

12 February 2024

An embrace of scientific advancements in seed breeding and agrochemicals is vital for SA's agricultural progress

- As an export-oriented agricultural sector, South Africa must always pay attention to global developments and risks that could undercut its competitiveness in the world market. Undoubtedly, several environmental, social and political risks remain on top of mind for farmers and agribusiness leaders. But one issue that does not always get full appreciation is the contribution of the agricultural input providers – various agrochemicals and seed breeding. The lack of public focus mainly stems from the fact that consumers and policymakers primarily monitor the end products: the harvest size and, in animals, the health and expansion of herds.
- Rarely do we see a concerted broader public focus on assessing whether South Africa is keeping up with the times in registering and developing its seeds and agrochemicals. This needs to change. South Africa's agriculture has more than doubled since 1994 in value and volume when assessed through the data from the Abstract of Agricultural Statistics published annually by the Department of Agriculture, Land Reform and Rural Development.¹ At the centre of this agricultural progress, there are two major catalysts – first, expansion of export markets, thus creating a demand pull for products, and second, the early adoption of high-yielding seed varieties in crops, improvement of genetics in animals, and the use of agrochemicals to nurture the sector.
- South Africa was especially embracing technological advancement in ways that much of the African continent was not, thus setting the country apart from much of Africa in terms of its yields. This technological embrace primarily explains higher crop yields in South Africa compared to some of the neighbouring African countries with even better climatic conditions. A case in point is South Africa's embrace of genetically modified crops, whose adoption in the early 2000s saw maize and soybean yields improve notably over time, thus keeping the country a net exporter and boosting food availability domestically.
- With this encouraging track record in embracing science, a semi-arid country like South Africa should invest more resources to science in the present day where climate change and changing geopolitical environments have introduced new risks, and each country should strive to improve its food security. Fortunately, South Africa has a thriving private sector-led agricultural sector, where resources have been channelled into research and could continue being devoted to this effort. In fact, the

¹ This data can be accessed here:

<https://old.dalrrd.gov.za/Portals/0/Statistics%20and%20Economic%20Analysis/Statistical%20Information/Abstract%202023.pdf>

government's spending in research and development has continued to fall, but this has been met with appreciable increase in research and development from the private sector.

- Still, the regulators in the country, specifically within the Department of Agriculture, Land Reform and Rural Development, need to share the urgency of the present moment and productively support technological advancement. Such support would come through constructively evaluating the various agrochemicals and seeds that the private sector presents and registering for use after being satisfied with the testing. The process, though, needs to be faster and agile and not be boxed down into the usual organized agriculture and government politics. Politics can be tolerable when addressing social issues, but science does not need cloudy judgment.
- What should be a priority is the health, improvement, sustainability, and competitiveness of South African agriculture. This is a prism through which the regulators should engage the input providers and private sector researchers. Equally, the organized agriculture groupings should ensure that their scientists are leading the engagements with the regulators and not muddy science with various issues they often raise with the government.
- A case in point of legislative work that needs to be revamped and modernised is Act 36 of 1947.² This is the Fertilizers, Farm Feeds, Seeds and Remedies Act 36 of 1947, which regulates the registration of fertilizers, farm feeds, sterilizing plants and certain remedies.
- Even countries that have always maintained a sluggish view of scientific progress in agriculture, like the European Union, are suddenly changing their approaches. For example, on 07 February 2024³, the European Parliament issued a statement highlighting that they have adopted a "position for negotiations with member states on the Commission proposal on New Genomic Techniques (NGTs), which alter the genetic material of an organism, with 307 votes to 263 and 41 abstentions."
- The European Parliament further stated that "the objective is to make the food system more sustainable and resilient by developing improved plant varieties that are climate resilient, pest resistant, and give higher yields or that require fewer fertilizers and pesticides."
- Currently, in the EU, "all plants obtained by NGTs are subject to the same rules as genetically modified organisms (GMOs). Members of the European Parliament (MEPs) agree with the proposal to have two different categories and two sets of rules for NGT plants. NGT plants considered equivalent to conventional ones (NGT 1 plants) would be exempted from the requirements of the GMO legislation, whereas other NGT plants (NGT 2 plants) would still have to follow stricter requirements. MEPs want to keep mandatory labelling of products from both NGT 1 and NGT 2 plants."
- We draw from this statement that South Africa should also review its regulations on gene-editing matters to be at the forefront, as the country has been within acceptable health regulations in the past two decades. The goal should be to support a growing and competitive agricultural sector. From its roots, trade and scientific embrace have been at the centre of South Africa's agricultural progress, and

² More information about Act 36 can be accessed here: https://www.gov.za/sites/default/files/gcis_document/201505/act-36-1947.pdf

³ The press statement by the European Parliament is available here:

https://www.europarl.europa.eu/pdfs/news/expert/2024/2/press_release/20240202IPR17320/20240202IPR17320_en.pdf

this should be the running theme even today. Importantly, with the EU now seeing the light, South Africa and New Zealand are the only major agricultural producers in the world that regulate NGTs and new breeding techniques under GMO legislation. This needs to change.

WEEKLY HIGHLIGHT

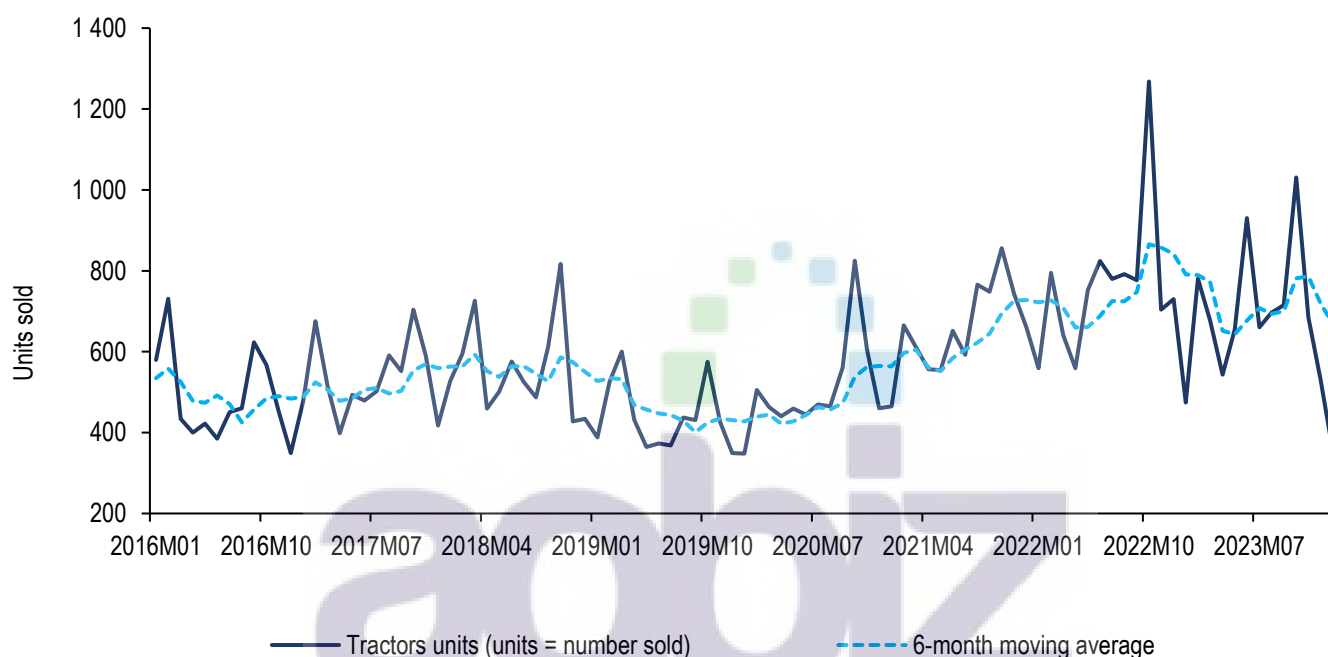
SA agricultural machinery sales had a poor start to the year

- We start the year with reasonably weak agricultural machinery sales data. South Africa's tractor sales were down 26% y/y in January 2024, with 353 units sold. At the same time, the combine harvesters were down 50% y/y, with eight units sold. At face value, this could be viewed as a worrying agricultural machinery sales report indicating difficulties in the sector. But we have a different reading of it. This is more of a normalization after a few years of robust sales.
- For example, South Africa's tractor sales for 2022 amounted to 9,181 units, up 17% y/y and the highest annual sales for the past 40 years. The combine harvesters also had an excellent performance of 373 units in 2022, up 38% y/y and the highest yearly sales figure since 1985. The sales for the year before were also exceptional. These generally strong agricultural machinery sales these past few years were primarily on the back of large grain and oilseed harvests. In 2023, the tractor sales were down marginally from the previous year, while the combine harvester sales held the last year's momentum.
- Thus, we think the January 2024 sales begin a correction period. While in the past, agricultural machinery sales would be read as one of the early indicators of the health of the farming sector, this time around, the sales should be read differently for the reasons we stated above.
- The summer crop production conditions are relatively robust in the fields across South Africa. For example, the recently released data by the Crop Estimates Committee puts the preliminary area plantings for 2023/24 summer grains and oilseeds at 4,41 million hectares, up by 0,4% y/y. This increase is not limited to a few crops but across most summer crops except for soybeans, where plantings possibly fell by 10% y/y to 1,04 million hectares (which is still well above the 5-year average area of 867 240 hectares). The area plantings for other major grains, such as maize and sunflower seed, is also well above the 5-year average.
- Notably, the weather conditions have been broadly favourable since the start of the 2023/24 production season, thus supporting crop growth. We currently expect harvest that will be broadly above the long-term average levels in major summer crops, which again illustrates that the weak sales are not mainly a production conditions issue but a lower replacement rate of machinery after excellent years of sales.
- Moreover, the rising interest rates added pressure to farmers' finances. The relatively weaker rand exchange rates also negatively influenced the farmers' machinery buying decisions. Also worth noting is

that while other input cost prices, such as fertilizer and agrochemicals, have softened in 2023, the price levels were still well above long-term levels, thus adding pressure on farmers' finances.

- In essence, the sales will likely remain subdued despite the promising agricultural season in 2023/24. The same factors underpinning the farm machinery market will likely prevail in the 2023/24 season.

Exhibit I: South Africa's tractor sales



Source: South African Agricultural Machinery Association and Agbiz Research

WEEK AHEAD

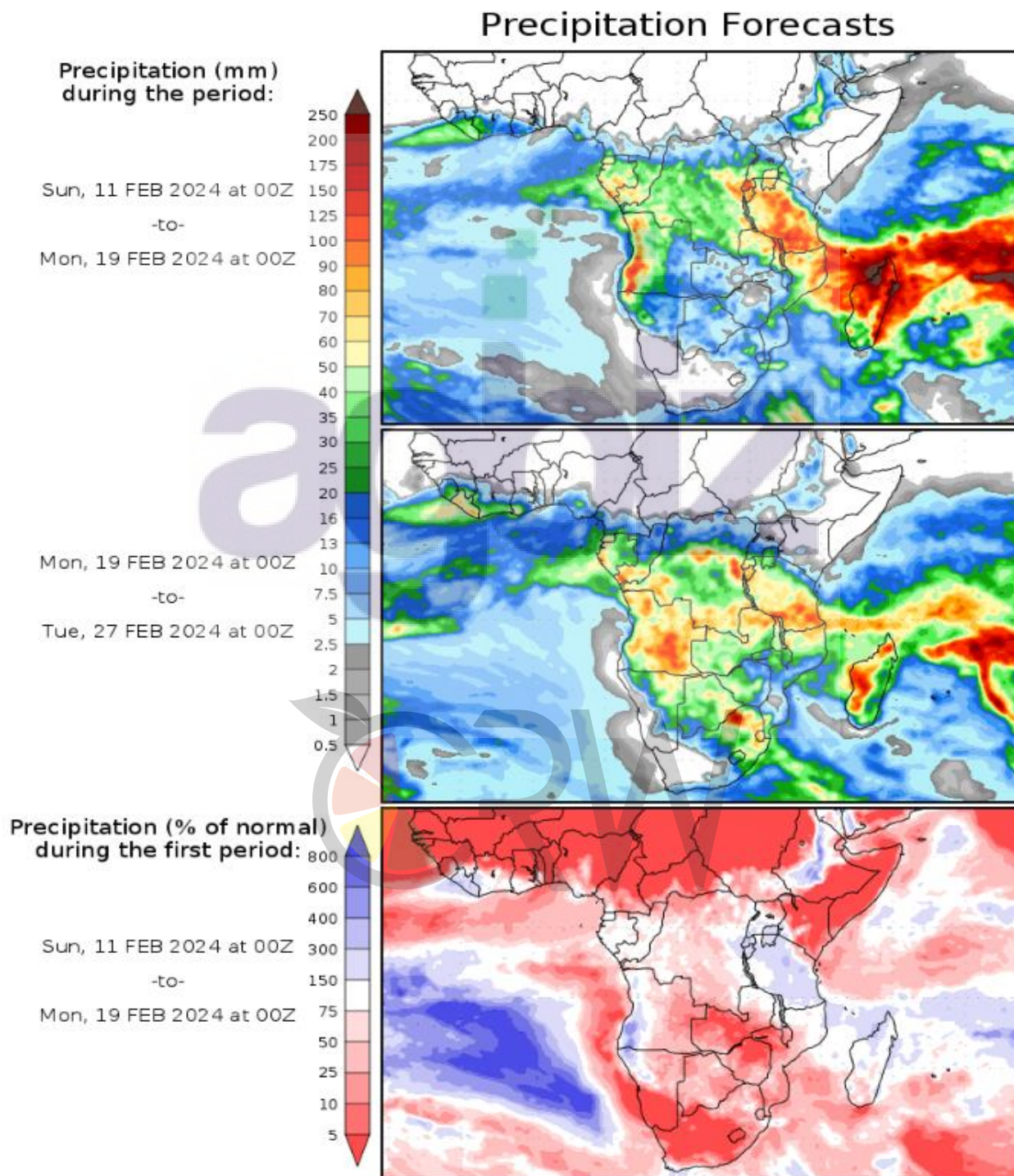
What we are watching this week

- This is a remarkably quiet week on the international agricultural front, we only have one major data release. The United States Department of Agriculture (USDA) releases its **weekly U.S. grains and oilseeds export sales** data on Thursday.
- Within the domestic front, there are also few data releases this week. SAGIS will kick things off with a release of its weekly **South Africa's Grains and Oilseeds Producer Deliveries** data for 09 February on Wednesday. In the previous release on 02 February, South Africa's 2023/24 maize producer deliveries were about 42 074 tonnes. This placed the 2023/24 marketing year's maize producer deliveries at 14,9 million tonnes out of the overall harvest of 16,4 million.
- On the same day, the soybean deliveries were about 2,7 million tonnes of soybeans out of the harvest of 2,8 million tonnes. The sunflower seed producer deliveries amounted to 716 564 tonnes out of the harvest of 720 000 tonnes.
- Also worth noting is that South Africa's winter wheat harvest is almost complete. Last week, 12 924 tonnes of wheat were delivered to commercial silos. This placed the 2023/24 wheat producer deliveries at 1,8 million tonnes out of the expected harvest of 2,2 million tonnes.
- On Thursday, SAGIS will publish its weekly **South Africa's Grains and Oilseeds Trade** data for 09 February. In the previous release on 02 February, the 40th week of the 2023/24 marketing year, South Africa exported 68 839 tonnes of maize. Of this volume, 45% was exported to Zimbabwe, 31% to Mozambique and the balance to the rest of the neighbouring African countries. This placed South Africa's 2023/24 maize exports at 2,9 million tonnes out of the seasonal export forecast of 3,3 million.
- South Africa is a net wheat importer, and 02 February was the 18th week of the new 2023/24 marketing year, with 53 672 tonnes of imports. About 56% originated from Latvia and 44% from Estonia. This placed South Africa's 2023/24 wheat imports at 694 431 tonnes out of the seasonal forecast of 1,6 million tonnes (down from 1,7 million tonnes in the 2022/23 season).

South Africa's Precipitation forecast

- Similarly to the previous week, the weather forecast for this week shows prospects of clearer skies over the central regions of South Africa, with possible light showers in the northern and eastern regions. This is not ideal as crops currently need moisture. Fortunately, the forecasts for the week after show possibility of decent rains over the summer crop growing regions of the country.

Exhibit 2: South Africa's precipitation forecast



Source: George Mason University (wxmaps)