

FEBRUARY 2022

PULA IMVULA

GROWING FOOD • PEOPLE • PROSPERITY

GRAIN SA MAGAZINE FOR DEVELOPING FARMERS



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PULA IMVULA IS AVAILABLE IN THE FOLLOWING LANGUAGES:

English, Tswana, Sesotho, Zulu and Xhosa.

Articles written by independent writers are the views
of the writers and not that of Grain SA.



THIS PUBLICATION IS
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*Every thread of the beard represents
a potential maize kernel. The beard is
where pollination occurs.*

Cover photo: Jenny Mathews

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A WORD FROM...

Liana Stroebel

FARMING MUST BE ONE OF THE HARDEST BUT GREATEST JOBS ON EARTH. IT TAKES A VERY SPECIAL TYPE OF PERSON TO BE A GOOD FARMER. LIKING THE OUTDOORS OR FIXING THINGS IS CERTAINLY NOT ENOUGH ANYMORE! A TRUE FARMER NEEDS TO BE A 'JACK OF ALL TRADES'.

As knowledge is power, to make informed decisions you need accurate and farm specific information at your fingertips on agronomy, plant health, seed, chemicals, fertiliser, mechanisation, budgeting, financial management, tax, marketing, human resource management, the weather and much more. Let's be honest, there are very few farmers in the world who are good at all of these things.

However, the awareness and acknowledgement of your strengths and weaknesses is absolutely crucial. Pride can be your worst enemy.

To achieve growth, it is important to surround yourself with people who are good at the things that are not your strengths. Invest your time in forging long-lasting relationships with professional input and service providers, co-operatives and reliable industry role-players with a sound track record.

Always aim to use the same contacts as your commercial neighbour or closest commercial farmers in your area. Know that every successful commercial farmer is also very reliant on the advice of these industry role-players!

As we are now half-way through the season, I wish you all the best! If you keep your head down, work hard, do the right thing at the right time, the odds for a good yield will be in your favour.

Follow the South African golf legend, Gary Player's advice: 'The harder you work, the luckier you get'. ■

Successful pollination is crucial for crop yield

THE POLLINATION PERIOD IS ONE OF THE MOST CRITICAL STAGES IN THE DEVELOPMENT OF A MAIZE PLANT. BY THIS TIME THE PREPARATION WORK IS DONE. DURING THE POLLINATION WINDOW WEATHER CONDITIONS ARE ABSOLUTELY CRUCIAL. HIGH TEMPERATURES, TOO MUCH RAIN OR DROUGHT WILL HINDER EFFECTIVE POLLINATION, WHICH IS CRITICAL FOR TOP YIELDS.

POLLINATION PERIOD

The flowering stage of a maize plant is the most critical period in its development for grain yield.

These are some key steps in the pollination process:

- Most maize hybrids tassel and silk about the same time. On a typical midsummer day, peak pollen shed occurs in the morning between 9:00 and 11:00, followed by a second round of pollen shed late in the afternoon.

- The pollen shed begins in the middle of the central spike of the tassel and spreads out later over the whole tassel.
- Pollen grains are borne in anthers, each of which contains a large number of pollen grains. The anthers open and the pollen grains pour out.
- Pollen is light and is often carried considerable distances by the wind. Pollen shed is not a continuous process. It stops when the tassel is too wet or too dry and begins again when temperature conditions are favourable.
- Little to no pollen is shed when the tassel is wet, so there is not much chance of pollen being washed off the silks during a rain-storm.
- The silks are covered with fine, sticky hairs, which serve to catch and anchor pollen grains.
- Pollen grain remains viable for only 18 to 24 hours and the pollen grain starts growth of the pollen tube down the silk channel within minutes of coming in contact with a silk.



As the pollen falls from the pollen sac it is gathered by the beard on the cob.



A tassel emerges at the tip of the maize plant.



The pollen sac holds the tiny particles of pollen.

- The pollen tube grows the length of the silk and enters the female flower (ovule) in 12 to 28 hours.
- A well-developed ear shoot should have 750 to 1 000 ovules (the potential kernels) which each produce a silk.
- The silks from near the base of the ear emerges first and those from the tip appear last. Under good conditions, all silks will emerge and be ready for pollination within three to five days. This usually provides adequate time to pollinate all silks before pollen shed ceases.
- Each tassel contains as many as two million or more pollen grains, which translates to at least 2 000 pollen grains produced for each silk of the ear shoot.
- Shortages of pollen are a problem under conditions of extreme heat and drought; they may also occur in fields characterised by uneven emergence in later emerging plants. ■



Pollen sacs burst open to drop the pollen onto the tassels on the mealie cobs below.



The tassel bearing the pollen.



**JENNY MATHEWS,
MANAGEMENT AND DEVELOPMENT
SPECIALIST AND EDUCATOR**

Maize outlook for the 2022 PRODUCTION SEASON

THIS ARTICLE LOOKS AT PROSPECTS FOR MAIZE PRODUCTION FOR 2022, GIVEN THE CROP ESTIMATES COMMITTEE (CEC) REPORT ON INTENTIONS TO PLANT BY PRODUCERS.

INTERNATIONAL PROSPECTS

According to the International Grains Council (IGC), global production is likely to increase by 7% year on year, with average yields projected to recover after two successive declines (**Table 1**). Large crops are expected for the northern hemisphere growers, including the USA and Ukraine, while bumper turnouts are also anticipated in Brazil and Argentina, but much will depend on conditions later in the season, especially given heightened expectations for dry weather.

Consumption is forecast at a new peak amidst expectations of record availabilities. Ending stocks may bounce back after successive

declines in the past two seasons but will remain below the recent average. Some concerns about next season's crop prospects given higher input costs also are featuring in the US market and currently supporting prices.

LOCAL PROSPECTS

According to the crop estimates committee report on intentions to plant, commercial producers intend to plant maize on 2,725 million ha for 2022, which is 30 200 ha less than the past season.

The report shows that producers intend on planting 1,644 million ha of white maize, which is 2,8% less than in the previous season. In the case of yellow maize, the expected plantings are 1,081 million ha, which is 1,65% more than the past season.

Table 2 is based on these intentions, with different scenarios based on low, average, and high yield prospects. Given the current

1 *Global supply and demand of maize.*

MT	2018/2019	2019/2020	2020/2021 (Estimate)	2021/2022 (Forecast)	Y/Y change
Opening stocks	344	326	298	276	-7,4
Production	1 132	1 126	1 126	1 210	7,5
Total supply	1 476	1 453	1 424	1 486	4,4
Total use	1 149	11 550	1 148	1 201	4,6
Food	128	130	130	133	2,3
Feed	676	692	681	716	5,1
Industrial	304	298	298	308	3,4
Closing stocks	326	298	276	285	3,3
*Major exporters	71	63	43	55	27,9
Trade	165	175	189	178	-5,8

*Argentina, Brazil, Ukraine, USA

Source: IGC, 2021



*If we estimate dignity by immediate usefulness,
agriculture is undoubtedly the first
and noblest science.*

~ SAMUEL JOHNSON
ENGLISH WRITER





weather forecast, scenario 2 (average yield) is more likely. This would mean a total crop of 15 million tons, with total commercial demand of 13 million tons and a carryover of about 2 million tons.

Such a large carryover would put some pressure on prices and therefore, more maize needs to be exported to balance things in the market and keep prices steady. However, the current challenge for exporting more is the issue of infrastructure, which still needs to be addressed through programmes like the agricultural master plan. ■

IKAGENG MALULEKE,
AGRICULTURAL
ECONOMIST AT GRAIN SA



2 The supply and demand for maize in South Africa.

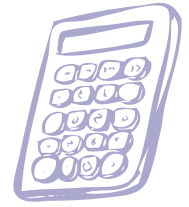
	GSA projection	Low yield	AVG yield	High yield
Updated: 28/10/2021	CEC 9th est.	Scenario 2	Scenario 2	Scenario 3
Marketing year	2021/2022*	2022/2023**	2022/2023**	2022/2023**
Area planted (x1 000 ha)	2 755	2 725	2 725	2 725
Yield (t/ha)	5,88	4,86	5,72	6,47
CEC crop estimate ('000 ton)	16 211	13 232	15 576	17 644
Commercial supply				
Opening stocks (1 May)	2 117	1 001	2 117	2 117
Commercial deliveries	15 136	12 682	15 026	17 094
Imports	5	5	5	-
Total commercial supply	17 258	13 688	17 148	19 211
Total RSA consumption (commercial)	11 020	10 220	10 220	11 020
**Exports	3 620	3 164	3 764	2 964
Total commercial demand	14 640	13 384	13 984	13 984
Carry-out (30 April)	2 618,12	303	13 984	5 227
Pipeline requirements (1½ months)	1 363	1 306	1 363	1 363
Surplus above pipeline	1 256	-1 003	1 801	3 864
Carry-out as a % of RSA consumption	24%	3%	31%	47%
Carry-out as a % of total commercial demand	18%	2%	23%	37%

Current season = *Estimate

New season = **Forecast

Source: Grain SA

Feel fully in control of YOUR FINANCIALS



ACCORDING TO THE LAW OF OUR LAND, INCOME ACQUIRED BY ANY INDIVIDUAL CARRYING ON 'PASTORAL, AGRICULTURAL OR OTHER FARMING OPERATIONS' IS INDEED TAXABLE, AND MUST BE COMBINED WITH ALL TAXABLE INCOME THAT IS COLLECTED FROM OTHER STREAMS OF INCOME TO CONCLUDE THE TAXPAYER'S TAXABLE INCOME FOR EACH YEAR OF ASSESSMENT.

The latest figures on the South African Revenue Services (SARS) website indicate the rate of tax according to income received (Table 1).

Here is a list of some important words used in the world of book-keeping:

ACCOUNTING

- The process of identifying, analysing, recording, accumulating, and storing information and data about the activities of a business.
- The process of preparing summary reports of these activities internally for managers and externally for those entitled to receive financial reports about the entity.
- Accounting reports are called financial statements and are used to make informed decisions.
- Accounting includes preparing tax returns that every business and income earner must file with SARS.

BALANCE SHEET

A balance sheet is a financial statement that reports a company's assets, liabilities and shareholder equity. It provides a snapshot of a company's finances – what it owns and owes on date of publication.

- **Assets** are all resources that are available to a business in the form

of cash, receivables, inventory, buildings, and any other properties that can be used for the business. Assets can be physical possessions like inventory and buildings, or they can be monetary resources such as cash and accounts receivables.

- **Liabilities** are those things a business owes, usually a sum of money.
- **Equity** is the amount of assets left in the business for its owners after deducting all the liabilities such as bank loans and trade payables (Figure 1).

Financial statements are prepared at the end of every financial period (1 March to 28 February) and whenever else it's needed. The main elements of a balance sheet are called accounts – such as cash, inventory list with current values, notes payable, and capital stock e.g. a farmer may still have grain stored in a silo. A balance sheet refers to the equality (or balance) of assets with the total of liabilities and owners' equity.

1

An easy sum to determine owner's equity.



Total Assets



Total Liabilities



Owners' Equity





1 2022 tax year (1 March 2021 - 28 February 2022).

Taxable income in rands	Rates of tax (R)
1 - 216 200	18% of taxable income
216 201 - 337 800	38 916 + 26% of taxable income above 216 200
337 801 - 467 500	70 532 + 31% of taxable income above 337 800
467 501 - 613 600	110 739 + 36% of taxable income above 467 500
613 601 - 782 200	163 335 + 39% of taxable income above 613 600
782 201 - 1 656 600	229 089 + 41% of taxable income above 782 200
1 656 601 and above	587 593 + 45% of taxable income above 1 656 600

CASH FLOW

This is cash flow from earning profit or from operating activities the flow of money out and into the bank account.

DEBITS AND CREDITS

Accounting jargon for decreases and increases recorded in accounts.

- **Creditors** are individuals or business entities that are owed money because they have provided goods or services or loaned money to another entity.
- **Debtors** are individuals or business entities that owe money to another entity because they were supplied with goods or services, or borrowed money from them. The debt is often divided into monthly repayments over a period agreed upon by the two parties until the debt is paid off. Debtors often need to **pay interest** in the original value of the loan.
- **Interest** is a fee charged by the entity giving the loan to the debtor for the privilege of repaying a debt slowly over an extended period of time.
- **Credits** record all the money flowing into an account i.e. money due to the business.
- **Debits** record all the money flowing out of an account i.e. money owed by the business.

FINANCIAL REPORTS

The financial reports of businesses include three primary financial statements namely, the balance sheet, income statement, and statement of cash flows.

FIXED ASSETS

These are recorded in an inventory list and include a wide variety of long-life, physical resources used by a business in conducting its operations e.g. land, buildings, machinery, equipment, furnishings, tools, and vehicles.

INCOME STATEMENT

This financial statement summarises income generated from sales and expenses/losses.

PROFIT

In an income statement, the preferred term for final or bottom-line profit is *net income*.

Accountants or bookkeepers keep the books ordered by systematically recording all financial activities of a business on a month to month basis. The financial statements of a business are then compiled for the accounting year which ends on the last day of February. ■



JENNY MATHEWS,
MANAGEMENT AND DEVELOPMENT
SPECIALIST AND EDUCATOR



Farming on paper leads to success

PLANNING IS THE PROCESS OF LOOKING AHEAD. IT IS ACTUALLY 'FARMING ON PAPER' AS YOU PLAN THE FUTURE OF YOUR FARMING OPERATION ON PAPER TO SEE THE RESULTS THAT CAN BE ATTAINED.

If you are not satisfied with your current situation and results, doing the same thing will not necessarily change your situation. Planning for the next season must therefore start with the question: Why am I doing what I am doing and can it be done better? Unfortunately there is not a direct answer. If you compare your answer with what realised you will be able to decide whether you are on the correct track or need to rethink your methods.

MAKE THE DECISION

The decision of what to produce will be determined by:

- The crops currently on the field.
- Crop rotation decisions.
- Realistic profitability calculations of the different crops that can be produced.

Realistic potential of the different crops is determined by the potential of the different fields as well as what was done last season that worked and that did not work. Each field needs to be planned according to the crop and the potential, and what was planted on the field, the herbicide that was used and which crops can be planted.

The decision on crop rotation needs to be made. This is important to be able to calculate how much money is going to be needed to be able to produce the following year's crop. This is very important because the money must be available before the production season begins. Production starts in July with the first field disking, taking of soil samples and the application of lime.

Many producers will say it is impossible but winning producers do it this way every year. They are always on time, have the best yields and usually also have the highest profitability.

COST OF INPUTS

Winning producers draw up a detailed crop budget including everything that is needed to produce a crop. There are norms that they use to calculate the cost of the inputs used.

Seed cost for the maize and other crops is easy to determine. Seed representatives can be contacted to assist in determining the cultivar planted, population per hectare and cost.

Fertiliser cost is more difficult to calculate but not impossible. The Fertiliser Association of Southern Africa (FERTASA) on a regular basis

1 *Plant nutrients withdrawal figures of maize at different yields for planning.*

Plant nutrients	Per t	Per 4 t	Per 6 t
Nitrogen (N)	15 kg	60 kg	90 kg
Phosphorus (P)	3 kg	12 kg	18 kg
Potassium (K)	4 kg	16 kg	24 kg

publish the fertiliser withdrawal figures per crop. Visit their website, www.fertasa.co.za for more information. The plant nutrients withdrawal figures of maize (kg/t grain) is shown in **Table 1**.

With this information, consult your fertiliser representative to assist in calculating the fertiliser needed as well as the cost. Concerning lime, a rule of thumb is 1 t/ha per year. Discuss this with your fertiliser representative as well.

Your **herbicide and pesticide** programme will differ according to the type of maize planted. If a Roundup Ready stack gene cultivar is planted, the programme will differ from a standard cultivar. Once you have decided on which cultivar to plant, invite your herbicide representative to visit your field to help you decide on a herbicide and pesticide programme. With his help you will be able to have a good indication of the cost of such a programme.

The **diesel and repair** works can also be fairly accurately calculated. As a rule of thumb, for conventional production practises 75 litres of diesel will be used. If you have your own diesel consumption figures use it. Use the current fuel price and you will be close to the actual cost. There is always a comparison between diesel cost and repair and maintenance cost.

If producers use their own fuel cost and add an extra 10% it will be close to their repairs and maintenance cost needed. Other costs like hedging and contract work insurance should also be included.

The difference between income and the direct allocatable costs is the crop gross margin. Remember if the gross margin is negative the chance that the crop will be profitable, is most unlikely. Revisit the costs and make some adjustments. ■



PIETMAN BOTHA,
INDEPENDENT AGRICULTURAL CONSULTANT

Meet the partners of the Farmer Development Programme

THE SUCCESS OF GRAIN SA'S FARMER DEVELOPMENT PROGRAMME (FDP) LIES IN NOT JUST ONE, BUT SEVERAL GREAT PARTNERSHIPS. THE MANAGEMENT TEAM, DEVELOPMENT COORDINATORS, MENTORS AND STUDY GROUP LEADERS COLLABORATE TO ENSURE THAT DEVELOPING FARMERS ARE REACHING NEW HEIGHTS. WITHOUT THE SUPPORT OF THE PROGRAMME SPONSORS/FUNDING PARTNERS – LIKE STANDARD BANK – NONE OF THIS WOULD HOWEVER BE POSSIBLE.

GOOD REASONS TO SUPPORT THE PROGRAMME

Standard Bank has partnered with Grain SA – as a partner of the Farmer Development Programme (FDP). The FDP's ultimate objective is to contribute towards seeing a prosperous agricultural sector, while addressing food security and transformation of the sector. This is in line with the bank's objective of inclusive banking and driving growth in the sector.

According to MC Loock, the senior manager Agribusiness of Commercial Banking at Standard Bank, it was an easy decision for Standard Bank to become involved in Grain SA's FDP. The fact that Grain SA has access to a portfolio of smallholder farmers to whom they have provided technical support, where smallholder farmers have completed training courses and joined study groups, made this partnership inviting to the bank. What sweetened the deal was that Grain SA also has access to commercial farmers who can act as mentors for smaller farmers.

It also impressed Standard Bank that Grain SA was the implementation agent for a number of funds whereby they provided support in the purchase of inputs. 'Grain SA has already been using the bank's system to make payments to input suppliers,' says MC. He adds that the bank had been looking for opportunities to share risk with input providers or other corporate funds such as AB InBev and PepsiCo, who are also partners of the FDP.

MC says the FDP was initially positioned as a 'test and learning' project over a three-year period within Standard Bank. 'It went so well that the bank is now going to renew the project for another three years. It also established the model for our Agricultural Business Development Programme, according to which Standard Bank has earmarked R500 million to support the developing market,' he adds.

KEY ASPECTS OF THE PARTNERSHIP

Track record: Through the programme the bank has a portfolio of developing farmers who were previously funded through other programmes. The bank provides production credit against the proven record of each farmer's production history achieved on those programmes. Grain SA's role is extremely important in verifying each farmer's production history.

Technical support: Another key aspect is that the right production techniques are used. Soil fertility, soil preparation, the right cultivar choice, and plant density are some of the aspects that need attention. 'Standard Bank relies on Grain SA's mentorship programme to ensure that the right things are done and that things are done correctly. Grain SA therefore gives creditworthiness to the project,' MC shares.



Standard Bank

OUTCOMES ARE IMPORTANT

Standard Bank hopes to see the following outcomes through its involvement in the programme:

- That small-scale farmers' efforts will be thrown together for better bargaining power. The establishment of buying groups to negotiate lower input prices, or joint marketing and the negotiation of premiums for the provision of products through black economic empowerment.
- That a farmer who proves that he achieves good yields on a small scale will have the opportunity to expand his farming operation by planting more hectares.
- To assist farming operations to meet the minimum standards, e.g. to register for VAT or to have a set of financial statements prepared each year.

For Standard Bank, it is important to bring small farmers into the banking sector so that they have active bank accounts from which cross-selling of other related banking products can be done. 'Eventually, we would like to see small farmers who have successfully completed the programme become independent clients of the bank,' says MC.

A SUCCESSFUL TRIAL PERIOD LEADS TO MORE

'The reasonable success of the programme serves as proof that it is possible to finance the developing agricultural market sustainably,' says MC. He adds that there are certain essential 'ingredients' that have to form part of this recipe for success.

For Standard Bank the programme now serves as a model according to which the bank wants to undertake the expansion of similar development projects in agriculture. The programme has also helped to teach bank employees who work with the small-scale farmers about the banking products offered to the market. 'They also learned a little bit about the agricultural sector,' adds MC. ■

PULA INVULA EDITORIAL TEAM

HOW and WHERE to invest

PEOPLE INVEST SO THAT THEY HAVE A BETTER FUTURE FOR THEMSELVES AND THEIR FAMILIES. EVERYONE HAS A DIFFERENT IDEA AND PLAN AS TO WHAT THEY WANT AND NEED, BUT THIS ARTICLE WILL RELAY THE ESSENTIALS THAT EVERYONE NEEDS TO THINK ABOUT.

Financial investing is not like investing in your business – it is the exact opposite. With financial investment one assumes you have already invested in your career, business and work. You have now decided that you want to get some money to work for you and your future. So, the first rule of investment is investing outside of your immediate business or career.

THREE AND A HALF MAIN ASSET CLASSES

The three main asset classes for investing are:

- bonds (\$130 trillion);
- cash or money markets like banks (\$48 trillion cross border and some \$70 billion local); and
- equities (\$90 trillion).

The estimated size in brackets as at the end of 2020 are given to show the relative size to each other, rather than for absolute comparisons.

Another bigish asset class is **property**, but some property is listed on stock exchanges, while houses in many cases are private. Commercial real estate (about \$40 trillion) is often listed, while the value of houses is estimated at \$180 trillion for the end of 2019.

For financial investing we leave out investing in homes unless it is in listed real-estate funds as the other rule of financial investing is liquidity; and investments in residential homes/houses on their own are not really liquid.

There are also small asset classes like commodities, such as gold (\$1,4 trillion) and silver, hedge funds and now also crypto currencies. I am not a fan of crypto currencies and the current asset value is less than \$2 trillion, while commodities would be about double that if all traded metals are included.

Many people do not understand markets like crypto, and to invest in gold or other commodities the most liquid way is via an exchange-traded fund (ETF), which would be listed.

Then there are unlisted shares and what is called private equity, but that is small and often listed via bundles listed on stock exchanges or in unit trust type listings. It is difficult to value the total, but it is similar in value to say a quarter of the commercial property, as some of it is indeed unlisted commercial property.

So, for financial investment purposes, we focus on the first three which are by far the biggest, while we also include commercial property, which is often listed on stock exchanges. The last four are all small in the bigger picture and have fewer investors by their very nature.

As an investor, not a producer, the next rule is diversification. It is not advisable to put all your investments in one stock or bond. Just like you do not only buy tractors when farming, but also land, water, seed, fertiliser, diesel and skills.

HOW MUCH TO PUT IN EACH OF THE BIG THREE ASSET CLASSES

The rule of thumb used to be to take 100 and subtract your age – that was how much you should put in equities. That was, however, when



humans lived to age 63 or something. Now we live to age 73 and beyond. I would now make the number 110.

So, at 60 years you should have 50% in the equity market on average.

The other rule of thumb I have is that bonds and cash are not equal, and that you should keep just your 'stop working' money in your bank account. So, if you are working at 60 years and plan to work until age 80 and expect to live to 95, you should keep 15% in the bank.

If at age 60 you place 50% in equities and have 15% in cash, the other 35% should be in bonds. As bonds and commercial property are normally interest rate related, I think part of your bond allocation could also be in property. (But as the world changes during the pandemic, that may no longer hold.)

That would be your average risk profile at age 60. But the trouble with normal is it never is average or normal. If you can handle more risk, you could add 10% to your equity balance and you therefore would have 70% equities, 15% cash and 15% bonds (or some commercial property).

You may have a much shorter investment horizon as you are very uncertain what your future holds and therefore decide to put only 50% or 40% in equities. That is your decision; this is just a rule of thumb.

The reason why equities make up most of an asset's allocation, is that they have over the last 120 years outperformed bonds and cash.



Bonds and cash, however, have been less volatile and provide a little certainty. All the other asset classes can be described as exotics (except for commercial property) as they are small, more volatile and riskier.

GEOGRAPHICAL ALLOCATIONS

The world is bigger than South Africa. The country makes up less than 1% of the world equity market and even less than that of the bond market.

Realistically, it is difficult putting all your assets elsewhere and it is probably not wise to do so if you plan to retire in South Africa. If not, well the 'wherever you plan to go' could be 25% or 30% of your investment share.

If, however, you want to retire in South Africa, then having 25% here is not a bad idea. Also, government debt in South Africa, apart from earning real positive interest, is also in local rands which government should be able to pay and our history is one of regular payments.

At present, I would say invest most all equity allocated in your portfolio outside of South Africa. Some 20% of bonds too – perhaps emerging markets added in.

Presently, overseas cash gives a negative return in many cases. That is a dilemma, so there is a need for South African or emerging market cash. But that is 10% to 15% of a portfolio. Take another 15% in South African bonds and 10% in overseas bonds.

Right now, therefore – and probably most of the next two years – the cash should be in South Africa as well as much of the bonds. That means more of the rule-of-thumb equity allocation in the portfolio has to be outside South Africa.

Also remember that over 50% of the world's equities are on US markets, but the quicker growth may come from elsewhere in the next decade – either from emerging markets or even Japan and Europe. So again, not all equities should be American – but yes, a large part would have to be. ■

Mike Schüssler is a consulting economist for Brenthurst Wealth. He is an independent economist with his own consultancy, www.economists.co.za.

**MIKE SCHÜSSLER, CONSULTING
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WEALTH. FIRST PUBLISHED IN
SA GRAAN/GRAIN IN MAY 2021**

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The ins and outs of FARMING TAX

WHAT IS DIFFERENT ABOUT FARMING TAX? ONE OF THE MOST SIGNIFICANT DIFFERENCES IS THAT, UNLIKE OTHER BUSINESSES WHERE DEPRECIATION CAN BE CLAIMED OVER TIME ON CERTAIN EXPENDITURE, PRODUCERS CAN DEDUCT CAPITAL EXPENDITURE IN FULL FROM FARMING INCOME. THIS INCLUDES EXPENDITURE ON ROADS, DAMS, FARM BUILDINGS AND MORE.

Unclaimed capital expenditure can also be added to the capital gains tax (CGT) base cost of the farm when selling it. Producers also only have to account for livestock at very low closing stock values and the Estate Duty Act makes provision for the farm to be included in the estate at market value less 30%.

As is the trend internationally, part-time farming is also increasing in South Africa. This is positive, contributing financial and business acumen. Anti-hobby legislation provides that a part-time producer must have a reasonable prospect of deriving taxable income within a reasonable time period in order to claim losses against other taxable income.

THE OPTIMUM STRUCTURE FOR A FARMING BUSINESS

It is important to have the optimum structure for the farming business, not only as far as running the business is concerned, but also for purposes of succession planning. The options to consider are farming in a company versus farming in a trust versus farming in your own name. The farming and land-owning entities also do not have to be the same. It is important to remember that there is not a general right or wrong structure, but there is an ideal one for each person's circumstances.



Company

Positive factors include the ease of doing business and being supported by the Companies Act, flexibility, good continuity and a low tax rate. But taking money out of the structure will cost you money in the form of dividend tax. In terms of section 7C of the Income Tax Act, donations tax can be payable on interest-free loans to companies underneath a trust. It could be better to rather charge interest, because the company would be able to claim a deduction. Unclaimed capital expenditure is not forfeited when the producer dies.

Trust

Trusts provide flexible and good continuity, but the ease of doing business is not that great and trusts are not recognised everywhere internationally. The tax rate is quite high at 45%, although it can be reduced if profits are distributed to beneficiaries. Unclaimed capital expenditure is not forfeited when the producer dies. Compared to companies, there is no tax cost when taking money out of the business for living expenses.

Individual

Farming in your own name with the land owned by a company or trust can be quite beneficial. Section 7C is not a problem, neither is there a tax cost to take money out of the structure. Cost in respect of capital expenditure on the land can be claimed against farming income. Losses can be deducted from other income. There is no continuity though on death and it may be advisable (for purposes of VAT and unclaimed capital expenditure) to transfer the business before death. It is also advisable to acquire licences and long-term contracts in a company or trust as opposed to in your own name.

ESTATE PLANNING

- How to split your farming business when you die, is a complicated decision. It depends on the number of children and if any or how many of them are interested in continuing with farming.
- Sub-dividing land is seldom a good option.
- Children's future careers should be monitored from an early age – expectations should be managed and investment decisions taken accordingly.
- Communication is vital – there should be no surprises after death. If the total estate consists of a farm and for example also cash, it must be remembered that it should not be equally split based on value between the children. Cash produces income on a passive basis, whereas a farm needs constant input and investment.
- During the life of the producer those involved in the farming must be remunerated at market value – any surplus can be distributed to other children. ■

For more information visit www.stonehagefleming.com.

DR CHARL DU TOIT, PARTNER: TAX
ADVISORY, STONEHAGE FLEMING
SOUTH AFRICA. FIRST PUBLISHED
IN SA GRAAN/GRAIN MAY 2021

SA Graan
Grain

There is always more to learn

THE GRAIN SA IMBIZO IS A PROGRAMME AIMED AT EMPOWERING PRODUCERS WHO HAVE GRADUATED FROM THE FARMER DEVELOPMENT PROGRAMME INTO THE COMMERCIAL ARENA. IT AIMS TO EQUIP THEM WITH ADVANCED SKILLS TO NAVIGATE THEIR WAY IN THE COMMERCIAL ENVIRONMENT. THESE PRODUCERS EXPRESSED A NEED TO UNDERSTAND HOW MAIZE GRADING WORKS.

As a result of lockdown regulations it had not been possible for the Imbizo to take place during 2020/2021. It was therefore very exciting to get the project kick-started again in September 2021. The following places were visited:

- Kokstad (Eastern Cape) – 2 September
- Ermelo (Mpumalanga) – 9 September
- Dundee (KwaZulu-Natal) – 16 September
- Lichtenburg (North West) – 23 September
- Bethlehem (Free State) – 30 September

The target audience was the commercial and potential commercial producers. More than 50 producers attended the training. The maize grading training was conducted in collaboration with the South African Grain Laboratory (SAGL) and Afgri silos, with a tailor-made course specifically for the Imbizo.

- For Kokstad and Lichtenburg, the training was a hybrid, where farmers attended physically and the facilitators from SAGL were online. The SAGL put together manuals and samples for the producers so that they could get practical experience and the theory behind the grading.
- For Ermelo, Dundee and Bethlehem, farmers were trained at Afgri silos and went through the process practically. The training was a great success. Producers were very pleased and expressed that the training is invaluable to their businesses.



Ermelo's group gives the Imbizo a thumbs up.



A large group of North West farmers attended the Lichtenburg Imbizo.

GRAIN SA'S FOOTPRINT IN LIMPOPO

On 4 October 2021, Grain SA also hosted an information day for Limpopo producers (see *Pula Imvula* January 2022). More than 150 producers showed up from different parts of the province for the meeting, with so much excitement and zeal. The esteemed guests included the local chief, delegates from the provincial Department of Agriculture, input suppliers and Grain SA staff members. The purpose of the day was to inform farmers more about Grain SA and its functions and to foster relationships among different stakeholders that service the producers.

Among all speakers the common thread of working together and consolidating efforts was emphasized. The programme for the day included:

- A presentation by the local Department of Agriculture and Rural Development, where they discussed funding opportunities (farmer support programme).
- The farmers got to meet Dr Sandile Ngcamphalala, the Farmer Development manager, who discussed the future of the programme and the plans going forward.
- Patricia Zimu further discussed the marketing of Grain SA and the overall functions of the organisation.
- Ikageng Maluleke discussed the importance of the economy on the producers and different aspects covered by Grain SA in the Applied Economy and Member Services department.
- A representative from Bayer discussed available seed cultivars for the season.

The involvement of Grain SA has helped the Limpopo members to uplift their standard of living by ensuring food security and creating job opportunities. The problem of hunger is being addressed.

This day was a great success and producers are excited about the planting season and looking forward to learning more through the programme. ■



The farmers who attended the Dundee Imbizo.

IKAGENG MALULEKE,
AGRICULTURAL
ECONOMIST AT GRAIN SA





DIAGNOSTIC CLINIC:

Ready to support grain producers

SUMMER GRAIN PRODUCTION REGIONS IN SOUTH AFRICA RECEIVED GOOD RAINS OVER THE PAST SEASON. ALTHOUGH THIS RAIN HAS BEEN CONCLUSIVE TO CROP GROWTH, IT HAS ALSO LEAD TO PEST AND DISEASE OUTBREAKS.

The pest and disease diagnostic clinic at the University of Pretoria, initiated by Grain SA and funded by the Department of Science and Innovation and the Maize Trust, aims to assist producers to get ahead of these outbreaks by providing accurate information about grain health issues in their fields.

This is a service that has been launched to support all summer grain and oilseed producers in South Africa with scientific information tailored to them – and it relies heavily on the participation of the producers.

HOW TO PARTICIPATE

The process starts when a producer is scouting a field and notices any sort of fungal growth, patches of plants not growing properly or any spots, stripes or holes in grain, leaves, shoots, roots or even issues in the soil. At this point, timing is crucial. Producers are advised to reach out to the diagnostic clinic as soon as possible in order to be guided through the process that has to be followed.

A producer will be advised on the following:

- What to sample.
- How much of the sample is needed.
- How to package it before sending it off to the clinic by courier.

At the diagnostic clinic a variety of tools and techniques are used to

analyse the sample to track down the cause of the symptoms. Once this is complete, the producer will receive a detailed report with support made available to help with any questions.

The initial value of such a service is the accurate identification of the pest, disease or organism causing the disease. But this programme has even more long-term benefits for producers. The real value of diagnostics lies in the subsequent research conducted on the wide variety of isolates collected. The success of this programme relies on the important role producers play in submitting samples to the clinic.

CONTACT DETAILS

- For assistance in packaging the samples and to let the university know that you are submitting samples; contact:
Lieschen de Vos at the University of Pretoria
 - Tel: 012 420 3939
 - Email: diagnostic.clinic@fabi.up.ac.za
- For more information:
Dr Miekie Human at Grain SA
 - Tel: 012 943 8207
 - Email: miekie@grainsa.co.za ■

Grain SA Research and Policy Centre

THE CORNER POST

BHEKI MABUZA *From thriving taxi owner to top farmer*



BHEKI MABUZA (48) KNOWS WHAT IT FEELS LIKE TO STARE DEATH IN THE FACE. AS A SUCCESSFUL TAXI BOSS, HE BECAME A TARGET AND WAS SHOT BY RIVALS. HOWEVER, THIS PAINFUL EVENT HAD A VERY POSITIVE OUTCOME. AFTER RECOVERING, BHEKI MADE THE DECISION TO SWOP CITY LIFE FOR THE FARM AND TAXIS FOR CATTLE – AND HE HAS NEVER LOOKED BACK.

AN ENQUIRING MIND FASHIONS A WINNER

Bheki is primarily a cattle farmer and owns 500 cows and 22 Brangus bulls. When he joined Grain SA eight years ago, he started attending study group sessions and became so inspired that he decided to try his hand at planting maize. He started small and planted only 3 ha, then increased it to 12 ha and later to 30 ha when the harvest was successful.

Through hard work (and asking many questions), he is now planting 110 ha of maize on land owned by him and his brother. He also leases 40 ha of land from a neighbouring farmer, where he plants soybeans. He dreams of owning a crop farm where he can plant at least 400 ha of maize.

In 2019 Bheki was one of the runners-up in the Grain SA Smallholder Farmer of the Year competition. In 2020, with a yield of 14,7 t/ha which was planted between 10 October and 28 October 2020, at a planting density of 55 000 plants/ha, he walked away with a third place in the category for maize production in the eastern Highveld region in the Grain SA Grow for Gold National Yield Competition.

What makes this achievement even more spectacular, is that Bheki, who farms on Donkerhoek in the Piet Retief region near Amersfoort in Mpumalanga, competed amongst some of the top South African commercial maize producers.

He would like to thank Grain SA, who 'opened a new world' to him through the study groups and training. Through Grain SA his path also crossed with Francois Scheepers, also known as Soois or Skippies, who became his mentor. 'Skippies explained everything to me. He taught me everything I know, even how to calibrate planters and set sprayers. Now I can help myself. He has put the light on and showed me where I had to walk,' says Bheki about his mentor, for whom he has great respect and admiration. Soois was also the first person he phoned after receiving his Grow for Gold certificate.

WINNING AGRICULTURAL PRACTICES

Bheki has successfully completed four training courses for which he received certificates. 'Although the study groups and training have played a huge role in the knowledge he has accumulated in the past eight years, it is his hunger for information that has played the biggest part in his success,' says Jurie Mentz, development coordinator at Grain SA's Louwsburg regional office.

'To be a successful farmer, you have to keep on learning,' says Bheki, who never hesitates to ask if he wants to know something. 'You must ask the people who have travelled the road ahead of you for advice – that is how you learn.'

Bheki has not just learned about the soil and the crops that grow on the farm but has also made sure he knows his 'enemy'. He asked Skippies about any weeds that grow in the field. 'This way I learned what the weed is and how to get rid of it.'

He has also focussed on getting his soils balanced and is following excellent liming and fertilisation practices. Regular soil sampling is done, and problems are identified and rectified timeously. All these practices contribute to his average yield of 10,68 t/ha on the 110 ha of maize planted. On the day of the interview (in December 2021), he had already received 230 mm of rain and was feeling very positive about the season ahead.

Bheki shares the following advice with other farmers:

- Timing is important. Know your planting window. Find out what you must spray and when it is the best time to spray.
- Don't mix crops. Each crop has its own spray programme and chemicals.
- Know your soil. If you do soil sampling, analysis and corrections early in the season, it will make an enormous difference in the yields at the end of the season. Do not underestimate the importance of adding lime to your soil.
- Know your weeds and how to control them.
- Do an annual post-season business analysis. This way you can see what you did right and where things went off track.
- Be ready for the next season. When you have finished planting, first pay off all your debts and buy your inputs – seeds, chemicals and fertiliser – for the next season and keep it in storage. You cannot wait until it rains before you buy your inputs.
- Do not think if you make a lot of money, it will be available for years to come. There may be a drought, so don't spend money on things that will not bring in money.
- Do not be scared or ashamed to ask. 'I did not know anything about planting soybeans, so I asked my neighbours. If you do not ask, you won't learn, and you will waste a lot of money.'
- Be passionate about farming. 'Although it is nice to make money, I am passionate about the process of planting, watching the crops grow, harvesting and doing it again next year. My maize is helping to eliminate hunger in South Africa.' ■



LOUISE KUNZ,
PULA IMVULA CONTRIBUTOR

A programme that is changing lives



Helping to make a good yield A REALITY

THE GRAIN SA FARMER DEVELOPMENT TEAM HAD 81 STUDY GROUPS MEETINGS AROUND THE KEY GRAIN GROWING REGIONS OF OUR COUNTRY DURING THE FIRST WEEKS OF NOVEMBER. THE LOGISTICS INVOLVED IN GETTING TO ALL THE FARMERS IN SOME RATHER REMOTE REGIONS IS NO SMALL FEAT AND INVOLVES TRAVEL ACROSS RUGGED TERRAIN AND SOME CHALLENGING OR QUESTIONABLE ROAD NETWORKS.

For years now we have been assisting rural farmers by meeting with them to discuss important farming operations, at the right times. More recently we have gone a step further and have helped farmers with the physical logistics of getting discounts on inputs from supporting input providers, and arranging deliveries to more convenient points for farmers who have struggled to access the correct inputs in years past.

Farmers were busy ordering and collecting inputs; taking soil samples, doing soil prep, checking weeds and planning their weed control programme for the season. For some the rains had arrived early and there was a frantic scurrying to get everything done. For others it was a case of enduring sweltering hot days scanning the horizon for signs of cooler wet weather.

The Grain SA team has sweated it out with the farmers arranging orders and deliveries of inputs, visiting the farmers' sheds to check through tractors and equipment and going to the fields to monitor seed bed preparation and check on the weed control required. We also hold regular conversations with study groups using power points and video to demonstrate and teach lessons about best practices for crop farming.

STUDY GROUP ACTIVITIES OVER A TWO WEEK PERIOD IN NOVEMBER

Deliveries of inputs were made to a number of study group farmers. This is a service Grain SA gives to the farmers who are participating in some of the projects because we know that historically it has been a challenge for farmers to access good quality inputs. It has also posed both a costly and logistical challenge to farmers to get the inputs to their fields.

The study group farmers where we visited had mostly completed their land preparation and initial spray programmes and some had already begun planting. Some of the study groups were still waiting for deliveries of fertiliser, seed and chemicals so our team was under pressure to organise deliveries.

- The Louwsburg office took inputs to the **Driefontein** farmers. 81 farmers were waiting to collect their delivery of fertiliser. The farmers were excited and very helpful. The Louwsburg office also monitored the delivery of fertiliser to **Donkerhoek** farmers. The fertiliser was delivered a bit late that day but the farmers were ready to collect and apply it as soon as possible. These farmers had a very good attitude and were patient about having to wait later because they are thankful for the help.
- We went to **Cancele** to deliver 84 bags of fertiliser and 56 bags of urea. Most of the farmers were absent so the chairperson signed for them.
- On 15 November the Maclear office met 30 farmers of the **Katkop 1 Lephaila study group** and off-loaded seed, Roundup and fertiliser for 34 ha. They went on to meet with 16 farmers from **Katkop 2 Nontso** to deliver their inputs. The next deliveries were to 17 farmers of the **Katkop 2 Ntaboduli** study group. It was a round trip of 260 km across some rough roads.

AT GRASS ROOTS



At Driefontein, study group farmers collected inputs that Grain SA had delivered to a more convenient collection point.



Fertiliser deliveries at Donkerhoek eventually took place after dark. The torches of the farmers lit the area while they were offloading the truck.



Delivery of inputs at Lunyaweni was done on their doorstep. What good service.



The group at Breyten (Louwsburg office) is always so helpful.



Personal contact on ground level

FROM 1 November to 18 November The Grain SA Farmer Development team made 73 farm visits to 37 farmers who are receiving individualised support from the team for this summer season.

Grain SA's Farmer Development team implements many different projects. The team is always thankful for supportive partnerships that provide donor funding to help change farmers' lives and ensure their growth and success. There are currently a number of different collaborations in place to make it possible for the team to walk alongside these farmers this season.



Farmer Tamsanqa Raphael Masuku farms on Kwaggafontein farm and is participating in the SACTA summer programme. The Dundee office team visited him to check on season preparation and monitor the herbicides and pesticides that he has in stock. Here he is spraying in the fields.



Reginald Thokozani, Masondo chairperson, checking his planter during a visit from the Dundee office.



The Louwsburg office visited the Nzimande Farming Projects in the Amsterdam district. Here is the chairperson Boy Zakew.

A team focused on the farmer and his yield

DURING November the Grain SA team travels many kilometres, working long hours and getting little sleep. All this with one aim – to help farmers get their crops planted at optimum times so they can achieve the best yields possible.

This is historically a huge challenge. Often funders are slow to deliver either finance or inputs, which delays soil preparation activities, spray programmes and planting. This means yields are compromised from the start. Grain SA has been actively lobbying for stakeholders and financiers to play their part in helping farmers get the best start every season. If farmer development is to be successful then the policy makers and role-players should do the right thing at the right time.

The Farmer Development team actively plays their role out there ensuring farmers are informed, equipped, supported and prepared. Soil sampling is demonstrated and results are explained. They network with suppliers and teach farmers to shop for the best product they can afford. Early season discussions include the importance of planning weed control and spray programmes as well as seed cultivar selection and correct procedures to follow when planting. The key message that is delivered encourages farmers to do the right thing at the right time and to monitor the crop progress throughout the season.

Farmers need to be hands on with the management of tractors. If tools let a farmer down at a busy time, it becomes very costly and causes unnecessary yield loss.



Graeme Engelbrecht from the Dundee office helped farmer Spehele Hlubi check the planters and sprayers in preparation for the summer planting. Spehele is part of the SACTA summer programme.



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