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An analysis of South Africa's pork industry amid rapid production growth and persistent African swine flu outbreaks

How the foot-and-mouth disease outbreak is disrupting the livestock trade

Anxious times for South African citrus



agriculture, land reform
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Department:
Agriculture, Land Reform and Rural Development
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FOREWORD

Welcome to the eighty-eight (88th) issue of the Trade Probe publication produced under the Markets and Economic Research Centre (MERC) of the National Agricultural Marketing Council (NAMC). The purpose of this issue is to provide a detailed analysis of trade trends and opportunities in the agriculture and food sectors. Some of the specific topics covered in this Issue include the following: How the foot-and-mouth disease outbreak is disrupting the livestock trade; The La Niña event and its potential trade implications for South Africa's fruit export season; An analysis of South Africa's pork industry amid rapid production growth and persistent African swine flu outbreaks, and how stricter biosecurity measures could improve South Africa's reputation in the international markets. Guided by the mandate of the National Agricultural Marketing Council (NAMC), the current issue of the Trade Probe seeks to inform policymakers, producers, traders and other stakeholders about the market opportunities and potential products demanded in the local and international markets.

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Contributors:

Dr Sifiso Ntombela
Dr Moses Lubinga
Dr Ndiadivha Tempia
Ms Onele Tshitiza
Mr Lucius Phaleng
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How the foot-and-mouth disease outbreak is disrupting the livestock trade

By Mr Lucius Phaleng

The livestock industry is one of the largest agricultural sub-sectors in the world market, valued at US\$1.4 trillion, employing at least 1.3 billion people and directly supporting the livelihoods of 600 million poor smallholder farmers in the developing world (Food and Agriculture Organisation, 2017). Growing livestock and producing animal products is often constrained by two factors, the availability of good animal genes and grazing pastures as well as the management of animal diseases. Countries that are free from major diseases tend to protect their domestic agriculture by totally excluding the importation of livestock products from areas affected by specific animal diseases such as the Foot and mouth disease (FMD). The FMD is one of the three major diseases considered to be distorting international trade – the others being bovine spongiform encephalopathy (BSE) and avian influenza (AI) – which have been a major cause of instability in meat markets and trade.

FMD is a highly contagious viral disease in livestock farming and it has the ability to significantly impact animal health and trade of animals and animal products. The disease affects cattle, swine, sheep, goats and other cloven-hoofed ruminants. FMD is a transboundary animal disease (TAD) that deeply affects livestock production and disrupts regional and international trade in animals and animal products. Approximately 77% of the global livestock population is infected in Africa, the Middle East, Asia, and a limited area in South America (OIE, 2022). Even countries that are currently free of FMD without vaccination remain at risk of incursion. Seventy-five per cent of the costs attributed to FMD prevention and control are incurred by low-income and lower-middle-income countries. Africa and Eurasia are the regions that incur the highest costs, accounting for 50% and 33% of the total costs, respectively (Knight, 2013). FMD is amongst the diseases monitored by the World Organisation for



Author: Mr Lucius Phaleng is an economist under the Trade Research Unit at the National Agricultural Marketing Council. He can be contacted at lphaleng@namc.co.za or (012) 341 1115.

Animal Health (OIE) and each country in the world, including South Africa, strives to eradicate the FMD through animal vaccinations and implementing livestock management strategies such as the compartmentalization of animals.

FMD poses a serious threat to the agricultural sector due to its highly contagious nature and can lead to substantial disruptions to livestock markets due to loss of production and access to international markets. The market implications vary across different control strategies due to, for example, differences in the duration of the outbreak, number of animals culled and closure of export markets. It is not a straightforward matter to discern the market impact from previous outbreaks due to the evolution of contingency plans, variations between countries, dependency on export markets, other shocks to the market, etc. South Africa recorded its first official foot-and-mouth disease outbreak in 1892. The country lost its FMD-free status in year 2000, when the country experienced the FMD outbreak of virus type O. Again, in 2011,

South Africa experienced a FMD outbreak in parts of the KwaZulu-Natal Province of South Africa, which led to the suspension of all exports of cloven-hoofed animals and their meat from the country. The disease also forced a halt to wool auctions, with South Africa being the world's second-largest exporter of fibre for the textile market. South African farmers had earned R1.34 billion (USD 193 million) from wool the previous year. The loss due to the ban on red meat exports due to the FMD outbreak amounted to around 30 million rand (Latham, 2011). Since 2011, South Africa has experienced smaller outbreaks of the FMD in some parts of KwaZulu Natal, Mpumalanga and Limpopo provinces. The frequent occurrence of FMD outbreak in the country resulted to the establishment of the Ministerial Task Team on biosecurity in 2021. The functions of the Task Team are to assess the biosecurity control measures in South Africa and advise government and role players in the livestock sub-sector to improve biosecurity control measures.

The La Niña event and its potential trade implication for South Africa's fruit export season

By Ms Onele Tshitiza



South Africa experienced above-normal rainfall in December 2021, continuing throughout the first 20 days of January 2022 (SAWS, 2022). The rainfall in most parts of the country, including the Western Cape, the Northern Cape, southern parts of Eastern Cape, the Free State and Limpopo was between 200% and 1000% of normal (the above-normal range). Rainfall was between 125% and 200% of normal in most coastal regions, like KwaZulu-Natal and other regions such as Mpumalanga and northern Limpopo. The percentage of normal rainfall is in the 75-125% range. The South African Weather Service (SAWS) predictions indicate that the country is likely to experience below-normal precipitation for the rest of summer in summer rainfall regions, except for the eastern interior, which is not yet known. According to SAWS, the rainfall could be attributed to the La Niña event that South Africa is experiencing. The La Niña event is a climate pattern in the Pacific Ocean that can affect weather and ecosystems (NOAA, 2022). According to SAWS (2022), the current event in South Africa is expected to weaken at the end of summer. Due to the nature of the agricultural sector's dependence on favourable weather conditions, such climatic events can affect production and the supply chain and, in turn, trade.

As was experienced recently, heavy rainfall can be ideal for drought-stricken areas and crop production. However, it can also cause damage to already ripe fruit, such as stone fruit, by encouraging rapid growth driven by the uptake of water, which can lead to cracking or splitting of the fruit (FGV, 2022). This damage can cause lower-than-expected crop yields, low-quality fruit and crop losses. These resulting factors might leave affected producers with lower revenue, as they may not be able to supply quality fruit to their market or might receive a lower price for the damaged fruit in alternative markets. Heavy rainfall can also delay the picking of fruit in time for export.

Furthermore, heavy rainfall associated with the La Niña event can cause floods and hailstorms, interrupting the movement of people and goods. South Africa's fruit sector is export oriented, and disruptions in packing and shipping can delay delivery to markets in an already competitive world. This article focuses on the potential implications of excessive rainfall on the stone fruit trade.



Author: Ms Onele Tshitiza is an economist under the Trade Research Unit at the National Agricultural Marketing Council. She can be contacted at otshitiza@namc.co.za or (012) 341 1115.

Plums and prunes packed for export in the 2021/22 season are expected to increase by 3% to 15.7 million cartons (5.25kg) compared to the previous season (Hortgro, 2022). Nectarine export volumes are anticipated to increase by 28% to 8.3 million cartons (2.5kg). Peach volumes are expected to increase by 2% to 2.4 million cartons compared to last season. On the other hand, apricots have been experiencing declining hectares, with this season expected to produce 589 597 cartons in exports, down by 14%. The indication is that stone fruits are expected to perform well. However, changes in weather conditions such as the heavy rainfall and the heatwave experienced recently in the Western Cape province could result in a lower crop estimate once the industry association, Hortgro, captures the overall damage from orchards.

Although no significant damage due to the recent above-normal heavy rainfall has thus far been reported, other challenges such as logistical delays in ports due to heavy winds could pose another threat to the current fruit export season. Stone fruit

exports declined in the second- and fifth-weeks of 2022 relative to the same weeks in 2021 (Table 1), which might not be directly related to the rainfall, but rather port inefficiencies in the Cape Town harbour and wind affecting the loading at ports. The exports of all stone fruits were over 20% lower in 2022 than in 2021 for week 2, except for nectarines. Few cartons were exported in week 5 of 2022 due to logistical issues. Although no disruptions due to rainfall have been reported in the producing regions of these industries so far, it is not uncommon for heavy rain, floods, heat and hail to cause losses in crop production. A survey of orchards will thus provide more accurate information on the extent of the damage from recent events in the country. Climate change poses inherent risks to crop production, so producers should assess these risks and take steps to mitigate them. On the other hand, the government should create strategies to reduce the impact of natural disasters and logistical challenges and provide support to farmers who cannot recover from losses easily.

Table 1: South Africa's total exports of stone fruits in weeks 2 and 5

	Week 2 total volumes exported			Week 5 total volumes exported		
	2021	2022	Diff (%)	2021	2022	Diff (%)
Peaches (2.50kg cartons)	1,584,602	1,273,437	-20	1784944	1598269	-10
Apricots (4.75kg cartons)	621,532	483,655	-22	630666	505148	-20
Plums/prunes (5.25kg cartons)	2,981,697	2,216,744	-26	5228575	5021658	-4
Nectarines (2.50kg cartons)	2,759,106	2,684,195	-3	3557072	4118692	16

Conclusion

Weather variabilities are inevitable, especially as the world struggles to combat the growing greenhouse gasses that cause climate change. The agricultural sector is especially vulnerable to these changes, as it relies on favourable weather conditions to produce optimally, particularly in dryland farming areas. Therefore, investment in cold storage infrastructure is vital for fruit producers to act as a mitigation strategy in the event of natural disasters such as heavy rainfall and hail to store ripe and ready crops. Other measures such as netting might be an alternative, although they also carry high costs. Varieties that are susceptible to climate change and its unexpected impacts will also become important, specifically in state-owned institutions (such as the Agricultural Research Council) that conduct plant breeding and biotechnological research in order to make the material available and accessible to all farmers. Therefore, farmers and government must make the necessary investments to reduce the impact of climate change.

How stricter biosecurity measures could improve South Africa's reputation in the international markets

By Mr Siphelele Ricardo Smith

The South African poultry industry has been hit by outbreaks of highly pathogenic avian influenza (HPAI), causing severe economic losses for the poultry sector due to mass culling and restricted access to national and international trade. The Department of Agriculture, Land Reform and Rural Development (DALRRD, 2021) announced the first case of the HPAI outbreak on 11 April 2021. As a result, some of the major market destinations for South Africa's poultry products, including Mozambique and Botswana, banned the importation of poultry products from South Africa (Farmer's Weekly, 2021). According to Poultry World (2022), disease outbreaks can often be attributed to biosecurity breaches and human error.

The table below shows South Africa's poultry importers from the first quarter of 2021 to the fourth quarter of 2021. It appears that European countries

such as France, the Netherlands, Denmark and Ireland have halted their poultry exports to South Africa, which could also be attributed to HPAI outbreaks across Europe, leading South Africa to ban products from these European countries. Spain appears to be the only EU country that has not been affected. Lower import volumes could allow the local poultry industry the opportunity to expand its local and continental market share. It could, however, expose the country to dumping once the HPAI-related export bans are lifted. As import volumes from Europe declined, there was a rise in poultry imports from Brazil, USA, Spain and Argentina. Although Brazil had higher production costs per whole bird than South Africa, Brazil ranked as South Africa's most important source of poultry imports. Wings were imported at R34/kg compared to the South African producer price of R38.27/kg (SAPA, 2022).

Table 2: South African poultry imports by origin (HS: 020714), 2021 Q1 – 2021 Q4

Exporters	Imported quantities (KG)			
	2021-Q1	2021-Q2	2021-Q3	2021-Q4
World	52 357 783	53 563 759	52 151 274	46 164 658
Brazil	25 439 245	33 171 356	25 263 482	19 855 588
USA	19 147 234	11 044 633	17 147 966	14 178 407
Spain	4 072 706	4 944 410	4 703 311	7 415 821
Argentina	2 562 757	3 578 232	3 426 739	3 782 635
Australia	0	0	690 780	636 360
Canada	131 000	234 000	468 000	104 000
Thailand	159 600	456 000	364 788	45 600
France	0	0	0	25 200
Netherlands	22 250	0	0	0
Denmark	50 000	25 675	0	0
Ireland	700 910	0	0	0

Source: ITC (2022)

Table 3 shows South Africa's poultry export destinations between 2021 Q1 and 2021 Q4, measured in kilograms. South Africa is not a major exporter of poultry meat in the global context and its main markets are neighbouring countries, most of which are members of the SADC. There was a notable decline in exports to Mozambique and Botswana in Q2 and Q3 of 2021, which could be attributed to HPAI-related export bans imposed after the country announced the first cases of HPAI. South Africa has been unable to export poultry to other markets, primarily because we have not developed the necessary systems to meet sanitary and phytosanitary (SPS) requirements, such as those of the European Union (Poultry Master Plan).

Table 3: South Africa's poultry exports by destination (HS: 020714), 2021 Q1 – 2021 Q4

Importers	Imported quantities (KG)			
	2021-Q1	2021-Q2	2021-Q3	2021-Q4
World	5 439 281	5 051 058	4 345 205	6 604 985
Lesotho	2 119 387	2 622 944	2 656 260	3 358 725
Mozambique	1 420 326	334 322	228 587	1 570 978
Namibia	851 984	1 478 870	1 133 844	1 029 588
Botswana	193 246	176 541	105 654	282 727
Eswatini	45 150	66 182	79 590	73 694
Zambia	135 820	27 300	99	57 114
Angola	0	0	0	53 696
DRC	40 437	21 442	25 203	48 985
Ghana	47 565	139 253	46 227	46 356
Gabon	0	36 041	24 269	25 357

Source: ITC (2022)

The poultry sector is South Africa's largest animal and animal product sector in terms of value and volume. Poultry meat provides an affordable source of protein to consumers, and poultry production presents livelihood opportunities. The severe impact of the HPAI outbreaks highlights the need to better monitor biosecurity practices among the different South African poultry production systems. Stricter biosecurity measures could improve South Africa's reputation in the international markets and open up more opportunities for expanding production and job creation in the country. The government must prioritise adequate measures to ensure that South Africa's biosecurity system is better resourced to provide an appropriate level of protection to the poultry industry.



Author: Mr Ricardo Smith is a Junior economist under the Agribusiness Development Unit at the National Agricultural Marketing Council. He can be contacted at rsmith@namc.co.za or (012) 341 1115.

An analysis of South Africa's pork industry amid rapid production growth and persistent African swine flu outbreaks

By Mr Thabile Nkunjana

Livestock production in South Africa is by far the biggest agricultural sub-sector, made up of cattle, sheep, pigs, and goats to a smaller extent. Projections point to a moderate rise in meat production, including pork, in the next few years. Of all meat types, pork production has exponentially increased over the past decade, including the 10% estimated production by smallholder producers (BFAP, 2021). The rise in pork production is influenced by its affordability compared to other red-meat types and the rising demand from the local middle class. Disease outbreaks such as the African Swine Flu, remains one of the challenges in the pork production. Countries such as Germany have suffered the consequences of African swine flu (ASF), resulting in a ban on its meat products in the global market. Countries across Asia have also been affected by the disease, including China, the Philippines and others. As a result, the global pork market has seen sporadic demand or supply with unpredictable prices, as observed in the EU and China during 2021. This article analyses the domestic pork industry following the rapid growth in production amidst persistent disease outbreaks and the potential implications. Presented in slaughtered numbers, the figure below shows commercial pork production through abattoir numbers from the 2009/10 to 2020/21 seasons. In the 2009/10 season, about 2.35 million pigs were slaughtered across the country compared to 3.49 million during the 2020/21 season, based on Red Meat Abattoir Association (RMAA) data. This represented a growth rate of 49%.

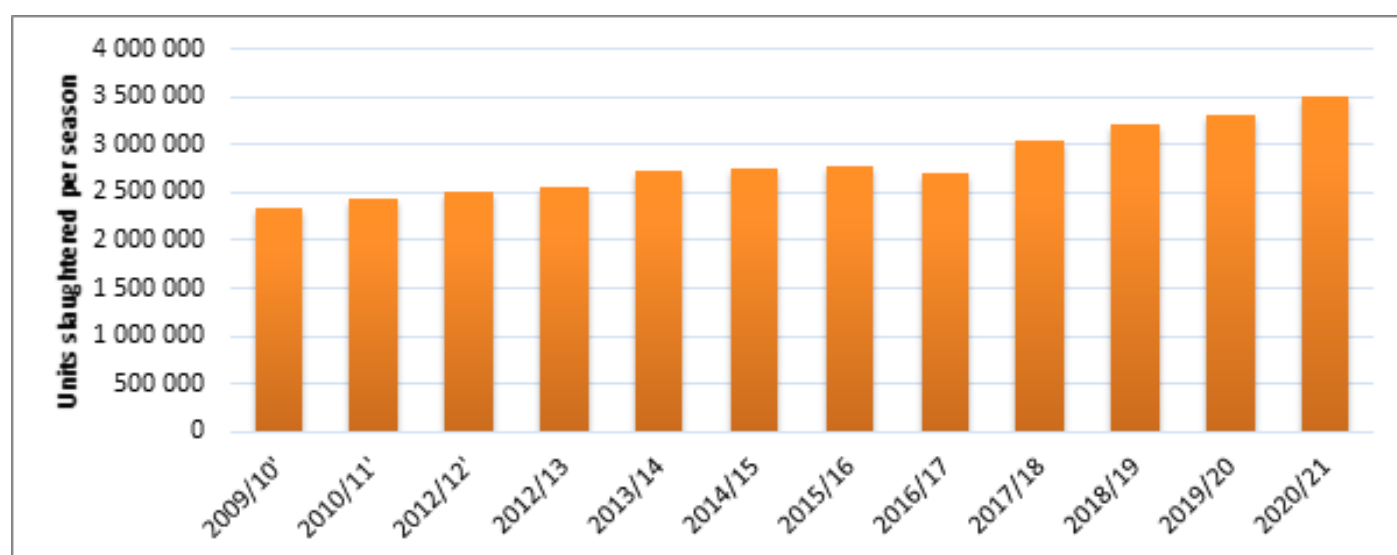


Figure 1: Pig slaughter numbers from commercial abattoirs in South Africa

Source: RMAA (2022)

The volume of pork products imported into South Africa declined by 10% between 2010 and 2020, which can be linked to the consistent growth in the number of pigs slaughtered, as shown in **Figure 1**.

Figure 2 presents South Africa's pork trade for the 2011 to 2021 marketing seasons in value terms. While import quantities declined, the value of pork imports into the country increased by 149% for the observed period. In 2011, pork imports were valued at R429.8 million and increased to a new record of R1.070 billion in the autumn of 2021. Similarly, pork export earnings increased by 152%, from R157.4 million in 2011 to a new record of R396.4 million in the autumn of 2021.

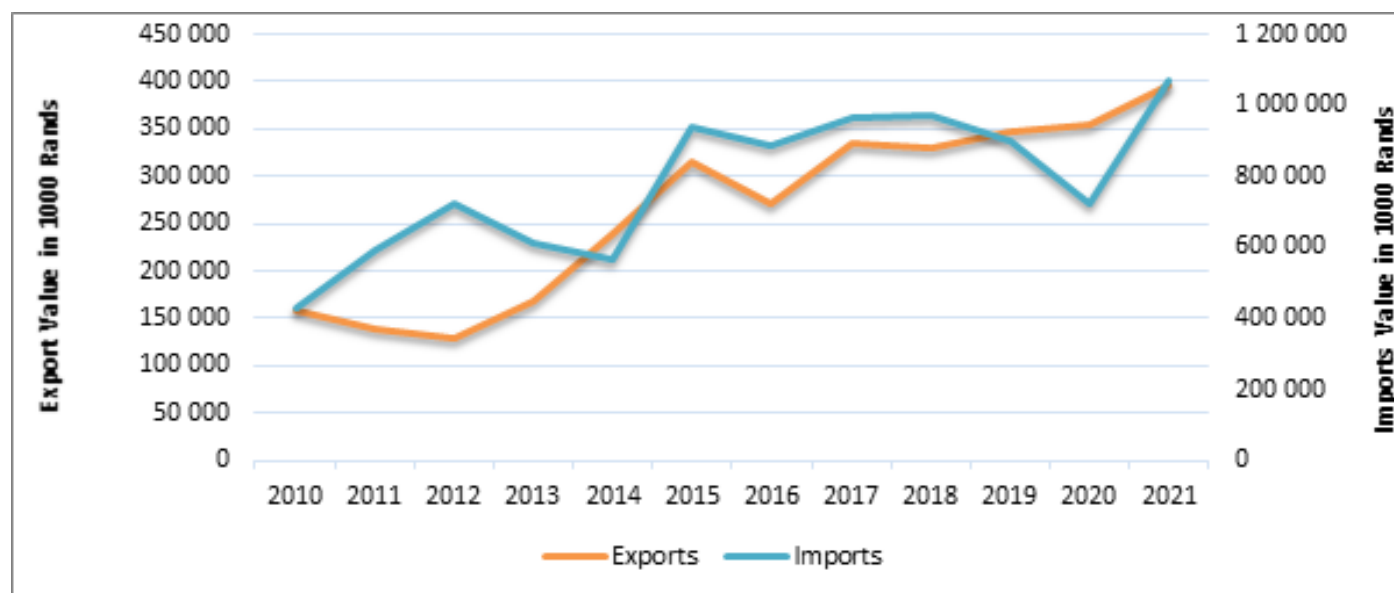


Figure 2: South African pork imports and exports

Source: ITC (2022)

South Africa's increase in pork export earnings is mainly supported by the Southern African region, followed by the Asia-Pacific Economic Cooperation (APEC) and the Middle East. In 2021, about 95% of South Africa's pork export earnings originated from Africa, an increase of 6% compared to 89% in 2020. Africa was followed by the APEC (4%) and the Middle East (1%), which declined compared to the previous year.

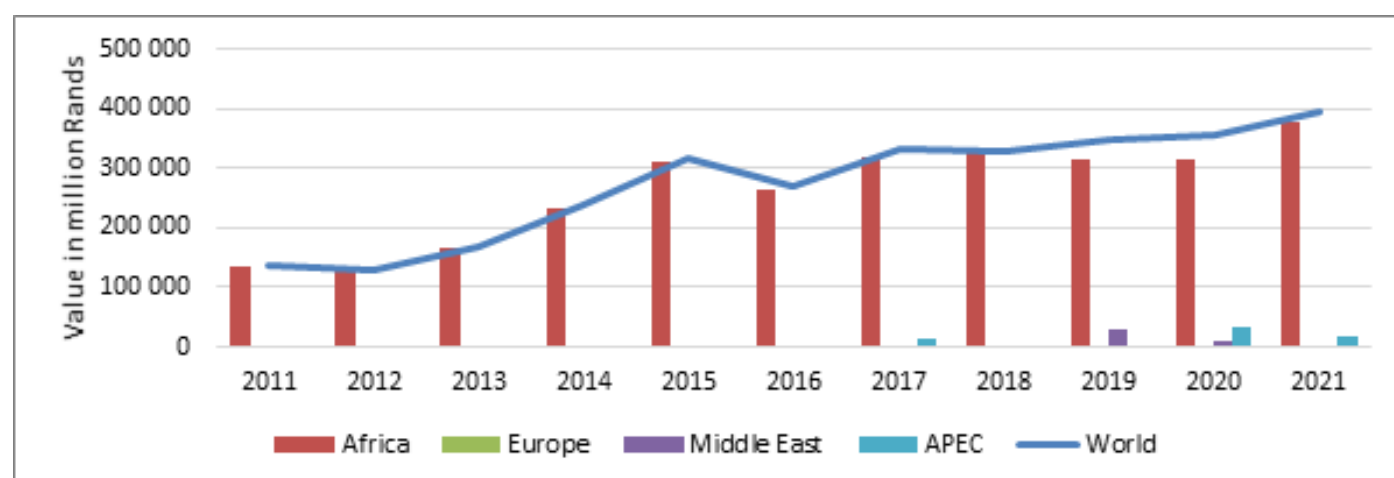


Figure 3: South African pork imports and exports

Source: ITC (2022)

Concluding remarks

2021 was a mixed bag for South Africa's pork export earnings. Major markets like Mozambique saw a decline, while others increased. But the general view is that Africa remains South Africa's main pork export market. Africa's increase offset declines in other regions. Namibia, Mozambique, Zimbabwe, Lesotho, Botswana and Congo (DRC) are the top buyers of South African pork. In 2021, export earnings from Zimbabwe increased by 1981% year-on-year, followed by Zambia (558%), Eswatini (201%) and Nigeria (115%). South Africa's pork imports have drastically increased in value terms despite a 49% increase in production volumes during the past decade. Generally, South African consumers prefer ribs of the pork carcass, which are a high-value part, fuelling an exponential rise in pork spending in the country. At least 75% of the total pork imports are ribs, resulting in a local supply imbalance for other carcass parts. New markets are therefore crucial, given the rate of production growth. However, disease outbreaks remain a fundamental challenge for the industry, especially for markets outside Africa. The country's ability to manage outbreaks will determine its success in gaining markets such as the EU, to which South Africa did not export in 2021 as it did in the previous year.



Author: Mr Thabile Nkunjana is an economist under the Agro- Food Chain Unit at the National Agricultural Marketing Council. he can be contacted at thabile@namc.co.za or (012) 341 1115.

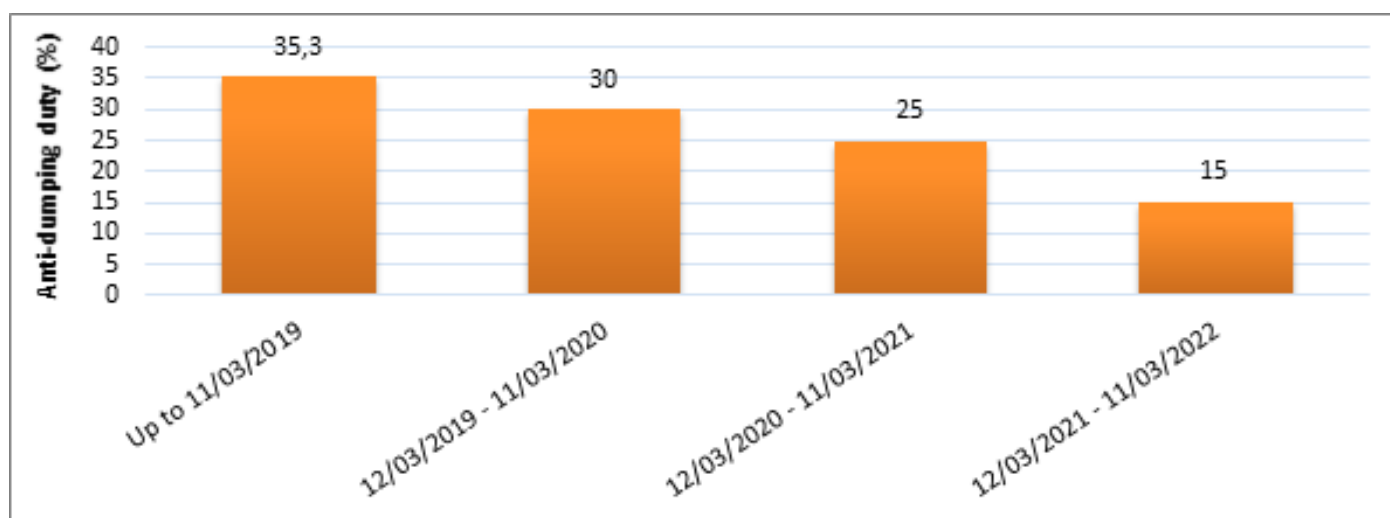
How chicken meat imports are influencing production in South Africa

By Dr Moses H. Lubinga

Between 2011 and 2020, South African poultry imports increased by 41%, but in some years like 2016, 2017 and 2019, the increase ranged between 57% and 65%. The poultry industry contends that chicken meat imports are negatively affecting domestic production (Breitenbach & Sulliman, 2021; FairPlay Movement, n.d.; USDA-FAS & GAIN, 2020). Frozen bone-in portions of fowls of the species *Gallus Domesticus* (HS 0207.14.9) are the major poultry products of concern, supplied by largely by European countries (Germany, the Netherlands and the UK) and Brazil. In 2013, the poultry industry officially took note of the surge in imports. It lodged a complaint claiming that European countries were dumping chicken products on the South African market, thereby constituting an imposition of temporary safeguarding measures (i.e. an anti-dumping duty), ranging between 22.03% and 73.33%, depending on the country supplying the chicken portions.

The provisional anti-dumping duties took effect between July 2014 and January 2015 as further investigations into the matter were ongoing. Upon validating the existence of dumping tendencies by some EU countries, South Africa took a bold stance to impose anti-dumping duties on frozen bone-in chicken portions. Following a successful investigation into the matter, anti-dumping duties on frozen chicken bone-in portions (HS 0207.14.9) originating in or imported from Germany, the Netherlands and the UK were imposed, and this came into effect in early 2015. Since then, the anti-dumping duties have been adjusted, as illustrated in

Figure 4. Against this backdrop, this article provides insights into how chicken meat imports affect the poultry industry in South Africa.



Source: Government gazette (2018; 2022)

Effect of chicken imports on domestic production

There have been numerous claims that imported chicken products are negatively impacting the productivity of the domestic industry (Breitenbach & Sulliman, 2021; FairPlay Movement, n.d.). Figure 5 presents a graphical illustration of the relationship between the volume of chicken imports and domestic production, showing a negative relationship between chicken meat imports and domestic production. However, despite the imposition of anti-dumping duties in 2014, there was an even more drastic increase (43%) in chicken meat imports until 2016, attributable to the prolonged drought that affected the feed industry in Southern Africa in general. While anti-dumping duties are only imposed on chicken parts, the graph includes all chicken products (fresh or frozen), irrespective of the country supplying the product. This graph provides a meaningful comparison with the production capacity of the domestic industry.

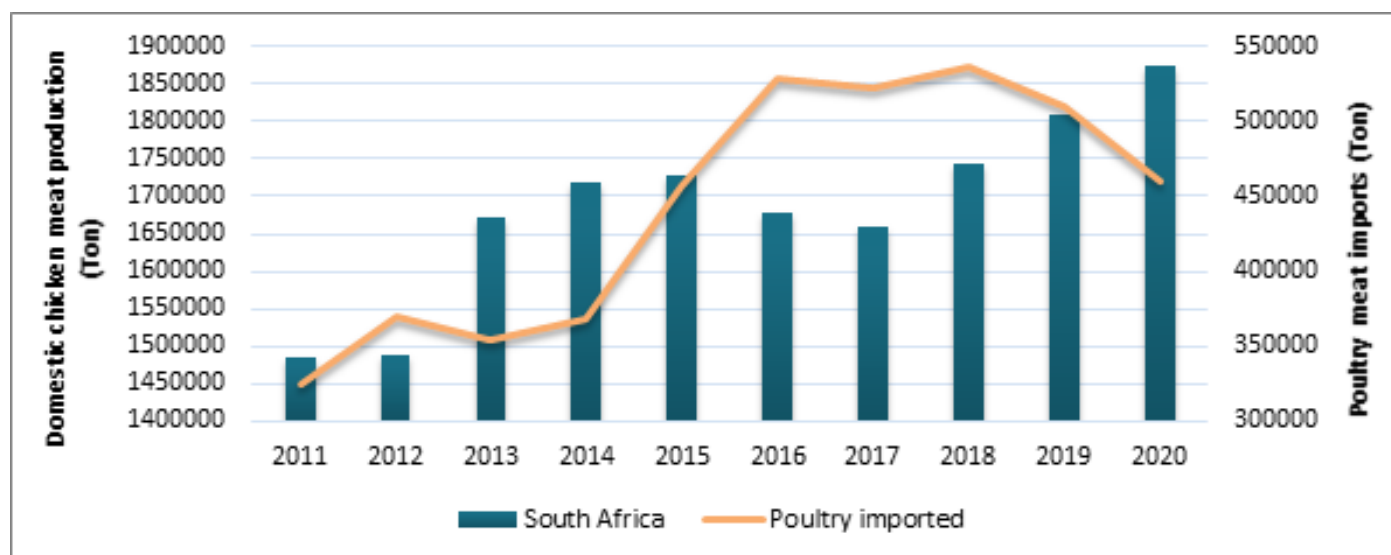


Figure 5: Relationship between chicken meat imports and domestic production

Source: Author's Computation (FAOSTAT, 2022 & TradeMap, 2022)

Imports exclude re-exports of chicken meat products (hs 020714) and live fowls of the species *Gallus Domesticus* (chicken) weighing less than or equal to 185 grams (HS 010511), since these are chicks for breeding stock. Since 2015, re-exports of frozen chicken cuts & edible offal (HS 020714) and frozen chicken, not cut in pieces (HS 020712), have generally been increasing, except for 2019 and 2020 when drastic declines of 263% and 695%, respectively, were observed. These declines are attributable to the disruptions in supply value chains due to the COVID-19 pandemic (Lubinga et al, 2021; Yu et al., 2021). However, on average, 485.6 tons and 552.8 tons of frozen chicken cuts & edible offal (HS 020714) and frozen chicken, not cut in pieces (HS 020712), have been re-exported since 2016. Thus, existing data (Table 4) suggests that not all the frozen bone-in chicken portions (HS 0207149) imported through South Africa's borders are consumed within the Republic. Major countries to which frozen bone-in chicken portions are likely re-exported include Mozambique, Lesotho and Namibia.



Author: Dr. Moses Lubinga is a Senior economist under the Trade Research Unit at the National Agricultural Marketing Council. He can be contacted at hlubinga@namc.co.za or (012) 341 1115.

Table 4: Percentage export growth in value for frozen bone-in chicken portions supplied by South Africa

Chicken bone-in products	Importing countries	2018-2019	2019-2020	2020-2021
Half carcass (02071491)	Lesotho	211	-2	69
	Namibia	-83	1192	-20
	Mozambique	-78	-64	-89
Quarters (02071493)	Mozambique	156	1659	-42
	Namibia	-37	86	-28
	Lesotho	46	-16	6
Wings (02071495)	Lesotho	343	-2	-22
	Botswana	37	-15	-14
	Namibia	-24	60	-6
Breasts (02071496)	Namibia	-74	-58	27
	Congo, (DRC)	-93	852	-27
	Lesotho		297	-23
Drumsticks (02071498)	Lesotho	126	11	45
	Namibia	-54	105	21
	Botswana	-5	-59	-15
Other cuts (02071499)	Lesotho	-16	64	109
	Namibia	4	26	6
		-65	14	-82

Source: ITC (2022)

To complement the graphical approach, correlation analysis was also used to ascertain the nature and strength of the relationship between imports and domestic production. When considering the period 2011 – 2020, the findings suggest that there is a moderate but positive (0.56) relationship between imports and domestic production. The implication is that as imports increased, domestic production also increased, but possibly to a lesser extent than it should have. This also implies that consumer demand was high for chicken meat products, not forgetting that some products were also re-exported. However, correlation analysis for the period during which anti-dumping duties were in effect (2014-2020) reveals a weak and negative (-0.16) relationship between chicken meat imports and domestic production. This means that as domestic production of chicken meat declined marginally, chicken meat imports increased, with the reverse also being true. Therefore, consumer demand and re-exports play a key role in influencing imports and domestic production.

Conclusion

Imports of chicken meat have been increasing significantly in Southern Africa because it is a highly sought-after protein source. While the domestic poultry industry claims that chicken meat imports, especially frozen bone-in portions, negatively affect their productivity, there is a very weak association between them. If the domestic industry produced sufficient volumes to meet the demand in local and export markets, the observed increasing imports trend might drop significantly. Therefore, it is recommended that the poultry industry focus on interventions to bolster production to meet the demand, or else, imports will continue regardless of safeguard measures. Interventions may include facilitating the full participation of previously disadvantaged small-scale farmers into the formal market structures. Facilitation might take different forms including access to land, training, as well as construction of basic production infrastructure.

Crop productivity and food security in the context of changing climatic conditions

By Dr Ndiadvha Tempia

Rising global temperatures alongside changes in rainfall in the past few decades have had a significant impact on various environmental and agricultural aspects (Fadji et al., 2022). Most crops are frequently exposed to abiotic stress caused by climate change, resulting in increased pests and diseases and increased severity and frequency of disease outbreaks. According to recent estimates, abiotic stress is anticipated to cause up to 50% losses, or higher, in worldwide agricultural productivity, depending on the region (Kumar & Verma, 2018). Furthermore, these losses coupled with rising population numbers means that intervention in agronomical and agro-ecological practices for different farming systems, the scale of production, and agro-ecological zones are needed to boost agricultural production. The use of microbial stimulants has been suggested as a viable alternative to support plants exposed to abiotic stress in the current context of fast-developing climate change. Crops may react differently to climatic stress depending on various agro-ecological zones. For example, microbial biostimulants may alleviate climate change-induced stress on plants in high-temperature, low-temperature and drought zones. Evidence from a survey of the literature by Fadji et al. (2022) indicates that certain microbial stimulants applied to grapevines, pears and apples, bean plants and wheat can protect these crops against freezing and stress conditions. Crops such as sorghum, tomatoes, soybeans and potatoes can also be protected against heat stress when microbes are applied. Using microbial stimulants can protect sunflowers, maize, oranges and wheat

from drought stress. With the recent sporadic and continued rainfall experienced in South Africa, it is arguable that South Africa is not spared from changing climatic conditions. In light of the rapid growth of the country's population, policymakers must consider the impact of climate change on food security and crop productivity. One of the country's most important mandates is food security. While South Africa is food secure at a national level, it is food insecure at the household level since not all households have adequate food (Altman et al. 2009).

Recent estimates for staple foods in the country, such as wheat and maize, indicate a good harvest. The projected 2020/21 maize production is up by 32% from 2011/12, which may be attributable to favourable weather conditions, improved agronomical practices and higher-yielding cultivars. However, such projections may be revised due to the recent rainfall during the summer 2021/22 season that could affect the productivity and yield of these crops. While maize production in 2021/22 is predicted to be the second highest on record, only 4% lower than the previous high of 2016/17, it is important to be mindful of the fluctuations that the country experienced during the drought-stricken years. This situation points to the fact that the impact of climatic conditions and the viability of farming practices should be a constant topic of evaluation and debate by policymakers to assess the applicability of various agro-ecological practices in the context of changing climatic conditions.



Author: Dr. Tempia Ndiadvha is a Senior Manager: Markets and Economic Research Centre (MERC) at the National Agricultural Marketing Council. She can be contacted at ntempia@namc.co.za or (012) 341 1115.

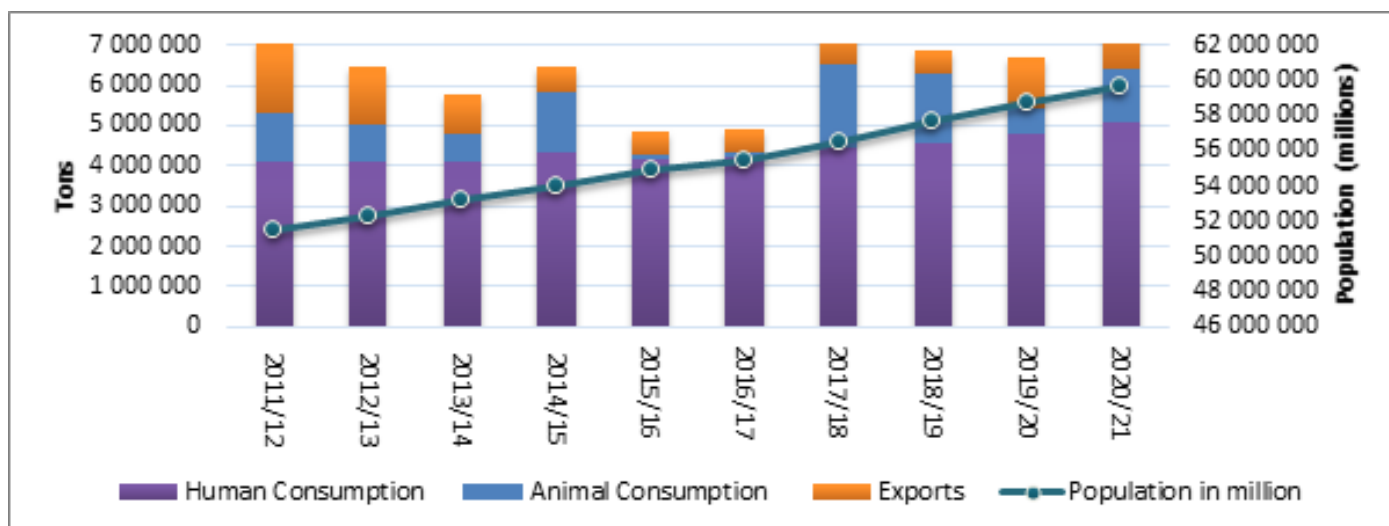


Figure 6: White maize human consumption, animal consumption, exports and population

Source: SAGIS (2021)

In addition to climatic conditions that affect crop production, targeted research should also focus on those crop imports on which South Africa heavily relies in order to meet its local demand. For example, sunflower seed producers continue to face the challenge of *Sclerotinia sclerotiorum* (a plant pathogenic fungus that forms white mould in favourable conditions). Producer deliveries and processed sunflower seeds (for human and animal consumption and crushed for oil and oilcake) have fluctuated over the 10 years, especially during drought-stricken years. Due to a lack of supplies in 2013/14, imports totalled 94 475 tons.

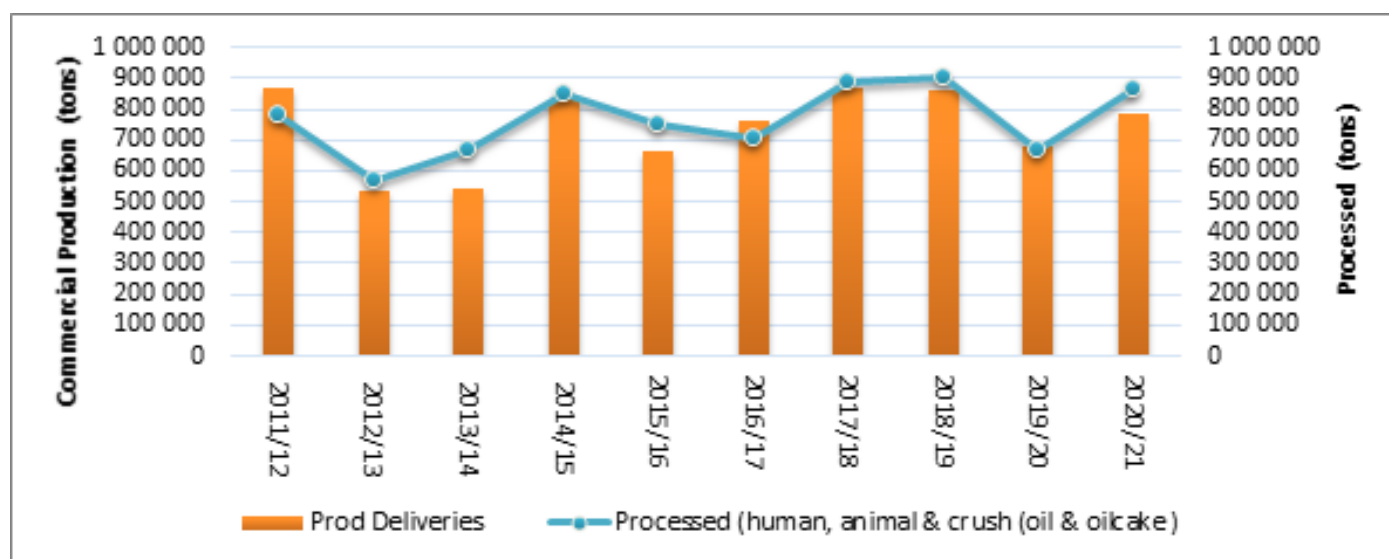


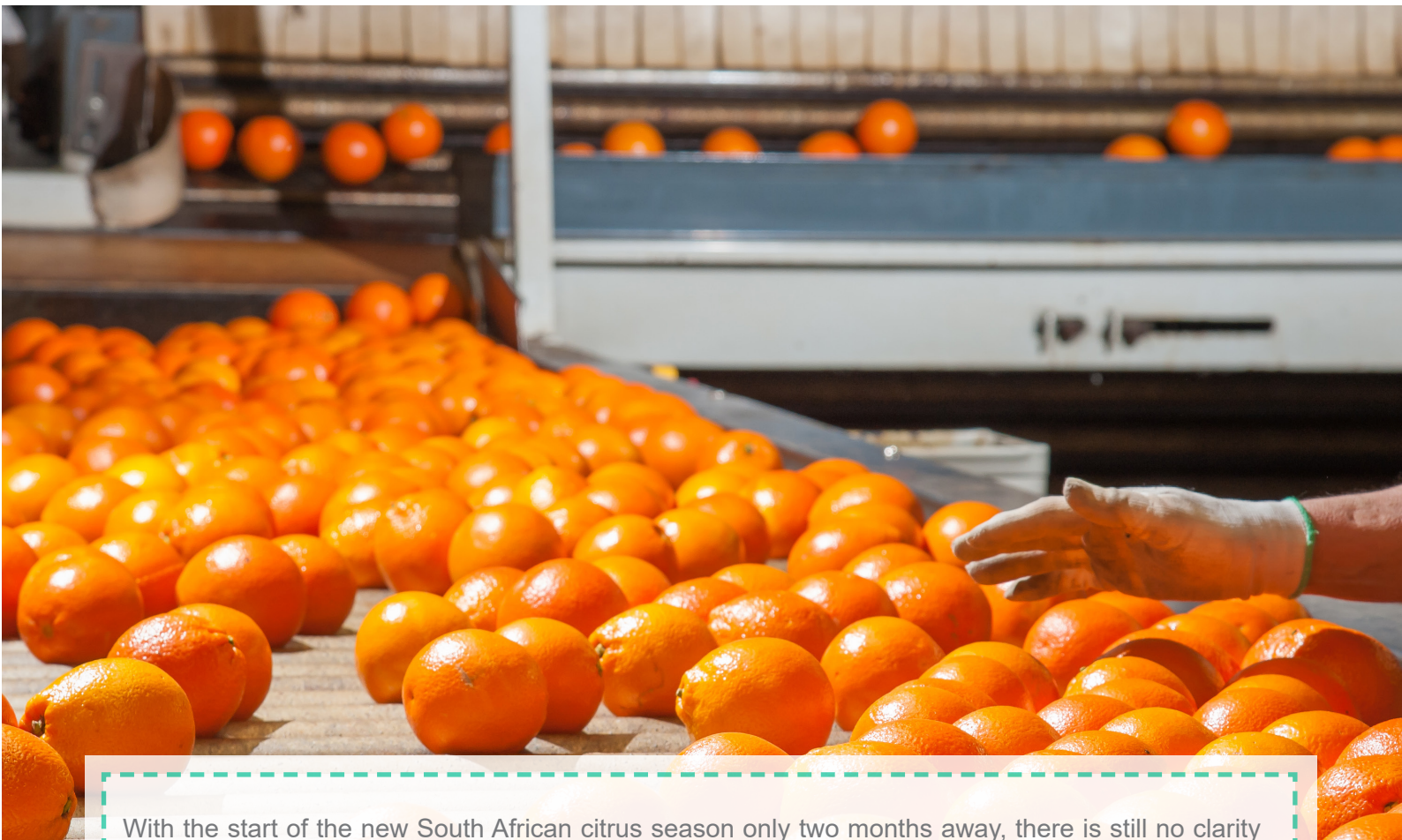
Figure 7: Commercial sunflower, production and processed for human, animal, oil and oilcake

Source: SAGIS (2021)

Concluding remarks

Ideas to stimulate policy debates include the following: Firstly, the adoption of agro-ecological practices that enhance crop productivity should be continuously assessed given the changing climatic conditions. These practices must be evaluated against different farming systems and ecological zones and the scale of production given the dualistic farming system in the country. Secondly, an integrated approach is needed to research activities, particularly public-private partnerships (PPPs), which will be crucial to understanding climatic conditions' impact on various crops, plant diseases, and plant productivity. This, in turn, will contribute towards food security and a sustainable and viable agricultural sector.

Anxious times for South African citrus



With the start of the new South African citrus season only two months away, there is still no clarity on the negotiations that are destined to put new legislation in place regarding citrus black spot (CBS) and false codling moth (FCM). The text needs to be advanced before the end of January, when the EU is expected to discuss the details of the new agreement. If there is consensus, the new legislation will come into effect on 1 May this year. South African sources have said that they wanted to prevent unilateral decisions in the EU that would have meant that the new agreement would not effectively mitigate the perceived risks among EU producers. Nearly four months later, the South African industry is still extremely concerned about the fallout from the interceptions, which came at the end of a very difficult shipping season. Delays hurt the campaign due to the riots in some South African regions in June, as well as inefficiencies at ports and the hacking of Transnet systems. South Africa has claimed that they are being discriminated against because the EU has not shown the same vigour in acting against other countries with far higher interceptions last year. The country has reacted to new EU proposals and is now hoping that a consensus can be reached before the end of January.

Link: Tralac (<https://www.tralac.org/news/article/15474-tralac-daily-news-18-january-2022.html>)

A call for the control and management of the fall armyworm in South Africa during the 2021/2022 crop production season



The Department of Agriculture, Land Reform and Rural Development (DALRRD) hereby makes a clarification call to all growers of maize and related host crops such as sorghum and sweetcorn, including community members, to take precautionary measures in controlling the fall armyworm (FAW). In South Africa, the FAW is a regulated pest in terms of the Control Measures Relating to Fall Armyworm, R. 449 of 26 May 2017 of the Agricultural Pests Act, 1983 (Act No. 36 of 1983). The FAW is a disastrous exotic pest with a wide host range and, if not properly controlled, it may lead to damage of the host crop and/or yield loss. The FAW is present in all the provinces of South Africa; however, the level of infestation varies per province, district or area. Farmers and community members are advised to take precautionary control measures, which include vigilant scouting for egg packs, leaf damage and caterpillars, as well as trapping, to ensure early detection for effective control of the FAW. The moth can be caught in traps with a lure, which can also serve as an early warning of the presence of the pest. Community members are still encouraged to report new infestations to fully understand the preferred host range of the FAW. more

Link: DALRRD (<https://www.dalrrd.gov.za/>)

Minister Didiza was pleased with South Africa's summer crop planting estimates despite the heavy rains



The Minister of Agriculture, Land Reform and Rural Development (DALRRD), Ms Thoko Didiza, said that SA's summer crop planting estimates provide hope despite the heavy rains. "The 2021/22 agricultural season started with rising concerns that floods would damage crops in provinces such as the North West, Free State, and parts of the Eastern Cape and KwaZulu-Natal. Also, farmers in various regions worried they wouldn't complete the usual area for their produce, negatively affecting the agricultural economy," said Minister Didiza. The Minister said that thanks to their resilience and dedication, South African farmers pushed through the heavy rains and continued to plant even beyond the usual optimal planting windows, ending in November for the eastern regions of South Africa and in December for the western areas. The estimates released by the DALRRD's Crop Estimates Committee show that the 2021/22 summer crop plantings are 4,21 million hectares, which is 0,4% more than the 2020/21 production season. There is a relatively decent area across summer crops and well above the average area for some. Summer crops comprise maize, sunflower seeds, soybeans, groundnuts, sorghum and dry beans. more

Link: DALRRD (<https://www.dalrrd.gov.za/Home/aid/1393>)

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For correspondence:

Dr. Sifiso Ntombela
sifiso@namc.co.za
+27 (0) 12 341 1115

For article contribution to the Trade Probe:

Mr. Lucius Phaleng
lphaleng@namc.co.za
+27 (0) 12 341 1115

Designed by
Mr Sylvester Moatshe
Smoatshe@namc.co.za
+27 (0) 341 1115

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