

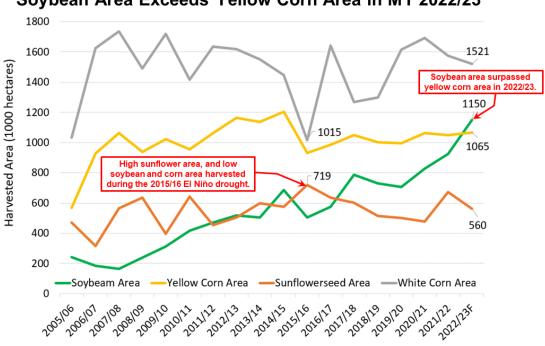
Foreign Agricultural Service Global Market Analysis International Production Assessment Division Web: <u>https://ipad.fas.usda.gov</u>

May 4, 2023

Commodity Intelligence Report

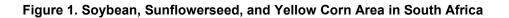
South Africa Soybean Area Rapidly Increases

South Africa's soybean production for marketing year (MY) 2022/23 is estimated at a record 2.7 million metric tons (mmt), up 0.1 mmt (2 percent) from last month and up 0.5 mmt (23 percent) from last year. Area is estimated at a record 1.2 million hectares (mha), unchanged from last month, but up 0.5 mha (23 percent) from last year. High fertilizer prices during the time of planting motivated farmers to plant record soybean area, and total soybean area for MY 2022/23 was greater than yellow corn area for the first time (Figure 1). In addition, South Africa's soybean oil and meal crushing capacities have increased in recent years which helps to satisfy local soy oil demand for human consumption and soy protein meal for animal feed.

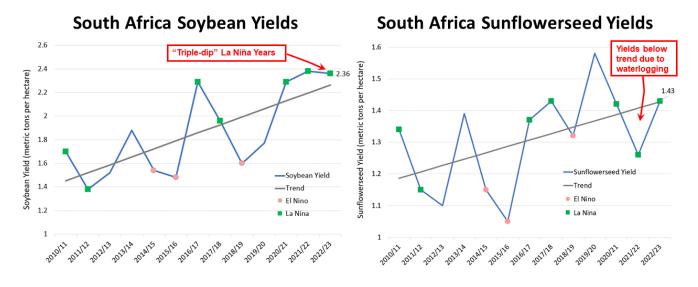


Soybean Area Exceeds Yellow Corn Area in MY 2022/23

Source: South Africa Crop Estimates Committee



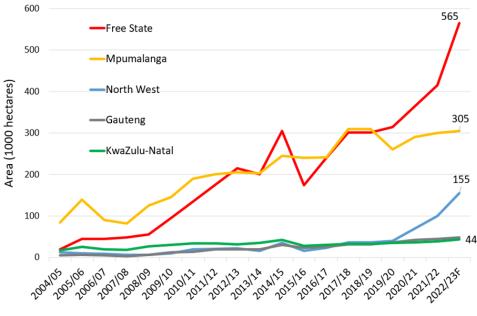
Soybean yield for MY 2022/23 is estimated at 2.36 metric tons per hectare (t/ha), up 2 percent from last month and 18 percent from the five-year average, and slightly below last year's record yield of 2.38 t/ha. Soybeans performed better than sunflower last year because sunflower experienced waterlogging problems in regions with high groundwater table (Figure 2).



Sources: USDA PSD Online (for crop yields) and NOAA's Oceanic Niño Index (ONI) for classification of La Niña and El Niño years.

Figure 2. Soybean and Sunflowerseed Yields for South Africa

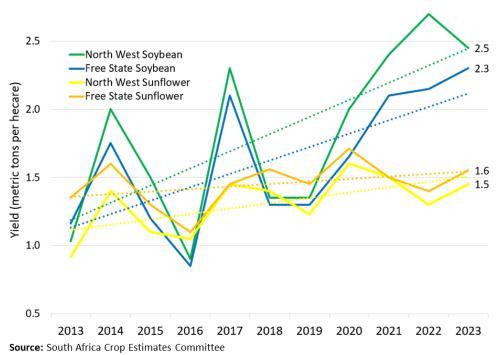
South Africa soybean area rapidly increased during the past three La Niña years, especially in Free State and North West provinces where soybean is the most predominate oilseed crop grown in rotation with corn (Figure 3). Recent soybean yield increases have out-paced sunflower yields in the western Free State and North West provinces because seed companies have provided higher yielding soybean cultivars that perform well in the dry agro-climate of the western corn belt (Figures 4 and 5).



Soybean Area Rapidly Increased in Free State and North West Provinces during Past Three La Niña Years

Source: South Africa Crop Estimates Committee

Figure 3. Soybean Area Rapidly Increased in Dry Western Provinces during Past Three Years



Soybean and Sunflower Yields by Province

Figure 4. Soybean Yield Increases in North West and Free State Provinces Out-Pace Sunflower

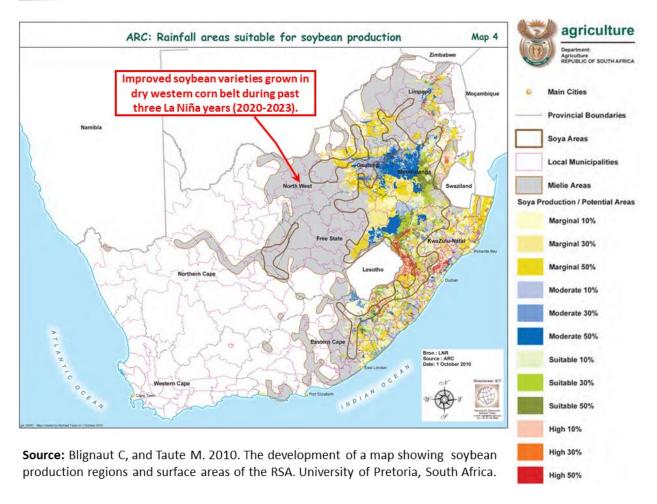
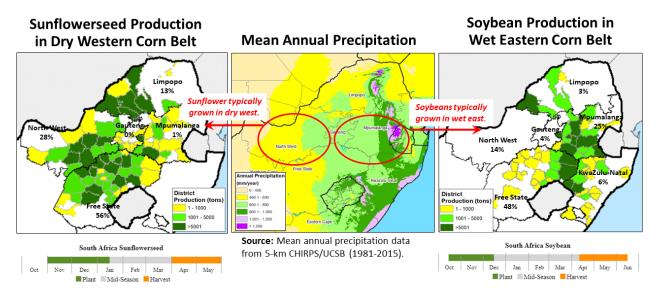


Figure 5. Improved soybean varieties planted in dry western corn belt during wet La Niña years.

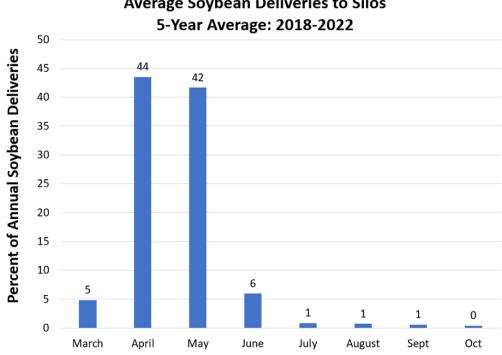
Soybean production is grown primarily in the eastern part of the corn belt, or eastern Free State (48 percent of total MY22/23 production), Mpumalanga (25 percent), North West (14 percent), and KwaZulu-Natal (6 percent) provinces (Figure 6). Dryland soybean reaches maturity by April, and the bulk of the soybean harvest (approximately 86 percent) is delivered to the grain silos during April and May (Figure 7).



Crop Production Sources:

1). Percentage production values from April 2023 forecast by South Africa's Crop Estimates Committee, Depart. of Agriculture, Forestry and Fisheries. 2). District production from 2007 Census of Commercial Agriculture, Statistics South Africa, 2011.





Average Soybean Deliveries to Silos

Source: South African Grain Information Service (SAGIS); Weekly Producer Soybean Deliveries to Silos

Figure 7. Average Soybean Deliveries to Silos

As a point of reference, approximately 11 percent of total soybean production was irrigated in 2017 (Table 1), and irrigated soybeans tend to be harvested slightly before dryland soybeans (in March) due to earlier planting dates. Many farms located along the western Free State and North West border have a shallow groundwater table that assists to water deeprooted crops, such as sunflower, during the summer season (Figure 6, sunflower production map).

Province	Planted hectares							
FIOVINCE	Total		Dry land		Irrigated			
	2007	2017	2007	2017	2007	2017		
Western Cape		404		404				
Eastern Cape	1 409	4 368	1 409	4 368				
Northern Cape	412	379	329		83	379		
Free State	22 178	202 549	21 854	196 277	324	6 272		
KwaZulu-Natal	14 894	21 457	12 255	12 700	2 639	8 756		
North West	5 102	17 258	1 883	13 139	3 219	4 119		
Gauteng	1 014	10 348	1 007	9 596	7	751		
Mpumalanga	56 734	207 149	52 461	202 673	4 272	4 476		
Limpopo	5 378	6 254	2 694	1 213	2 684	5 041		
South Africa	107 124	470 169	93 895	440 372	13 228	29 796		

South Africa Soybeans Area and Production for 2007 and 2017

Province	Production in metric tons							
	Total		Dry land		Irrigated			
	2007	2017	2007	2017	2007	2017		
Western Cape		760		760				
Eastern Cape	1 653	8 835	1 653	8 835				
Northern Cape	924	758	785		139	758		
Free State	29 914	342 180	29 450	323 693	464	18 486		
KwaZulu-Natal	31 644	52 990	23 947	24 808	7 697	28 181		
North West	12 130	32 091	3 003	20 096	9 127	11 994		
Gauteng	1 556	22 501	1 542	19 444	14	3 057		
Mpumalanga	87 302	366 677	77 926	353 950	9 375	12 726		
Limpopo	12 640	15 755	5 071	1 839	7 569	13 916		
South Africa	177 765	842 549	143 378	753 428	34 386	89 121		

Source: Statistics South Africa, 2020. Census of commercial agriculture, 2017. Report No. 11-02-01 (2017), Pretoria, South Africa

Table 1. Dryland and Irrigated Soybean Production during 2007 and 2017.

FAS personnel traveled in South Africa's corn belt in mid-March 2023 (Figure 8). They interviewed crop analysts from the five major grain cooperatives, and they visited several farms in North West and Free State provinces. Crop conditions were reported to be most favorable in the Free State province where record soybean yields of 2.3 t/ha are expected. Free State province accounts for approximately 48 percent of the total soybean crop during MY 2022/23. In addition, soybean crop conditions in Free State were considered better than last year due to less waterlogging problems in

the high-water table regions located near the western Free State and North West border.

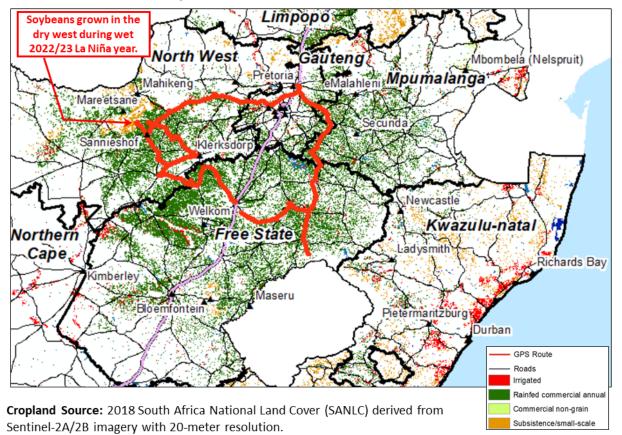




Figure 8. Mid-Season Crop Assessment Route from March 12-16, 2023

FAS staff also visited a farm located in the dry western part of the corn belt (located near Sanneishof) where soybeans were planted in mid-November 2022 and record or near record soybean yields are expected at harvest time in mid-April 2023 (Figures 8 and 9). Farmers in the dry western corn belt mentioned they recently switched from sunflower to soybeans due to improved soybean varieties suitable for dry agro-climates in the western corn belt (Figure 5). They also mentioned they will monitor La Niña or El Niño forecasts in September to determine if they will plant soybeans during a wet La Niña year or sunflower during a dry El Niño year (Figure 10).

Soybeans (background) were planted next to sunflower (foreground) on the dry western edge of South Africa's corn belt.

(Farm located near Sanneishof, North West, South Africa with annual precipitation of 600-mm per year.)

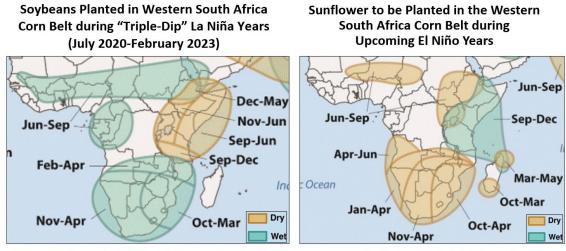


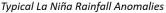
E 25° 38' 55.36" S 26° 20' 02.99"

Elevation: 1403 m



Figure 9. Soybeans and sunflowerseed planted in South Africa's dry western corn belt.





Typical El Niño Rainfall Anomalies

Source: FEWS NET, 2020: El Niño/La Niña and Precipitation, Agroclimatology Fact Sheet Series

Figure 10. Soybeans planted during wet La Niña years and sunflowerseed planted during dry El Niño years in South Africa's western corn belt.

References:

Blignaut C, and Taute M. 2010. The development of a map showing the soybean production regions and surface areas of the RSA. University of Pretoria, South Africa. https://www.up.ac.za/media/shared/Legacy/sitefiles/file/48/2052/blignautcandtautem201 0soybeanproductionregionsofrsa_pdf.pdf, Accessed on April 14, 2023

Statistics South Africa, 2020. Census of commercial agriculture, 2017. Report No. 11-02-01 (2017), Pretoria, South Africa, https://www.statssa.gov.za/publications/Report-11-02-01/Report-11-02-012017.pdf, Accessed on April 14, 2023

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Current World Agricultural Production Reports <u>https://www.fas.usda.gov/data/world-agricultural-production</u>

Production, Supply and Distribution Database (PSD Online) https://apps.fas.usda.gov/psdonline/app/index.html#/app/home

Global Agricultural Information Network (Agricultural Attaché Reports) https://www.fas.usda.gov/databases/global-agricultural-information-network-gain

Crop Explorer https://ipad.fas.usda.gov/cropexplorer/

Global Agricultural and Disaster Assessment System (GADAS) <u>https://geo.fas.usda.gov/GADAS/index.html</u>