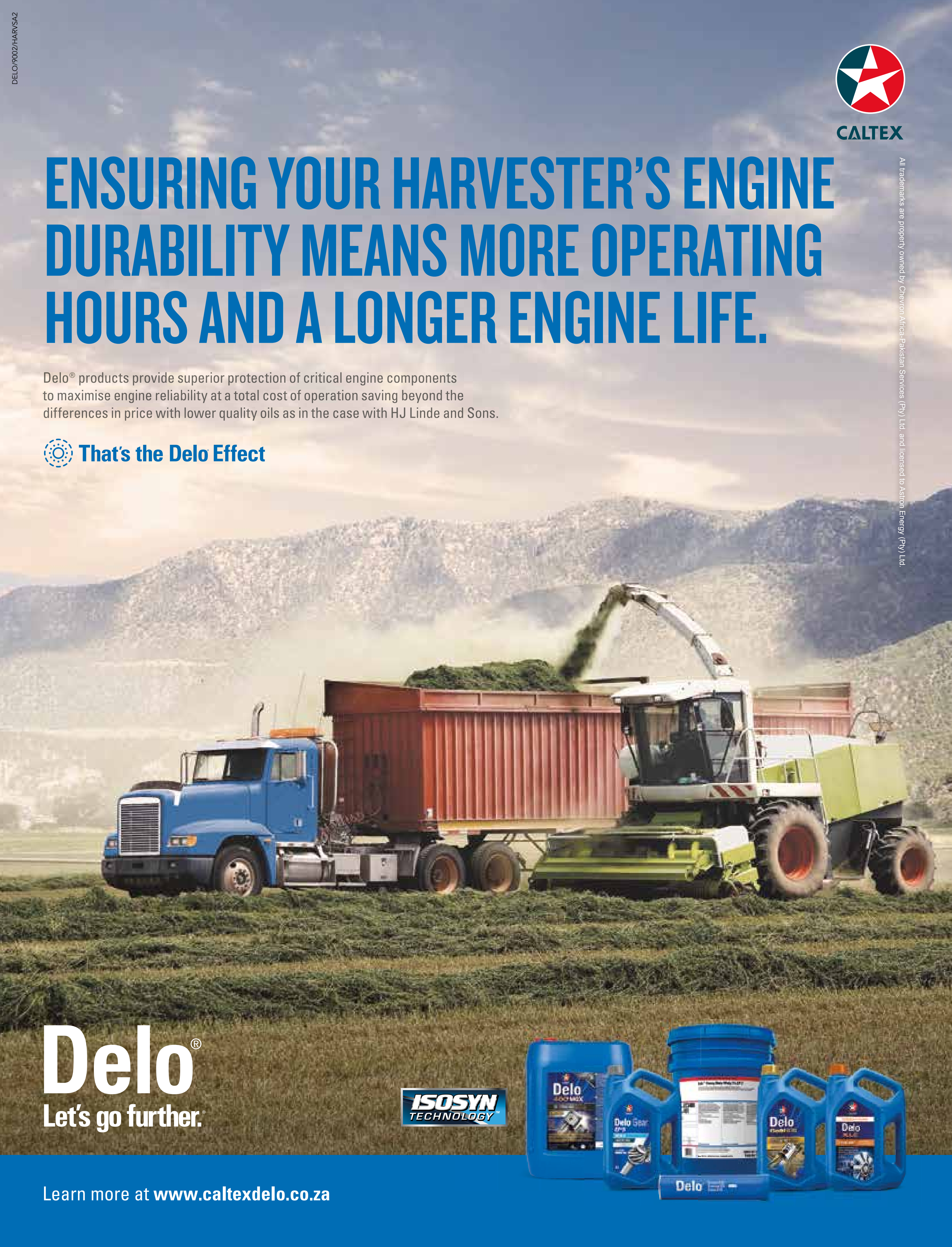
In terms of drought, there is minimal assistance from funding structures that specifically assist grain producers. It once again demonstrates how absolutely necessary aid

is in terms of crop insurance for producers, which will ensure their survival in the difficult

and challenging climate cycles by meeting financial obligations.

The shortage of rain and the warm weather experienced was very disappointing for producers. Although the extent of damage varies between crops and areas and the yield potential has been affected, producers are keeping their heads high with hope in their hearts for the next season.

Grain SA


DELO/9002/HARVSA2
CALTEX
ENSURING YOUR HARVESTER'S ENGINE DURABILITY MEANS MORE OPERATING HOURS AND A LONGER ENGINE LIFE.
Delo® products provide superior protection of critical engine components to maximise engine reliability at a total cost of operation saving beyond the differences in price with lower quality oils as in the case with HJ Linde and Sons.
That's the Delo Effect
All trademarks are property owned by Chevron Africa-Pakistan Services (Pty) Ltd. and licensed to Astron Energy (Pty) Ltd.
Delo®
Let's go further.
ISOSYN TECHNOLOGY
Learn more at www.caltexdelo.co.za

RIDING THE STORM

Crop insurance as risk management tool

The climate of Southern Africa is highly variable due to its geographical position halfway between the warmer conditions closer to the equator to the north and the very low temperatures of the South Pole to the south.

Adding the relatively small land mass of the African subcontinent, splitting two massive oceans of different temperature characteristics can create some "perfect storm" scenarios. Adding the additional effect of global warming and climate change can intensify extremes of climate elements on the subcontinent. For decision-making processes in agriculture, it is important to have a good understanding of the climate of a specific farming area where activities are planned. Long-term average climate statistics are more than often misleading and it is important to analyse risks in more detail. An example is to look at the occurrence of events and extremes: What is the frequency of occurrence? What is the maximum extent of damage possible?

At what time of the season is the risk at its highest? Etc. For the climate element of rainfall, it is even more important to determine the risk for drought and extreme high rainfall events.

A characteristic of rainfall in Southern Africa is the occurrence of multiple years of below-average rainfall, creating super droughts due to the cumulative effect of semi-cycles of three to seven years or even longer of below average rainfall. It is difficult for farmers to survive extended periods with low production and low income without government assistance.Wetter periods are also part of the climate system. Consecutive seasons with above average rainfall is also not uncommon, posing a different set of risks like a higher incidence of hail, increased incidence of pests and diseases, different nutritional demands of crops, etc.

Risk management is the process of determining the type and extent of risk but also, more importantly, managing risk to mitigate the effect on the final outcome. There are some ways to manage risk:

- Avoid the risk. If the rainfall is too low to plant, the soils not suitable for crop production or commodity prices too low, do

not try to produce grains. Avoid the risk by not planting.

- Reduce the risk. Conservation tillage, water management and planting only when sufficient water is available are examples of ways to reduce production risk. The total risk can also be reduced by diversification, geographically or different enterprises.
- Transfer the risk. Insurance can be an option to transfer the risk. An insurer can manage the risk better or more cost effectively by the pooling effect of combining risks of a large number of clients. This is valid for a peril like hail where there is a more random occurrence of damage. Losses caused by a peril like drought can, however, extend over large areas and involve many clients. Insurers are often reluctant to cover drought due to the extent of the potential losses in one season.
- Accept the risk. Budget to assimilate the potential losses. This is often very difficult, especially in areas where severe damage can occur. A money-saving plan is often not sufficient to cover losses and even worse when consecutive severe losses occur. A combination of risk acceptance and risk transfer (insurance) is often used to manage risk.
- Exploit the risk. Develop new ways to use the risk in such a way to offset the initial effect. When drought occurs, it is often better to cut grains for silage to utilise the dry matter than to wait for a total crop failure.
- Ignore the risk. This is an option when the risk is very low. It is however not a good option when the premium is too high and not "affordable". A high premium rate is an indication of the risk and must be taken seriously. When considering whether to ignore the risk, the question is whether the farmer can afford not to transfer the risk to an insurer: Can he carry the loss or losses on his own without serious consequences for his future?

Crop insurance is a valuable tool in the risk management process. It is, however, not the only consideration to ensure good risk management and must be used in combination with sound decisions in the bigger picture of sustainability.

Johan van den Berg, Santam Agriculture

PASSION AND PRODUCTIVITY

Inside Poland's flourishing agriculture sector

Hard-working, hospitable, democratic, obstinate, courageous, resourceful, entrepreneurial and nature-loving – these are the traits that "make Poles Polish", according to Culture.pl, and we are inclined to agree. Certainly these traits were abundantly evident among the representatives of the Polish agriculture and food industries that we encountered during a media tour hosted by KOWR, Poland's National Support Centre for Agriculture, from 30 September – 4 October this year. After this thoroughly immersive experience taking in visits to growers, manufacturers and institutes in seven cities and towns as well as the Polagra 2019 food fair, we were much better placed to understand the story of Polish agriculture's remarkable success since joining the European Union in 2004.

Harvest for the world

Setting out from Warsaw, we made our first stop at Europejskie Centrum Owocowe (ECO) outside Rębowola. A fruit growers group whose 145 grower members collectively own a total orchard area of 1 700 hectares, ECO produces more than 50 000 tonnes of apples, pears, plums, blueberries and other soft fruit annually and supplies the fruit to Poland's largest retail chains as well as 14 foreign countries. As such, ECO clearly contributes to and shares in Poland's enviable status as a global leader in horticulture (world Number One in black currants, sour cherries and raspberries, Number Three in apples after China and the USA). All the same, the agriculture business being what it is, the group never relaxes its vigilance – especially when it comes to apples. Ever since Russia banned Polish apple imports in 2014, closing off their then biggest market, Polish apple producers have to dig deep. A patriotic domestic consumption campaign went some way to absorb the surplus, but ECO has preferred to expand its footprint overseas.

Egypt and Jordan especially have proven receptive, with 645 containers shipped in the last season; uptake is increasing in the UAE, Saudi Arabia, India and Vietnam.

State-of-the-art technology plays a vital role in ECO's success. Apples are pregraded in terms of size, quality and colour and can be stored in a ULO (Ultra Low Oxygen) chamber for up to 12 months. "This enables us to deliver first-class apples throughout the year," stated marketing director Pawel Zalewski.

ECO's unique high-storage warehouse system gives the group a unique edge.

"As a group we buy apples en masse and pre-grade them by the ton. All the information is stored on the system so when an order comes in, we can immediately start loading the containers," said Zalewski.

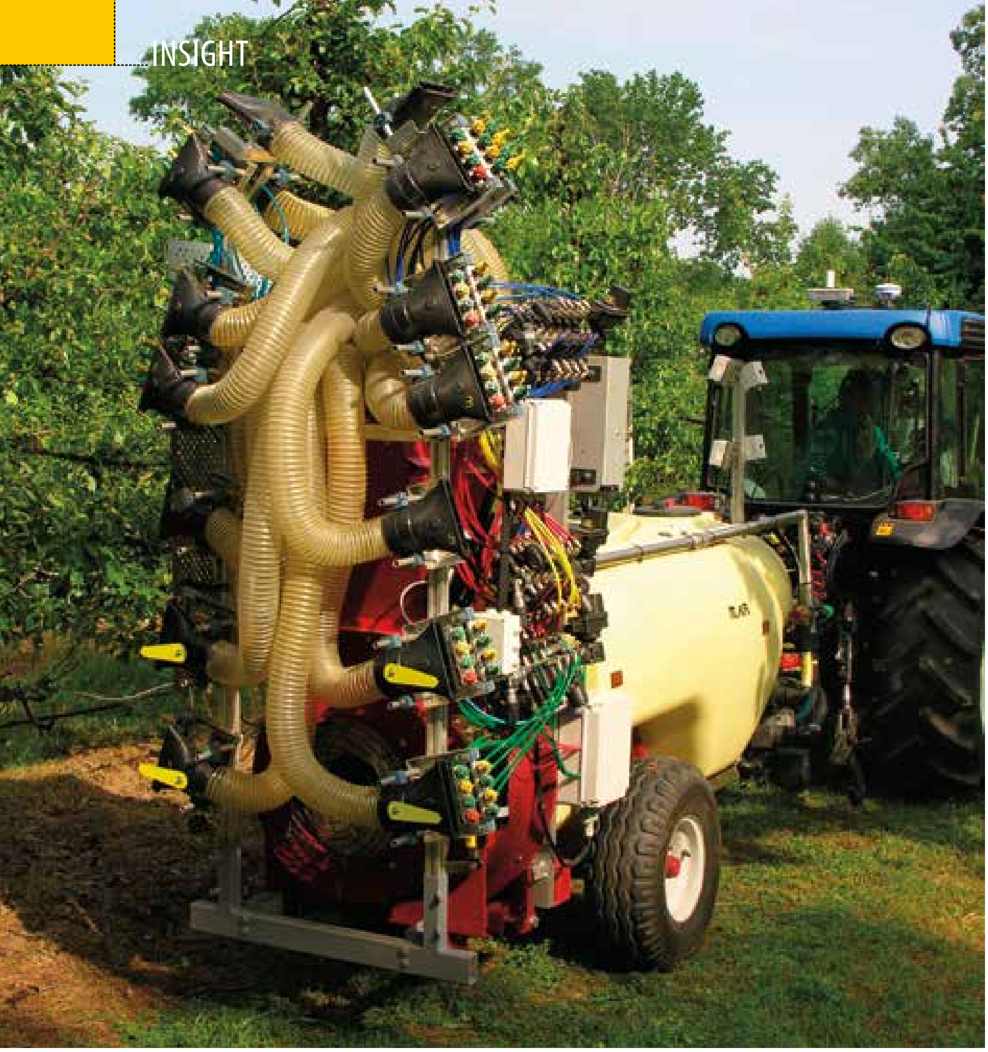
Consumer expectations are a complicating factor. Although the most popular apple variety in Poland is the Ligol – prized for its sweetness, juiciness and pressure – it does not accord with international clients' priorities. "Polish consumers are more interested in taste than colouration, but in UAE, for example, red apples have to be Royal Galas, because of the colour. Golden Delicious has to be yellow in Egypt and Jordan but green in the Gulf – you won't sell yellow Golden Delicious in the Gulf," said Zalewski.

The cooperative approach is popular in Polish agriculture generally. For ECO growers, membership makes it easier to obtain EU certification. "Serious clients won't consider you without certification. They must have the assurance that your safety, quality and pesticide residues are in line with EU law."

Engineered in Poland

Physics, chemistry, literature, medicine, economics and peace – these are the fields of the 19 Nobel Prizes awarded to 18 Polish laureates since 1903 (Maria Curie won twice). This passion for education is one of the reasons Poland has always managed to bounce back from the disasters history has inflicted on the country in disproportionate measure. Agriculture is no exception. After the devastation wrought by World War 2, for example, Polish agriculture was very weak, but now it is the biggest in Europe – thanks in no small part to the indigenous capacity to design and manufacture agricultural equipment suitable for all scales of production.

With its headquarters in an elegant stone building once owned by the Bishop of Warsaw in Skierniewice, the InHort Research Institute of Horticulture is a research and development organisation supervised by the Ministry of Agriculture and Rural



Development. Its staggeringly broad research programme covers every aspect of the sciences pertaining to fruit, vegetables, ornamental plants and bees, from basic physiology, biochemistry and molecular biology, to biotechnology, creative breeding, protection of genetic resources, agronomy, plant pathology, fruit and vegetable storage and processing, food safety, horticultural engineering, economics and marketing. Although time did not allow for us to develop more than a superficial acquaintance with the institute's pursuits, it was clear that Polish agriculture has reason to be extremely grateful for the level of scientific and technical support that InHort provides.

Dr Krzysztof Rutkowski took us through the innovative post-harvest technologies InHort is developing to improve the storage and processing of fruit and vegetables. Advanced microwave and ultrasonic technology has been developed to dry even soft fruit like blueberries and cranberries and producing fat-free apple and beetroot chips; maturity indices are used to enable growers to gauge the optimum harvest date; low-oxygen storage techniques delay the ripening and maintain the quality of apples and pears; and many more. Climate change is of particular concern, with Poland suffering the second worst drought in Europe after Belgium: "We know that the climate is changing and we can expect new diseases."

Professor Ryszard Hołownicki then presented some of the mechanical technologies designed and manufactured specifically for horticulture in Poland by InHort, some personally designed by the professor himself (in Poland, "professor" is the most prestigious academic title, awarded at a special ceremony by the state president). South African stone fruit growers would have been especially interested in the various low-cost, low maintenance shakers and catching frames that two workers can use to harvest 50 trees an hour, a harvester that directly shakes fruiting shoots at the rate of 500 trees an hour, and the first ever self-propelled cherry combine harvester prototype that can harvest up to 500 trees an hour.

On the environmental side, a tunnel sprayer project targeting lower spray drift, lower spray losses, spray recycling, a more predictable biological effect and self adjustment of the spray dose has yielded the first ever two-row orchard tunnel sprayer. Further innovations include a dual-fan axial sprayer for the target-oriented spraying of high trained trees and a crop-adapted spray application with adjustable air-flow.

Sprayers, black currant harvesters, shakers, rotary movers, harvest aids and trailers are locally produced in Poland. The value chain includes SMEs and micro-enterprises and benefits. The close relationship between InHort, manufacturers and growers translates into a flexible, innovation and adaptable system for supporting new developments. InHort encourages cooperation with interested parties from anywhere in the world, and we believe that South Africa has much to gain from such cooperation, especially with regard to assisting emerging farmers. The need to increase the productivity of small farms is an area where Poland and South Africa have common ground (the vast majority of Polish farms are still under ten hectares) and InHort is on the case, having developed, for example, a new orchard training system for small family farms that enables "the farmer and his wife" to harvest an entire orchard by themselves.

Favourable terms

Poznań is an ancient university town on the Warta River in western Poland.

Centre of the Polish agriculture revival of the nineteenth century, Poznań also hosts the annual Polagra Food and Polagra Tech International Trade Fair. Some 50 000 people attended the four-day event this year, with more than 800 exhibitors from 30 countries showcasing their products, services and technology.

The Polish dairy industry is a dominating presence at Polagra, and no wonder – the industry has reached such heights of productivity and efficiency that Polish dairy products are finding their way all over the world. Even in South Africa, retailers are finding it cheaper to import milk from Poland than buy locally – a controversial matter, but one that cannot be laid at the door of the Polish dairy industry. The fact is that Polish dairy producers are paid less per litre than their South African counterparts – so how do they keep afloat? One way to avoid falling to the mercy of milk buyers is to belong to one of the 100 cooperatives that form part of the National Association of Dairy Cooperatives, which buys and processes the milk from 120 000 dairy farmers (12 billion litres this year).

"We will buy the milk even if there is a surplus – we will never decline to buy and tell the farmer 'go drink your own milk,'" said President of the Board Waldemar Broś. "This is unique to the dairy sector."

The association has developed a refined input production system on very good credit terms – for example, a farmer who wants to buy machinery can get a year's loan and have the dues deducted from their milk earnings. "They can pay it back in milk," smiled Broś, adding that not only do cooperatives offer dairy farmers the best deal by far, but they also negotiate with retailers – "the hardest thing by far".

Dairy goat farming is a different proposition. "Naturalness, purity and lightness" are not qualities immediately associated with goats – but, together with "attachment to tradition", they are the core values of Danmis, a goat dairy company that farms on a 1000 ha near the village of Bukowiec, "the land of goat milk flowing". As director Dariusz Maciński told me with a smile, "In the past, the first thing that farmers did when they got some money was to get rid of the goats and a buy cows. Goats were associated with filth because they eat absolutely everything. However, the goat's stomach is so efficient that the milk it produces is healthier than cow's milk. For example, the goat is the only ruminant that effectively filters, isolates and eliminates heavy metal contaminants from the body. Now we are making high-quality niche products from goat's milk."

Not only can we verify that the milk, yoghurt, cream cheeses and hard cheeses that Danmis produces are delicious to taste, but we are impressed by their scientific argument for the quality of goat's milk. Rich in calcium and vitamin B13, goat's milk is easily digestible within 20 minutes, as opposed to 2 to 4 fours for cow's milk, and is especially recommended for pregnant women and those planning pregnancy thanks to the folic acid it contains. Goat's milk has a much lower lactose content than cow's milk and, above all, is hypoallergenic, containing very little casein (the main cause of allergy to cow's milk proteins.

Goats abound in South Africa and Lesotho's rural areas, and there is surely potential to spread the goat's milk gospel and expand the small existing goat's milk industry to include small-scale traditional farmers, provided they receive the necessary support to achieve export-quality certification.

Efficiency, variety, opportunity

From Poznań, we transferred to Toruń, birthplace of the astronomer Nicolas Copernicus, who lent his name to the Kopernik Confectionery Factory, which started making gingerbread in 1751. Today it's the largest gingerbread producer in the world, still making gingerbread according to the traditional recipe whereby the dough is left to ferment for 12 months. This makes for a unique flavour. The history and legends surrounding the origins of gingerbread made for a fascinating visit.

We then went on to visit the agricultural holding Gospodarstwo Rolne Romuald Wiśniewski, also known as "Sławkowo", a fourth-generation family farm that grows cereals rapeseed, corn, potatoes, sugar beets, onions and beetroot on 1000 ha of land. It is said that in business relations, Poles look for honesty, reliability, personal integrity, and experience – qualities which the Wiśniewskis (father and son) have in spades. We spoke through an interpreter, but we felt at home with these hard-working, passionate expert farmers whose modest demeanour and simple clothes belie the wealth they have won from the soil. They, too, are suffering from drought ("If it carries on like this we'll have to start planting oranges") but they have no intention of quitting.

Our tour concluded with visits to two very impressive production facilities. In Bydgoszcz, we were hosted by Mlekpol – far and away Poland's biggest producer of milk and dairy products and one of the twenty largest raw milk producers in Europe, set a record as the first purchaser in Poland to purchase more than 1.8 billion litres of milk a year. Now it buys an average of 5 million litres of milk a day from the 10 000 members of the Spółdzielnia cooperative and processes the milk in 12 state-of-the-art production plants. Overall, it has to be said that the quality of Polish dairy is outstanding and also comparatively cheap (cream cheese, for example, costs approximately one third the price of its South African counterparts in the supermarket). What impresses most about Mlekpol's output is the sheer variety available. For example, kefir, still considered a somewhat exotic product in South Africa, is a perfectly standard consumer item, no more expensive than a bottle of milk. The four types of flavoured buttermilk would probably go down well with South African consumers, as would the lactose-free milk.

Ligol is the most popular apple in Poland

The final stop was in Solec Kujawski, where for 30 years the family-owned company Drobex has been producing top-flight poultry meat. An investment in its own research facility paid off handsomely and now the company has contracts with major Polish retailers as well as KFC restaurants throughout Western Europe. A tour of the facility, where chickens are killed, plucked, eviscerated, cut up, packed, packaged and dispatched at the rate of 12500 birds an hour, left no doubt as to the company's technical efficiency.

Drobex sources its chicken feed on international markets and we believe that this could be an excellent opportunity for South African black fly maggot farmers like AgriProtein!

Greg Penfold

Export challenge

Mboweni must put money behind agriculture export objectives

In its August 2019 economic strategy, Treasury outlined the laudable objective of increasing agricultural exports by R6 billion over the next ten years. Finance Minister Tito Mboweni's mid-term budget policy statement on Wednesday is an opportunity for Treasury to bring the national budget into alignment with the country's growth priorities.

One of the core barriers to expanding agricultural exports are the severe budgetary and capacity constraints at the Department of Agriculture, Land Reform and Rural Development.

Of the R7,1 billion allocated to the Department in the 2019 budget, only R273 million was earmarked for Trade Promotion and Market Access. To compound matters, according to the latest Annual Report, the Department is currently operating with a vacancy rate of 19,5%.

With these budgetary and personnel constraints, it is not surprising that the processing of export protocols is taking anywhere from 12 to 17 years for one commodity to gain access to one market. Along with revenue and economic growth, these constraints are also stalling employment and skills development in the agricultural sector.

For example, South African blueberries does not have access to key eastern markets at a time when demand for blueberries are growing phenomenally in those countries. Between 2013 and 2017, China's imports of blueberries increased by a Compound Annual Growth Rate of 71%. And our competitors have capitalised on this growth with amazing results.

Although blueberries were only introduced as a crop in Peru in 2007, they are now the second-largest exporter of blueberries to China after Chile.

> Treasury's economic strategy acknowledges the need to leverage public-private partnerships to address the constraints faced in the implementation of export requirements

Peru's revenue from the exports of blueberries grew from $84,000 in 2012 to $ 381.1 million in 2018. Blueberry production in Peru grew by 206% annually on average between 2012 and 2018.

This year their blueberry exports are expected to reach 110 000 tons, surpassing Chile as the world's largest blueberry exporter by 2021.

At the current rate, South African blueberries will only gain access to the Chinese market in 2045. The practical consequence of not being in these markets is the lost opportunity to create an additional 14 000 new jobs by 2023.

It is not only the berry industry that faces this problem. Other fruits and other commodities are struggling with market access delays due incapacity at the Department.

Treasury's economic strategy acknowledges the need to leverage public-private partnerships to address the constraints faced by government departments and agencies in the implementation of export requirements and in the provision of export documentation and licensing timeously.

The industry is ready to play ball and waiting for government to come to the party.

At his Medium Term Budget Policy Statement, Minister Mboweni has an opportunity to ensure that the national budget reflects South Africa's economic priorities.

In particular, this is a chance for him to back up his economic strategy with the necessary departmental resources to make R6 billion in agricultural export growth a realistic, attainable goal.

Jean Kotze, Chairperson Of The South African Berry Producers Association (SABPA)

Packing with a punch!

Ensure your packer runs at maximum efficiency

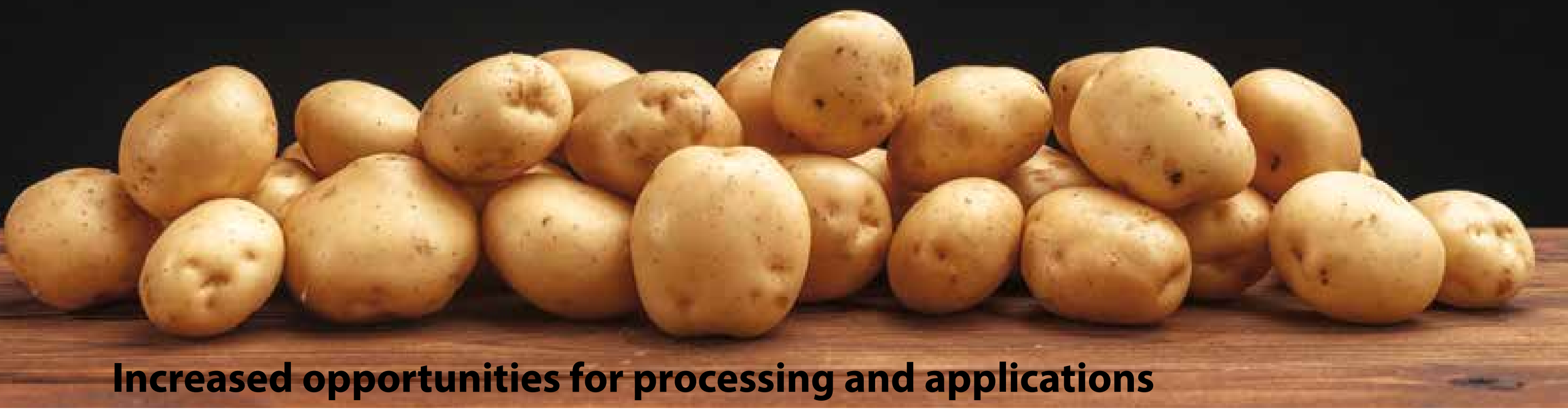
Maintaining pack house productivity and efficiency is the number one priority for fresh produce packers and growers in order to remain competitive.

This is especially important during short growing seasons, where an abundance of fresh produce may have to be packed within just a few weeks. The most important parameter in measuring pack house productivity is units packed per worker hour. The main factors that affect productivity can be divided between actual packing line and operational "downtime' issues. Both reduce available packing time.

The key factor affecting productivity is the lack of product at a line. Implementing the PP-300 range of auto packers with the integrated soft bin tipper integrated will ensure your packer runs at maximum efficiency: for example, A15C, 72 count, 16kg, 4 layers @ 300 cph/ 4.8 tons p/h. The dry bin filler DBF-C has a production capacity of 6 tons per hour. Integrating 42x DBF-C fillers will up your production to 40 tons per hour.

The fastest dual-stage TE-800D tray erector will eliminate your lack of packing material at the line, erecting at a speed of 2400 cartons per hour. Knowing Gossamer design and manufacture all equipment locally will give you the peace of mind to operate at top efficiencies.

BUDDING PROSPECTS FOR POTATOES



Increased opportunities for processing and applications

Among the South African companies that participated in the 2019 Fruit Logistica Asia Trade Show in Hong Kong in September was Potatoes SA. According to an SA Government News Agency report, the company's participation in the show was driven by China's previous hosting of the World Potato Congress in 2015, where potatoes were made known as the next significant product they were looking to surpass rice with.

Potatoes SA CEO Andre Jooste said at the start of the show, "That development coupled with the innovations and product developments we witnessed in 2015 were key in informing us that there was still a lot to learn. When the dti presented us with this opportunity to come and showcase this year we saw that as an opportunity to further build on the knowledge and experience that we previously obtained."

The Department of Trade and Industry (dti) led a delegation of 22 local companies to the annual trade show, which focuses on the fresh, unprocessed fruit and vegetables produce sector and the related value chain.

Participation in the fair, said the dti, is to ensure that local companies gain market access and acquire knowledge on global trends and innovation within the fresh produce sector.

The trade show also offers the opportunity to establish new business contacts as it brings together key players from all over the world under one roof.

Potatoes SA hoped to build networks and connections to open up markets for the country's over 500 producers to export potatoes into the world.

"We have the capacity to meet the volumes and are one of the few areas in the world that produce potatoes all year round in sixteen different production regions because of our favourable climate. We have determined that export is very important also for our local industry to not only develop markets to the north but to also look at the Middle East and in the long term if there are markets in the Far East," says Jooste.

The participation of South African companies at Fruit Logistica forms part of the dti's

Export Promotion Strategy targeting high-growth export markets and supporting South Africa's fresh produce sector.

According to a report by FreshPlaza, Potatoes SA would like to grow the processing segment, which accounts for 20 to 25% of South African potato production at present. Further opportunities are presented by innovative applications for potatoes in confectionery, bread and pasta, as seen at the 2015 World Potato Congress. FreshPlaza quoted Dr Jooste as saying: "There are strong opportunities and interest from the Middle East, already an export destination for South Africa, and from countries to the west of China. Of course, the more eastwards you move in Asia, the more you would encounter competition from Australia and South America."

A quarter of a century ago, there were four times as many commercial potato production units in South Africa as there are now. Yield has declined proportionately.

A hope renewed

Rain could mean a normal agriculture season

Recent rains in some parts of the country have renewed hope of a normal season after weeks of heat, dryness and decreasing dam levels.

While the overall dam levels for the country remain above 60% at 62% full during the week ended 21 October 2019, some provinces such as Gauteng are facing water restrictions due to higher temperatures and the decline in water levels in critical dams.

Water levels in the Vaal dam, a major supplier to Gauteng, dropped to 49.6% full, relative to 85.7% last year.

The situation is compounded by the closure of the Lesotho Highlands Water tunnel for maintenance until the end of November and the fact that the Katse and Mohale dams reached a record low of 13.6% and 32.7% respectively.

In contrast, the Sterkfontein dam is sitting at good levels of 91.5% full, relative to the 94.4% achieved during the same period last year.

Elsewhere, slight rains in Mpumalanga still bode well for the season as the planting window has already opened from 1 October. The province has received near-normal rainfall during the last three months with September alone being above-normal. This bodes well for summer grains and oilseeds as the planting window is from 1 October and ending 15 November and 10 December respectively for the cold and high temperate regions.

Although all provinces are currently above 50% full, with the lowest being Limpopo (LP) and the Eastern Cape (EC) at 51.6% and 50.5% respectively, some critical dams for irrigation such as the Middle-Letaba and Tzaneen are extremely low at 3.3% and 6.8% respectively and good rains are needed urgently to salvage the situation.

Further, 50% of dams in LP have reached a level below 50% full, while 11 dams in the EC are lower than 20% with four already empty. The province's two major dams, Darlington and the Kouga, have decreased further week on week (w/w) and still below the 50% mark at 36.3% and 36.6% respectively full.

The latest assessment of the rain for the three-month period from July to September 2019 shows a weak start to the 2019/20 crop season. The period was characterised by below-normal rainfall for the country, but a few isolated areas received near-normal rainfall except over the Free State and Gauteng according to charts from the South African Weather Service (SAWS).The rest of the country is still waiting for decent rains that would ensure a good crop but also improve pasture conditions for livestock and alleviate pressure on irrigated and dryland fruit and vegetables.

Drought conditions persist in some areas of the country – parts of the Northwest, the Northern and Eastern Cape provinces where livestock turnoff has been high. Except for the Pongolapoort and the Vaal, the country's top 10 dams by capacity were above 60% full, with the Theewaterskloof and Vanderkloof dams reaching 69.3% and 80.1% full respectively.

In the WC, citrus supporting dams that reached good levels were Berg River, Buffelsjags, and Clanwilliam at 99.4%, 98.6% and 80% full, respectively. The Brandvlei dam was however closer to the 50% level at 53.8% full.

The short – to medium-term rainfall outlook still indicates that we have a long way to go for the new crop season. The rainfall forecast for the next two weeks shows rainfall prospects for the interior provinces of FS, NW, GP, LP and MP in the region of 18mm to 35mm of rain. Light showers are also expected for the coastal areas of the Western Cape, and KZN.

It is still a long way into the summer rainfall season and we hope for the rains to materialise and help break the drought particularly in the Northern Cape.

Paul Makube, Senior Agricultural Economist at FNB

Can you afford to die?

Will your family survive the impact of Section 9HA of the Income Tax Act?

Agriculture is a unique industry. It is the industry that ensures national food security, that (literally) puts food on the table daily. To contribute to food security, South Africa has specific tax legislation in place. Section 26 of the Income Tax Act (ITA) stipulates that a farmer's taxable income is determined in accordance with the provisions of the Act, subject to the requirements of the First Schedule of the Act. Therefore, this special tax dispensation is in place to promote food security.

Amendments to the ITA came into effect in March 2016, incorporating the rules applicable at death (see paragraph 40-41 of the Eighth Schedule: Capital Gains Tax) into the new Section 9HA and revised Section 25 of the Act.Briefly, Section 9HA deals with tax in respect of the disposal of the estate; Section 25 deals with the tax of the deceased estate. Upon death, the individual's tax is closed; all deductions arising are made against the estate up to date of death. The executor registers a new tax number, meaning the estate effectively gets its own tax number: no claims, losses or expenditure of the deceased may be deducted.

This Act and its application particularly concern farmers farming in their own name (whose farm, livestock, vehicles and farm implements are registered in their own name). In accordance with the First Schedule of the ITA, livestock market value is reduced to a standard value, while depreciation applies to farm implements and vehicles. At death, all assets are deemed to have been disposed of at market value.

Prior to March 2016, the difference between market value and standard value was subject to capital gains tax at an effective rate of 18%. Section 9HA stipulates that capital gains tax is changed to income tax, with a maximum rate of 45% for an individual.

Where crops are on the land, all expenditure is claimed from the individual's estate, but no current expenditure may be claimed against the estate tax: the full profit on the crops will be taxable in the estate. Only expenditure incurred by and in the name of the estate may be claimed from income.

The table below shows the potential impact on the estate of the income tax calculation from March 2016, compared to capital gains tax prior to March 2016.

This example results in a difference of R3 564 141 – cash required additionally to the estate and tax.

Calculation of trading stock in estate

Assets	Number	Book value/Standard value	Market value	Subjected
Dairy cows	220	R 8,800	R 2,200,000	R 2,191,200
Dry cows	130	R 5,200	R 1,300,000	R 1,294,800
Heifers	81	R 2,430	R 364,000	R 607,500
Calves	73	R 2,190	R 328,500	R 326,310
Sheep	65	R 390	R 195,000	R 194,610
Farm implements		R 653,896	R 9,240,000	R 8,586,104
				R 13,200,524
	Capital gains tax at 18% prior to March 2016			R 2,376,094.32
	Income tax at 45% after March 2016			**R 5,940,235.80**

Section 9HA does not apply if the farmer's spouse is the sole heir. In reality, the income tax is deferred only until the surviving spouse dies.

What is the answer?

When the Act was implemented, experts in this field consulted with Revenue Services and the Treasury regarding the impact of farming activities that are discontinued upon the death of the farmer, and the threat to food security. The answer to this was more of a question – why do farmers still farm in "own name"? The complex answer to this question can only be provided with the assistance and knowledge of an expert in this field. The estate and associated tax comprise not only income tax but also estate duty, capital gains tax, value-added tax, etc.

The following benefits apply to persons farming within a company:

- Farm operations may qualify as a small business enterprise subject only to income tax at the lower rates.
- The company cannot "die": if the necessary management agreements and business contract are in place, farming operations can simply continue.
- Shareholding in the company will be an asset in the estate subject to capital gains tax, at a lower rate than income tax.

The question every farmer should ask is: Can I afford to die?

A specialist adviser will be able to help you answer these questions.

If you have any enquiries, please do not hesitate to contact your Sanlam Financial Planner.

Safeguarding the fruits of your labour

Sanlam respects how hard you work to ensure the success of your agricultural business, while facing challenges such as fluctuating markets and unpredictable weather conditions.

That's why we offer a wide range of financial solutions – from fiduciary services, investments, life cover, sickness and disability cover to business insurance. Sanlam is dedicated to giving you the peace of mind that your financial future is protected.

Because instilling a sense of surety against the unknown is what makes us Wealthsmiths™.

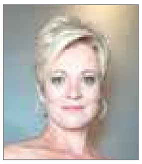
Contact us for professional financial advice.

Marita Steenkamp
Investment Specialist
028 424 1085
083 701 3249

Hermie Steenkamp
Financial Planner
028 424 1085
083 700 3602

Andre Lubbe
Financial Planner
023 342 3670
082 497 6087

Charles Bezuidenhout
Financial Planner
028 312 2569
082 410 3339



Shimen Swanepoel
Financial Planner
023 316 2515
076 804 3963

Kevin Conradie
Financial Planner
071 626 2732

Insurance | Financial Planning | Retirement | Investments | Wealth

Sanlam
Wealthsmiths™

Sanlam is a Licensed Financial Services Provider.

Poultry plus

North West youth on track to turn small-scale poultry farming into big business

The taste of success has come to 25 small scale poultry farmers in North West province who are on track to grow to commercial operations in the future, thanks to training on farm management and record-keeping. The 25, all from the North West province, were among over 240 South African poultry farmers who learned new business and financial management skills in a series of workshops by the World Poultry Foundation, with grants from US government agencies. Johannesburg-based Franchising Plus, which delivered the training in February and followed up in July, said a common problem among the farmers was ineffective financial management.

Annie Baptiste of Franchising Plus says many of the farmers were living without cash reserves for the next cycle, even though some were turning over up to R70,000 a month from their farms.

"We found that while several participants were graduates and some had a farming background, their business management skills were lacking. Most were not separating their business income from their personal income. Instead of having a business account and paying themselves a salary, they were spending their revenues as soon as they came in. This meant they had no reserves for future cycles and expansion, and no records to support bank loan applications."

By simply improving their financial management, the participants were able to set aside funds for running costs and expansion, and were able to improve their turnover.

The course also covered farming best practices, where participants discovered

the importance of careful feeding and poultry management, so reducing their poultry mortality rate and improving profitability.

Says Baptiste: "63% said their income had increased, 74% reported improved profitability and 80% said their record-keeping had improved since the training."

Thanks to their improved farming practices and financial management, the participants are now on track to grow substantially, Baptiste believes. "We found most of the young farmers who were trained in Potchefstroom and around the country have ambitions to grow into commercial producers.

There is certainly a market for more poultry in South Africa – plus, the poultry sector has a relatively low barrier to entry. We see many young people who have access to land turning to poultry farming first as a means to supplement their income, and later as a potential business." Of the emerging poultry farmers trained nationwide, 63% were women. "There is definitely a shift towards more women going into agriculture," she says.

One such farmer, Neo Mohlamme of Neo Poultry Farm in Klerksdorp, currently has six chicken houses on 174 hectares and aims to grow substantially– targeting 45–50 chicken houses within the next five years.

"There is huge demand in my region, because chicken is the most affordable meat around," she says. "As a result of the training, my records are now up to date, I have opened a business bank account and I also comply with SARS."

Mosele Mokgoetsi of Blesbokfontein Farm in Ventersdorp currently has over 1500 layers and says she cannot keep up with demand. She aims to expand to around 90,000 chickens and is working to raise the capital to expand.

The training has helped her manage feed more effectively and so improve profitability, she says: "Because of the training I am now able to do feed conversion ratio, I weigh my feed and I know now how many grams the chicken can eat per day and I can also check with the egg production and how it correlates."

As more young people move to build their own businesses in the agriculture sector, Baptiste believes there is ample room for the North West's small scale poultry farmers to grow. "There is definitely room for more small scale farmers in the region, and opportunities for emerging farmers to grow commercial and sell nationally – particularly if they run their businesses more effectively and collaborate more for their collective benefit," she says.

Kabelo Phalane

New life for soil

Carbon tax off-set opportunities for agribusiness

The Carbon Tax Act 15 of 2019 came into force on 1 June 2019. It is envisaged that companies with carbon tax liabilities will be able to use carbon offsets to reduce the carbon tax liability. In addition to these domestic developments, the exact mechanism of international offset regime in terms of the Paris Agreement is set to be agreed upon in early December. The agricultural sector is well placed to generate ancillary income by delivering much needed carbon offsets to large emitters.

A United Nations report on Climate Change and Land published in August 2019 focuses on how the development of agriculture has started depleting substantive soil carbon stocks. Conventional agricultural practices such as soil tillage and monoculture leave the soil bare, while overuse of chemicals depletes soil carbon stocks. In essence, living soil is full of microorganisms that store carbon dioxide taken up from the root systems of plants. When these microorganisms are dead, the soil no longer acts as a carbon sink and an effective means of taking up and storing carbon captured from the atmosphere.

Soil, together with our oceans and forests, is recognised among the planet's largest existing carbon reservoirs, with enormous potential for carbon capture and storage. The UN estimates that soils can sequester around 10% of anthropogenic emissions over the next 25 years. But is it really up to the world's farmers to fix the world's climate change problems, particularly with the persistent pressure of having to produce more food with less resources?

With the right economic framework providing financial incentives, carbon sequestration in agribusiness has potential. Potential projects include:

- Regenerative agriculture, planting cover crops in between main crops, crop rotation and pasture cropping with no tiling;
- Management regimes protecting indigenous vegetation on farm land from clearance or naturally regenerating previously cleared land;
- The protection and rehabilitation of wetlands and converting biomass into recalcitrant biochar; and
- Adopting precision agriculture practices to reduce nitrous oxide emissions from the soil by improving fertilizer.

Offset opportunities exist not only with respect to developing projects that sequestrate carbon but also projects that reduce the emissions traditionally associated with agriculture. These include reducing methane emissions from livestock as a result of enteric fermentation through the introduction of effective feed substitutes. Other potential projects include effective manure management as well as the development of biogas facilities.

But what financial incentives exist for agribusiness to develop such projects?

Internationally, in terms of the Kyoto Protocol of 2005, parties could meet emission reduction targets by purchasing international carbon credits issued for every metric tonne of carbon dioxide prevented from entering the atmosphere. However, storing carbon in soil has historically been excluded from international carbon markets because it is extremely difficult to measure how much carbon goes into the soil and how long it stays there.

This is changing with technology opening up the potential for the agricultural sector to play a key role in global emission reduction efforts. The new international regime under the Paris Agreement of 2016 will apply from 2020. From 2 to 13 December 2019, the Conference of the Parties (COP 25) is scheduled to bring together delegates from the international community, including South Africa.

It is anticipated that the rules, modalities and procedures for allowing offsets from the agricultural sector will be recognised due to the agricultural sector's key role in global emission reduction efforts.

Locally, the Carbon Tax Act 15 of 2019 came into force on 1 June 2019. In terms of the draft regulations on carbon offsets published in November 2018, projects will be required to comply with eligibility standards that will rely primarily on existing international carbon offset standards.

It can be anticipated that these draft regulations will soon be promulgated in their final form providing much anticipated confirmation of the technical details on how the agricultural sector can harness the potential provided by South Africa's new offset regime.

As environmental considerations become more mainstream, investors, retailers and consumers are all likely to increase their push for all participants from farm to fork to do more as regards sustainability. The financial incentive for the agricultural sector to reduce their emissions and sequestrate carbon in South Africa is set to take off as a result of international but more particularly domestic developments. Agribusinesses that plan for and adopt agricultural offset projects at scale are likely to benefit from this.

The ENSafrica Natural Resources and Environmental team is well placed to provide further information. Contact James Brand at jbrand@ensafrica.com for enquiries.

FRUSTRATION WITH A FAILING SYSTEM

The private sector has to lead the way

Do we want economic growth? One could immediately say– What a question? Of course we want economic growth. Economists and opinion formers emphasize repeatedly that we can't address the country's comprehensive problems without it. Lately, our country has been weighed down under several influences which hampered or prevented desirable growth. We think of a ransacked public treasury, continued corruption, lingering crime, Eskom's collapse, the price of affirmative action, serious droughts, declining infrastructure and an unhealthy policy environment. To discuss these bottlenecks in depth is no longer necessary – South Africans hear it regularly. The question is whether the people in high places hear and understand! With current policy directions, the question may rightfully be asked whether government is serious about achieving and maintaining economic growth.

The medium-term budget was just presented. Minister Tito Mboweni is entangled in an ideologically driven three-party alliance web with an anti-capitalist agenda. A policy environment created more than 25 years ago systematically broke the much-needed investment confidence which was supposed to lay the foundation for economic growth. As expected, in his efforts to position South Africa better, Mboweni focused on the sinking ship of Eskom.

Rather than more money, it is necessary to direct the requisite expertise with a rationalised workforce to enable Eskom to be the reliable energy supplier it used to be. Unless the ANC produces a rational policy which instills confidence, we won't make any progress. A vague, uncertain policy environment does not promote clarity and confidence.

A survey done amongst farmers on what their biggest problems are and for which they seek solutions revealed the following. Amongst others, the drought was mentioned but all realised that the solution would only be sufficient rain.

- Farmers are extremely frustrated with failing systems at all levels in the country. This is directly attributed to the BEE policy. To obtain permits and licenses which are increasingly required for a wide variety of services is almost impossible. In the interim budget, several matters with merit have been raised, such as the need to make it easier to do business. However, the problem remains and the required expertise is lacking.
- Uncertainty regarding land ownership remains an issue which limits farmers to identify and evaluate options for further investment and expansion on their farms. The emotion created by the ANC over land ownership creates unrealistic expectations.
- The safety and security conditions have assumed critical levels. With a government that does not honour its' responsibility, law-abiding citizens are placed in an untenable situation.

Do we just take note of these realities or do we do something about it?

Firstly, it must be realized that there are economic realities and principles which cannot be ignored. If one is measured against these rules in the production process, one will either pass or fail the test. It will determine whether business will grow or not. Indeed, these criteria apply to all forms of business and even to governments of the world. Isn't our dilemma of lack of growth in South Africa the result of a government that currently fails the test when measured against economic principles?

There is concern that the government has not addressed the lingering and serious drought at all in the interim budget. The impact of this drought has already brought about a national disaster. It has long been the case that it does not only affect farmers: the entire agricultural value chain is being influenced.

Rural communities are deprived of opportunities as agriculture, the lifeblood of the countryside, is no longer the economic cornerstone it used to be. Just consider the economic contribution which the agricultural workforce spends on a monthly basis in rural areas and it will be realised what role agriculture plays other than putting food on the table.

Just consider that with 750 000 farm workers with a minimum wage of R3200 (which in reality is much higher), the monthly financial injection of the workers in the rural area would amount to R 2.4 billion.

Is it not high time that the economically active residents of South Africa who wish to see our country function properly and flourish start planning beyond the scope of a stuttering government?

Under current policy direction, however, there are worrying aspects which are blooming. Poverty and unemployment loom large.

Recovery can only be addressed in a sustainable manner if the economy is to grow. It lies in the hands of the private sector to get it right.

Bennie van Zyl,
General Manager, TAU

EIE Group
INDUSTRIAL EQUIPMENT

Toyota Industrial Equipment
YOUR TRUSTED PARTNER IN MATERIALS HANDLING

Toyota 62-8FD25

South Africa's bestselling Forklift.
The Toyota 62-8FD25 is our flagship forklift with proven legendary reliability, since 2007. It has become the bestselling forklift in South Africa, with over 6000 units currently in operation. The 62-8FD25 forklift model offers distinguished driver comfort, safety, ergonomics, and reliability. This diesel operated forklift is designed to minimize fuel consumption and maximize on productivity, with a built-in unique SAS (System of Active Stability) that provides operators with peace of mind, making their day to day operation safer and efficient.

At Toyota Industrial Equipment our aim is to offer customized solutions to suit your businesses unique operational needs. The Toyota 62-8FD25 can be tailored to fit your specific application. Contact your nearest Toyota Forklift branch for a quote on the Toyota 62-8FD25 special or book a demo to experience the Toyota difference.

Toyota 62-8FD25

Toyota 8FBN - 8FBE Electric Range

As the world moves to a "Greener" future, we have become eco-conscious of legislations in food safety and emissions. As the global market leader in materials handling, Toyota Industrial Equipment is passionate about reducing our carbon footprint and helping our valued business partners in reducing theirs, while still giving you the quality products you can rely on. The battery-operated forklift trucks come with all the features you have come to trust about the Toyota brand. Meticulously designed to our legendary standard of safety, durability and reliability. The comprehensive battery-powered forklift range includes 4-wheel forklifts, from 1.5 – 8 Tons, and compact 3-wheel forklifts from 1 – 2 Tons. With battery-operated equipment that embraces an IPX4 weather rating, meaning outdoor operation in the rain is no cause for business disruption.

Our 8FBN (4-wheel) range features a direct replacement for your existing diesel or gas unit, while the 8FBE (3-wheel electric) range offers compact solution to help you save space between racking or stacks, allowing you to better utilize limited space.

Toyota 8FBE 3-wheel electric

Toyota 8FBN 4-wheel electric

Lithium-ion

Lithium-ion Battery

Toyota Industrial Equipment is proud to bring to market our Lithium-ion solutions, across the complete battery-operated range of forklifts and warehousing equipment. Lithium-ion enables you to operate multiple shifts with a single battery, ensuring longer operational time and productivity as well as opportunity charging, while minimizing your business down time and eliminating the need for battery changes.

Benefits of Lithium-ion:

- Fast charging and opportunity charging
- No deterioration when not in use
- Longer battery life
- No maintenance, gassing or ventilation
- Real-time monitoring
- Does not slow down during discharge

Toyota BT - LPE200B

Toyota's Ifoy award winning range of low lifters now includes the LPE200B that is manufactured in Sweden. This powered pallet truck has an essential simplicity, making this pallet truck smooth, easy to use and powerful.

With the maximum speed of 7.5 kilometers per hour, its' lifting and lowering performance as well as low energy consumption gives the machine many work cycles per battery charge. The BT Powertruck makes sure that the drive wheel grip is always optimized according to the load weight. The Optimized Truck Performance (OTP) feature gives speed control when cornering and smooth driving in pedestrian mode, making it comfortable, safe and efficient.

Toyota BT Levio - LPE200B

Toyota BT Reflex - RRE160HR

Toyota BT - RRE160HR

The O-series reach truck is suited for both indoor and outdoor use and it is available with different weather protection options with polycarbonate windows on the overhead guard or one or more sides of the cab.

Increased ground clearance and rubber wheels coupled with a revised gearbox allows the truck to work on uneven ground, in yards, block stacking, servicing outdoor racking and loading and unloading vehicles from the side.


AGRICO
Advanced panel
FREE!
with
internet control.*
AGRICO
Order a new Agrico centre pivot
with a Premium control panel and get an upgrade.
*Free subscription included for the first 12 months.
Contact details: Alfred Andrag | c: 082 824 1214
t: 021 950 4111 | f: 021 950 4208 | alfred.andrag@agrico.co.za
More than 100 years' service
Sales and Service with branches across Southern Africa:
Aliwal North | Bellville | Bethlehem | Bloemfontein | Caledon | Ceres | Christiana | Cradock | Estcourt | George | Hartswater | Humansdorp | Kakamas | Kimberley | Kroonstad
Lichtenburg | Lusaka | Mukushi | Nelspruit | Nigel | Nylstroom | Pietermaritzburg | Piketberg | Rawsonville | Tzaneen | Upington | Vredendal | Wellington