

Storage capacity for carry-over stock: Are we geared?

By Mariana Purnell

There is a general sense of optimism in the South African maize market after the good rains received in April. The United States Department of Agriculture (USDA) increased its previous estimate for South Africa's 2018/19 maize production to 13,2 million* tons, depending on the expected higher yields in some parts of the country.

The size of the expected commercial maize crop was set at 13,207 million tons by the National Crop Estimates Committee (CEC) in July 2018. However, it is still much lower than the record crop of 17,5 million tons for the 2017/18 production season – the biggest crop ever produced in South Africa.

The July production estimate for white maize was 6,88 million tons and 6,327 million tons for yellow maize. If local maize production reaches 12,42 million tons or more in 2017/18, it will be much higher than the annual consumption of approximately 10,5 million tons. The three major maize producing regions, namely the

Free State, Mpumalanga and North West, are expected to produce 81% of the 2018 crop. The current yield figures are mainly from producers in the different provinces.

Pressure on storage

It is important to note, though, that the marketing year started with a large carry-over stock of approximately 1,4 million tons that must be added to the expected large harvest. South Africa will therefore remain a net exporter of maize in the 2018/19 marketing year, and maize prices will remain under pressure. The production estimate for sunflower seed is 792 255 tons, while almost 1,97 million tons of soya beans are expected in the new season.

South Africa has sufficient storage capacity, but the location of fixed storage facilities plays a major role. Storage in certain areas is utilised far above maximum capacity, while it is hardly utilised in other areas. The size of the total 2018/19 summer grain harvest will place pressure on the country's storage and handling if the large carry-over stock is taken into account (*Table 1*).

Table 1: Expected summer grain production for the 2018/19 season and the February carry-over stock.

Grain type	6 th national crop estimate tons	February carry-over Sagis tons	Total tons
White maize	6 879 960	4 204 857	11 084 817
Yellow maize	6 327 350	2 202 432	8 529 782
Sunflower	792 255	233 329	1 025 584
Soya beans	1 550 800	418 085	1 968 885
Sorghum	83 070	70 933	154 003
Wheat	505 000	1 394 460	1 899 460
Barley	106 150	393 585	499 735
Canola	80 000	79 491	159 491
Oats	691 150	51 404	742 554
TOTAL	17 015 735	9 048 576	26 064 311

The carry-over stock of all crops will therefore have a strategic impact on agri-businesses in the coming season. In general, everyone will have a larger carry-over stock than the previous season. It is clearly indicated by Sagis's stock figures when compared to previous seasons.

For some time now, the national commercial role-players in storage and handling have been proactively talking to clients about possibly moving their stock or earlier shipments and to create additional capacity. The issue was discussed at various forums and the process is managed at silo level to accommodate clients as far as possible. Conditions change daily, and possible exports will also affect planning.

National silo capacity

Storage capacity is not limited to concrete silos; most agri-businesses also have silo bags and bunkers (Table 2). These agri-businesses provide relevant information on their websites. In addition, producers created extra storage capacity on their farms, over and above the commercial silos – the northern parts of the country have a capacity of 14,1 million tons, with capacity of more than 800 000 tons in the south.

Table 2: Countrywide structures that increase the national storage capacity (Sagis).

Type of storage	National capacity
Concrete silos	25,4 million m ³
Silo bags	550 000m ³
Bunkers	1,15 million m ³
Other	685 000m ³

The new harvest will be delivered from March. The wheat stocks in particular influence the storage capacity in the northern areas. Where a silo tube is partly filled with a specific commodity of specific grade quality, the available capacity is not sufficient to store another grain. This affects the national silo capacity, including the Western Cape.

If the figures are analysed, silo owners need to plan carefully, especially because a part of the national capacity lies with

processors and is not available for general storage. A total storage capacity of 27 290 000m³ is available to store 26 064 311 tons of grain plus wheat. While the new harvest is collected, old stock is fortunately still flowing to buyers and processors, which frees up much needed storage capacity.

Logistics improved a lot over the

past three years, with an increase seen in rail transport (Figure 1, 2 and 3). Both road and rail transport are effective and can handle the expected volumes if necessary. Moving stocks between silos to create more capacity in some areas will require strategic decisions. Given the drought in Argentina and a premium placed on their maize, South

African grain is closing in on the 'cheapest in the world' spot. Agri-businesses will therefore consider strategic export actions.

After the 68 414 tons of maize exported during the first two weeks of April, it was expected that South Africa would not be able to export significant amounts of maize in the 2017/18 season that ended in April 2018 – although every little bit helps when creating badly needed capacity. It places South African exports for the 2017/18 maize marketing season on 2,1 million tons, i.e. 84% of the season's export estimate of 2,5 million tons.

With regard to transport, it helps that a significant portion of the maize destined for export by sea is transported to Durban via rail, but not all – domestic transport and transport to other parts of Africa is by road. Visit www.sagis.org for more information.

***Note:** The USDA covers both commercial and non-commercial production. Their figures therefore differ from the CEC's figures, which mainly focuses on commercial production. The non-commercial/existence farming production represents 6% of the estimated crop of 13,2 million tons. The USDA's estimate of commercial maize production is also 12,42 million tons. 🌱

Figure 1: Maize – transport by component.



Maize exports via Durban and other transport of maize mostly occur by road and have increased sharply since 2007, while the use of rail transport decreased. The use of freight rail fell from more than 30% to approximately 10%, but has shown an increase since 2016 (Sagis).

Figure 2: Wheat – transport by component.



The transport of imported wheat, deliveries and moving of wheat by road increased sharply between 2006 and 2011. Since 2011, between 20 and 25% of all wheat has been transported by rail annually (Sagis).

Figure 3: Barley, oats and soya beans – transport by component.



Barley, oats and soya beans transported by road and rail stabilised at around 65% by road and 20% by rail the past three years (Sagis).

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