



# South African

## Supply and Demand Estimates

January 2024 Report



**GRAIN & OILSEEDS SUPPLY & DEMAND  
ESTIMATES COMMITTEE (S&DEC)**

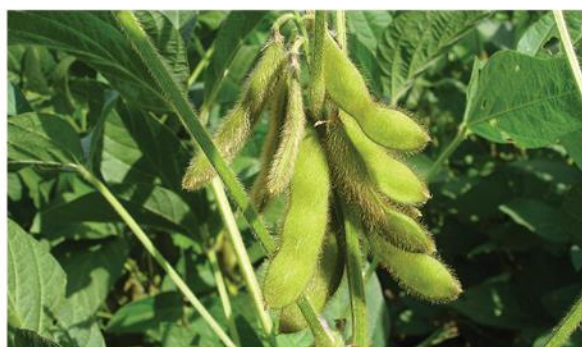
**SASDE – 128<sup>th</sup> meeting held on  
2 February 2024**



The NAMC, Maize Trust, Oil and Protein  
Seeds Development Trust, Sorghum Trust  
and Winter Cereal Trust jointly fund the  
Grain and Oilseeds Supply & Demand  
Estimates (S&DE) initiative



**[www.namc.co.za](http://www.namc.co.za)**



## THE SOUTH AFRICAN SUPPLY AND DEMAND PROJECTIONS FOR GRAINS AND OILSEEDS FOR JANUARY 2024 ARE AS FOLLOWS:

### WHITE MAIZE (2023/24 Season)

**Supply:** The total supply of white maize is projected at 9 443 400 tons for the 2023/24 marketing season. This includes an opening stock level (at 1 May 2023) of 1 082 640 tons and local commercial deliveries of 8 289 965 tons. Whole white maize imports are estimated at 0 tons for the season, early deliveries of 55 795 tons and a surplus of 15 000 tons.

**Demand:** The total demand (domestic plus exports) for white maize is projected at 7 897 000 tons. The total domestic demand is projected at 6 562 000 tons. This includes 5 280 000 tons processed for human consumption, 1 250 000 tons processed for animal and industrial consumption, 11 000 tons for gristing, 15 000 tons withdrawn by producers, 2 000 tons released to end-consumers and a balancing figure of 4 000 tons (net receipts and net dispatches). A projected export quantity of 335 000 tons of processed products and 1 000 000 tons of white whole maize is estimated for exports for the 2023/24 marketing season.

**Stock levels:** The projected closing stock level for 30 April 2024 is estimated at 1 546 400 tons. At an average processed quantity of 545 083 tons per month, this represents available stock levels for 2.8 months or 86 days.

*Please note: When utilizing 45 days' stock as a proxy, there is potential for 1 740 000 tons of white maize available for exports for the 2023/24 marketing season (provided there is efficient logistical capacity). Keep in mind that, as of 26 January 2024, 794 567 tons have already been exported (weekly SAGIS figures).*

### YELLOW MAIZE (2023/24 Season)

**Supply:** The total supply of yellow maize is projected at 8 257 257 tons for the 2023/24 marketing season. This includes an opening stock (at 1 May 2023) of 871 291 tons and local commercial deliveries of 7 465 260 tons. No yellow maize imports estimated for the season, early deliveries of a minus 79 294 tons and a surplus of zero tons.

**Demand:** The total demand (domestic plus exports) for yellow maize is projected at 7 125 500 tons. The total domestic demand is projected at 4 867 500 tons. This includes 565 000 tons processed for human consumption, 4 250 000 tons processed for animal and industrial consumption, 9 500 tons for gristing, 6 500 tons withdrawn by producers, 19 500 tons released to end-consumers, a balancing figure of 5 000 tons (net receipts and net dispatches) and a projected deficit of 12 000 tons. A projected export quantity of 128 000 tons of processed products and 2 130 000 tons of yellow whole maize is estimated for exports for the 2023/24 marketing season.

**Stock levels:** The projected closing stock level for 30 April 2024 is estimated at 1 131 757 tons. At an average processed quantity of 402 042 tons per month, this represents available stock levels for 2.8 months or 86 days.

*Please note: When utilizing 45 days' stock as a proxy, there is potential for 2 667 000 tons of yellow maize available for exports for the 2023/24 marketing season (provided there is efficient logistical capacity). Keep in mind that, as of 26 January 2024, 1 997 505 tons have already been exported (weekly SAGIS figures).*

## TOTAL MAIZE (2023/24 Season)

**Supply:** The total supply of maize is projected at 17 700 657 tons for the 2023/24 marketing season. This includes an opening stock (at 1 May 2023) of 1 953 931 tons and local commercial deliveries of 15 755 225 tons. No imports are expected, early deliveries of a minus 23 499 tons and a surplus of 15 000 tons.

**Demand:** The total demand (domestic plus exports) for maize is projected at 15 022 500 tons. The total domestic demand is projected at 11 429 500 tons. This includes 5 845 000 tons processed for human consumption, 5 500 000 tons processed for animal and industrial consumption, 20 500 tons for gristing, 21 500 tons withdrawn by producers, 21 500 tons released to end-consumers, a balancing figure of 9 000 tons (net receipts and net dispatches) and a deficit of 12 000 tons. A projected export quantity of 463 000 tons of processed products and 3 130 000 tons of total whole maize is estimated for exports for the 2023/24 marketing season.

**Stock levels:** The projected closing stock level for 30 April 2024 is estimated at 2 678 157 tons. At an average processed quantity of 947 125 tons per month, this represents available stock levels for 2.8 months or 86 days.

*See Appendix 1 for detailed S&D table. An explanation of terms and calculations is available on the NAMC website (<https://www.namc.co.za/category/research-publications/supply-demand-estimates/>).*

## SWEET SORGHUM (2023/24 Season)

**Supply:** The total supply of sweet sorghum is projected at 190 977 tons for the 2023/24 marketing season. This includes an opening stock level (at 1 March 2023) of 32 617 tons, local commercial deliveries of 69 360 tons, imports of 89 000 tons for South Africa and a sweet sorghum surplus of zero tons.

**Demand:** The total demand (domestic plus exports) for sweet sorghum is projected at 128 460 tons. This includes 1 600 tons for indoor malting, 22 000 tons for floor malting, 81 000 tons for meal, rice and grits, 11 050 tons for feed, 160 tons withdrawn by producers, 100 tons released to end consumers, and a balancing figure of 550 tons (net receipts and net dispatches). A projected export quantity of 8 000 tons of sweet sorghum is estimated for exports for the 2023/24 marketing season.

**Stock levels:** The projected closing stock level for 28 February 2024 is estimated at 62 517 tons. At an average processed quantity of 9 638 tons per month, this represents available stock levels for 6.5 months or 197 days.

## BITTER SORGHUM (2023/24 Season)

**Supply:** The total supply of bitter sorghum is projected 42 739 tons for the 2023/24 marketing season. This includes an opening stock level (at 1 March 2023) of 14 339 tons, local commercial deliveries of 21 500 tons, bitter sorghum imports of 1 300 tons and a surplus of 5 600 tons for South Africa.

**Demand:** The total demand (domestic plus exports) for bitter sorghum is projected at 35 210 tons. This includes 12 000 tons for indoor malting, 17 000 tons for floor malting, 2 000 tons for meal, rice and grits, 2 005 tons for feed, 50 tons withdrawn by producers, 130 tons released to end consumers, a balancing figure of 25 tons (net receipts and net dispatches), and a zero deficit. A projected export quantity of 2 000 tons of bitter sorghum is estimated for exports for the 2023/24 marketing season.

**Stock levels:** The projected closing stock level for 28 February 2024 is estimated at 7 529 tons. At an average processed quantity of 2 750 tons per month, this represents available stock levels for 2.7 months or 83 days.



## TOTAL SORGHUM (2023/24 Season)

**Supply:** The total supply of sorghum is projected at 233 716 tons for the 2023/24 marketing season. This includes an opening stock level (at 1 March 2023) of 46 956 tons, local commercial deliveries of 90 860 tons, sorghum imports of 90 300 tons for South Africa with a surplus of 5 600 tons.

**Demand:** The total demand (domestic plus exports) for sorghum is projected at 163 670 tons. This includes 13 600 tons for indoor malting, 39 000 tons for floor malting, 83 000 tons for meal, rice and grits, 13 055 tons for feed, 210 tons withdrawn by producers, 230 tons released to end consumers, a balancing figure of 575 tons (net receipts and net dispatches), and a deficit of 4 000 tons. A projected export quantity of 10 000 tons of total sorghum is estimated for exports for the 2023/24 marketing season.

**Stock levels:** The projected closing stock level for 28 February 2024 is estimated at 70 046 tons. At an average processed quantity of 12 388 tons per month, this represents available stock levels for 5.7 months or 172 days.

*See Appendix 2 for detailed S&D table.*

## WHEAT (2023/24 Season)

**Supply:** The total supply of wheat is projected at 4 257 484 tons for the 2023/24 marketing season. This includes an opening stock level (at 1 October 2023) of 563 259 tons, local commercial deliveries of 2 044 225 tons, whole wheat imports estimated for South Africa of 1 650 000 tons and a surplus of zero tons.

**Demand:** The total demand (domestic plus exports) for wheat is projected at 3 819 700 tons. This includes 3 485 000 tons processed for human consumption, 30 000 tons processed for animal consumption, 6 500 tons withdrawn by producers, 1 700 tons released to end consumers, 19 000 tons projected seed for planting purposes, a balancing figure of 3 000 tons (net receipts and net dispatches) and a deficit of 4 500 tons. A projected export quantity of 30 000 tons processed products and 240 000 tons whole wheat is estimated for exports for the 2023/24 marketing season.

**Stock levels:** The projected closing stock level for 30 September 2024 is estimated at 437 784 tons. At an average processed quantity of 292 917 tons per month, this represents available stock levels for 1.5 months or 45 days.

*See Appendix 3 for detailed S&D table.*

## SUNFLOWER SEED (2023/24 Season)

**Supply:** The total supply of sunflower seed is projected at 813 127 tons for the 2023/24 marketing season. This includes an opening stock level (at 1 March 2023) of 73 517 tons, local commercial deliveries of 724 110 tons, sunflower seed imports of 12 500 tons for South Africa and a surplus of 3 000 tons.

**Demand:** The total demand (domestic plus exports) for sunflower seed is projected at 686 550 tons. This includes 2 000 tons processed for human consumption, 5 500 tons processed for animal consumption, 675 000 tons for crush (oil and oilcake), 150 tons withdrawn by producers, 200 tons released to end consumers, 3 300 tons seed for planting purposes and a balancing figure of 350 tons (net receipts and net dispatches). A quantity of 50 tons is estimated for exports for the 2023/24 marketing season.

**Stock levels:** The projected closing stock level for 28 February 2024 is estimated at 126 577 tons. At an average processed quantity of 56 875 tons per month, this represents available stock levels for 2.2 months or 68 days.

*See Appendix 4 for detailed S&D table.*

### **SOYBEANS (2023/24 Season)**

**Supply:** The total supply of soybeans is projected at 2 887 797 tons for the 2023/24 marketing season. This includes an opening stock level (at 1 March 2023) of 171 897 tons, local commercial deliveries of 2 705 300 tons, 3 100 tons of soybean imports for South Africa and a surplus of 7 500 tons.

**Demand:** The total demand (domestic plus exports) for soybeans is projected at 2 593 650 tons. This includes 22 000 tons processed for human consumption, 162 000 tons processed for animal (full fat) feed, 1 800 000 tons for crush (oil and oilcake), 150 tons withdrawn by producers, 200 tons released to end consumers, 11 000 tons seed for planting purposes, and a balancing figure of 300 tons (net receipts and net dispatches). A quantity of 598 000 tons soybeans is estimated for exports for the 2023/24 marketing season.

**Stock levels:** The projected closing stock level for 28 February 2024 is estimated at 294 147 tons. At an average processed quantity of 165 333 tons per month, this represents available stock levels for 1.8 months or 54 days.

*Please note: When utilizing 45 days' stock as a proxy, there is potential for 650 000 tons of soybeans available for exports for the 2023/24 marketing season (provided there is efficient logistical capacity).*

*See Appendix 5 for detailed S&D table.*

### **PLEASE NOTE:**

**The February SASDE Report will be released on 1 March 2024.**

# Appendix 1: Detailed S & D table for Maize: January 2024

		White Maize	White Maize	Yellow Maize	Yellow Maize	Total Maize	Total Maize
	Marketing season	Final for 2022/23	Projection for 2023/24	Final for 2022/23	Projection for 2023/24	Final for 2022/23	Projection for 2023/24
		tons	tons	tons	tons	tons	tons
1	CEC (Crop Estimate)	7 850 000	8 499 965	7 620 000	7 895 260	15 470 000	16 395 225
2	CEC (Retention)	177 000	210 000	390 000	430 000	567 000	640 000
3	Min: Early deliveries for current season (March + April)	141 188	194 205	272 860	509 294	414 048	703 499
4	Plus: Early deliveries for next season (March + April)**	194 205	250 000	509 294	430 000	703 499	680 000
5	<b>Available for the commercial market</b>	<b>7 761 812</b>	<b>8 345 760</b>	<b>7 417 140</b>	<b>7 385 966</b>	<b>15 192 451</b>	<b>15 731 726</b>
6	<b>SUPPLY</b>						
7	Opening stock (1 May)	1 465 537	1 082 640	658 682	871 291	2 124 219	1 953 931
8	Producer deliveries	7 723 640	8 289 965	7 465 688	7 465 260	15 189 328	15 755 225
9	Imports	0	0	0	0	0	0
10	Early deliveries (Net)*	0	55 795	0	-79 294	0	-23 499
11	Surplus	0	15 000	24 045	0	24 045	15 000
12	<b>Total Supply</b>	<b>9 189 177</b>	<b>9 443 400</b>	<b>8 101 822</b>	<b>8 257 257</b>	<b>17 337 592</b>	<b>17 700 657</b>
13	<b>DEMAND</b>						
14	<b>Processed for the local market</b>	<b>6 421 561</b>	<b>6 541 000</b>	<b>4 931 679</b>	<b>4 824 500</b>	<b>11 353 240</b>	<b>11 365 500</b>
15	- human	4 827 300	5 280 000	560 627	565 000	5 387 927	5 845 000
16	- animal and industrial	1 583 331	1 250 000	4 364 891	4 250 000	5 948 222	5 500 000
17	- gristing	10 930	11 000	6 161	9 500	17 091	20 500
18	Withdrawn by producers	15 442	15 000	13 415	6 500	28 857	21 500

19	Released to end-consumers	1 905	2 000
20	Net receipts(-)/disp(+)	1 233	4 000
21	Deficit	11 871	0
<b>22</b>	<b>Local demand</b>	<b>6 452 012</b>	<b>6 562 000</b>
<b>23</b>	<b>Exports</b>	<b>1 654 525</b>	<b>1 335 000</b>
24	- products	155 871	335 000
25	- whole maize	1 498 654	1 000 000
<b>26</b>	<b>Total Demand</b>	<b>8 106 537</b>	<b>7 897 000</b>

34 548	19 500
2 201	5 000
0	12 000
<b>4 981 843</b>	<b>4 867 500</b>
<b>2 295 281</b>	<b>2 258 000</b>
141 660	128 000
2 153 621	2 130 000
<b>7 277 124</b>	<b>7 125 500</b>

36 453	21 500
3 434	9 000
11 871	12 000
<b>11 433 855</b>	<b>11 429 500</b>
<b>3 949 806</b>	<b>3 593 000</b>
297 531	463 000
3 652 275	3 130 000
<b>15 383 661</b>	<b>15 022 500</b>

<b>27</b>	<b>Closing Stock (30 Apr)</b>	<b>1 082 640</b>	<b>1 546 400</b>
28	- processed p/month	535 130	545 083
29	- months' stock	2,0	2,8
<b>30</b>	<b>- days' stock</b>	<b>62</b>	<b>86</b>

<b>871 291</b>	<b>1 131 757</b>
410 973	402 042
2,1	2,8
<b>64</b>	<b>86</b>

<b>1 953 931</b>	<b>2 678 157</b>
946 103	947 125
2,1	2,8
<b>63</b>	<b>86</b>

Appendix 2: Detailed S & D table for Sorghum: January 2024

		Sweet Sorghum	Sweet Sorghum	Bitter Sorghum	Bitter Sorghum	Total Sorghum	Total Sorghum
	Marketing season	Final for 2022/23	Projection for 2023/24	Final for 2022/23	Projection for 2023/24	Final for 2022/23	Projection for 2023/24
		tons	tons	tons	tons	tons	tons
1	CEC (Crop Estimate)	79 400	71 860	23 740	22 500	103 140	94 360
2	CEC Retentions	0	2 500	0	1 000	0	3 500
3	<b>Available for the commercial market</b>	<b>79 400</b>	<b>69 360</b>	<b>23 740</b>	<b>21 500</b>	<b>103 140</b>	<b>90 860</b>
4	<b>SUPPLY</b>						
5	Opening stock (1 March)	51 986	32 617	54 171	14 339	106 157	46 956
6	Prod deliveries	79 530	69 360	22 935	21 500	102 465	90 860
7	Imports for South Africa	768	89 000	0	1 300	768	90 300
8	Surplus	10 168	0	-300	5 600	9 868	5 600 *
9	<b>Total Supply</b>	<b>142 452</b>	<b>190 977</b>	<b>76 806</b>	<b>42 739</b>	<b>219 258</b>	<b>233 716</b>
10	<b>DEMAND</b>						
11	<b>Processed</b>	<b>100 806</b>	<b>115 650</b>	<b>59 435</b>	<b>33 005</b>	<b>160 241</b>	<b>148 655</b>
12	- Indoor malting	888	1 600	11 763	12 000	12 651	13 600
13	- Floor malting	8 694	22 000	40 274	17 000	48 968	39 000
14	- Meal, rice & grits	70 555	81 000	1 873	2 000	72 428	83 000
15	- Pet Food	1 702	500	32	5	1 734	505
16	- Poultry feed	7 466	7 800	1 913	1 000	9 379	8 800



		Sweet Sorghum	Sweet Sorghum	Bitter Sorghum	Bitter Sorghum	Total Sorghum	Total Sorghum
	Marketing season	Final for 2022/23	Projection for 2023/24	Final for 2022/23	Projection for 2023/24	Final for 2022/23	Projection for 2023/24
		tons	tons	tons	tons	tons	tons
17	- Livestock feed	11 501	2 750	3 580	1 000	15 081	3 750
18	Bio-fuel	0	0	0	0	0	0
19	Withdrawn by prod	228	160	777	50	1 005	210
20	Released to end-cons	105	100	56	130	161	230
21	Net receipts(-)/ disp(+)	278	550	-224	25	54	575
22	Deficit	0	4 000	0	0	0	4 000 *
23	Exports	8 418	8 000	2 423	2 000	10 841	10 000
24	<b>Total Demand</b>	<b>109 835</b>	<b>128 460</b>	<b>62 467</b>	<b>35 210</b>	<b>172 302</b>	<b>163 670</b>
25	<b>Ending Stock (28/29 Feb)</b>	<b>32 617</b>	<b>62 517</b>	<b>14 339</b>	<b>7 529</b>	<b>46 956</b>	<b>70 046</b>
26	- processed p/month	8 401	9 638	4 953	2 750	13 353	12 388
27	- months' stock	3,9	6,5	2,9	2,7	3,5	5,7
28	<b>- days' stock</b>	<b>118</b>	<b>197</b>	<b>88</b>	<b>83</b>	<b>107</b>	<b>172</b>

\* The deficit and surplus reported between sweet and bitter sorghum was due to a correction on the SAGIS data where bitter sorghum was incorrectly declared as sweet.

### Appendix 3: Detailed S & D table for Wheat: January 2024

		Wheat	Wheat
	Marketing season	Final for 2022/23	Projection for 2023/24
		tons	tons
1	CEC (Crop Estimate)	2 110 000	2 089 225
2	CEC (Retention)	0	45 000

<b>3</b>	<b>SUPPLY</b>		
4	Opening stock (1 Oct)	625 083	563 259
5	Prod deliveries*	2 059 649	2 044 225
6	Imports	1 684 356	1 650 000
7	Surplus	7 379	0
<b>8</b>	<b>Total Supply</b>	<b>4 376 467</b>	<b>4 257 484</b>

<b>9</b>	<b>DEMAND</b>		
<b>10</b>	<b>Processed</b>	<b>3 491 898</b>	<b>3 515 000</b>
11	- human	3 452 070	3 485 000
12	- animal	39 828	30 000
13	- gristing	0	0
14	Withdrawn by producers	6 206	6 500
15	Released to end-consumers	1 411	1 700
16	Seed for planting purposes	18 612	19 000
17	Net receipts(-)/disp(+)	3 901	3 000
18	Deficit	0	4 500
19	Exports	291 180	270 000
20	- products	38 859	30 000
21	- whole wheat	252 321	240 000
<b>22</b>	<b>Total Demand</b>	<b>3 813 208</b>	<b>3 819 700</b>

<b>23</b>	<b>Closing Stock (30 Sep)</b>	<b>563 259</b>	<b>437 784</b>
24	- processed p/month	290 992	292 917
25	- months' stock	1,9	1,5
<b>26</b>	<b>- days' stock</b>	<b>59</b>	<b>45</b>

#### Appendix 4: Detailed S & D table for Sunflower Seed: January 2024

		Sunflower Seed	Sunflower Seed
	Marketing season	Final for 2022/23	Projection for 2023/24
		tons	tons
1	CEC (Crop Estimate)	845 550	724 110
2	<b>SUPPLY</b>		
3	Opening stock (1 March)	31 790	73 517
4	Prod deliveries	841 784	724 110
5	Imports for South Africa	6 805	12 500
6	Surplus	11 241	3 000
7	<b>Total Supply</b>	<b>891 620</b>	<b>813 127</b>
8	<b>DEMAND</b>		
9	<b>Processed</b>	<b>815 258</b>	<b>682 500</b>
10	- human	1 656	2 000
11	- animal	6 058	5 500
12	- crush (oil and oilcake)	807 544	675 000
13	Withdrawn by producers	392	150
14	Released to end-consumers	106	200
15	Seed for planting purposes	1 775	3 300
16	Net receipts(-)/disp(+)	402	350
17	Deficit	0	0
18	Exports	170	50
19	<b>Total Demand</b>	<b>818 103</b>	<b>686 550</b>
20	<b>Ending Stock (28/29 Feb)</b>	<b>73 517</b>	<b>126 577</b>
21	- processed p/month	67 938	56 875
22	- months' stock	1,1	2,2
23	<b>- days' stock</b>	<b>33</b>	<b>68</b>

## Appendix 5: Detailed S & D table for Soybeans: January 2024

		Soybeans	Soybeans
	Marketing season	Final for 2022/23	Projection for 2023/24
		tons	tons
1	CEC (Crop Estimate)	2 230 000	2 755 300
2	Retention	0	50 000
<b>3</b>	<b>SUPPLY</b>		
4	Opening stock (1 March)	168 387	171 897
5	Prod deliveries	2 186 711	2 705 300
6	Imports for South Africa	4 154	3 100
7	Surplus	7 570	7 500
<b>8</b>	<b>Total Supply</b>	<b>2 366 822</b>	<b>2 887 797</b>
<b>9</b>	<b>DEMAND</b>		
<b>10</b>	<b>Processed</b>	<b>1 907 982</b>	<b>1 984 000</b>
11	- human	21 739	22 000
12	- animal feed (full fat soya)	189 605	162 000
13	- crush (oil/oilcake)	1 696 638	1 800 000
14	Withdrawn by producers	0	150
15	Released to end-consumers	130	200
16	Seed for planting purposes	8 971	11 000
17	Net receipts(-)/disp(+)	338	300
18	Deficit	0	0
19	Exports	277 504	598 000
<b>20</b>	<b>Total Demand</b>	<b>2 194 925</b>	<b>2 593 650</b>
<b>21</b>	<b>Closing Stock (28/29 Feb)</b>	<b>171 897</b>	<b>294 147</b>
22	- processed p/month	158 999	165 333
23	- months' stock	1,1	1,8
<b>24</b>	<b>- days stock</b>	<b>33</b>	<b>54</b>



## South African Supply and Demand Estimates



This report is for information purposes only. It is not a complete analysis of every material fact regarding any and/or every commodity, company or industry that June be of consequence to stakeholders. The report reflects the judgment of the S&DEC at the time and date of publication. Data was obtained in good faith from sources believed to be reliable; however, the S&DEC makes no representations as to the completeness or accuracy thereof. The S&DEC does not accept any liability for any direct or consequential loss arising from the use of this report or its contents. This report is the exclusive property of the S&DEC and June be reproduced, redistributed or published by any recipient for any purpose, while acknowledging the source of information.

For further clarification pertaining to the definitions of the selected items contained in the South African Supply and Demand Estimates (SASDE) Report, kindly visit: <https://www.namc.co.za/wp-content/uploads/2020/03/Definitions-for-selected-items-of-the-SASDE-Report-revised-March-2020.pdf>

CONFIDENTIALITY ISSUES that S&DEC members are committed to adhere to on the day of the meeting:

- No member is allowed to discuss information with anyone other than a member of the S&DEC before the embargo time;
- Only the NAMC release the information to the media; and
- Members must regard the detail of any information that was collected for and/or discussed during the meeting, as confidential.

Compiled by the South African Grain & Oilseeds Supply & Demand Estimates Committee

**Enquiries:**

Funzani Sundani

+27(0)12 341 115/+27(0)78 084 1329 & [fsundani@namc.co.za](mailto:fsundani@namc.co.za)

OR

Dr Moses Lubinga

+27(0)12 341 115/+27(0)83 237 0138 & [HLubinga@namc.co.za](mailto:HLubinga@namc.co.za)

© 2024. Published by National Agricultural Marketing Council (NAMC).

**Disclaimer:**

Information contained in this document results from research funded wholly or in part by the NAMC acting in good faith. Opinions, attitudes and points of view expressed herein do not necessarily reflect the official position or policies of the NAMC. The NAMC makes no claims, promises, or guarantees about the accuracy, completeness, or adequacy of the contents of this document and expressly disclaims liability for errors and omissions regarding the content thereof. No warranty of any kind, implied, expressed, or statutory, including but not limited to the warranties of non-infringement of third-party rights, title, merchantability, fitness for a particular purpose or freedom from computer virus is given with respect to the contents of this document in hardcopy, electronic format or electronic links thereto. Reference made to any specific product, process, and service by trade name, trade name, trade mark, manufacturer or another commercial commodity or entity are for information purposes only and do not imply approval endorsement or favouring by the NAMC.