Hard work pays off:
Soya bean exports are here to stay

By Dr André van der Vyver, executive director, and Juan-Pierre Kotze, researcher, SACOTA

The current season has yielded a new record soya bean crop. The Crop Estimates Committee's (CEC) initial forecast in February 2022 of 1,821 million tons grew by 330 000 tons (18,1%), according to the latest data released in July 2022.

It was thought that the disastrous start to the production season, which saw excessive rain and flooding, would have a greater negative effect on soya beans than it would maize. Fortunately, however, this was not the case. Although we all share in the joy producers are currently experiencing, especially since soya bean prices have increased as well, it has resulted in another interesting challenge. For the first time the industry has a significant surplus – enough to plan for consistent future exports.

Production could exceed demand

With the growth in soya bean production and the possibility of further increases, local production will soon exceed demand and there will be a build-up of stocks. This became evident in June 2022 when the CEC increased soya bean production to a then new record of 2 091 350 tons.

The National Agricultural Marketing Council (NAMC) also adjusted its estimated carryover stock for the end of the season to 377 800 tons – this figure took into account an estimated 50 000 tons of exports. Similar to the previous season, it was anticipated that the bulk of the exports will again go to Zimbabwe for local consumption and some to Mozambique.

In July, the crop increased by another 60 000 tons, but by then the NAMC had adjusted its export estimate to 100 000 tons and its end-of-season surplus to 376 800 tons. This was *inter alia* based on a South African Cereals and Oilseeds Trade Association (SACOTA) report regarding imminent exports.

Experts have already predicted new record soya bean plantings the coming spring. The main reason is that soya beans are more profitable than most other summer grain commodities. This can be attributed to new and improved cultivars that produce higher yields, and the high prices of fertiliser – less fertiliser is used for soya beans than for maize, for example.

Over the past seven years, the average annual growth in production was 16% compared to 8% for local demand. Production increases would have been even higher if the 2019/20 and 2020/21 seasons did not suffer setbacks, as can be seen in *Figure 1*.

Figure 1 also indicates that local demand comprises crush as well as animal and human consumption of raw soya bean as calculated by the South African Grain Information Service. For a more comprehensive calculation, the volumes of imported cake should be converted to raw soya beans. This is assuming that in future a substantial portion of imported cake will be substituted by local oilcake. In turn, this means the demand for local soya beans will continue to grow.

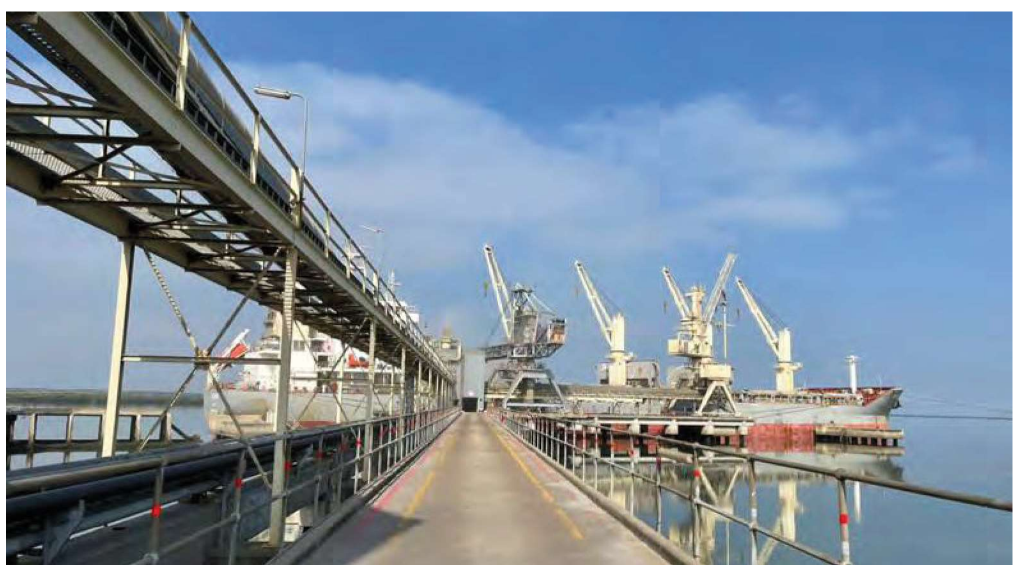
The new season production cost estimates indicate that the profitability of maize will increase with approximately R4 000/ha, while soya bean will be roughly double this. Calculations and yields, of course, vary between areas.

It is therefore no surprise that the exporting members of SACOTA have started to investigate the possibility of suitable export markets. The oil content of South African soya beans is typically lower than South American and United States (US) soya beans. International contracts normally trade on a basis of 18,5% oil with a reciprocal allowance.

The oil content of South African soya beans varies greatly, depending on the region, with some being more than 21% while others are as low as 17%. Therefore, any export contract should specifically accommodate a more lenient specification and/or potentially a discount on the sales price.

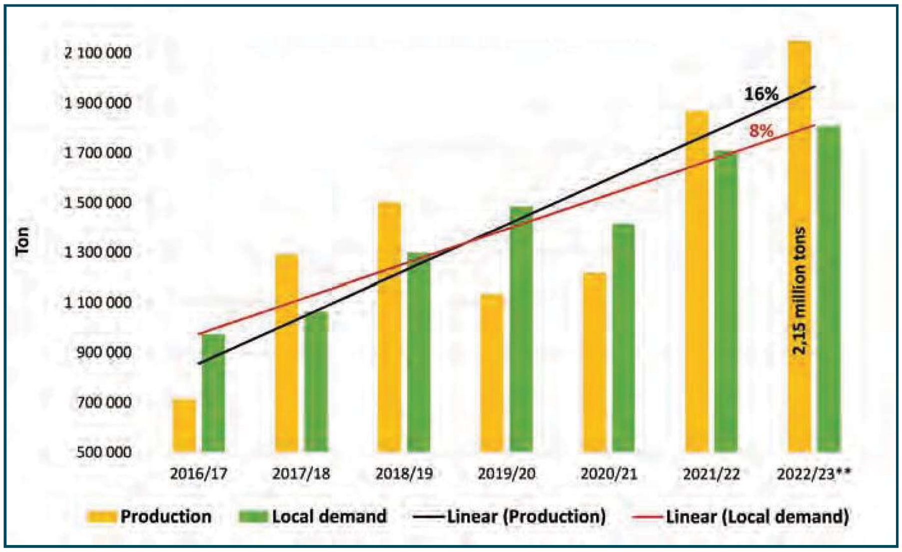
Logistical constraints

Another challenge has been logistical constraints. The Port of East London recently opened up, but has been facing some challenges, although lately significant volumes of soya beans are



Exports of South African soya beans via the Matola Silos and Grain Terminal in Maputo in July 2022.

Figure 1: Average annual growth in soya bean production and demand in South Africa.



produced in the Southeastern Free State. Several agricultural industries have investigated the Port of Maputo as an alternative. It has always been a natural choice for exports out of Mpumalanga, but it had limitations.

However, the challenge of exporting through Mozambique has been overcome. The Export Trading Group, a SACOTA member, confirmed that the first soya bean export vessel of approximately 30 000 tons completed loading towards the end of July and left for Malaysia.

Soya beans have been transported from Mpumalanga by road across the Lebombo Border Post (Komatipoort border) and offloaded at the Matola Silos and Grain Terminal in Maputo. Two more vessels out of Maputo have been scheduled (one to Bangladesh and another to Malaysia), as well as a vessel out of Agriport, Durban, to Malaysia in early November. This will be the first significant deep-sea export of soya beans in many years.

Cost and profitability

Using Grain SA's production cost and profitability calculations for the past season – adjusted according to June/July 2022 prices (R8 650/ton) and the CEC Free State average yields (2,1 ton/ha) – we noticed that the net profit per ton is approximately R4 300 ex-farm for soya beans produced in the eastern production areas. This far exceeds storage and transport costs (currently around R600 to R700/ton) to deliver the products to the Durban harbour. Early costs and price predictions for 2022/23 indicate a similar scenario.

The bulk of the export season runs from late March to early November, which means it uses the last of the old-season grain and oilseeds until around June before gradually moving over to new-season products, depending on the harvesting tempo. Export cost calculations and prices are therefore a combination of old- and new-season products combined with low or high storage costs.

Despite all the successes, logistics could remain a challenge. It is already a struggle to transport substantial volumes of maize by rail. Globally, utilising an efficient rail system is key to a competitive export industry.

Soya beans, which are more quality-sensitive than maize and cannot afford long wagon standing or turnaround times, are likely to depend on road transport exclusively. There is one important consolation: although soya bean weighs 7% more than maize per volume, it is worth double its weight in value. This means that only half the tonnage has to be transported and exported to earn the same value for the industry compared to maize.

Promising opportunities await SA

Grain SA, in collaboration with the Department of Agriculture, Land Reform and Rural Development (DALRRD), supported by SACOTA, has also been working on opening the export market to China. Since the turn of the century, China has dominated the global import market for soya beans. In 2022/23, China is expected to import 100 million tons, compared to South Africa's new 2022 record production of 2,15 million tons.

If this market could be opened for South African exports, it would mean unlimited offtake, even if local production had to double. However, good news was received in June when the *Protocol of Phytosanitary Requirements for the Export of Soya Beans from South Africa to China* was finally signed by the relevant ministers of both countries. SACOTA is currently co-ordinating the registration of exporting members, export silos, and terminals as per the protocol requirements.

In future, the protocol will require production monitoring during the season, and inspections of storage and loading facilities by the DALRRD.

Opportunities for the soya bean industry look promising. Maputo, like East London, will also add more choices to SACOTA exporting members. This will be highly beneficial for producers and the rural economy. It will create much-needed rural job opportunities and earn foreign exchange for South Africa. At a free-on-board price of around US$610/ton and a R16,80-to-one-US dollar exchange rate, a soya bean export vessel of 35 000 tons will earn South Africa approximately R360 million in forex.

SACOTA wishes to congratulate those leaders in the oilseeds industry who persevered and believed in the future of soya beans. It would be unfair to single out individuals since many contributed to discussions initiated and facilitated by the Oil and Protein Seeds Development Trust/Oilseeds Advisory Committee, the Protein Research Foundation soya bean value chain initiative, Grain SA oilseeds working groups, the South African National Seed Organization, the South African Cultivar and Technology Agency and the DALRRD.

For enquiries, contact
Dr André van der Vyver at
083 412 0287 or email
andre.vandervyver@sacota.co.za.
Alternatively, visit *www.sacota.co.za*.