





PULA IMVULA

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A WORD FROM... Dr Pieter Taljaard

ITH THANKFUL HEARTS, WE CAN LOOK BACK AT THE PAST TWO BLESSED GRAIN SEASONS IN SOUTH AFRICA. TYPICALLY AS CYCLES GO, WE ARE PARTICULARLY THANKFUL BECAUSE OF THE EXTREME DRY PERIODS WE ENDURED BE-FORE. WHO CAN STILL REMEMBER THE FRIGHTENING DAY ZERO APPROACHING IN THE MOTHER CITY? IM-PORTANT TO KNOW AND REMEMBER IS THAT THESE CYCLES WILL REMAIN.

Climatologists and weather experts warn we might experience even more extremes, adding even more risk to local agriculture and in particular grain production. We know we have some of the best and most resilient farmers in the world. Our ability to creatively innovate, cultivate new ideas, and adopting new technology in a short time, enables us to survive and stay food secure in this semi-arid climate.

As the rate of change keeps increasing, the risks of globalization, in essence, the dependence on China because of their 'artificially low production costs', are becoming ever more clear. Growing our local food production and ensuring farm-level profitability is of utmost importance to ensure long-term sustainability. The naked truth is that the drivers of profitability affect all types of producers in the same way, irrespective of their development status, the only difference being their ability to hold on to another year (maybe).

I want to conclude by urging everyone to focus on the real issues, ensuring that resources are optimally used and that we think longer term. Africa is the continent of opportunities where future growth will be. It is up to us to determine who will gain from it, children from Africa or will we allow other continents to pride our land? There are enough opportunities and real, passionate farmers are few. Our real challenge is to support these farmers that will contribute to food security and continue to farm sustainably.

Together we will make the difference! I wish you all a blessed grain season. Happy holidays and a Merry Christmas!

Leaf diseases on maize: WHAT DOES THIS SEASON HOLD?

ISEASE CAN ONLY OCCUR WHEN THE HOST, PATHOGEN AND SUITABLE ENVIRONMENTAL CONDITIONS OVERLAP. GIVEN THE NEWEST LONG-TERM WEATHER FORECASTS PRODUC-ERS CAN EXPECT SOME DISEASES AND THEY MUST BE ON THE LOOKOUT FOR DISEASES.

THE SEASON AHEAD

Climate is the overriding aspect in the prediction of the pests and plagues. The incidence of pests and plagues is completely dependent on the environmental conditions during the critical growth stages of the crop. According to the 30 September 2021 long term weather forecasts of the South African Weather Service, the El Niño-Southern Oscillation (ENSO) is likely to remain in a neutral state for spring, with a likely change to a weak La Niña during early- and mid-summer. As we move towards the mid-summer season, ENSO starts playing an important role in our summer rainfall. As such, the increased likelihood of a weak La Niña during early- and mid-summer is expected to be favourable for above-normal rainfall in that period.

The multi-model rainfall forecast indicates mostly above-normal rainfall for the north-eastern half of the country throughout the early-summer (October to December and November to January) and mid-summer (December January February) seasons. Above-normal minimum and maximum temperatures are expected across the country throughout the early-summer and mid-summer seasons except for parts of the north-east of South Africa which are expected to have below-normal maximum temperatures during mid-summer.

CLIMATE AND LEAF DISEASES ON MAIZE

Maize diseases develop over time. Climatic will determine when the infection occurs, how fast the disease establishes, and what the

1

More general leaf diseases on maize in South Africa.

Leaf disease/ symptom	Туре	Growth stages	Conditions	Fungicide	Control
Common rust (Photo 2)	Fungus	Later V stages (V8+)	Moderate temperatures (16°C - 25°C).	Yes	Fungicides and hybrid selection.
Northern corn leaf blight (Photo 1)	Fungus	V6 to R stages	Moderate temperatures (18°C - 27°C); long dew periods/ high humidity.	Yes	Fungicides, hybrid selection, crop rotation and ploughing in of plant residues.
Grey leaf spot (Photo 3)	Fungus	Fungus From flowering (VT - R1+)	Moderate to hot temperatures (22°C - 30°C); long dew periods/ high humidity (>95%).	Yes	Fungicides, hybrid selection, crop rotation and ploughing in of plant residues.
Maize streak disease (front page photo)	Virus	V stages	Tropical areas where hosts are present all year, as well as conditions that increase vector activity (particularly hot irriga- tion areas).	No	Control leaf hoppers (systemic seed treatments and sprayings) and weed control.
Bacterial streak (Photo 5)	Bacterium	From flowering (VT - R1+)	Warm, irrigation areas.	No	Crop rotation, fallow fields and destroy infested plant residues.
Sunburn (Photo 4)	Environment	All stages	Heat/sun inhibition.	No	Hybrid selection and moisture management.
<i>Phaeosphaeria</i> leaf spot	Fungus and possible bacte- rium complex	R3+	Areas with high humidity and cool night temperatures.	Less effective	Not usually necessary, but hybrid selection destroys infested plant residues and moving of planting date can help.
Downy mildew	Fungus	Early V stages	Warm, moist areas (tropical ar- eas), particularly in fields where the disease was observed be- fore. Soil temperatures above 20°C promote infection.	Yes	Soil treatments with metalaxyl, earlier planting date in infested fields, good quality seed and avoid crop rotation with sorghum.
<i>Diplodia</i> leaf streak	Fungus	All stages	Warm, moist areas and minimum tillage.	Yes	Crop rotation, good agricultural practices and ploughing in of plant residues.
Eyespot	Fungus	R3+	Cool, moist conditions, mini- mum tillage, insect pests like thrips and aphids can promote infestation.	Yes	Crop rotation, ploughing in of plant residues and insect control.
Polysora rust	Fungus	R3+	Tropical areas, warm (24°C - 28°C), humid weather.	Yes	Fungicides and earlier.





Common rust.



Northern corn leaf blight.



Sunburn/drought inhibition symptoms on maize leaves.



Grey leaf spot.

damage will be in the end. There are no new leaf diseases in South Africa that can surprise the producer. They are often the direct consequence of climate conditions changing. It is therefore important for producers to recognise the well-known leaf diseases on maize, and also to know when one can expect to see them.

Only the correct diagnosis of a disease can determine if the control strategy will be successful. One of the most common mistakes producers still make is to administer fungicides for diseases caused by viruses, bacteria or even physical damage (sunburn or wind damage).

Sometimes grey leaf spot, bacterial streak and sunburn damage are confused. Management of these problems is very different, and in some cases not even possible. A good local reference resource will help the producer to recognise diseases and to then make the correct management decisions.



Before they occur, the most important maize leaf diseases have unique needs in terms of environmental conditions. Furthermore, the physiological growth stage of the plant determines when certain diseases appear.

The most important maize leaf diseases for which the producer should be on the lookout are summarised in **Table 1**.

There are various other leaf diseases that were not mentioned in this article because they are less common or occur sporadically. However, this does not mean that they cannot cause huge yield losses under the right conditions. In order to react timeously, it is wise to still consult a good source or expert if suspicious symptoms are observed.

> PIETMAN BOTHA, INDEPENDENT AGRI-CULTURAL CONSULTANT



Bacterial leaf streak.

Technology strengthens a farmer's management abilities

UST AS SIGNIFICANT AS THE SHIFT FROM ANIMAL POWER TO MECHANICAL POWER ON FARMS ONCE WAS, THE SHIFT OVER THE PAST FEW DECADES INSIDE THE FARM OFFICE HAS BEEN REVOLUTION-ARY. JIM CARROLL (AMERICAN AUTHOR) SAID THAT SOME PEOPLE SEE A TREND AS A THREAT; BUT PEOPLE WHO ARE PROGRESSIVE, FUTURE THINKERS AND INNOVATORS SEE THE EXACT SAME TREND AS AN OPPORTUNITY.

Let's talk about the farm office. Are you running away from it or running towards it? Are you drowning or are you staying on top of the paper work you need to be doing every day?

CHANGE IS INEVITABLE

I have witnessed many changes in the farm office over the past 40 years:

- No more weekly collections of post from bulging post office boxes.
- No more endlessly overflowing office waste paper bins.
- Waiting in bank queues to deposit or withdraw cash is something of the past.
- Face to face meetings with SARS, Eskom and others no longer take place.
- The arrival of the monstrous desk top computer brought about many changes, like learning how to get our own email address and then learning to communicate online.
- Entering a learning curve as we discovered the wealth of information waiting at the touch of our finger tips via Google.

This world of fast paced and rapidly changing technological innovation is a world of satellites, antennas, laptops, tablets and smart phones – enough to take one's breath away if you had never been exposed to the world of computer literacy and information technology as a young person.

Now we simply cannot do without this world of computers, the World Wide Web, Power Point presentations, spread sheets, word processing, digital photos, hard drives and flash drives. We have to adapt and use technology as far as it suits us.



TECHNOLOGY IS FOR EVERYONE

Computer literacy is no longer reserved for a few 'clever people' – it is a competency we all need to learn. If a farmer wants to run his farming operation efficiently today, he needs to master basic computer skills. Computer literacy is as much a part of our ability to function in the modern world as the traditional 3Rs – reading, writing and arithmetic – were in the 'good old days'!



The internet affords farmers opportunities to be better informed and more efficient. It is easy to learn more about the crops you grow and to monitor market place prices or even find buyers for your produce. There are many programmes available that could become tools to strengthen the farmer's management abilities.

Our farm office is now being managed with minimal paperwork, much less travelling and standing in queues that cost us time and money. We bought useful accounting programmes that provide us with all sorts of information at the touch of a button. Yes, it still demands our time and attention but the secret lies in mastering the computer so that it works for you.

These are just some areas technology makes the farm office more efficient:

- Information availability: Office management can be more efficient when information is typed and stored on your computer or 'in the cloud'. It's easier to save information and search for documents and messages on the computer. Filing correctly is important.
- Business communications: The introduction of computer faxes and electronic mail systems has revolutionised the way that businesses communicate. The savings, both in time and money, have been considerable and it also speeds up information delivery.
- **Bookkeeping**: Computer systems are used for a variety of accounting functions like cash flow analysis, tracking of invoices and payments and debts. It assists us in effective management of VAT and taxes due. Small business owners use computers for bookkeeping more than for any other purpose.
- Banking: Online and mobile banking is so efficient. It is however important to learn safety measures and be wise. Never divulge passwords or personal information and banking balance and details on the phone or online. Double check accounts into which





you make payments before transferring cash. Be savvy and smart.

- Filing: No more files or bulky filing cabinets. Rather save and store digital files from your business institutions like banks and agribusinesses which you can share with your bookkeepers and accountant to make the bookkeeping processes more efficient.
- Administration: Easy office access to printing and photocopying via computer and printer.
- **Employee records**: Easy to keep information about each employee with start date, identity documents, PAYE and UIF records.
- Stay in touch: Learn to navigate social media platforms like to learn where auctions are taking place. You can follow Grain SA on Facebook, Twitter and Instagram.

• Stay informed: Find useful websites like *www.grainsa.co.za*. There is a wealth of information uploaded on a daily basis. Look out for Latest Reports and Market Watch. You can even read the *Pula Imvula* online via this website.

TAKE YOUR OFFICE WITH YOU

Increasingly tech savvy farmers are taking their office with them in their bakkies and on their tractors.

- We now have the freedom to monitor the futures trading exchange minute by minute no matter where we are, and buy or sell our crop when the price is right.
- Taking technology into the tractor cab can be very exciting as one is able to feed information to practice precision farming. The lime spreader that accurately reads the map of the field and deposits fertilisers specifically, the combine harvester that monitors yields meter by meter so the farmer can exactly pinpoint highest and lowest yielding patched in one field and figure out why this was the case.
- We can take digital photos of a sick plant and send it to experts for diagnosis and advice on how to remedy the problem. This is time saving and efficient.

Be a good leader and an eager learner. Equip your team to work with modern technology. Stay up to date. Don't be shy to ask for guidance from experts around you. If you need courses then tell Grain SA – they will always try to make a plan.

JENNY MATHEWS, MANAGEMENT AND DEVELOPMENT SPECIALIST AND EDUCATOR



WORDS OF



No race can prosper until it learns there is as much dignity in tilling a field as in writing a poem.

> ~ BOOKER T. WASHINGTON (adviser to US presidents)



Declining global maize STU *supports prices*

HE STOCKS TO USE RATIO (STU) PROVIDES IN-SIGHTS BETWEEN SUPPLY AND DEMAND. IT IS A CRUCIAL INDICATOR USED TO PROVIDE INSIGHT INTO THE RELATIONSHIP BETWEEN SUPPLY AND DEMAND. THE HIGHER THE RATIO, THE BETTER SUPPLIED THE WORLD OR THE COUNTRY IS. THEREFORE, THIS WILL IMPACT THE DECISION TO IMPORT, PLANTING INTENTIONS FOR THE FOLLOWING SEASON AND COM-MODITY PRICING.

INTERNATIONAL MARKETS

World maize production is forecast to exceed the previous record, set five years ago, with larger than average crops expected from several key growers, including the major exporters at 1,209 million tons (+7%). Demand is expected to rise by an above average 4%, with gains predicted for all demand components, which includes food, feed and industrial use.

According to the International Grains Council (IGC), the world ending stock for the 2021/2022 season will be 282 million tons, which is 2,9% higher than the previous season's ending stock, but still lower than the three preceding seasons.



Source: USDA's PS&D

2



South African maize ending stocks vs stocks to usage ratio.

Source: SAGIS

Globally, the maize picture has seen a downward trend when it comes to stocks to usage. Even though biotechnology has created healthy improvements in yields, the usage has also increased considerably from energy to industrial purposes. The fall in production has resulted in the supply/demand picture being markedly tighter in recent seasons.

At present, the global maize STU is at 25,4% (**Graph 1**). In theory, this means that the world has enough maize in stores to meet 25% of a year's demand. The optimal ending stock as a percentage of consumption is approximately between 12% and 15%. End stock for consumption of less than 12% means that imports will be required.

Graph 1 also indicates major exporters of maize. Ukraine and Argentina are above the 15% mark and therefore considered as comfortable, but the United States of America and Brazil are below the 12% mark and therefore indicate critically low stock levels. This a problem as they are major exporters of maize. Lower stock levels support prices, and this has been the case internationally over the past season.

LOCAL MARKET

Locally, as plantings continue across the country, weather prospects are looking good. Local demand is expected to decrease moderately by about 1,65% compared to the previous season. The projected ending stock level on 30 April 2022 is estimated at 3,3 million tons, with stocks to usage ratio at 23,97% (**Graph 2**).

As indicated before, the percentage of local consumption is a good measure to express the size of the available stock. The optimal ending stock as a percentage of local consumption is approximately between 12% and 15%.



Ending stocks for consumption of less than 12% means that the local stocks are low and may have to be imported. Given the increased production levels for 2021/2022, South Africa remains at a comfortable level in terms of stocks. Although stock levels remain good, maize prices remain high due to the support from international fundamentals.

IKAGENG MALULEKE, AGRICULTURAL ECO-NOMIST AT GRAIN SA



LEARNING TO BE AN AGRICULTURAL LEADER

HREE OF GRAIN SA'S PERSONNEL RECENTLY GRADUATED FROM THE LEADERSHIP ACADEMY FOR AGRI-CULTURE, PREVIOUSLY KNOWN AS THE GRAIN ACADEMY. THE ACADEMY IS SPONSORED BY SYNGENTA AND PRESENT-ED IN PARTNERSHIP WITH GRAIN SA AND THE NORTH-WEST UNIVERSITY BUSINESS SCHOOL.

The programme which previously was just for young producers now focuses on the agricultural sphere as a whole. Individuals from all facets of agriculture – producers, government employees, private companies and organised agriculture – are invited to participate. The idea behind the programme is to get the conversation going throughout the agricultural value chain and for participants to build networks throughout. It has a pure leadership focus that includes self-leadership, leading others, relationship management and communication skills.

Ikageng Maluleke, an agricultural economist who is a monthly Pula contributor, was part of the class of 2020, while Sandile Ngcamphalala, programme manager: Farmer Development and dr Miekie Human, research and policy officer, were part of the class of 2021. As a result of lockdown restrictions, the graduation ceremony for the 2020 class had to be postponed. The ceremony for the classes of 2020 and 2021 took place on 8 October at The Venue in Pretoria. ■

PULA IMVULA EDITORIAL TEAM



lkageng Maluleke, a graduate from 2020, is standing between the two 'giants' of Grain SA – dr Pieter Taljaard, CEO of Grain SA, and Jannie de Villiers, former CEO of the organisation.







A positive work environment IS IMPORTANT

ELL-BEING REFERS TO A STATE OF BEING COMFORTABLE, HAPPY, SATISFIED, HEALTHY. THUS, WHEN AN EMPLOYER CARES FOR EMPLOYEES, THEY WILL BE COMFORTABLE, SATISFIED, FEEL SAFE AND SECURE IN THEIR WORKING ENVIRONMENT, AND FEEL HAPPY TO WORK FOR THE PARTICULAR EMPLOYER. THE RESULT BEING IMPROVED PRODUCTIVITY, RESPON-SIBILITY FOR RESOURCES, AND LOYALTY TOWARDS THE BUSINESS.

'Take care of your employees and they will take care of your business. It's as simple as that' – a quote by Richard Branson, a well-known billionaire. Is there something to learn from this quote? The well-being of employees/staff is a well-discussed topic which we will address in this article. The focus will therefore be on some practical matters.

ATTITUDE MAKES A DIFFERENCE

How will you as employer experience a positive attitude or wellbeing from your employees towards the working environment? You will experience actions such as your staff being friendly, being compassionate about and committed to their work and responsibilities, taking care of tools and equipment, and being on time. They will be more efficient and committed to success and excellence regarding their job.

Vice versa, a negative well-being will be illustrated by employees being late for work on a regular basis without sound reasons and being absent or on sick leave unnecessarily. They will not care for the tools and equipment whether it is damaged or lost. You could also experience petty theft of small tools and inputs such as seed, and feed and staff could even harm crops. Staff will be irritable, shorttempered, and moody and more aggressive. Drinking can become a problem. You could also observe a loss in concentration and a lack of energy. A high staff turnover is a sure sign of a negative attitude. All this comes at a cost to your business.

As an employer you must realise you are a manager and a leader and address any negative attitude.

LEADING IN THE RIGHT WAY

Being a manager requires proper management of all labour affairs according to the labour laws. For example:

- Ensure you pay your staff their correct salary and at the time/day as agreed on.
- Do not neglect occupational health and safety matters. Improve workplace safety through training, safety equipment and clothing, and safe practices.
- Do not expect work to be done without proper tools, equipment, and other resources.

As a leader you must inspire your staff. For example:

- Your own integrity must be beyond doubt let your no be your no and your yes, your yes, and do not make promises you cannot keep.
- Be unscrupulously honest, be genuine and be the example to your staff. They must trust you.
- Treat your staff with dignity and respect treat them as you would like to be treated.
- Avoid favouritism treat all the same.
- Communicate properly, clearly and with respect with your staff especially as to their tasks and what you expect from them. Provide them an opportunity to voice their opinion and above all listen to them. Shouting will bring you nowhere. Never use foul language.
- Express your gratitude if and when necessary but be honest. The digital resources of today can be useful a SMS or WhatsApp message can work wonders. A message 'Thank you very much for your effort today with the special task you had to do. We do appreciate it' can only lift the spirit of a staff member.

We are not saying that you must be a friend to all. To the contrary, you must be firm, fair to all and maintain discipline. Be strict but also accommodating.

You must have already heard other employers describing their staff as the main asset of their business. Are they? Does it show in the way staff is treated? You are in a farming business to make money, therefore address the well-being of your staff.

It thus seems that the statement of Richard Branson bears truth. Your business can only benefit from your employees' positive attitudes.

MARIUS GREYLING, INDEPENDENT AGRICULTURAL MANAGEMENT CONSULTANT



CHANGE is necessary for GROWTH



RAIN SA HAS BEEN INVOLVED IN DEVELOPING EMERGING FARMERS SINCE ITS INCEPTION. THE FARMER DEVELOPMENT PROGRAMME (FDP) FORMS ONE OF THE CORE BUSINESS UNITS OF THE ORGANISATION.

The aim of the programme is to equip individual farming enterprises towards becoming self-sustainable and to make a significant contribution to the national goal of a united and prosperous agricultural sector. To ensure its sustainability, the programme will now enter a new phase, but will still focus on the development, training and mentorship support of emerging farming enterprises.

FARMER SUPPORT AND SUSTAINABLE FUNDING

At the 2020 Grain SA Congress the decision was made to transform the Grain SA FDP to a non-profit organisation called Phahama Grain Phakama (PGP). The new organisation has been registered and is on the brink of becoming fully operational. Additionally, PGP will be registered as a public benefit organisation (PBO) with the South African Revenue Services (SARS) and specifically as a Section 18A company with benefits to offer funding partners and sponsors of public benefitting projects in terms of farmers.

The goal of PGP is exactly the same as that of the FDP – to develop farmers. It will now just be structured through an independent arm of Grain SA. The name – which basically means 'growth for grain farmers' – is symbolic of the accelerated growth needed for many new era commercial producers in South Africa to sustain their businesses and make a fair contribution to national food security. The focus of the organisation will therefore move towards a greater emphasis on the commercialisation of new era producers, within the wider Grain SA structure.

Although more support will be given to new era commercial producers towards becoming independent commercial producers, subsistence farmers will still receive support through the Beyond Abundance project.

'Many of the new era producers who are part of the programme have been receiving support for many years and are still not farming independently. Our task going forward is to develop these farmers to commercial level, or at least a state of independence from the programme,' says Sandile Ngcamphalala, Grain SA's programme manager for Farmer Development. They should be ready to farm independently within three to five years.

'Currently there are just over a hundred new era producers supported through the programme. It is a priority that these beneficiaries also join Grain SA as commercial members and that they participate within the Grain SA structure. The organisation will take active steps to promote commercial membership amongst new era producers. We cannot afford to have free riders. Most of these farmers are fully capable; we just have to allow them to grow.'

A PROGRAMME THAT WORKS

Grain SA's FDP has been operational for more than 20 years and thanks to the dedicated team that have carried the programme, it is still going strong.

The programme aims to support developing farmers to harvest the highest possible yield from the land they are farming – whatever the size – using a combination of technologically advanced practices. Farmers are trained, mentored and supported every step of the way to ensure that they reach the stage where they can take full responsibility for their farms and carry on without the support of the programme.

Over the years, the farmers that have continuously demonstrated full commitment and a great sense of responsibility and who have taken full advantage of the mentorship and funding support, have achieved great success. The challenge is to accelerate the scaling up. Challenges in this regard also include issues that have nothing to do with the programme effort. Access to secured high potential land, affordable inputs and funding remains key and thus a greater focus of the programme going forward.



The brand-new PGP logo.

TAKING THE LEAD

Sandile Ngcamphalala was appointed as farmer development lead responsible for PGP in March 2021. He has dual reporting responsibilities to Grain SA CEO, Dr Pieter Taljaard, and to PGP's board of directors, including Derek Mathews, Jaco Breytenbach, Jeremia Mathebula, Ramodisa Monaisa, Richard Krige, Sarel Haasbroek and Willem Groothof, who were appointed on 1 September 2020 as per the Companies and Intellectual Property Commission (CIPC) notice.

At the first meeting of the board of directors which took place on 11 November 2020, Ramodisa Monaisa was elected as the first chairperson of the board, with Jeremia Mathebula as vice-chairperson.

FUNDING PARTNERS AS CORNERSTONE

The FDP cannot operate without sponsorships and the programme has been sponsored by numerous different industry trusts and partners over the past few years. PGP has been established as the development entity of Grain SA to ensure that Grain SA is BEE compliant and that donors can benefit from their involvement with the programme. This will make it possible for PGP to actively source more funding directly targeted for farmer input support, especially from the private sector.

Current funders of the programme have welcomed the establishment of PGP and are committed to support the organisation into the next phase. These include AB InBev, the South African Cultivar & Technology Agency (SACTA), Standard Bank, PepsiCo, Bayer, Corteva, the Maize Trust, the Oil and Protein Seeds Development Trust, Pannar, the Winter Cereal Trust, Sasol South Africa and the Sasol Trust.

Without these partnerships, the programme could not continue and Grain SA is grateful to each one for their trust and willingness to invest in the development of South Africa's emerging farmers to ensure the transformation of the sector.

Grain SA and PGP will also explore more opportunities for partnerships with international donors – and where applicable – with provincial governments as key and strategic partners. Through this initiative Grain SA hopes to increase partnerships and ensure the programme is sustainable and that the supported farmers can access maximum benefits.



Meet the partners of the Farmer Development Programme

ENRY FORD, THE FOUNDER OF THE FORD MOTOR COMPANY, BELIEVED IN TEAMWORK. ONE OF HIS FAMOUS QUOTES ABOUT TEAMWORK STATES: 'COMING TOGETHER IS A BEGINNING, STAYING TOGETHER IS PROGRESS, AND WORKING TO-GETHER IS SUCCESS.'

Grain SA's Farmer Development Programme (FDP) is successful as a result of a great team who are working together. Apart from the management team, the development coordinators, mentors and study group leaders collaborate to ensure that developing farmers are reaching new heights. However without the support of the programme sponsors/funding partners, none of this would be possible.

One of the programme's steadfast partners who shares Grain SA's vision for farmer development – and also help make the publishing of *Pula Imvula* possible – is **The Oil and Protein Seeds Development Trust** (OPDT)/**Oilseeds Advisory Committee** (OAC). OPDT/OAC have been involved in farmer development since its inception in 1997 with transformation forming a great part of the OPDT/OAC research budget. They contribute towards the promotion and development of the oil seed industry through their sponsorship and support to the FDP, particularly through funding for mentorship, soil corrections and crop insurance. This partnership with Grain SA also makes it possible for information and advisory services to be provided to the developing agriculture sector through articles in the *Pula Imvula* and training courses.

TRAINING IS KEY

According to Gerhard Keun, CEO of OPDT, their farmer development involvement was at first a training programme for emerging sunflower farmers in North West. The training was originally done by farmer organisations like the National Oil and Protein Seed Producers Organisation (NOPO) and the National Maize Producers Organisation (NAMPO) before Grain SA took over the baton and built on this positive momentum.

Since then the programme has expanded to include extensive training, sponsorship of *Pula Imvula*, the planting of trials and mentorship. 'Our involvement in farmer development is very important to us. Through our partnership with Grain SA we can entrust money to an organisation who spends it for the benefit of developing producers and gets the necessary results by assisting them with oilseed production,' says Gerhard.

The original project named Farmer Development by Grain SA, focused on training, the sponsorship of articles for *Pula Imvula*, planting trials and mentoring. This programme was expanded in 2020 when OPDT and Grain SA joined hands and launched the project Farmer Development by Grain SA: Advanced Farmer Input Support. Through this project producers receive money for inputs to make it possible for them to produce oilseeds. Gerhard explains: 'With this sponsorship, mentoring, insurance and soil corrections are all made possible. It gives producers a last boost to move to commercial status and provides them with an opportunity to apply for money from other external financial sources to cover the rest of their input costs.'

A soybean awareness DVD which shows the full spectrum of soybean production has also been produced in co-operation with



OBJECTIVES OF OPDT/OAC

The main objectives of the OPDT are the promotion and development of the oilseeds industry in South Africa through:

- Financing for research projects pertaining to the improvement, production, storage, processing and marketing of oilseeds.
- Financing for the provision of information and advisory services to the oilseeds industry relating to the production of oilseeds and marketing conditions.
- Financing of market access or of any further conduct which is in the interest of the oilseeds industry.
- The main objectives of the OAC are:
- The rendering of advice to the trustees of the Oilseeds Trust in respect of the application of its funds for the benefit of the oilseeds industry.
- Making of recommendations to all interested parties in the oilseeds industry.
- The appointment of trustees to the Oilseeds Trust and any other institutions which the Committee deems necessary to investigate, promote and report on matters relating to the Oilseeds Industry, referred to it.

Grain SA and translated into isiXhosa and isiZulu. This is now used in Grain SA's Schools Programme.

MORE FARMERS WILL ENSURE FOOD SECURITY

All farmers who plant oilseeds are eligible to benefit from this sponsorship. 'We do not look at the size of the land – everyone should get training to improve and to be able to contribute to household nutrition and national food security. We want a small scale farmer to become self-sufficient and a potential commercial farmer to develop into a commercial producer,' says Gerhard.

OPDT/OAC's main goal is to assist Grain SA in growing the number of farmers in South Africa through their involvement, by developing and enabling sustainable producers in the country. Training in production practices of oilseed crops like sunflower, soya beans, canola and groundnuts is a crucial part of the Grain SA Farmer Development Programme. Through this food security will also be enhanced.

The importance of accelerating farmer development to grow more farmers for South Africa is one of the main reasons for OPDT/OAC's involvement in Grain SA's Farmer Development Programme.



AVOIDING THE DISEASE TRIANGLE

AIZE IS ONE OF THE MOST IMPORTANT AGRICULTURAL CROPS IN SOUTH AFRICA, WITH APPROXIMATELY 2,3 MILLION HA PLANTED ANNUALLY. MANAGING DISEAS-ES IS JUST ONE OF THE MANY ASPECTS OF PRODUCTION THAT MAIZE PRODUCERS NEED TO CON-SIDER EACH SEASON.

While the symptoms of many of the leaf disease pathogens are often obvious from early in the season, the symptoms and effect of diseases infecting the grain are often only fully realised at harvest time, long after any opportunity has passed to try and remedy the situation.

COMMON MAIZE EAR ROTS

Ear rots impact the returns of the crop in two ways:

- Firstly as a direct yield loss. Ears infected by these diseases may be destroyed or have significantly lighter kernels, resulting in less tonnage per hectare.
- The second impact is the financial penalty that may be imposed due to down-grading of the maize at the silo.

The financial implications of these two losses when combined can be substantial, so reducing the risk of ear rots is a very important aspect of production.

While there are several different causal organisms for ear rot in maize, they all require the fulfilment of what is commonly termed the 'disease triangle' for infection to occur. When all three corners (factors) of the triangle are present simultaneously, disease development can take place (**Figure 1**).

Scan the QR code for more information on ear rot diseases and diseases in general.



The disease triangle. When all three corners of the triangle are present (the overlap of the circles) the disease can occur.





Fusarium ear rot mostly occurs as a secondary infection associated with insect damage on the ears.



For Diplodia to flourish, it needs a dry early season, followed by extended wet conditions at silking.



Prolonged cool, wet weather within three weeks of the onset of silking provides favourable conditions for Gibberella ear rot infections.



IMITATE NATURE WITH

RODUCERS HAVE TO REMEMBER THAT THEY ARE FARMING WITH SOIL – NOT WITH MAIZE, GRASS, CATTLE OR TREES. INSIDE THE SOIL ARE LIVING MICRO-ORGANISMS, WHICH ARE THE 'HERD' THEY HAVE TO MANAGE AND PRESERVE. PRODUCERS WHO PLACE THESE MICRO-ORGANISMS FIRST, WILL REAP THE BENEFITS.

A cover crop is nothing but a weed of a person's choice. There are many reasons why producers cultivate cover crops, but overall the main objectives are to provide healthy nutrition to the soil and microorganisms. Cover crops can also be grazed and eventually leave a protective mat (*mulch*) on the surface to protect the soil against overheating and moisture loss.

MULTISPECIES COVER CROPS

With cover crops producers try to imitate nature. By planting multispecies cover crops that bear flowers, even greater biodiversity is created. However, the cultivation of multispecies cover crops takes effort – because of the different seed sizes there is no precision, but it is also not random.

Nature tries to keep the soil covered at all times and will always tend to do this. Planting succession commences with the pioneer plant and ends with the climax plant, when the area is in balance with adequate biodiversity. That is the reason for the concept of a multispecies cover crop – each species brings its own benefits and returns something important to the soil.

Benefits of a multispecies cover crop include the following:

- Cover crops reduce or combat erosion living roots retain the soil.
- Reduced moisture loss due to evaporation takes place covered soil is cooler and evaporation is therefore less.
- Adequate cover by cover crops suffocates weeds.
- Cover crops help to make key minerals namely Ca, P, N – available.

 For every 1% increase of the carbon percentage in the soil, the water-holding capacity is increased by 144 000 l/ha.

Multispecies cover crops are species specific, not cultivar specific. The composition of the performing cover crop will look different every year. One crop will therefore not outperform the others every year, because the years differ and crops will benefit from or be harmed by this. Producers tend to prefer grass crops (the strongest, cheapest, best producers), but slow growers that make the smallest contribution to nitrogen fixation and root systems are also necessary. Plant multispecies cover crops in a ratio of 40% grass to 60% legumes.

Preferably use a collection of five plant species: grain, grasses, legumes, brassicas (mustard/cabbage family like Japanese radishes or turnips) and chenopods (the Chenopodium family like pigweed and sugar beet). The plants interact with each other. Brassicas, like radishes and turnips, are excellent choices, but are not mycorrhiza friendly. Mycorrhiza are a beneficial network of fungi that occur among plant roots and loosen plant nutrients for the plant to utilise (mycorrhiza enlarge the root area network of the plant). Sunflower is particularly mycorrhiza friendly.

There are cover crops that are excellent extractors of nitrate (N), while others are better at extracting calcium or magnesium or phosphates and other minerals and combinations of them.

These extraction systems function effectively when autoregulating mechanisms are activated or switched off during shortages or an excess of minerals. An example of this is nodule forming in legumes, which is generally switched off with high levels of nitrates in the soil, while the activities of many weeds and some grass species are in fact switched on by high nitrates.

Here what is more beneficial to the animal is set off against what is more beneficial to the soil. It is better for animal performance to use young, high-nutrient digestible material. However, the soil prefers a mature plant with its root system fully developed, which can return the most photosynthate to its reserves for survival and building the succession.

- This contributes towards protecting crops against root knot eelworm. Brassicas secrete chemicals that are toxic to eelworms and provide assistance against fungal diseases.
- Cover crops feed the soil and microbes with continuous exudates of glucose secretions directly in the root zone.
- Provision of habitat to beneficial insects through nectar and pollen and protection.
- Soil aggregate formation comes from mycorrhiza, which form glomalin. This follows on the digestion of organic matter by the micro life that forms the basis of humus. Humus can accommodate cations and anions, while clay retains only cations. This therefore increases the cation exchange capacity (CEC) and anion exchange capacity (AEC).



C:N ratios of cover crops and relative degradation rates.

Cover crop	Ratio	Tempo
Rye straw	82:1	
Wheat straw	80:1	
Maize residues	60:1	
Mature lucerne hay	25:1	
Ideal soil microbe diet	24:1	Relative degradation rate
Clover	23:1	Faster
Cattle manure (rotten kraal manure)	20:1	
Fresh weeds	20:1	
Legume hay	17:1	
Radish	15:1	
Young lucerne hay	13:1	
Vetch	11:1	
Soil microbes (average)	8:1	

A MIXTURE OF SPECIES

The use of cover crops is just as important as the choice of the cover crop combination. Cover crops should be used by implementing high-density grazing. Ultra high-density grazing, which is a non-selective grazing principle, can provide even better results.

Ultra high-density grazing implies a grazing pressure of 1 000 cattle/ha for a period of 30 minutes to two hours, depending on the available biomass. It can also be indicated as 50 kg live mass per square metre (a cow of 500 kg on 10 m²) for 30 minutes to two hours. Selective grazing must be prevented as far as possible at all times. Remember that all components in the cover are not equally palatable. However, an average combination

nutritional value is better than the nutritional value of monoculture grazing.

High-density grazing requires management and good planning. It involves more than just chasing the animals in and having them graze. The rest phase when the grazing recovers

2

Example of a summer cover crop mix that is commonly recommended.

Planting time – middle of November to middle of January					
Component	Seed/ha and contribution to mix 🤞				
Forage sorghum	4 kg (biomass, material/cover, energy grazing source)				
High-sugar forage sorghum	4 kg (biomass, material/cover, energy grazing source)				
Babala/hybrid babala	4 kg (biomass, material/cover, energy grazing source)				
Sunn hemp	4 kg (legume, nitrogen fixation, flowers attract insects)				
Dolichos (beans)	6 kg (legume, nitrogen fixation, protein grazing source)				
Cowpeas	6 kg (legume, nitrogen fixation, protein grazing source)				
Grazing vetch	4 kg (legume, nitrogen fixation, spring grazing, protein grazing source)				
Chicory	1 kg (deep root system, circulates nutrients)				
Sunflower	1 kg (flowers attract insects, mycorrhiza friendly)				
Buckwheat	1 kg (flowers attract insects, releases phosphates)				
Tiller radish/daikon radish	1 kg (biological ripper, accumulates nutrients, energy)				
Total	36 kg				

Note: Utilisation as needed, but with soil health in mind it is more beneficial at mature stage of the cover crop or as standing hay.

Example of a winter cover crop mix.

Planting time – March/April					
Component	Seed/ha and contribution to mix				
Black oats (saia)	5 kg (biomass, material/regrowth, nematode, energy grazing source)				
White oats (spring oats)	5 kg (biomass, material/regrowth, nematode, energy grazing source)				
Spring rye	5 kg (biomass, material/cover, energy grazing source)				
Stooling rye	5 kg (biomass, material/bones in spring, energy grazing source)				
Grazing vetch	4 kg (legume, nitrogen fixation, flowers attract insects, protein grazing source)				
Forage peas	8 kg (legume, nitrogen fixation, flowers attract insects, protein grazing source)				
Lupine	8 kg (legume, nitrogen fixation, protein grazing source)				
Chicory	1 kg (deep root system, circulates nutrients)				
Japanese radish	1 kg (accumulates nutrients, energy grazing source)				
Tiller radish/daikon radish	1 kg (biological ripper, accumulates nutrients)				
Forage turnip	1 kg (accumulates nutrients, energy grazing source)				
Phacelia	1 kg (flowers attract insects)				
Total	45 kg				

Note: Utilisation as needed, but with soil health in mind it is more beneficial at mature stage of the cover crop. Try to retain living roots in the soil for as long as possible.



Imitate nature with a...

is the longest phase in the entire cycle. It is not about the number of animals, but rather about the period for which the animals utilise the planting and the recovery period. One animal can overgraze if it grazes in the same spot all the time, because it is always picking out the palatable plants.

ROLE OF COVER CROPS IN STOCK FARMING

Cover crops are also important to stock producers. If approximately 20% of agricultural land is allocated on a rotation basis to be planted with a cover crop, the carrying capacity is improved. Pastures can contribute towards saving natural grazing and be used at strategic points.

The natural grazing fertilising that occurs during high-density grazing has major benefits for stock producers. One cow produces 27 kg of wet manure and 1 ℓ of urine per day. If this is concentrated, it provides fertiliser and irrigation, together with the freshening/recovery during the long rest period. Initially the cattle will not eat the first green spots, but they will do so six months later when they get into that camp again.

Cover crops form part of the nutrient cycle in that they absorb surplus nutrients (mainly nitrogen) from the previous season and store this in biomass. When the biomass starts to decompose, these nutrients are recirculated in the topsoil to be absorbed by the subsequent crop. Certain cover crops have deeper roots than the cash crops, which enables them to extract nutrients below the normal depth.

The way in which cover crops release nutrients back into the soil differs (**Table 1**). Compared to vetch, for example, rye takes longer to decompose. Rye therefore provides a cover crop for a longer period, while vetch releases nutrients into the soil more quickly.

Multispecies cover crop mixes play a large role in bringing the best of two worlds together. One with a high carbon-to-nitrogen ratio (C:N ratio), which offers cover for longer, and the other with a low C:N ratio that releases nutrients into the soil more rapidly.

RUDI KUSCHKE, GRAZING CONSULTANT AND PIETMAN BOTHA, INDEPENDENT AGRICULTURAL CONSULTANT. FIRST PUBLISHED IN SA GRAAN/GRAIN NOVEMBER 2020



Avoiding the disease triangle... (continued from page 13)

The factor at each corner presents an opportunity to manage disease development. The host plant (maize hybrid), the presence or absence of the pathogen and the environmental conditions each provide a unique chance to get ahead of a potential problem.

In South Africa the three main ear rot pathogens that occur are Gibberella ear rot, Diplodia ear rot and Fusarium ear rot. Sporadic outbreaks of at least some of these diseases occur with varying severity in most seasons. The environmental conditions favourable for Gibberella infection are prolonged cool, wet weather within three weeks of the onset of silking. Diplodia is favoured by a dry early season, followed by extended wet conditions at silking. Fusarium ear rot generally occurs as a secondary infection associated with insect damage on the ears.

TIMING IS IMPORTANT

Spreading planting dates and using hybrids from a range of growth classes can help against both Gibberella and Diplodia ear rots because of their strong link to environmental conditions for infection to take place. A range of planting dates and growth classes will widen the window during which silking will occur and help to mitigate risk. Using Bt-containing hybrids or good chemical control of chewing insects from silking to R5 stage can reduce the impact of Fusarium ear rot, which is often associated with insects feeding on the ears.



Hybrid selection can also be used to reduce the risk of ear rots. Most seed companies will be able to give at least some indication of hybrid susceptibility to these more common ear rots. By balancing the risks of these diseases with the attributes of hybrids in a package, the risk of significant crop loss due to ear rots can be reduced. As previously mentioned, hybrid growth classes should also be considered to help spread the risk.

REDUCE INOCULUM LEVELS

Taking the pathogens into account, the reduction of inoculum levels in the fields is an important tool in managing the risk of infection. Overwintering of the pathogens occurs in the crop residues. Practices such as tillage to break down the crop residues as well as crop rotation to non-host crops, can bring down the risk of problems in future maize crops.

GRANT PRINGLE, PRODUCT AGRONOMIST FOR THE EASTERN PRODUCTION REGION, PANNAR SEED. FIRST PUBLISHED IN SA GRAAN/GRAIN MARCH 2021







THE CORNER POST

ITUMELENG MONGANE Farming is not a job; it's a calling

HE AMERICAN COMEDIAN AND MEDIA PERSONALITY, STEVE HARVEY SAID: 'YOUR CAREER IS WHAT YOU ARE PAID FOR, YOUR CALLING IS WHAT YOU ARE MADE FOR'. SOME FARMERS REALISE FROM A VERY YOUNG AGE THAT THEY ARE DESTINED FOR A CAREER ON THE FARM, WHILE OTHERS FIRST VENTURE INTO OTHER FIELDS BEFORE EVENTUALLY MAKING THEIR WAY BACK TO THE LAND.

Itumeleng Naphtaly Mongane (59) is one of these. He first worked on the mines near Rustenburg before answering his calling to farm. 'Farming is in my blood, I suppose I was born to farm as my father was also a farmer," he says. In 1981 the work on the farm became too much for his father Johannes and Itumeleng made the decision to exchange the security of a monthly income to take over the farming duties on the farm at Nooitgedacht in the Lichtenburg area.

Today he could not see himself doing anything else. 'Farming gives my life purpose. It not just a job; it is a calling,' he shares. Although Itumeleng does not have a son to follow in his agricultural footsteps, he is determined to get his two daughters involved. 'Jobs are scarce, so they will just have to learn to farm and carry on what my father began.'

FARMING TO MAKE A DIFFERENCE

Itumeleng is very aware of the importance of food security and it is also his motivation behind his love of farming. 'I love farming because I can help other people in this way by providing food on their tables. I farm to make food for people,' he says about his passion. To him the excitement of seeing something grow from a seed to food will never disappear.

A lesson ltumeleng has learned over the years is that you can't fulfil your calling in your comfort zone and the fact that farming differs from one season to the next, has not dampen his passion. A farmer must be ready for anything. You never know what will happen from one season to the next.' Last year he had a good harvest realising about 5,1 tons per hectare but as the prices were not to his liking, his income was not what he had hoped for. 'This year (last season) my yield was not as good, but the price of the maize was great. Itumeleng realised about 1,2 tons per hectare on sunflower and 3 tons per hectare with his maize.

This humble farmer owns three tractors and a planter. 'Because I have my own implements, I can plant and plough when I am ready. Now I just need a bigger 100 kW tractor, then I can provide more food for even more people,' he says.

IMPROVING SKILLS IS IMPORTANT

Many years ago Bophuthatswana's then government allocated land to residents of the settlement of Nooitgedacht. Itumeleng now leases 180 hectares of arable land from fellow residents of this settlement who do not own the equipment to cultivate their lands. By leasing the land, he is not only helping himself but at the same time providing an extra income for these households.

His father Johannes farmed with maize, sunflower and beans but Itumeleng decided to focus on maize and sunflower. He dreams of expanding his farming operation but says that without funding this remains a dream for now. Due to a lack of funds he only cultivated 110 hectares this season.



Itumeleng is part of Grain SA's Farmer Development Programme and regularly attends the study group meetings. Here various topics are discussed like soil acidity, food security, weed and pest control, soil conservation and plant nutrient requirements. 'I enjoy attending the study group meetings because I learn a lot.' Due to lockdown restrictions very few meetings could take place and Itumeleng says he really misses the interactions with other farmers.

Du Toit (Thabo) van der Westhuizen, the development coordinator from the Lichtenburg Office in North West, has been mentoring Itumeleng for the past eight years. 'Thabo is a great mentor. He has a beautiful heart and works very graciously with us. If I do not understand something completely, he will explain it again and again until I grasp it,' says Itumeleng of his kind mentor. 'He taught me how to cultivate the soil and plant properly to improve my yield.'

To improve his farming skills he regularly attends courses offered by Grain SA. The courses which he has found to be especially helpful are about tractor and farm implement maintenance, as well as the various management courses which include farming for profits, resource assessment and farm planning, as well as business ethics and farm management. These courses are designed to focus the attention of the farmer on matters beyond mere production as farming is a business and you should conduct your business according to good business management principles.

LOUISE KUNZ, PULA IMVULA CONTRIBUTOR





Gearing up for THE NEW SEASON

FOOD IS SO MUCH MORE THAN JUST WHAT WE CONSUME – FOOD SYSTEMS NEED TO NOT ONLY RESOLVE ISSUES OF HUNGER BUT THEY ALSO NEED TO CONTRIBUTE TO IMPROVED WELL-BEING, BALANCED EATING PLANS, REDUCED DIET-RELATED DISEASE AND THE HEALTH AND SUSTAINABILITY OF THE PLANET.

In May, Thoko Didiza, minister of Agriculture, Land Reform and Rural Development, said: 'Land delivery is vital in reversing the land inequality in our country. However, the productive use of the land is equally an important function.'

This is exactly where we see our Grain SA Farmer Development Programme making an impact. We don't have the power to give farms to individuals nor do we have funds to assist farmers financially. What we do have is a wealth of knowledge and a passion to see successful transformation and sustainable development within the agricultural sector. We have a team of dedicated development agriculturalists that is skilled and equipped to share this knowledge with developing farmers.

During September 2021 our team made **59 farm visits** to some of the advanced farmer members who are participating in the different programmes being implemented by our farmer development teams. The teams also had contact sessions with **81 study groups**. We aim to build relationships, get to know the regions where our members farm and offer timeous advice.

September was a busy month for summer grain farmers as we were closing off the 2020/2021 growing season, while at the same time preparing for the new season ahead. These are some of the important activities that received attention.

- It is important to **conduct a post-season business analysis**. Farmers have to know what their profit margins look like.
- Grain SA's teams of development coordinators and mentors are meeting farmers and encouraging a **business minded approach**.

Farmers must ask questions like: What did the year cost them and what were the returns on the crop? Were there good profits or were the margins small? Too many farmers head straight on into the next season without considering the strengths and weaknesses of their operations. Can improvements be made? Is there an area where there could be savings? Should any of the operations be abandoned? Is there any way there could be a value add onto the crop, for example feed some of the maize crop to broiler chickens or livestock?

- Farm maintenance needs to be done. Read more on page 19.
- Soil sampling, analysis and corrections are early season activities that make all the difference to yields. We teach the importance of soil status every year.
- A key activity now is planning, budgeting, drawing up cash flows and sourcing financing for new season inputs. Costly mistakes can be made if the input requirements for the season are not carefully calculated. Developing farmers rely heavily on guidance from our team. We are encouraged when new farmers join Grain SA because they have seen the excellent results of their neighbours. Farmers who are willing to learn and lean on the wisdom and experience of others will most certainly grow their businesses faster.



During one of the 81 study group sessions that took place during September, Graeme Engelbrecht, provincial coordinator from the Dundee office, shared his knowledge with farmers from the Ngoba study group.

AT GRASS ROOTS



David Nhlapo of Sgegede farms recently met with Jurie Mentz to join Grain SA. His dad sadly passed away and he is eager to pick up the baton and learn to do things correctly. David is a proactive farmer who shows great potential. He wants to plant maize and soybeans and had already got a soil analysis and started his primary tillage timeously.



Du Toit (Thabo) van der Westhuizen, provincial coordinator in North West, checks on crop progress on one of the farms in his area.



Louwsburg provincial coordinator, Jurie Mentz monitors the planting of maize in his service area.





Farmer Development Programme

Feedback

Farm maintenance is vital

DURING farm visits and study group sessions the importance of farm maintenance is discussed. Some of these are essentially post-harvest tidy up activities, but it is also important to service the tractors and machinery for the new season. Recently one of the mentors' trained eye noticed that the bolts had not been tightened properly on a disc about to start preparations. The farm workers quickly tightened them and a potentially costly stoppage was avoided. Fencing and watering points all need to be checked and maintained now.



As a participant in the stimulus package project of the DRDLR, Ntombizethu Dorcas Shongwe of Smutsoog Farm in Mpumalanga received new tractors and equipment. Grain SA team members demonstrated the calibration of planter and boom sprayers for the farm workers



John Mabasa was doing maintenance and servicing tractors and implements pre-planting when the team paid him a visit.



During a visit to Smutsoog Farm. the importance of maintenance was also discussed. The farmers and workers were taught how to look after their equipment. Here farm workers are checking that there are no loose nuts and bolts.

Growing for gold

GRAIN SA'S Grow for Gold National Yield Competition is a platform where grain producers compete to see who achieves highest yields. The competition is for maize, wheat, sunflower and sovbean producers.

Jurie Mentz, the development coordinator from Louwsburg regional office, is proudly celebrating the success of a new era commercial farmer and member of Donkerhoek study group, Bheki Mabuza who farms near Amersfoort in Mpumalanga. Bheki achieved top yields of 14,7167 t/ha which saw him a top 3 finalist in the Eastern Highveld region.

The Mabuza's have participated in Grain SA's programme for ten years. Previously a taxi owner, Bheki decided to leave that industry to rather farm full time. Their farming operation has grown significantly thanks to hard work and wise investments. He has been proactive about learning as much as possible about the land and the crops they grow. The Mabuza's have expanded from 2 hectares to 30 hectares to 110 hectares – and there are many more plans for the future.

Jurie says a key ingredient to the Mabuza's success is a thirst for knowledge that causes them to read a lot and ask questions all the time. Bheki has focussed on getting his soils balanced with excellent liming and fertilisation practices. Regular soil sampling is done and problems are identified and rectified. Jurie also says the fields are always prepared in good time.



Bheki Mbuza came third in his category in the Grow for Gold competition, competing against commercial farmers – a huge achievement!



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