

# PULA IMVULA

GROWING FOOD • PEOPLE • PROSPERITY

GRAIN SA MAGAZINE FOR DEVELOPING FARMERS



*William Raphoto, the 2023 Grain SA/Absa/John Deere Financial New Era Commercial Farmer of the Year.*

## HARD-WORKING FARMERS *celebrate their success*

ONE OF THE MOST COLOURFUL DAYS ON THE GRAIN SA CALENDAR, TOOK PLACE ON 20 SEPTEMBER AT NAMPO PARK. THE DAY OF CELEBRATION EMBODIES NOT ONLY THE RICH DIVERSITY OF SOUTH AFRICA, BUT ALSO THE UNIFYING PASSION FOR AGRICULTURE THAT EXISTS WITHIN THE COUNTRY'S FARMING COMMUNITY.

The aim of the celebratory function is to give recognition to emerging farmers who are part of the PGP Farmer Development Programme and who excel in their respective categories. In preparation of the event, judges travelled to all ends of South Africa to identify finalists in the various categories.

Derek Mathews, chairman of Grain SA, congratulated all the finalists and top achievers, saying that there needs to be recognition for farmers who are in their fields through drought and in rain. 'Be proud to be a farmer and use every opportunity. Keep to your commitments and together we will grow,' he concluded.

### PROGRAMME

Grain SA farmer development lead, Dr Sandile Ngcamphalala, and Jeremia Mathebula, vice chairperson of Grain SA, launched Phahama Grain Phakama (PGP) during the event. PGP is an independent arm of Grain SA and 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.

Sponsor representatives, Dr Langelihle Simela (business development manager: Absa AgriBusiness Centre of Excellence), Sakhumzi May (acting executive manager: Agricultural Economics and Advisory, Landbank), Dr Nolwazi Mkize (regulatory lead for Africa, Bayer), Diale Tilo (executive director, Kgodiso Development Fund), Fortune Mathiba (operations manager at John Deere Financial), Andries Wiese (Hollard Insure) and Marthinus Loock (senior manager: AgriBusiness at Standard Bank) took turns to speak about the importance of farmer development and the role each of these organisations play in partnership with Grain SA.



Hard-working farmers celebrate...

AND THE WINNERS ARE...



1: Finalists in the Subsistence Farmer of the Year category (photo on the right) were Thabisa Mthwayi, Beauty Gumbi Bisisiwe and Portia Msibi. They all received a prize from Backsaver Farming Equipment. The winner, Portia, is congratulated by Derek Mathews.

### GRAIN SA SMALLHOLDER FARMER OF THE YEAR

Nkosinathi Hadebe farms on communal land near Newcastle in KwaZulu-Natal. This former policeman farms with maize and livestock and was introduced to farming by his parents. He joined a Grain SA study group in 2019 and started on 2 ha of maize from where he has expanded to 15 ha using his own equipment. Hadebe rents 230 ha of grazing land for his livestock.



3: Finalists in the Smallholder Farmer of the Year category were Amos Mahlangu, Nkosinathi Hadebe and Siphiwo Mahlinza. A big smile from the winner, Nkosinathi Hadebe – with him is his wife Sibongile.

### GRAIN SA/ABSA/JOHN DEERE FINANCIAL SUBSISTENCE FARMER OF THE YEAR

Busisiwe Msibi who farms on land near Volksrust, joined the Grain SA's Beyond Abundance programme nine years ago. In the 2022/2023 season she planted maize on 3 ha and dry beans on 0,5 ha. At the Msibi homestead they expect to harvest a total maize yield of around 14 tons.

2: Finalists in the Potential Commercial Farmer of the Year category were Philani Khoza, Zoliwe Nombewu and Kopano Lentswetshi. Here is the very happy winner, Philani, smiling at his family and friends.



### GRAIN SA POTENTIAL COMMERCIAL FARMER OF THE YEAR

Philani Khoza from Dukuza in KwaZulu-Natal, plants maize and soybeans. He joined Grain SA in 2014 and through the mentoring programme, he started to plant 1 ha which has increased to 82 ha. His future plans are to increase the hectares of commercial land he is currently renting near Bergville and to eventually acquire his own land.

Photos by Lizel Snyman.





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**4: The three finalists in the New Era Commercial Farmer of the Year category were William Raphoto, Bothlale Tshabalala and Luvuyo Mbutho. The 2023 Commercial Farmer of the Year, celebrates with Du Toit van Westhuizen, regional development manager for North West. In William's hand is the key to his brand new John 5075E utility tractor.**

#### GRAIN SA/ABSA/JOHN DEERE FINANCIAL NEW ERA COMMERCIAL FARMER OF THE YEAR

William Raphoto walked away with this prestigious award and a brand-new John Deere 5075E utility tractor as prize. He farms with maize and sunflower on 510 ha (210 ha of his own land) near Lichtenburg in North West. William became a member of Grain SA in 2005 and also joined the 500 Ton Club this year.



**5: Jeremia Mathebula and Dr Sandile Ngcamphalala congratulate each other for the successful launch of PGP.**

*More pictures of the event on page 8.*

**VALERIE CILLIERS,  
SA GRAAN/GRAIN EDITOR**



## A (LAST) WORD FROM... Jenny Mathews



**IT'S THE END OF THE YEAR AND FOR MANY GRAIN FARMERS AROUND THE COUNTRY IT'S THE BEGINNING OF A NEW CROPPING SEASON. FOR ME, IT'S THE END OF A SEASON!**

After 18 years of involvement with Grain SA, it's now time for me to focus on other things. My heart is full of all the rich experiences that my involvement has given me. I'm thankful for the opportunities I've had to meet dedicated personnel on the Grain SA teams, who inform and champion farmers and development.

Hard-working farmers around the country have inspired me and made me passionate about development in the agricultural sector. I've written reports, articles and training manuals. I've served as a judge for the Farmer of the Year and found it increasingly hard to choose the best of the best – because so many farmers have become very good at what they are doing. I have spoken up on matters that affect developing farmers and have even spoken to politicians with some of you to tell them what our needs are.

I have taught – but have been taught more!

I had a poster on my classroom wall with these encouraging words: 'Don't judge each day by the harvest you reap but by the seeds that you plant.' Development work is not easy. It's often two steps forward and one step back. Too often hidden agendas, politics and greed get in the way of good things happening. Development demands change and change is hard. But change is also good, and transformation is even better!

It is time for farmers from all corners of the grain-growing community to plug in, get informed and speak up. Farmers, please use your communication channels and make sure you are heard! Speak up for Grain SA/Phahama Grain Phakama. Tell your policymakers and decisionmakers about the integrity and value of the Farmer Development Programme. Tell them who you want to partner with on the development journey! As Martin Luther King said: 'Our lives begin to end the day we become silent about things that matter.'

Thank you for the opportunities to serve the grain farmers of our country. May God bless us and the work of our hands.

**– Jenny Mathews served on the Farmer Development Working Group from 2005 to 2023, chairing it for seven years. Her contribution to Pula will be sorely missed.**





# Assess the body condition of cows

**T**HE BODY CONDITION SCORING (BCS) OF CATTLE ALLOWS FARMERS TO ASSESS THE FAT RESERVES OF COWS DURING VARIOUS PRODUCTION PHASES. WHEN EVALUATED AT KEY PRODUCTION TIMES, THIS INFORMATION CAN BE USED IN MANAGEMENT AND FEEDING DECISIONS. THE AIM OF BCS IS TO OBTAIN A SIMPLE AND RELIABLE MEASURE OF THE LEVEL OF BODY FAT RESERVES IN LIVE ANIMALS.

It is important for a farmer to keep his eyes on his cattle and to spend time with the herd to keep them fat, but what should a farmer look at when he is with his cattle? The most important aspect is to determine that each animal's stomach is filled and that it was also filled yesterday. This is very important, as enough feed will lead to the production of calves. Therefore, it is important to look at the BCS because this will help the farmer to keep track of what is happening throughout the year.

## FEEDING AND MANAGEMENT

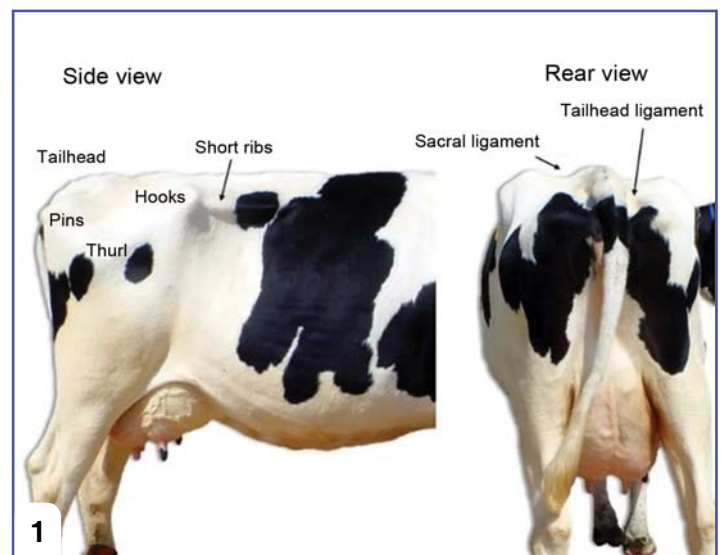
Cattle farmers can use BCS to regulate the feeding and management, which will ensure that breeding cattle are in an appropriate condition at different stages of their production cycle. Action can then be taken to alter the condition of cows that are not in the right condition at critical stages. Scoring can be done easily in circumstances where weighing may be impossible or impractical.

The technique is easily learned and is most useful when practised regularly by the same person in the same herd over several years. The use of technology such as regular photos of each cow can be of helpful to see changes in a cow.

## BCS OF BEEF COWS

Variation in the BCS of beef cows has several practical implications. The condition of cows at calving is associated with the lactation performance of each cow, as well as the health of the new-born calf. Incidents of calving difficulty increase in extremely fat heifers, although the condition is often overrated as a cause of calving difficulty in older cows.

However, the condition of cows at breeding affects their reproductive performance in terms of the number of services required



*Evaluation marks in assigning BCS.*

per conception, calving interval and the percentage of cows failing to become pregnant during the breeding season.

Numbers are used in the BCS system to describe the relative fatness or body composition of the cow. The scoring system for beef cattle has a range of one to five, with one representing very thin cows and five representing very fat cows. A cow with a BCS of three is in an average condition. Evaluation focusses on the backbone, ribs, hip bones, rump, pin bones, tailhead and thigh, as evaluations marks used in assigning the BCS illustrate in **Photo 1**.



Thinner cows look very sharp, angular and skinny, while fatter cows look smooth and boxy with bone structures increasingly hidden from sight or touch.



| Body condition score                  | Vertebrae at the middle of the back | Rear view (cross-section) of the hook bones | Side view of the line between the hook and pin bones | Cavity between tailhead and pinbone | Rear view | Angled view |
|---------------------------------------|-------------------------------------|---|--|-------------------------------------|-----------|-------------|
| 1<br>Severe underconditioning         |                                     |   |  |                                     |           |             |
| 2<br>Frame obvious                    |                                     |   |  |                                     |           |             |
| 3<br>Frame and covering well balanced |                                     |   |  |                                     |           |             |
| 4<br>Frame not as visible as covering |                                     |   |  |                                     |           |             |
| 5<br>Severe overconditioning          |                                     |   |  |                                     |           |             |

**Figure 1: Guidelines for determining BCS by palpation of fat cover.**

Source: <https://www.pakdairyinfo.com/bcs.htm>

**Look at the following when doing the body condition scoring of cows (See Figures 1 and 2):**

- **Backbone:** Is it flat or is there a ridge? Can you see or easily feel notches?
- **Long ribs:** Can you see or easily feel the ribs? If visible, how many can you see?
- **Short ribs:** Can you see the short ribs? What do they feel like? Are the rib ends sharp or rounded?
- **Hip bones:** Are the hip bones rounded or angular?
- **Rump:** Is the area between the pins and hip bones, flat, sunken or hollow?
- **Pin bones:** Are they pointed, 'tap'-like or rounded?
- **Tailhead:** Is there a hollow space between the tail head and pin bones? Is it a deep V- or shallow U-shape?
- **Thigh:** Is the area indented, flat or rounded? Is the muscle structure defined?

The system is relatively simple: Thinner cows look very sharp, angular and skinny, while fatter cows look smooth and boxy with bone structures increasingly hidden from sight or touch.

By comparing the newest BCS with the previous BCS, the change can be measured and correction actions can be implemented. Changing the licks or camps can have a major impact on the BCS and eventually on the calving percentage. A body conditioning score of one or two will improve with the inclusion of maize in the feed mix.

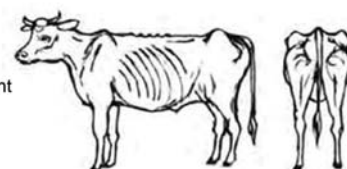
Remember that gut fill and late pregnancy can make animals appear fatter than they are.

Farmers must aim to keep cows' BCS between a score of two and four, with the aim at three. When this is done, cows will produce calves and each cow will have enough milk to produce a good weaner calf. The body condition, particularly at calving, has a major influence on pregnancy outcomes in cow-calf operations.

Take a yearlong approach by doing body condition scoring of the cow herd (or a representative portion of the herd) periodically during the season. This will help to make informed decisions related to

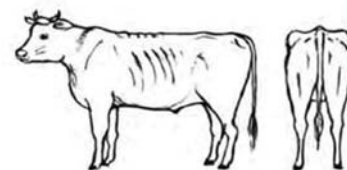
#### Condition score 1

Backbone prominent  
Hips and shoulder bones prominent  
Ribs clearly visible  
Tail-head area recessed  
Skeletal body outline



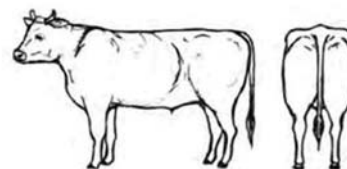
#### Condition score 2

Backbone visible  
Hips and shoulder bones visible  
Ribs visible faintly  
Tail-head area slightly recessed  
Body outline bony



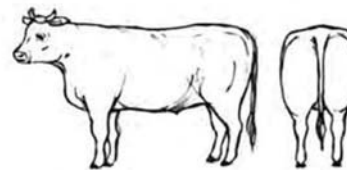
#### Condition score 3

Hip bones visible faintly  
Ribs generally not visible  
Tail-head area not recessed  
Body outline almost smooth



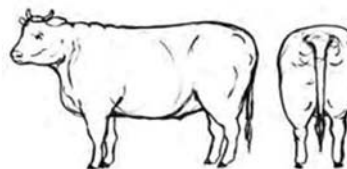
#### Condition score 4

Hip bones not visible  
Ribs well covered  
Tail-head area slightly lumpy  
Body outline rounded



#### Condition score 5

Hip bones showing fat deposit  
Ribs very well covered  
Tail-head area very lumpy  
Body outline bulging due to fat



**Figure 2: Body conditioning score guidelines.**

Source: [https://www.researchgate.net/figure/Cattle-body-condition-scoring-system-Anon1994-Body-condition-scores-BCS-of-1-5-were\\_fig14\\_267948147](https://www.researchgate.net/figure/Cattle-body-condition-scoring-system-Anon1994-Body-condition-scores-BCS-of-1-5-were_fig14_267948147)

weaning, supplementation, forage and other management that can affect the body condition.

Proactive management can help farmers to keep their cows in a seasonally appropriate body condition economically, allowing the operation to achieve optimal reproductive performance. ■

**PIETMAN BOTHA,**  
INDEPENDENT AGRI-  
CULTURAL CONSULTANT





# An in-DEPTH LOOK at the past maize season

IN THE BIGGEST PART OF THE MAIZE PRODUCTION AREA, THE PLANTING SEASON IS OVER. LET'S LOOK BACK ON THE 2022/2023 MAIZE SEASON.

When looking back at this season, the previous four seasons will be compared to it and broken down into two sections.

- The first section will focus on the performance of supply and demand, with the following included: Opening stock, ending stocks, total supply, total demand and stock-to-use percentage.
- The second section will focus more on the processing of maize and the exports, including human consumption, animal/industry consumption and exports. The objective of this article is to measure

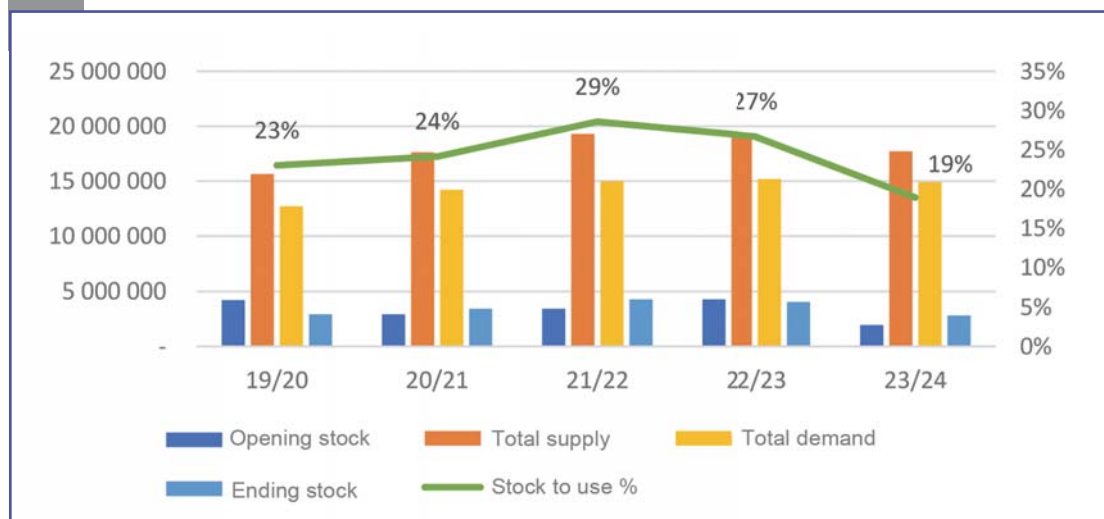
the performance of this year against the performance of the previous four years.

## DEMAND AND SUPPLY

**Graph 1** illustrates the maize demand and supply performance in terms of the opening stock (blue bar), total supply (orange bar), total demand (yellow bar), ending stock (light-blue bar) and the stock-to-use percentage as a green line.

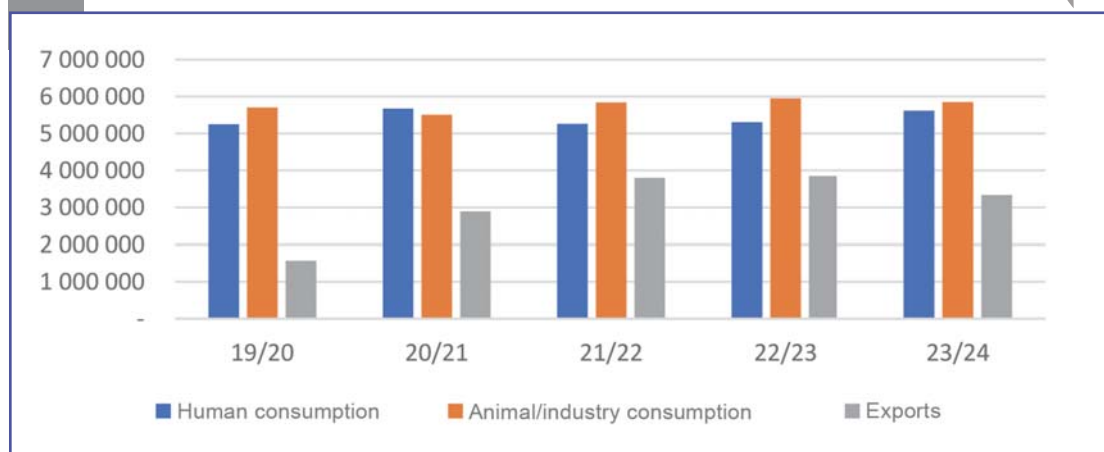
Comparing the opening stock and ending stock, it is clear there was an increasing trend from the 2020/2021 season onwards until 2022/2023. This trend is also visible in the total supply, but only from the 2019/2020 season until 2021/2022. In the 2022/2023 season, there

### 1 Maize demand and supply.



Source: SAGIS, NAMC, Grain SA

### 2 Maize processed and exported.



Source: SAGIS, NAMC, Grain SA





will be a lower supply number due to fewer plantings and, therefore, a lower opening and ending stock for the 2023/2024 season.

The rule of thumb is that the stock-to-use percentage should be about 12% for it not to have a downward effect on prices. As can be seen in Graph 1, the stock-to-use percentage is higher than 20%, which means that there is an overproduction of maize and it must be exported. The 2023/2024 season is estimated to have a stock-to-use percentage of 19%, which is not great compared to the rule of thumb but better than the 27% of the previous season.

The 2023/2024 season is estimated to have a stock-to-use percentage of 19%, which is not great compared to the rule of thumb but better than the 27% of the previous season.

## PROCESSED AND EXPORTED

**Graph 2** illustrates the maize processed and exported, which includes human consumption (blue bar), animal/industry consumption (orange bar) and exports (grey bar).

From the 2019/2020 season onwards, the exports increased until the 2022/2023 season, which is correlated with the stock-to-use ratio in Graph 1. When the stock-to-use ratio was at its highest, the exports were also at their highest.

It is important to note that in the 2023/2024 season, exports are estimated to decline with the stocks-to-use ratio due to the estimated supply of maize being lower. The graph shows that animal and industry consumption has stayed relatively constant over the five seasons, while human consumption varies from one season to the next.

## CONCLUSION

The 2022/2023 season has been a competitive season in terms of production and demand, although the stock-to-use ratio has declined. In the context of maize processed and exported, it had almost the same exports as the previous season. With the 2023/2024 season, it is estimated that the exports and supply will be lower, although the demand will stay the same, resulting in a lower stock-to-use percentage. ■

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# 2023 Day of Celebration: We were there!