

United front tackles soya bean value chain challenges

By Gerhard Keun, chief executive officer, Protein Research Foundation

The soya bean industry has made excellent progress over the past few years. Local production doubled and processing of local soya beans increased substantially, leading to an improvement of the trade balance with significantly fewer imports of oilcake into South Africa. This was a great improvement for everyone in the soya bean value chain.

During a meeting at the Sunflower and Soybean Forum (SSF) in 2018, it was reported that the industry was facing a situation where a substantial supply of soya beans is available, yet oilcake is still being imported. The Protein

Research Foundation (PRF) identified this as an opportunity to facilitate a soya bean value chain discussion.

Various stakeholders join forces

On 6 December 2018, a first meeting was called between stakeholders, which included representatives of the South African Oil Processors' Association (SAOPA), Animal Feed Manufacturers' Association (Afma), South African Cereals and Oilseeds Trade Association (Sacota), Grain SA, the Protein Research Foundation (PRF), the Oilseeds Advisory Committee/Oil and Protein Seeds Development Trust

(OAC/OPDT), the South African Cultivar and Technology Agency (Sacta), the Department of Trade and Industry (dti), and the Department of Agriculture, Forestry and Fisheries (DAFF).

The meeting was held in order for stakeholders to address certain industry bottlenecks, as well as discuss strategies regarding the industry's future. The soya bean industry was recognised as the cornerstone of various other industries and, as such, it is vital to secure the growth thereof. Five categories were discussed, namely supply and demand balance, pricing transparency, quality, infrastructure, and imports and exports (Table 1).

Table 1: Categories discussed during the first soya bean value chain stakeholder meeting.

Supply and demand	
Processing capacity	Processing capacity was confirmed at 2,1 million tons (a level of 80% utilisation would result in 1,68 million tons crushing capacity. Full-fat capacity is at 450 000 and 360 000 tons at 80% utilisation).
Local infrastructure	
<ul style="list-style-type: none"> Electricity supply Water supply 	Load-shedding and constraints relating to access to water create substantial downtime. This directly results in wastage and losses, which affect crushing margins.
<ul style="list-style-type: none"> Transport/logistics 	Improved infrastructure in terms of logistics is needed. If South Africa wants to achieve total replacement of imported oilcake, transport to the coastal regions (such as the Western Cape) needs to be addressed.
Quality	
South African soya beans and soya bean oilcake quality must be confirmed and combined with reliable and consistent supply.	A South African industry norm regarding oilcake quality needs to be developed and published in order to manage and co-ordinate the quality of oilcake in the country. The industry also needs to launch an investigation into and set the benchmark on best practices, in alignment with international standards and quality handling.
Pricing and transparency	
	Developing an oilcake futures contract to be listed on the South African Futures Exchange (Safex).
Imports and exports	
During years of oversupply, it is important to be able to export.	DAFF is in the process of applying for market access to China.

On 11 November 2019, role-players in the soya bean value chain met again to report back on progress made with the actions identified in 2018, as well as to identify and discuss new strategies. Attendance of the value chain discussion was also extended to representatives of

the South African Poultry Association (Sapa), Agbiz Grain, the South African Grain Laboratories NPC (SAGL), South African Pork Producers' Organisation (Sappo), and the World Bank.

On 27 August last year, role-players in the soya bean value chain met

again to report back on progress relating to the actions identified in 2018 and 2019, as well as to identify and discuss new strategies. It was also resolved that in future, meetings will be organised on a quarterly basis in order to speed up and increase progress.

Table 2: New strategies identified by role-players in the soya bean value chain.

Farm-level economics	
In major producing countries, producers are delivering soya beans with a significantly higher moisture content (up to 17%), which can potentially reduce harvest losses.	<ul style="list-style-type: none"> Identify four or five silo complexes that are close to crushing plants to undertake a cost-benefit exercise of delivering soya beans with a higher moisture content. Green beans are an extremely isolated problem, but the international experience is that harvesting at higher moisture levels could increase the quantity of green beans, which is a problem and will need to be addressed in the study.
Soya bean content and quality	
Consistency and not quality of soya beans are the biggest issue. This is due to management issues such as green beans, moisture content, time of harvesting, etc.	<ul style="list-style-type: none"> Explore the possibility of compensating producers of soya beans with a higher protein content. Inconsistent results for the same quality tests at various laboratories must be addressed. Suggest a reference laboratory such as the SAGL and do continuous competency tests on soya bean and soya bean meal for quality.
Information from processors and storage operators who receive stock directly from farms will add great value to the data which the SAGL already has.	<ul style="list-style-type: none"> The SAGL should supply results timeously and should not provide historical data only at the end of the season. Members of Agbiz Grain will be asked about the possibility of providing samples per silo per week.
Local infrastructure	
Expansion of soya bean production to the western production regions will be influenced by transport differentials to be implemented during 2021 by the JSE.	
Rail infrastructure will have to be used in order to unlock the potential for soya bean oilcake in the Western Cape.	
The JSE's intention to scrap broker codes when trading on Safex requires attention.	<ul style="list-style-type: none"> Scrapping of broker codes when trading on Safex will be discussed before attending the JSE marketing meeting. Scrapping of broker codes might be a risk to smaller crops such as soya bean and sunflower and should perhaps be implemented for maize as a first step.
Supply and demand	
The expansion of local soya bean processing capacity, which depends on future scenarios of feed use, needs to be discussed.	Several master plans are currently being developed or have been completed. The various initiatives between the livestock, grains, and oilseeds industries must be co-ordinated to ensure alignment.

Table 3: Initial as well as new strategies discussed during an additional meeting between soya bean value chain role-players.

Farm-level economics	
Delivering soya beans at a higher moisture level to reduce harvest losses.	<ul style="list-style-type: none"> Identify four or five silo complexes that are situated near crushing plants to undertake a cost-benefit exercise of delivering soya beans with a higher moisture content. The issue of green beans will be handled as part of the project.
Financing of producers	<ul style="list-style-type: none"> A report will be compiled regarding the availability of finance for producers.
Soya bean content and quality	
To initiate a soya bean, full-fat soya bean, and soya bean meal quality study.	The project proposal, to determine the key drivers of the quality of soya bean products (full fat, expeller, and solvent extraction meal) for feed use in South Africa, submitted by the Bureau for Food and Agricultural Policy (BFAP), was approved.
Intervention regarding sourcing nutrient information on direct deliveries from processors and storage operators.	
Inconsistent results for the same quality test at various laboratories are being addressed.	The project proposal, to establish a proficiency testing scheme for soya beans and soya bean meal, submitted by the SAGL, was approved.
Markets and integrated value chains	
The impact of import duties on soya beans and soya bean meal.	The project proposal, to analyse the impact of import duties on soya beans and soya bean meal on the integrated soya and livestock value chain, submitted by BFAP, was approved.
Transport/logistics	
A discussion regarding an alternative transport differential system with the University of the Free State.	The transport issues are to be attended to by an ad-hoc work group comprising representatives of Grain SA, Sacota, Agbiz Grain, the dti, and DAFF.
To find a solution for cost-effective delivery to the Western Cape.	
To attend to the possibility of rail infrastructure.	

The efforts of the soya bean value chain group will contribute not only to co-ordinating actions in the soya bean industry

and/or to promote the industry, but also to create an entire value chain plan in order to create additional value for end consumers. 🌱

For any information, send an email to Gerhard Keun at gkeun@proteinresearch.net.