

## The EU's recent acceptance of GE maize imports could influence Africa's approach

The European Union is one of the regions that have, for some time, resisted the importation and cultivation of genetically engineered (GE) crops. But this changed on 01 July 2022, when the European Commission approved imports of genetically engineered maize for food and animal feed. This follows a similar approach with soybeans.<sup>1</sup> This authorization for imports is valid for 10 years but does not include cultivation. These will mainly be imports, and all will be subject to the European Union's labelling and traceability rules.<sup>2</sup> After close to 25 years of opposition to GM crops, this perhaps signals a move to wider future acceptance of GM crops in the EU, though the recent concession was perhaps more forced by shortages and grain prices than European consumers' support of the well-proven science.

Importantly, some African countries arguably closely followed the EU's approach on GE crops by prohibiting their imports and cultivation. With this new development in the EU, it is plausible that some African countries might consider evaluating their current restrictions, especially for vital staple grains such as maize. Kenya is one example - a country with maize import needs of 700 000 tonnes in the 2022/23 marketing year.<sup>3</sup> Yet, the Kenyan consumers cannot access the abundant GE maize in the world market, let alone utilise the crop technologies to reduce crop losses. With a change in regulations, Kenya would be able to access more affordable maize from the likes of South Africa, the US and South American countries, directly benefiting consumers and stimulating the struggling animal sector. The typical major suppliers of non-GE maize to Kenya have been Tanzania, Mexico and small volumes from Zambia and South Africa.

Still, the most critical step in GE regulations, particularly in Africa, would be permitting cultivation. Of course, this typically introduces debates about the ownership of seeds and how smallholder farmers could struggle to obtain seeds and supporting inputs in some developing countries. These are realities that policymakers in the African countries should manage in terms of reaching agreements with seed breeders and technology developers but not close off innovation, as is currently the case. The technology developers also need to be mindful of these concerns when engaging various governments in the African countries. This discussion should occur even sooner in Africa, as the geopolitical and climate change risks present the urgency to explore the technological solutions to increase each country's agricultural production.

The only country that is an anomaly in Africa is South Africa, which began planting genetically engineered maize seeds in the 2001/02 season. Before its introduction, average maize yields were around 2.4 tonnes per hectare. This has now increased to an average of 5.6 tonnes per hectare as of the 2020/21 production season. Meanwhile, the sub-Saharan African maize yields remain low, averaging below 2.0 tonnes per hectare. While yields are also influenced by improved germplasm (enabled by non-genetically modified biotechnology) and enhanced low and no-till production methods (facilitated through herbicide-tolerant GM technology), other benefits include labour savings and reduced insecticide use as well as enhanced weed and pest control.

<sup>1</sup> More information is available [here](#).

<sup>2</sup> More inflation about this announcement is available [here](#).

<sup>3</sup> Kenya's maize estimates can be accessed [here](#).

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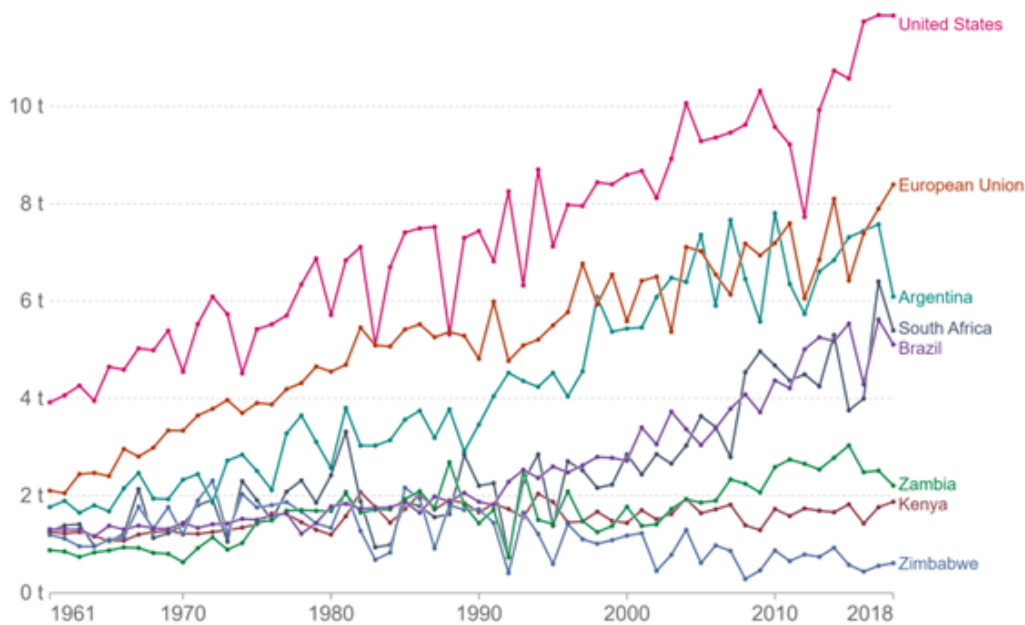
With the African continent currently struggling to meet its annual food needs, using technology, genetically modified seeds, and other means should be an avenue to explore to boost production. The benefits of an increase in agricultural output are evident in Argentina, Brazil, the United States, and South Africa. The EU, which has arguably had a major influence on the general perception of GE crops in Africa, is changing its stunts, at least on imports. This should serve as an essential signal to African countries. Still, their actions shouldn't aim to match that of the EU but go further and argue for access of these technologies to domestic farmers under fair agreements with the seed and technology developers, all of which can be negotiated at a country level.

The EU doesn't have as much urgency to improve maize yields through GE crops as much of Africa. The EU's maize yields are comparable with South Africa, the United States, Argentina and Brazil, which have long adopted genetically modified seeds (see Exhibit 1). In these countries, among others, genetically modified seeds have had additional benefits such as lowering insecticide use, encouraging more environmentally friendly tillage practices and crop yield improvements. The recent change will ensure that the EU can supplement its maize yields with imports from a range of countries that produce GE crops. For South African farmers, this is an opportunity to access a broader EU market for maize exports, as the government has already started exporting large volumes of maize to Italy. Ultimately, these are essential developments worth monitoring as they follow the example of China, which has also recently cleared the path for cultivating genetically modified (GM) crops in the country.<sup>4</sup> In sum, the EU's GE crops import approval is positive, but it is unclear what it really means, and is specific event/s approved.

### Exhibit 1: Maize yields in selected regions

#### Corn yields

Average corn (maize) yields, measured in tonnes per hectare per year.



Source: UN Food and Agriculture Organization (FAO)

OurWorldInData.org/crop-yields • CC BY

Source: Chart adopted from OurWorldInData

<sup>4</sup> More information on China's GE crops development is available [here](#).

## Weekly highlights

### What does the recent Russia-Ukraine grain deal mean for Africa?

The Russia-Ukraine "grain deal" signed on July 22, 2022, is a positive step in addressing global food insecurity. Russia agreed not to attack grain vessels in the Black Sea region, which could restore the grain trade. But this promise didn't last for long, as we woke up the following day to the news of a series of Russian missile strikes that hit the critical Ukrainian port of Odesa. This attack will likely undermine the grain deal, a multinational effort to avert the global food crisis. Also, the grain traders and merchants might be reluctant to be in this risky zone, which ultimately defeats the deal.

The deal itself was significant as Ukraine has roughly 22 million tonnes of grain (wheat, maize, sunflower seed and other grains) in silos, unable to reach the export markets. This is mainly because of the disruptions of the war on infrastructure and the attacks on vessels transporting goods. The "grain deal" was aimed at changing this chaotic situation, with Russia promising not to attack grain vessels. Disappointingly, this promise wasn't kept.

Assuming that Russia had kept their word, the immediate benefit of the deal was going to be through grain prices, which could have softened following the agreement, although possibly marginal, as it implies that there will be an increase in supplies available to the world market. The possible softening of prices would have added to an already positive picture of global grain prices, which have come off from the record levels we saw in weeks following Russia's invasion of Ukraine. For example, the FAO's Global Food Price Index was down 2% in June 2022 from the previous month, a third monthly decline. Still, this is up 23% y/y, which means that the recent deal and possible resumption of trade would bring much-needed relief to the grains market.

Still, grain prices were unlikely to return to pre-war levels, as a range of factors were already driving agricultural prices up over the past two years. For example, drought in South America, East Africa, and Indonesia and rising demand for grains in China have weighed on global grains supplies these past few seasons and thus, pushed prices up before the war. The possible price decline and increase in supply due to the Russia and Ukraine "grain deal" would have likely benefited all importing countries and consumers in the medium term. This assumes that shipping lines will start taking orders and moving the grains.

From an African perspective, the continent imports about US\$80 billion worth of agricultural products a year, mainly wheat, palm oil and sunflower seed. (The sub-Saharan Africa region's food import bill is using over US\$30 billion per year). Therefore, however marginal, a potential decline in the prices of these commodities would be a positive for the importing countries in the continent and African consumers. Importantly, Africa imports US\$4 billion of agricultural products from Russia, 90% of which is wheat and 6% is sunflower seed. The major importing countries are Egypt (50%), followed by Sudan, Nigeria, Tanzania, Algeria, Kenya, and South Africa. Similarly, Africa imports US\$2.9 billion worth of agricultural products from Ukraine. About 48% of this was wheat, 31% maize, and the rest included sunflower oil, barley, and soybeans.

Therefore, a resumption of the trade activity would have released about 22 million tonnes of grains out of Ukraine, and indeed, one can assume that Russian orders would have also increased. The countries that would most benefit from physical supply in Africa are the ones mentioned above. The softening in prices after this decision would benefit the global consumer. Also, the World Food Programme will be able to source food for donations in some struggling African regions, such as East Africa, where there is a bad drought and parts of Asia. So, this is overall a good development for consumers, specifically in the poor

developing nations. One can't miss the Ukrainian farmers who were worried that without resumption of trade, the crop would rot in silos; there will now be some relief and space to store the new season crop.

Overall, there remains significant uncertainty about this matter following the Russian missile attacks on the Ukraine grain-exporting ports this past weekend. The next few days and multinational discussions that will likely follow will be a crucial determinant of whether grain trade resumes in this area. There will also need to be measures in place to assure the merchants of the safety of their cargo if they indeed agree to facilitate exports in this risky zone. The grain price dynamics and possible benefits for importing countries will all depend on these uncertain developments. Still, any success in the exports of grains from Ukraine will benefit the African countries directly through the delivery of physical supplies or indirectly through possible global price softening.

### **South Africa's consumer food price inflation hit the highest level since February 2017**

South Africa's consumer food price inflation accelerated to 9,0% y/y in June 2022, from 7,8% in the previous month. This was the fastest pace since February 2017. There was an overall increase across the food basket, except for fruit which moderated somewhat. This broader uptick in the consumer food price inflation largely mirror the increase we have seen in the global agricultural commodity prices, and indeed the domestic market.

As we previously stated, we are also seeing the spillover the Russia-Ukraine war had on agricultural commodity prices transmitted into retail food prices. In fact, for the grain-related and vegetable oils products, we will likely see a continuous mild uptick persistent in the coming month or two, which could maintain the headline food consumer price inflation number at higher levels. Since the Russia-Ukraine war began and disrupted the global grains market, the global agricultural commodity prices have increased significantly, with the FAO's Global Food Price Index in June 2022 averaging 154 points, which is up 23% y/y (although this has softened on a monthly basis and from the record high we saw in March 2022). South Africa, which is interlinked with global agricultural markets, has also experienced increased agricultural commodity prices. The result of these developments is the recent uptick in the cereals, and oil and fat products prices in the consumer food price inflation basket.

Still, we think the outlook on South Africa's food product prices will remain mixed in much of the second half of the year. In the case of fruits and vegetables, South Africa has a sizable harvest and the disruption in fruit exports within the Black Sea region could add downward pressure on domestic prices. Therefore, we hold a generally favourable view of these product price directions for the coming months.

The one essential product whose price trend remains uncertain is meat. The outbreaks of foot-and-mouth disease have led to the temporary closure of some key export markets for the red meat industry. Ordinarily, this would add downward pressure on prices as it implies that we would see an increase in domestic meat supplies. But this time around, the spread of the outbreak is vast, to an extent that we might see a decline in slaughtering in major feedlots, which would ultimately keep red meat prices at relatively higher levels; an opposite of what we initially anticipated. This remains uncertain and we will closely monitor the monthly slaughtering activity. Additionally, there are fears of a potential increase in poultry product prices, which too is an upside risk to consumer food price inflation.

In sum, various factors in the South African food market will likely push in opposing directions in the coming months. Still, South Africa will likely remain an exception from the world, with food price inflation contained at relatively lower levels than most regions of the world that have consumer food price inflation hovering at over 10% y/y.

## Exhibit 2: South Africa's consumer food price inflation



Source: Stats SA and Agbiz Research

## Data releases this week

We start the week with a global focus, where, today, the United States Department of Agriculture (USDA) will publish its weekly **US Crop Progress** data. In these data, our focus is on the crop-growing conditions. These data are particularly important as we continue to hear cases of extreme heat in most regions of the world, that are threatening crops. In the previous release, in the week of 17 July 2022, about 64% of the maize crop was rated good/excellent, which is down by 1% from the rating in the same week a year ago. Moreover, about 61% of the soybean crop was rated good/excellent, compared with 60% in the same week last year. On Thursday, the USDA will release the **US Weekly Export Sales** data.

On the domestic front, on Wednesday, SAGIS will release the **Weekly Producer Deliveries** data for the week of 22 July 2022. This data will help us get insight into the progress of the maize harvesting activity. In the previous release of the week of 15 July, about 6,88 million tonnes of maize had already been delivered to commercial silos, out of the expected harvest of 14,68 million tonnes. Moreover, the soybean harvesting process is nearly complete. In the week of 15 July 2022, about 2,09 million tonnes had already been delivered to commercial silos, in line with the expected harvest for the season. In terms of sunflower seed, in the week of 15 July 2022, about 772 647 tonnes had already been delivered, against an expected harvest of 961 350 tonnes (second largest on record).

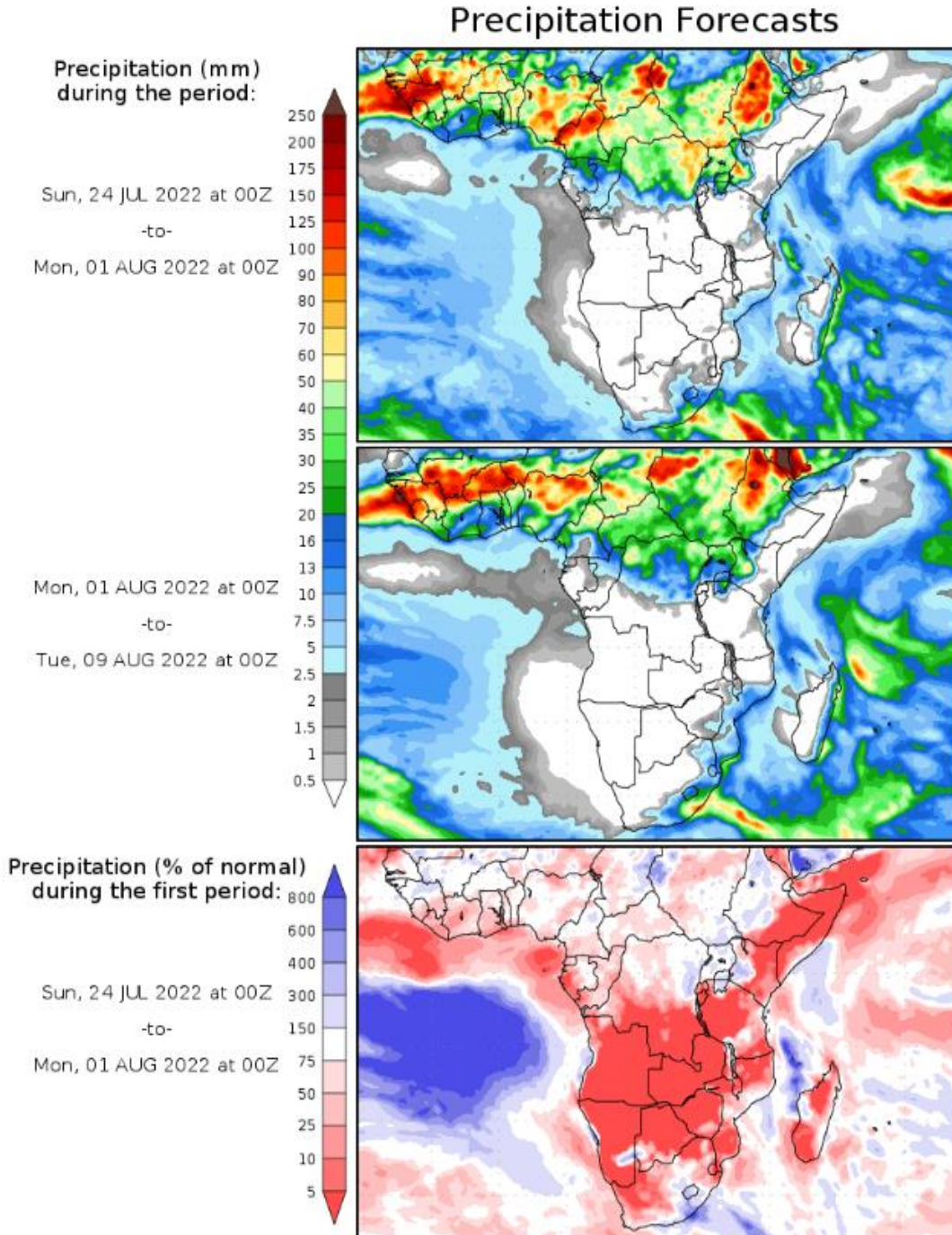
On Thursday, SAGIS will publish the **Weekly Grain Trade** data for the week of 15 July 2022. In the previous release on 15 July 2022, which was the 11th week of South Africa's 2022/23 maize marketing year, the weekly exports amounted to 83 967 tonnes. The key markets were Japan and South Korea and the Southern Africa region. This brought the total 2022/23 exports to 989 814 tonnes out of the seasonal export forecast of 3,20 million tonnes. This is slightly down from 4,10 million tonnes in the past season due to an expected reduction in the harvest.

South Africa is a net importer of wheat, and 15 July was the 42nd week of the 2021/22 marketing year. The total imports are now at 1,32 million tonnes out of the seasonal import forecast of 1,48 million tonnes (slightly below the 2020/21 marketing year imports of 1,51 million tonnes because of a large domestic harvest). The major wheat suppliers are now Argentina, Lithuania, Brazil, Australia, Poland, Latvia and the US. As we stated in our previous notes, if one looks into South Africa's wheat imports data for the past five years, Russia was

one of the major wheat suppliers, accounting for an average share of 26% a year. This has now been replaced by the above-mentioned suppliers.

Also on Thursday, Statistics South Africa will release the **Producer Price Index (PPI)** data for June 2022.

### Exhibit 3: South Africa's precipitation forecast



*The weather forecast for this week shows clear skies over most regions of South Africa.*

*This is with the exception of possible light showers in the eastern regions of the country.*

*This drier weather outlook bodes well for the summer crop harvesting process that is currently underway in central and western regions of South Africa.*

Source: George Mason University (wxmaps)