# A PROFILE OF THE SOUTH AFRICAN CABBAGE MARKET VALUE CHAIN

2021



Directorate Marketing Private Bag X 15 Arcadia 0007 Tel: 012 319 8455 Fax: 012 319 8131

E-mail: PA.DM@dalrrd.gov.za

www.dalrrd.gov.za

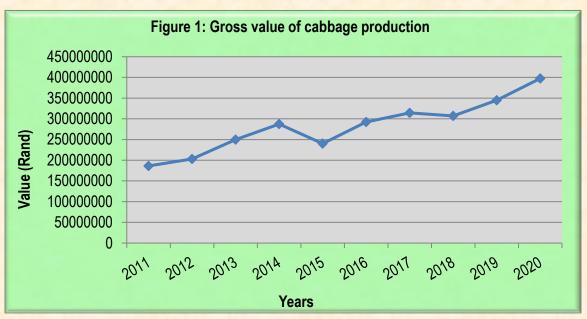


## TABLE OF CONTENT

1. DESCRIPTION OF THE INDUSTRY	3
1.1 Production areas	4
1.2 Production trends	4
2. MARKET STRUCTURE	5
2.1 Domestic market and prices	6
2.2 South Africa Cabbage Exports	7
2.3 Share Analysis	19
2.4 South African Cabbage Imports	24
2.5 Processing	28
3. MARKET INTELLIGENCE	32
3.1 Tariffs	32
3.2 Non tariff barriers	34
3.3 The United States	35
3.4 Asian Market Access	36
4. GENERAL DISTRIBUTION CHANNELS	36
5. LOGISTICAL ISSUES	36
5.1 Mode of transport	36
5.2 Cold chain management	37
5.3 Packaging	37
6. COMPETITIVENESS OF SOUTH AFRICAN CABBAGE EXPORTS	37
7. CHALLENGES	40
8 ACKNOWLEDGEMENTS	40

#### 1. DESCRIPTION OF THE INDUSTRY

Cabbage is a leafy green biennial, grown as an annual vegetable for its dense-leaved heads. Cabbage belongs to a class of vegetables called Brassica, also known as cruciferous vegetables because their flowers are cross-shaped. Other crucifers are broccoli, kale, cauliflower and Brussels sprouts. Cabbage can be green, purple and white. Green cabbages are the most common, with smooth leafed red and crinkle-leafed savoy cabbage of both colours are rarely seen. As with most vegetable crops, cabbages are mostly produced for and marketed through the national fresh produce markets, the informal market and chain stores. Cabbage is used raw in salads, such as coleslaw, as a cooked vegetable, or preserved in pickles or sauerkraut. Cabbage is 90% water and an excellent source of minerals, Vitamin A and C and the B vitamins. Fresh cabbage juice has been shown to promote rapid healing of peptic ulcers. Cooked cabbage is often criticized for its pungent, unpleasant odour and taste. These develop when cabbage is overcooked and hydrogen gas is produced. Cabbages are packed with elements which are useful to human body. According to World Atlas, cabbage plant is classified as an anti-oxidant due to the presence of polyphenols including anthocyanins, gallic acid, vanillic acid, and coumaric acids. These elements plays a significant role in cancer prevention.



Source: Statistics and Economic Analysis, DALRRD

Figure 1 above illustrates the contribution of the cabbage industry to the gross value of agricultural production from 2011 to 2020. In 2012, the industry gross value experienced steady growth. These can be attributed to a steady increase in production output, which occurred while the producer prices were also favourable. In 2013, cabbage gross value increased by 22.9%, when compared to the previous year value and this can be ascribed to a slight increase in production output and good producer price. Higher industry contribution was recorded in 2014 and this represents a growth of 15% in gross value in comparison to 2013 value. The growth in gross value can be assigned to a 1.5% increase in production output and 13.4% increase in producer price. There was a 16.5% drop in cabbage gross value during 2015 when compared to the previous year's value and this can be

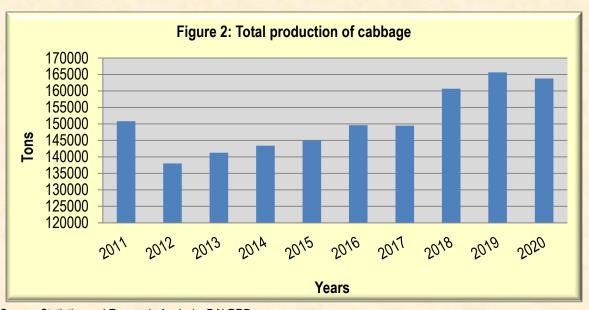
attributed to a 17% drop in producer price. In 2016, cabbage gross value grew by 21.7% in comparison to the 2015 gross value and this increment in gross value can be ascribed to a 17.9% increase in cabbage production output. There was a 7.5% increment in the cabbage gross value during 2017 when compared to 2016 gross value and this can be attested to favourable producer prices that occurred during the same season. As of 2018, cabbage's gross value has slightly dropped by 2.3% relative to 2017 gross value and this can ascribe to low producer prices during the same year. There was a 12% increment in cabbage gross value during the 2019 season and this can be ascribed to an increase in cabbage production output. In 2020, South Africa's cabbage gross value has increased by 15% in comparison to the 2019 value and this can be attested to the 16% increase in the producer's price.

#### 1.1 Production areas

Cabbage grows best under cool conditions cabbage. Cabbages are produced in all provinces of South Africa, but the production is concentrated in Western Cape, KwaZulu Natal, Eastern Cape, Gauteng, Free State and North West provinces. Globally, China followed by India, Russian Federation, South Korea, Ukraine, Indonesia and Japan are the top countries in cabbage production, while Russia is the biggest cabbage consuming country in the world. The top African countries producing cabbage are Angola, Egypt, Kenya, Ethiopia, South Africa and Rwanda.

#### 1.2 Production trends

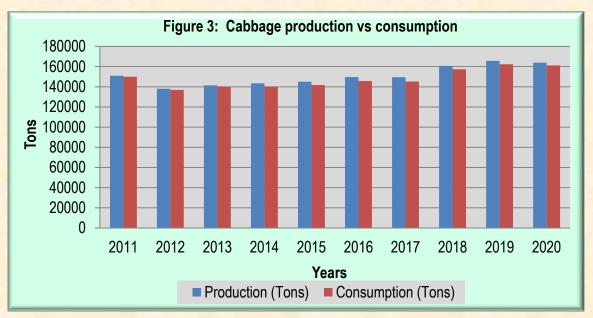
Figure 2 below illustrates the production volumes for cabbages over the past ten years.



Source: Statistics and Economic Analysis, DALRRD

During 2011, cabbage production output was just above 150 851 tons. During 2012, production dropped by 8.4% when compared to the 2011 production season. In 2013, production volume slightly increased by 2.3% when compared to the previous year output. Production output grew further by 1.5% in 2014, when compared to the previous year output. During 2015, production volume

increased by 17.4% in comparison to 2014 production output. In 2016, cabbage production output increased by 3.2% in comparison to the previous year production output. During 2017, there was a slight drop of 0.09% in production volume relative to 2016 production volume. As of 2018, South Africa's cabbage production output grew by 7.5% in comparison to the previous year (2017) production output. During 2019, there was a 3% increment in cabbage production output relative to 2018 output. As of 2020, South Africa's cabbage production output declined slightly by 1.1% in comparison to 2019 output.



Source: Statistics and Economic Analysis, DALRRD

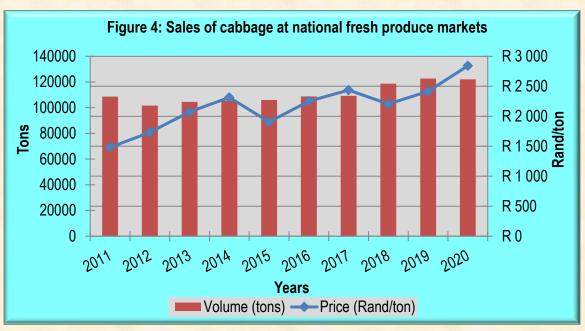
Figure 3 above depicts the local consumption of cabbages compared to the production over the 10 years. In 2020, South African average cabbage consumption was approximately 161 107 tons per annum. Consumption volumes have decreased slightly by 0.7% compared to 2019 consumption volumes, which can be ascribed to a 1.1% decline in production volume. The figure illustrates that the production of cabbage is slightly higher than the consumption. Most of the cabbages are produced for domestic consumption. South Africa is self-sufficient in terms of cabbage production and the surplus is also exported. Russia is the third country producing in the world and it is also the largest cabbage consuming country.

#### 2. MARKET STRUCTURE

The cabbage industry operates in a deregulated environment where the prices are determined by the forces of demand and supply. Fresh cabbages are sold through the fresh produce market, processors, restaurants, hawkers, retailers and chain stores. Cabbages are also exported to other countries through export agents and marketing companies. South Africa also imports from other countries.

## 2.1 Domestic market and prices

National Fresh Produce Markets remain an important channel for the sale of fresh cabbage in South Africa. In 2020, approximately 75% of cabbages were distributed through fresh produce markets. The remaining 25% represents a direct sale from producer to wholesalers, retailers, processors, informal traders, exports and consumers.

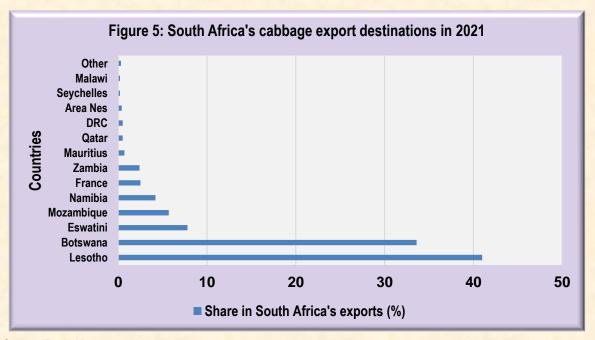


Source: Statistics and Economic Analysis, DALRRD

Figure 4 above illustrates the sales of cabbage in the national fresh produce market over 10 years. During 2012, market price eased higher by 17% due to a 6.3% drop in cabbage volume supplied at the markets. In 2013, the market price has gone up by 19.7% despite a 2.8% increase in cabbage volume supplied at the market and this can be attributed to strong cabbage uptake during the same year. In 2014, the market price has gone up by 11.6% despite a 0.8% increase in volume supplied at the markets and this can be ascribed to strong cabbage uptake. During 2015, there was a slight increase of 0.6% in cabbage volume supplied at the market and this has negatively impacted the market price by 17.7% when compared to 2014 figures. In 2016, cabbage prices eased higher by 18% when compared to 2015 price. During 2017, there was an 8.2% increment in cabbage market price despite a 0.4% growth in the cabbage supplied at the market and this can be ascribed to strong demand in the same season. As of 2018, there was an 8.6% increase in volume supplied at the market and this has negatively impacted the cabbage price by 9.5% in comparison to the 2017 price. During 2019, cabbage market price increased by 9.6% despite a 3.3% increase in cabbage volume supplied at the market and this can be ascribed to strong cabbage uptake in the same year. As for 2020, cabbage supplied at the fresh produce market declined slightly by 0.6% as a subsequent the market price grew notably by 17.6%.

## 2.2 South Africa Cabbage Exports

South Africa is not a major cabbage exporter; more than 90% of cabbage produced is absorbed by the domestic fresh market. In 2021, South Africa's cabbage exports represented 0.1% of world exports and it ranked number 37 in the world. South Africa has lost its export share in the world, and its competitiveness in the world, as in 2019, it was ranked number 32 in world cabbage exports. In 2021, Lesotho, Botswana, Mozambique and Eswatini were still the primary recipients of cabbage exported from South Africa. China, the United States of America, Spain, Netherlands, Italy, Canada, Germany and Portugal are the top countries exporting cabbage. Figure 5 below illustrates South Africa's cabbage export destinations during 2021.



Source: Trade Map

Further details relating to the exports of cabbage in 2021 are presented in Table 2.

Table 2: South Africa's major cabbage export destinations in 2021

Importers	Value exported in 2021 (USD thousand)	Trade balance 2021 (USD thousand)	Share in South Africa's exports (%)	Quantity exported in 2021 (tons)	Growth in exported value between 2017-2021 (%, p.a.)	Growth in exported quantity between 2017- 2021 (%, p.a.)	Growth in exported value between 2020-2021 (%, p.a.)
World	2246	2208	100	10848	-7	-3	-12
Lesotho	921	921	41	5227	-7	-3	-15
Botswana	754	754	33.6	3214	1	4	6
Eswatini	176	141	7.8	676	8	16	30

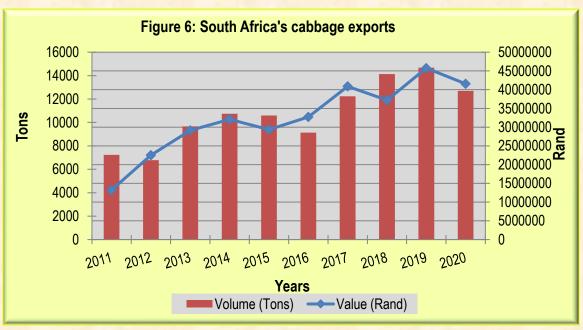
Importers	Value exported in 2021 (USD thousand)	Trade balance 2021 (USD thousand)	Share in South Africa's exports (%)	Quantity exported in 2021 (tons)	Growth in exported value between 2017-2021 (%, p.a.)	Growth in exported quantity between 2017- 2021 (%, p.a.)	Growth in exported value between 2020-2021 (%, p.a.)
Mozambique	128	128	5.7	1306	-25	-16	-67
Namibia	95	95	4.2	212	0	22	15
France	56	56	2.5	56	18	14	286
Zambia	54	54	2.4	50	-23	-31	59
Mauritius	15	15	0.7	21	40	26	80
Qatar	11	11	0.5	29	67		
DRC	11	11	0.5	10	20	10	50
Area Nes	8	8	0.4	29	-36	-37	-81
Seychelles	5	5	0.2	3	-1	-32	-30
Malawi	4	4	0.2	4	-13	-13	-23

Source: Trade Map

Table 2 indicates that in 2021, Lesotho has accounted for 41% share of South Africa's cabbage export, followed by Botswana with 33.6%, Eswatini has commanded 7.8% share and Mozambique has received a 5.7% share of cabbage exports. South African cabbage exports to the world have decreased by 7% in value and the export quantity has decreased by 3% between 2017 and 2021 period. South African exports to Botswana have increased by 1% in value and 4% in quantity between the 2017 and 2021 periods. South African cabbage exports to Mozambique have decreased by 25% in value and 16% in quantity between 2017 and 2021 period.

Figure 6 below illustrates cabbage exports from South Africa over 10 years. In 2011 cabbage export volumes were at a record low of 7 235 tons per annum. In 2012, cabbage exports fell by 6.3% when compared to the 2011 exports and this can be ascribed to an 8.4% drop in domestic production. During 2013, South Africa's cabbage export has significantly gone up by 42.4%, when compared to the previous year exports and this can be ascribed to a 2.3% increase in domestic production output. South Africa grew by 11.3% during 2014, in comparison to 2013 exports. During 2015, cabbage export dropped by 1.5% in comparison to 2014 export volume. From 2011 to 2015, it was less profitable to export cabbage since low export value was recorded for volume exported. In 2016, cabbage exports declined by 13.7% despite a 3.2% increment in the domestic production output. In the same year, cabbage export fetched a higher value in comparison to the 2015 export value. During 2017, there was a notable increase of 33.8% in South Africa's cabbage exports despite a 0.09% decrement in the domestic production output. At the same time, South African cabbage exports traded lower in value relative to the 2016 export value. As of 2018, South Africa's cabbage export grew notably by 15.6% in comparison to the 2017 export volume and this can be ascribed to a 7.5% increment in domestic production output. In the same year, it was notably less profitable to export cabbage relative to the previous year's (2017) export value. In 2019, South Africa's cabbage export increased by 3.8% and it was more profitable to export cabbage when compared to 2018 exports.

As of 2020, cabbage exports from South Africa decreased by 13% compared to 2019 export levels. This can be attributed to the 1.1% fall in domestic output.



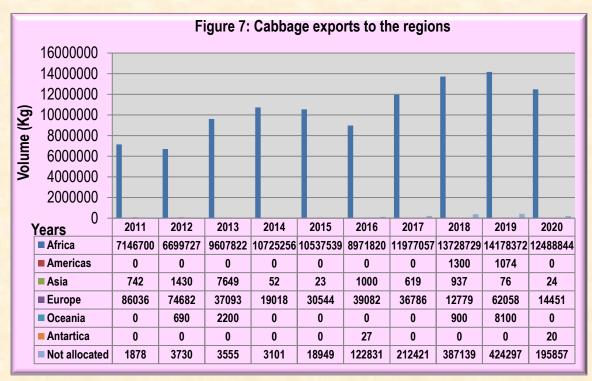
Source: Quantec Easydata

Figure 7 below illustrates the South African cabbage exports to the regions. South Africa exported cabbages mainly to Africa and Europe. In 2011, the African region was the major market for cabbage exports originating from South Africa. In the same year, the unallocated cabbage exports have notably increased. In 2012, there was an increase in export volumes destined for Asia and Oceania regions. In 2013, African region continued to be the main export market for cabbage exports from South Africa. In the same year, there was an increase in volumes exported to Asia and Oceania while the export to Europe dropped by 51.3%. In 2014, cabbage exports increased by 10% and the export volume were the highest in 10 years. At the same time, exports to Asia were insignificant and export to Europe notably dropped. Unallocated export has slightly dropped when compared to the 2013 export volume.

In 2015, the Africa region was still the primary export market for cabbage originating from South Africa, followed by the Europe region. Unallocated volume notable increased, when compared to the 2014 export volume. In 2016, African region remained the main recipient of cabbage export originating from South Africa, however, the export volume has dropped by 14.8%. At the same time, the unallocated export volume increased significantly. Cabbage to Europe and Asia has also notably increased. In 2017, the Africa region was still the primary recipient of South Africa's cabbage export and the export volume grew sharply by 33.5% relative to 2016 exports. In the same year, unallocated cabbage export volume surged by 72% relative to the previous year (2016) export. As of 2018, South Africa's cabbage export volume has increased by 15.5% relative to the 2017 export volume and this can be ascribed to a 7.5% increment in cabbage production output. In 2019, the African region was still by far the primary recipient of cabbage exports originating from South Africa. At the same time, unallocated exports grew by 3%, a notable volume was exported to the Europe region, exports to

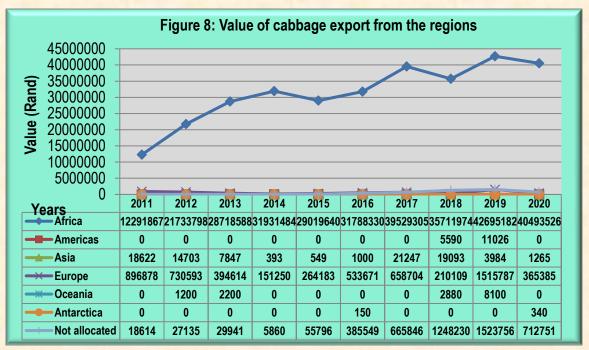
<sup>\*</sup> Quantec Easy data has revised its export data to reflect SACU export from 2010

Oceania and Europe were less significant. As of 2020, the African region was still the primary export market for cabbage export from South Africa, whereas the cabbage export to Europe declined sharply by 77% and unallocated export has dropped by 53% relative to the 2019 export volume.



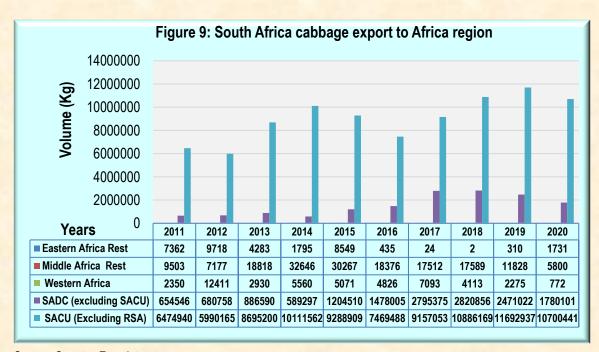
Source: Quantec Easydata

Figure 8 below illustrates the value of South African cabbage exports. The figure shows that it was generally more profitable to export cabbage to the European region, this is illustrated by the high export value. Export to African countries earned less value despite high volumes to the region. In 2012, it was more profitable to export cabbage to Asian and European regions and at the same time, the value of unallocated cabbage exports have also dropped. In 2013, Europe continued to be more a profitable market for exports from South Africa, and unallocated exports had recorded a higher value. Africa, Oceania and Asia regions were the least profitable export markets. In 2014, Europe, followed by Asia was the most profitable export markets, while exports to the African region remained the least profitable market. In 2015, Europe was still the most profitable export market for cabbage from South Africa and the unallocated exports had a higher value. In 2016, cabbage export to the Europe region was more profitable, while export to Africa region had a lower value. Cabbage exports to Asia have fetched higher value during 2017, followed by exports destined to the European region whilst exports to Africa were least profitable. As of 2018, Asia region was the most profitable export market for cabbage from South Africa, followed by Europe, America, Antarctica and Africa was still the least profitable export market. During 2019, it was more profitable to export cabbage to Asia, followed by Europe and Americas markets whereas African market was least profitable. As of 2020, the Europe region was still the more profitable market whilst the exports destined to Africa region has fetched lower value.



Source: Quantec Easydata

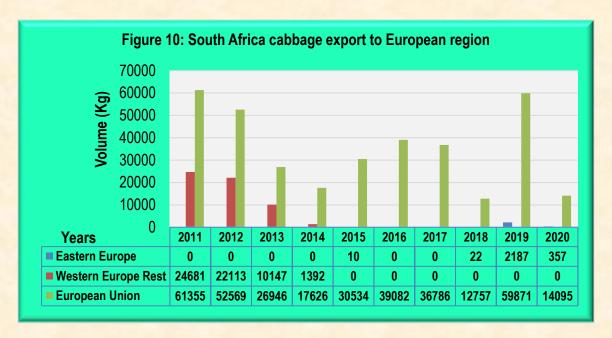
Figure 9 below illustrates South Africa's cabbage export destined to African region.



Source: Quantec Easydata

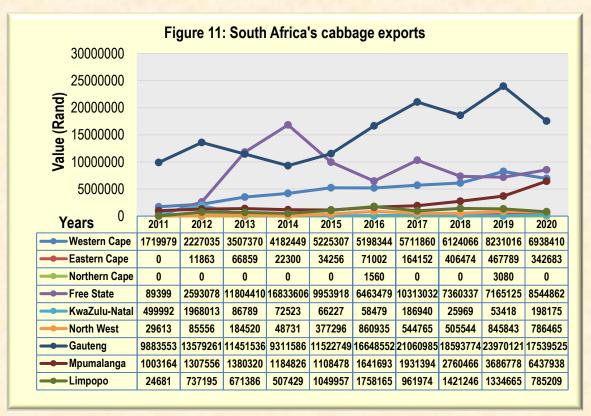
Figure 9 above shows South Africa's cabbage export to Africa region. During the period under review, South Africa exported cabbage mainly to the SACU countries, followed by SADC countries. Notable export volume was exported to Eastern Africa in 2012. During 2012 and 2013, there was a significant growth in export volume destined for Middle Africa and SACU countries. In 2015, there was a notable

increase in export volume to Eastern Africa and export volume to the SADC region has doubled when compared to the 2014 export volume. Cabbage export to the SADC region increased by 22.7% during 2016, whereas exports to SACU, West Africa, Middle Africa and Eastern Africa has declined. In 2017, SACU countries has imported 73.8% of South Africa's cabbage exports, exports to SADC countries increased significantly by 89%, West Africa export has eased higher by 48.8% whilst export to Middle Africa has dropped by 4.7% relative to 2016 export. As of 2018, SACU and SADC countries were the primary export markets for cabbage export originating from South Africa. South Africa has also exported cabbage to a notable volume to Middle Rest Africa whilst export to Eastern Africa and Western Africa has notably dropped. In 2019, SACU (Lesotho, Botswana and Eswatini) followed by SACD (Mozambique and Eswatini) countries were still the primary recipient of cabbage exports originating from South Africa. There was also a notable volume of cabbage exports destined for Middle Africa. As of 2020, export volume to the SACU region declined 8.4% and cabbage export to SADC has surged relative to 2019 export whilst export to West Africa was insignificant.



Source: Quantec Easydata

Figure 10 above illustrates South Africa's cabbage exports to the European region in 10 years. In the Europe region, South African cabbage exports are primarily destined to European Union countries and West Europe. Cabbage exports to Eastern Europe and northern Europe were insignificant. A record-high volume destined for European Union was recorded in 2011 and from 2012 to 2014, there was a steady decline in export volume to European Union. During 2015, there was a notable increase in volume exported to the European Union. In 2016, European Union (France, United Kingdom and the Netherlands) remained the primary recipient of cabbage export originating from South Africa and the export volume grew by 27.9% compared to 2015 export. In 2017, France, Netherlands and United Kingdom were still the primary markets for South Africa cabbage exports destined to the European region. As of 2018, European Union countries were still the main market of cabbage exports from South Africa. During 2019, European Union countries remained the primary export market for cabbage originating from South Africa and the volume destined to Eastern Europe was less significant. Cabbage exports to European countries fell by 75% in 2020 as compared to the volume exported in 2019.

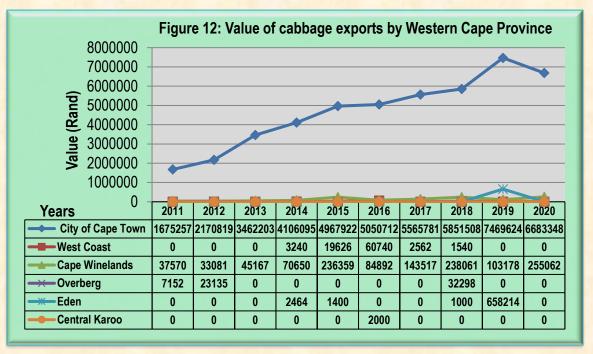


Source: Quantec Easydata

Figure 11 above is the illustration of cabbage exports by South African provinces from the 2011 to 2020 period. During 2012, cabbage export recorded for Free State has considerably increased while the cabbage exports for North West, Gauteng, Mpumalanga and Limpopo have dropped. In 2013, Free State and Gauteng were the primary exit points for cabbage exports originating from South Africa. In 2014, Free State cabbage export value has surged whilst Gauteng export value has significantly dropped relative to 2013. At the same time, Gauteng export has significantly dropped and Western Cape export has notably increased. In 2015, Gauteng province continued to be the preferred cabbage export exit point and the export value has notably increased in comparison to the 2014 export value. As of 2016, Gauteng's export value increased notably by 42.6%. Eastern Cape, North West, Mpumalanga and Limpopo also registered notable increments in the export values. At the same time, KwaZulu Natal and Free State export values have declined in comparison to 2015 export values.

In 2017, there were significant increases in South Africa's cabbage export values recorded in Gauteng, Western Cape and KwaZulu Natal. As of 2018, there was a sharp increase in cabbage export values recorded for Eastern Cape, Limpopo, Mpumalanga and Western Cape. At the same time, free State, KwaZulu Natal. North West and Gauteng cabbage export values have declined relative to the 2017 export value. During 2019, Gauteng was still by far the primary exit point for South Africa's cabbage exports, Western Cape export value has increased by 34%, Eastern Cape export grew by 15%, North West export value has gone up by 67% whilst Limpopo export value declined by 6% relative to 2018 exports. In 2020, Gauteng remained by far the most important exit point for South African cabbage exports, while Western Cape export value fell by 15%, Mpumalanga export value surged by 75%, Free State export value increased by 19%, and Limpopo export value

rose by 41% compared to 2018. The following figures (Figures 12-18) show the value of cabbage exports from the various districts in all Provinces in South Africa.



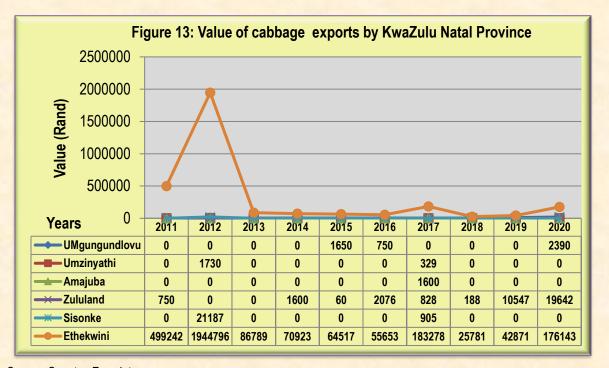
Source: Quantec Easydata

Figure 12 above indicates that cabbage exports from Western Cape province were mainly from the City of Cape Town. During 2012, value of the City of Cape Town export has considerably increased while the value for Cape Winelands has significantly dropped. As of 2013, City of Cape Town continued to lead in cabbage export from the Western Cape Province and the value has substantially increased, when compared to 2012 export value. In 2014, City of Cape export value has surged and in the same year, West Coast also contributed notably to Western Cape cabbage exports. During 2015, City of Cape Town recorded the highest export value and it represents a 9.7% increase in comparison to the 2014 value. In the same year, Eden and Cape Winelands have significantly contributed to Western Cape cabbage export.

In 2016, City of Cape Town remained the primary exit point for Western Cape cabbage exports and the export value increased by 2.5%, West Coast export value has surged when compared to the previous year export value. At the same period, Cape Winelands and Eden cabbage export values experienced notable decrements in the export values while Central Karoo registered its first cabbage value in 10 years. During 2017, City of Cape Town and Cape Winelands cabbage export values have eased notably higher, whilst West Coast export value has drastically dropped in comparison to 2016 export value. As of 2018, City of Cape Town was by far the primary exit point of Western Cape cabbage exports. At the same time, Cape Winelands export value has drastically gone up by 65.8%, Overberg has contributed notably to Western Cape cabbage exports, whilst West Coast and Eden have registered less significant export values. During 2019, the City of Cape Town has remained the main exit point for Western Cape cabbage export and the export value rose notably by 27%. At the same time, Eden export value surged whilst the Cape Winelands dropped sharply by 56% relative

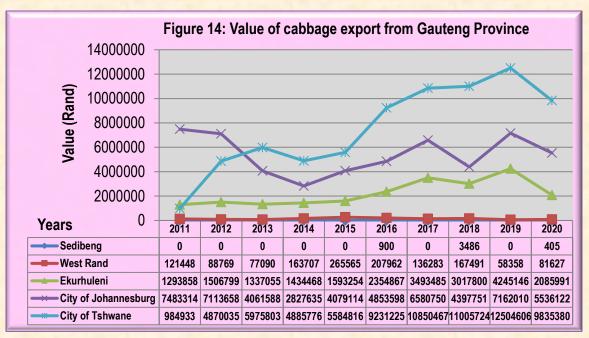
to the 2018 export value. As of 2020, City of Cape Town export value declined by 10% whereas Cape Winelands export value surged by 147% relative to the 2019 export value.

Figure 13 is the illustration of cabbage exports by KwaZulu Natal province from 2011 to 2020.



Source: Quantec Easydata

Figure 13 above indicates that cabbage exports from KwaZulu Natal province were primarily from Ethekwini district municipality. During 2012, Ethekwini cabbage export value surged and the export value was a record high in 10 years. In 2013, KwaZulu Natal cabbage exports were from Ethekwini and the export value for this municipality has dropped by 95.8% when compared to the 2012 export value. In 2014, Ethekwini export value dropped further by 36.5% and at the same year, Zululand contributed for the first time to KwaZulu Natal cabbage exports. During 2015, Ethekwini export value slightly increased; Umgungundlovu and Zululand export values were insignificant. Ethekwini was still the main contributor to cabbage exports from KwaZulu Natal. However, the export value has dropped by 13.7% in 2016. At the same time, Umgungundlovu and Zululand export values were still insignificant. In 2017, Ethekwini was still the primary exit point for KwaZulu Natal cabbage exports and the export value was incomparably higher relative to 2016, Amajuba and Umzinyathi have contributed for the first time to KwaZulu Natal cabbage export. As of 2018, there was a significant drop in cabbage export value recorded Ethekwini and Zululand have recorded a trivial export value. During 2019, Ethekwini export significantly grew by 66% and Zululand export value was incomparably higher when compared to 2018 export value. As of 2020, Ethekwini was still by far the primary exit point for KwaZulu Natal cabbage export and Zululand export cabbage value has surged by 86% relative to the 2019 export value.

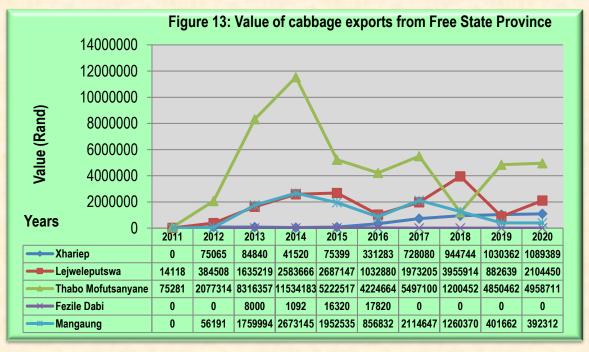


Source: Quantec Easydata

As can be seen from Figure 14 above, cabbage exports from Gauteng province were mostly from the City of Johannesburg, Ekurhuleni and City of Tshwane. In 2011, City of Johannesburg was the primary exit point of Gauteng provincial cabbage export values. In 2013, West Rand has contributed to Gauteng cabbage exports, for the first time in a ten year period. In the same year, Ekurhuleni export value has notably increased and the City of Johannesburg recorded the highest export value in a 10 year period, while City of Tshwane export value has decreased. During 2014, West Rand, Ekurhuleni and the City of Tshwane cabbage export values have significantly improved while the values for City of Johannesburg have drastically dropped. In 2015, there was an increase in the City of Johannesburg, Ekurhuleni and West Rand export value, while City of Tshwane has experienced a slight decline in export value. During 2016, there was a surge in City of Tshwane, City of Johannesburg and Ekurhuleni cabbage export values, whereas the West Rand export value dropped by 34.4% in comparison to previous year export values. The City of Tshwane was still the main exit point for Gauteng cabbage exports and the export value eased higher by 18%. City of Johannesburg export value grew by 16%. As of 2017, Ekurhuleni export value has significantly increased by 48% whilst West Rand export value has drastically dropped by 56.5% relative to the previous year (2016) export value. In 2018, City of Tshwane was by far the primary exit point for Gauteng cabbage export, City of Johannesburg export value has notably dropped by 33%, Ekurhuleni export value declined by 13.6% whilst West Coast export value has increased by 22.8% relative to 2017 export values. During 2019, there was a 62% increase in City of Johannesburg export value. City of Tshwane has experienced 13% growth, Ekurhuleni export rose by 40% whilst West Rand export value declined notably by 65% in comparison to 2018 exports. As of 2020, City of Johannesburg, City of Tshwane and Ekurhuleni were still the primary exit points for Gauteng provincial cabbage export, however, there was an overall decrement in Gauteng provincial cabbage export value.

Figure 15 below shows cabbage exports from Free State province during 10 years. From 2011 to 2012, Thabo Mofutsanyane was the primary exit point for Free State provincial export. In 2013, Free State exported cabbage through Fezile Dabi and Xhariep districts and the increase in cabbage

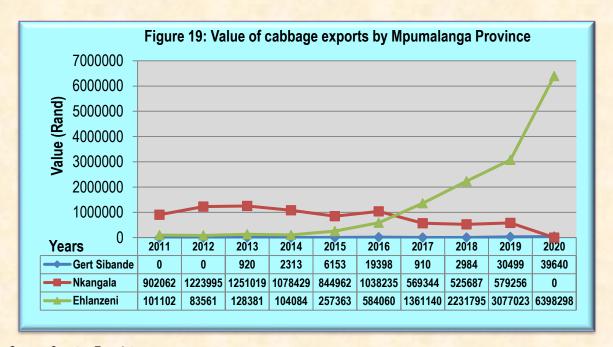
exports can be attributed to cabbage export to neighbouring Lesotho. During 2014, Free State exported cabbage through Thabo Mofutsanyane and Mangaung and the export values recorded for these municipalities were significantly high. There was a notable increment in Xhariep and Fezile Dabi district in 2015. In the same year, Thabo Mofutsanyane and Mangaung export values have sharply decreased in comparison to 2014 values. During 2016, there was an overall decline in cabbage export value for Free State provincial exports and this can be attributed to a 7% decline in cabbage export value destined to neighbouring Lesotho. In 2017, there was a surge in export values recorded for Thabo Mofutsanyane, Lejweleputswa, Xhariep and Mangaung whilst there was no export value registered for Fezile Dabi. The surge in Free State overall provincial export value can be attributed to 114% increase in value of exports destined to neighbouring Lesotho during 2016-2017 period. As of 2018, Lejweleputswa was the primary exit for Free State cabbage exports, Thabo Mofutsanyane export value has drastically dropped by 78% and Mangaung has experienced a notable drop of 40% in export value relative to 2017 value. In 2019, Thabo Mofutsanyane and Xhariep export values were incomparably higher when compared to the 2018 export value. At the same time, Lejweleputswa and Mangaung export values have dropped by 77% and 68% respectively. Thabo Mofutsanyane and Lejweleputswa export values remained the key exit point for Free State province cabbage exports in 2020. At the same time, Mangaung export values have fallen by 2.3% to 2019.



Source: Quantec Easydata

Figure 16 below, shows that the cabbage exports from Mpumalanga province was mainly from Ehlanzeni municipality. In 2011 and 2012, Ehlanzeni and Nkangala districts were the primary exit point for Mpumalanga cabbage export. Ehlanzeni export value has surged during 2014 in comparison to 2013 export value. A record-high export value was recorded during 2015 for Ehlanzeni district. At the same time, Gert Sibande recorded its first export value in ten years but the export value was insignificant. In 2016, there was a surge in cabbage export values for Ehlanzeni and Gert Sibande. At the same time, Nkangala contributed for the first time to Mpumalanga cabbage export.

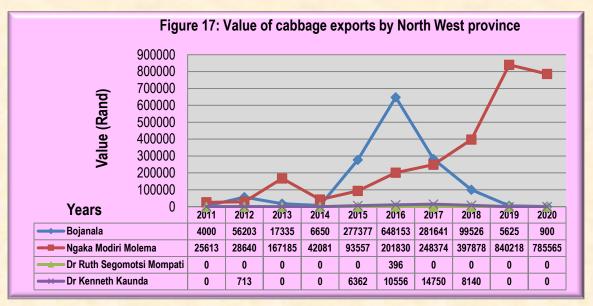
High cabbage export value recorded for Mpumalanga can be ascribed to 72% increment in export recorded for neighbouring Mozambique between 2015 and 2016 period. During 2017, Ehlanzeni and Nkangala cabbage export values have surged relative to the 2016 export value and this can be attested to a notable 76% increment in cabbage value destined to neighbouring Mozambique and 36% increase in exports destined to Eswatini between 2016 and 2017 period. As of 2018, Ehlanzeni cabbage export value has surged in comparison to 2017 export value, Nkangala export value has decreased by 7.6% whilst Gert Sibande has registered a trivial export value. During 2019, Ehlanzeni has continued to be the main exit point for Mpumalanga cabbage export and the export value rose by 37% and Nkangala export share has increased by 10% relative to the 2018 export value. As of 2020, Ehlanzeni cabbage export value has surged and Gert Sibande cabbage export value increased by 29% relative to the 2019 value.



Source: Quantec Easydata

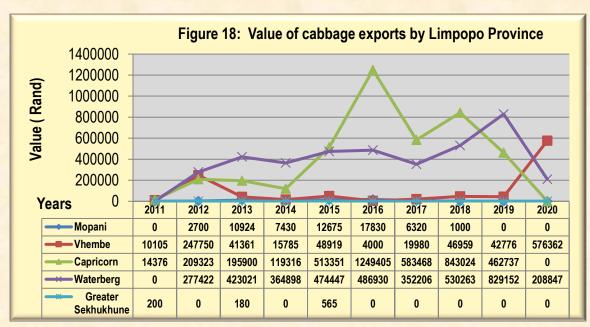
Figure 17 below illustrates that in 2011 and 2012, notable exports were recorded for Ngaka Modiri Molema and Bojanala. During 2014, North West cabbage was exported through Ngaka Modiri Molema district and Bojanala. In 2015, Bojanala export value has surged and Dr Kenneth Kaunda has recorded its first export value, but the value was insignificant. At the same time, Ngaka Modiri Molema export value has slightly dropped when compared to the 2014 value. During 2016, Ngaka Modiri Molema and Bojanala cabbage export values have surged. Dr Kenneth Kaunda has also registered a notable gain in the cabbage export value. High export values during the period under review and can be ascribed to an increase in cabbage export to neighbouring Botswana. There was a significant reduction Bojanala cabbage export value during 2017, Ngaka Modiri Molema export grew by 23% and Dr Kenneth Kaunda cabbage export value eased higher by 39.7%. The overall North West export value has dropped 36.7% relative to the 2016 export value and this can be attested to an 18% drop in the value of export destined for neighbouring Botswana between 2016 and 2017 period. As of 2018, Ngaka Modiri Molema has contributed significantly to North West cabbage exports and the export value grew notably by 60%, Bojanala export value has sharply dropped by 64.6% and Dr Kenneth Kaunda district export value was less significant. During 2019,

Ngaka Modiri Molema was the primary exit point for North West cabbage export and the export value was incomparably whilst Bojanala export value has sharply dropped to a less significant value. As of 2020, Ngaka Modiri Molema remained the key exit point for North West cabbage exports in 2019, but the export value decreased by 6.5% relative to the 2019 value.



Source: Quantec Easydata

Figure 18 below illustrates the value of cabbage export by Limpopo province.



Source: Quantec Easydata

Figure 18 above illustrates that in 2011, notable export value was recorded for Capricorn and Vhembe districts and during 2012, the values have significantly increased. In 2013, Limpopo province exported cabbage from Waterberg district, but the value was insignificant. As of 2014,

Limpopo province exported cabbages through Waterberg, Capricorn and Mopani, which contributed for the first time in 10 years. In 2015, there was a sharp increase in Capricorn export value, while Mopani and Waterberg experienced a decrement in export values. Capricorn cabbage export value surged and Waterberg export value has also increased by 2.2% during 2016. At the same time, Mopani and Vhembe districts have registered insignificant export values. In 2017, Capricorn was still the primary exit point for Limpopo cabbage export, followed by Waterberg however, the export values have experienced significant decrements relative to 2016 values. In the same year, the was a notable increment in Vhembe export value whilst Mopani has experienced a 31% decrement in comparison to 2016 export value. As of 2018, Capricorn and Waterberg were still the main primary exit point for cabbage export from Limpopo province. At the same time, Vhembe district cabbage export was incomparably higher when compared to 2017 export value. In 2019, Waterberg cabbage export value increased notably by 56% whilst Vhembe District decreased by 45% relative to 2018 values. As of 2020, the cabbage export value for the Vhembe district has surged, but the cabbage export value for the Waterberg district has decreased considerably compared to the 2019 export value.

## 2.3 Share Analysis

Table 3 illustrates the provincial share of national cabbage exports. Gauteng has commanded the greatest share of provincial cabbage export. During 2012, Gauteng continued to lead in cabbage exports by recording 60.33% of exports and KwaZulu Natal has increased its share from 3.77% to 8.74%. As of 2013, Free State increased their cabbage export shares to 40.49%% whereas Gauteng export share fell to 39.28% respectively. Free State province has commanded the highest export share of 52.34% in 2014 and Gauteng export share dropped from 39.28% to 28.95%. High export share by Free State province can be attributed to an increase in cabbage export destined to neighbouring Lesotho. During 2015, Gauteng export share has increased and Western Cape has commanded a 17.81% share, while Free State export share has dropped from 50.16% to 33.93%.

In 2016, Gauteng province was still the main exit point for South Africa's cabbage exports and its export share increased to 53.45% while Free State export share has notably dropped to 19.76%. In the same year, Western Cape export value dropped slightly to 19.90%, while North West, Mpumalanga and Limpopo have registered notable gains in their cabbage export share. The high export share in the Western Cape and Gauteng can be attributed to registered exporters and exports exit points based in these provinces. During 2017, Gauteng was still leading in cabbage export share with 51.53%, Free State export share has increased to 25.23%, Mpumalanga export share has increased slightly to 4.73% whilst Western Cape export share eased lower to 13.97%. As of 2018, Gauteng has commanded 49.98% of South Africa cabbage export share, Free State export share has declined to 19.79%, Western Cape export share grew to 16.46%, Mpumalanga has recorded 7.42% export share and Limpopo has recorded 3.82%. In 2019, Gauteng was still leading in South Africa cabbage export and it has commanded 52.38%, Western Cape has commanded 17.99%, Free State has registered 15.66% share and Mpumalanga has recorded 8.06% share. As of 2020, Gauteng province has commanded 42.19%, Free State has registered 20.55% share, Western Cape export share dropped slightly to 16.69% and Mpumalanga has commanded 15.49% export share of Gauteng provincial cabbage export share.

Table 3: Share of provincial cabbage exports to the RSA cabbage exports (%)

Table of Offare of	P. C	Jiai Gabi	ouge ex	• • • • • •	1110 110	1 00000	go onpo	7.60 (70)		
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Province										
Western Cape	12.98	9.89	12.03	13.00	17.81	15.90	13.97	16.46	17.99	16.69
Eastern Cape	0	0	0.23	0.07	0.12	0.22	0.40	1.09	1.02	0.82
Northern Cape	0	0	0	0	0	0	0	0	0.01	0.00
Free State	1	11.52	40.49	52.34	33.93	19.76	25.23	19.79	15.66	20.55
KwaZulu-Natal	3.77	8.74	0.30	0.23	0.23	0.18	0.46	0.07	0.12	0.48
North West	0	0	1	0.15	1.29	2.63	1.33	1.36	1.85	1.89
Gauteng	74.59	60.33	39.28	28.95	39.28	50.91	51.53	49.98	52.38	42.19
Mpumalanga	7.57	5.81	4.73	3.68	3.78	5.02	4.73	7.42	8.06	15.49
Limpopo	0.19	3.28	2	1.58	3.58	5.38	2.35	3.82	2.92	1.89
South Africa	100	100	100	100	100	100	100	100	100	100

Source: Calculated from Quantec Easydata

Table 4: Share of district cabbage exports to the total Western Cape provincial cabbage

exports (%)

exports (%)										
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
District										
City of Cape										
Town	97.40	97.48	98.71	98.17	95.07	97.16	97.44	95.54	90.75	96.32
West Coast	0	0	0	0.08	0.38	1.17	0.04	0.03	0	0
Cape										
Winelands	2.18	1.49	1.29	1.69	4.52	1.63	2.51	3.89	8.00	0
Overberg	0.42	1.04	0	0	0	0	0	0.53	0	0
Eden	0	0	0	0.06	0.03	0	0	0.02	1.25	3.68
Central Karoo	0	0	0	0	0	0.04	0	0	0	0
Western Cape	100	100	100	100	100	100	100	100	100	100

Source: Calculated from Quantec Easydata

Table 4 above indicates that the City of Cape Town commanded the greatest share of cabbage exports from Western Cape province. During 2012, City of Cape Town continued to lead in Western Cape cabbage exports and it has commanded a 97.48% share. In 2013, the City of Cape Town increased its export share from 97.48% to 98.71%, West Coast and Cape Winelands export shares were insignificant. In 2014, export share for City of Cape Town has slightly dropped to 98.17%. In the following year (2015), City of Cape export share has dropped slightly to 95.07% and Cape Winelands export share has increased to 4.52%. During 2016, City of Cape Town export value eased higher to 97.16% and Central Karoo has registered a trivial share. In 2017, City of Cape Town was still leading in Western Cape cabbage exports and the export value has increased further to 97.44% and Eden export value grew to a 2.51% share. As of 2018, City of Cape Town export share has dropped slightly to 95.54%, whilst Cape Winelands export share grew slightly to 3.89% share

relative to 2017 share. During 2019, City of Cape Town export share dropped further to 90.75%, Cape Winelands export share increased to 8% and Eden has commanded a 1.25% share of exports. As of 2020, City of Cape Town was still in the lead and it has commanded 96.32% share of Western Cape cabbage export and Eden has commanded 3.68% share.

Table 5: Share of district cabbage exports to KwaZulu Natal provincial cabbage exports (%)

Table of chart of district subbage experts to trivalaria fraction provincial subbage experts (70)												
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
District												
Umgungundlovu	0	0.02	0	0	2.49	1.28	0	0	0	1.21		
Umzinyathi	0	0.09	0	0	0	0	0.18	0	0	0		
Amajuba	0	0	0	0	0	0	0.86	0	0	0		
Zululand	0.15	0	0	2.21	0.09	3.55	0.44	0.72	19.74	9.91		
Sisonke	0	1.08	0	0	0	0	0.48	0	0	0		
Ethekwini	99.85	98.92	100	97.79	97.42	95.17	98.04	99.28	80.26	88.88		
KwaZulu Natal	100	100	100	100	100	100	100	100	100	100		

Source: Calculated from Quantec Easydata

Table 5 above, shows that, in 2011, Ethekwini has commanded 99.85% share of cabbage exports from KwaZulu Natal the province. During 2012, continued to lead in the KwaZulu Natal cabbage export and it has commanded 98.92% share of cabbage exports. In 2013, Ethekwini commanded a 100% share of cabbage export from the KwaZulu Natal province. Ethekwini export share dropped slightly from 100% to 96.95% and 3.05% share was recorded for the Zululand district. During 2015, Ethekwini continued to command the greatest share of KwaZulu Natal export and Umgungundlovu has commanded a 2.49% share of the exports. The greatest share by Ethekwini can be attributed to Durban harbour which renders exports exit point. In 2016, Ethekwini continued to command high export value for KwaZulu Natal and Zululand export share increased to 3.55%. During 2017, Ethekwini has advanced its cabbage export share to 98.04%, Umzinyathi, Amajuba, Zululand and Sisonke have registered insignificant shares. As of 2018, Ethekwini has continued to lead in KwaZulu Natal cabbage export share and it has commanded 99.28% share. In 2019, Ethekwini export share dropped to 80.26% whilst Zululand export share notably increased to 19.74% share. City of Cape Town cabbage export share eased higher to 88.88% share whilst Zululand export has declined to 9.91% share.

Table 6: Share of district cabbage exports to the Gauteng provincial cabbage exports (%)

Years	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
District										
Sedibeng	0	0	0	0	0	0.01	0	0.02	0	0.00
West Rand	1.23	0.65	0.67	1.76	2.30	1.25	0.65	0.90	0.24	0.47
Ekurhuleni	13.09	11.10	11.68	15.41	13.83	14.14	16.59	16.23	17.17	11.89
City of Johannesburg	75.71	52.39	35.47	30.37	35.40	29.15	31.25	23.65	29.88	31.56
City of Tshwane	9.97	35.86	52.18	52.47	48.47	55.45	51.52	59.20	52.17	56.08
Gauteng	100	100	100	100	100	100	100	100	100	100

Source: Calculated from Quantec Easydata

Table 6 above, illustrates that the City of Johannesburg commanded the greatest share of cabbage exports by Gauteng province. In 2011, City of Johannesburg cabbage export share has commanded 75.71% and Ekurhuleni commanded a 13.9% share of Gauteng cabbage export. During 2012, the export share of the City of Johannesburg has decreased to 52.39%. In 2013, City of Johannesburg continued to be the preferred exit point for Gauteng exports and City of Tshwane export share increased further from 35.85% to 52.18%. In 2014, City of Tshwane was the lead municipality in cabbage exports from Gauteng and it has commanded a 52.47% share. In the same year, Ekurhuleni, the export share increased to 15.41%, while the City of Johannesburg export share has dropped from 35.47% to 30.37%. In 2015, City of Tshwane recorded 48.47%, followed by the City of Johannesburg with a 35.40% share of Gauteng cabbage export. At the same time, West Rand has increased its export share from 1.76% to 2.30%. During 2016, City of Tshwane cabbage export share grew to 55.45%, Ekurhuleni export share slightly increased to 14.14% while City of Johannesburg export share dropped to 29.15%. OR Tambo International Airport renders the exit point of cabbages exports from Gauteng province. In 2017, City of Tshwane has continued to lead in Gauteng export share by commanding 51.52% share, followed by City of Johannesburg with 31.25% and Ekurhuleni export share has eased higher to 16.59%. As 2018, City of Tshwane has commanded 59.20% of Gauteng cabbage export share, followed by City of Tshwane with 23.65% and Ekurhuleni has commanded 16.23% share. In 2019, City of Tshwane export share declined to 52.17%, City of Johannesburg export share has gone up to 29.88% and Ekurhuleni has registered a 17.17% share. City of Tshwane export share rose to 56.08 % in 2020, City of Johannesburg export share increased to 31.56 %, and Ekurhuleni export share increased to 11.09 % in Gauteng.

Table 7: Share of district cabbage exports to the Free State provincial cabbage exports (%)

able 7. Office of district cabbage exports to the Free otate provincial cabbage exports (70)												
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
District												
Xhariep	0	2.89	0.72	0.25	0.76	5.13	7.06	12.83	14.38	12.75		
Lejweleputswa	15.79	14.83	13.85	15.35	27.00	15.98	19.13	53.74	12.32	24.63		
Thabo Mofutsanyane	84.21	80.11	70.45	68.52	52.47	65.36	53.30	16.31	67.70	58.03		
Fezile Dabi	0	0	0.07	0.01	0.16	0.28	0	0	0	0.00		
Mangaung	0	2.17	14.91	15.88	19.62	13.26	20.50	17.12	5.61	4.59		
Free State	100	100	100	100	100	100	100	100	100	100		

Source: Calculated from Quantec Easydata

Table 7 above, indicates that in 2011, Thabo Mofutsanyane commanded 84.21% share of Free State provincial cabbage export. As of 2012, Thabo Mofutsanyane has commanded an 80.11% share, Lejweleputswa registered 14.83% and Xhariep commanded a 2.89% share of cabbage exports from Free State province. During 2013, Thabo Mofutsanyane commanded 70.45% and Mangaung has commanded a 14.91% share of cabbage exports from Free State province. In 2014, Thabo Mofutsanyane has recorded a 68.52% export share and Lejweleputswa has commanded a 15.35% export share. During 2015, Lejweleputswa export share has increased to 27%, Mangaung export share has gone up to 19.62%, while Thabo Mofutsanyane export share has dropped from 68.52% to 53.30%. Thabo Mofutsanyane increased to 65.36% and Xhariep has gone up to 5.13% in 2016. In the same year, Lejweleputswa cabbage export share dropped to 15.98% and Mangaung export share has decreased to 13.26%. During 2017, Thabo Mofutsanyane export share eased lower to 53.30%, Mangaung has experienced a notable increase in export share and it has commanded

20.50%, whereas Lejweleputswa export share grew to 19.13%. In 2018, Lejweleputswa cabbage export share has gone up from 19.13% to 53.74%, Thabo Mofutsanyane export share has notably dropped from 53.30% to 16.31% share%. As of 2019, Thabo Mofutsanyane cabbage export share increased sharply to 67.70%, Lejweleputswa export share dropped notably to 12.32% and Xhariep has registered a 14.38% share. As of 2020, Thabo Mofutsanyane cabbage export share declined further to 58.03%, Lejweleputswa has commanded 24.63% share and Xhariep registered 12.75% share of Free State provincial cabbage export share.

Table 8: Share of district cabbage exports to the Mpumalanga provincial cabbage exports (%)

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
District										
Gert Sibande	0	0	0	0	0.555	1.182	0.047	0.11	0.83	0.62
Nkangala	89.92	93.61	90.63	91.02	76.23	63.24	29.48	19.04	15.71	0
Ehlanzeni	10.08	6.39	9.30	8.78	23.22	35.577	70.474	80.848	83.46	99.38
Mpumalanga	100	100	100	100	100	100	100	100	100	100

Table 9: Share of district cabbage exports to the Limpopo provincial cabbage exports (%)

able 3. Office of district cabbage exports to the Elimpopo provincial cabbage exports (70)											
Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
District											
Mopani	0	0	1.63	1.46	1.21	1.01	0.66	0.07	0	0	
Vhembe	40.94	33.61	6.16	3.11	4.66	0.23	2.08	3.30	3.20	73.40	
Capricorn	58.25	28.39	29.18	23.51	48.89	71.06	60.65	59.32	34.67	0	
Waterberg	0	37.63	63.01	71.91	45.19	27.70	36.61	37.31	62.12	26.60	
Greater											
Sekhukhune	0	0	0	0	0.05	0	0	0	0	0	
Limpopo	100	100	100	100	100	100	100	100	100	100	

Source: Calculated from Quantec Easy data

Table 9 illustrates that in 2011, Capricorn has recorded the greatest share of 58.25% and Vhembe commanded a 40.94% export share of Limpopo cabbage export. In 2012, Waterberg commanded the greatest share of 37.63%, followed by Vhembe with 33.61% and Capricorn has commanded has registered 28.39% of Limpopo cabbage exports. During 2013, Waterberg commanded a 63.01% share and Capricorn registered a 29.18% share of cabbage exports from Limpopo. In 2014, Waterberg export share has notably increased to 71.91% and Capricorn has registered a 23.51% share of Limpopo cabbage export share. Capricorn export share has notably increased from to 48.89% during 2015, while Waterberg export share has dropped from 71.91% to 45.19%. In 2016, Capricorn continued to lead in Limpopo cabbage export share by commanding 71.06% whereas Waterberg export share has dropped to 27.70%. In 2017, Capricorn was still leading in Limpopo cabbage export share by recording 60.65%, Waterberg export share eased higher to 36.61% whilst Mopani has registered trivial share. As of 2018, Capricorn has commanded a 59.32% share of Limpopo cabbage export, followed by Waterberg with a 37.31% share and Vhembe has commanded a 3.30% share of cabbage exports. In 2019, Waterberg has commanded the greatest share of 62.12% share of Limpopo cabbage export whilst Capricorn export share declined to 34.67% share.

Vhembe had the largest percentage of Limpopo cabbage exports in 2020, accounting for 73.40 %, while Waterberg's share fell to 26.60 %.

Table 10: Share of district cabbage exports to the North West provincial cabbage exports (%)

Year District	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bojanala	13.51	65.69	9.39	13.65	73.52	75.28	51.70	19.69	10.67	0.11
Ngaka Modiri Molema	86.49	33.48	90.61	86.35	24.80	23.44	45.59	78.70	99.33	99.89
Dr Ruth Segomotsi Mompati	0	0	0	0	0	0.05	0	0	0	0
Dr Kenneth Kaunda	0	0.83	0	0	1.69	1.23	2.71	1.61	0	0
North West	100	100	100	100	100	100	100	100	100	100

Source: Calculated from Quantec Easy data

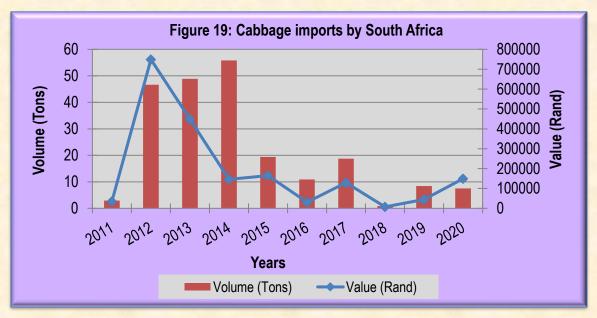
Table 10 illustrates that in 2011, Ngaka Modiri Molema district has recorded 86.49% of North West export share and Bojanala commanded 13.51% of cabbage export share. In 2012, Bojanala has recorded 65.69% of export share, whilst Ngaka Modiri Molema export share dropped to 33.48% share. As of 2013 and 2014, Ngaka Modiri Molema continued to register a higher cabbage export share. In 2015 and 2016, Bojanala contributed notably to North West cabbage export share by commanding more than 70% share of the exports. In 2018, Ngaka Modiri Molema has commanded a 78.70% share of North West cabbage export and Bojanala district export share declined by 19.69% relative to the 2017 share. As of 2019, Ngaka Modiri Molema cabbage export share rose to 99.33% whilst Bojanala export share dropped to 10.67% share. Ngaka Modiri Molema has commanded the largest share of 99.89% in North West cabbage export share and Bojanala export share was less significant.

#### 2.4 South African Cabbage Imports

South Africa is not a major cabbage importer and its cabbage imports represent approximately 0% of the world's imports. During 2020, South Africa's imports were ranked 152 in world imports. In 2019, South Africa's cabbage imports were ranked 162 in the world cabbage imports. South Africa is self-sufficient in terms of cabbage production, hence the low cabbage import except for a record high import in 2014. United States of America, Canada, Hong Kong (China), Germany, Malaysia, Netherlands, United Kingdom and the Netherlands were the top countries importing cabbage in 2020. Figure 19 below illustrates South Africa's cabbage imports.

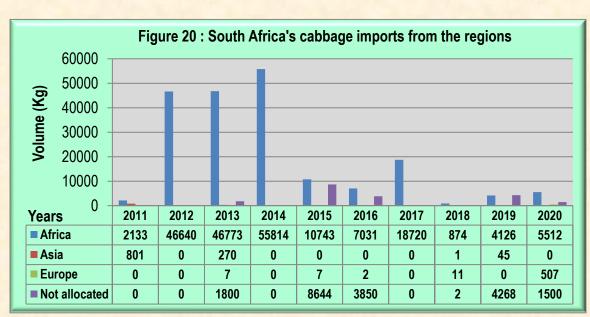
Figure 19 below shows that in 2011, South Africa has imported just 2.9 tons of cabbage. In 2012, South Africa cabbage imports were incomparably higher when compared to the 2011 imports. The increase in imports can be attributed to an 8.4% drop in domestic cabbage output in the same year. South Africa's cabbage imports increased steadily during 2013 and 2014. The increase in 2014 was 4.7% despite a 1.5% growth in domestic cabbage output. It was more expensive to import cabbage from 2009 to 2013, as high import values were recorded for volume imported. During 2015, South Africa's cabbage imports dropped by 65%, when compared to 2014 imports and this can be attributed to a 17.4% increase in the domestic production output. Cabbage imports notably dropped by 43.8% in 2016 and this can be attributed to a 3.2% increase in the domestic output. During 2017, South

Africa's cabbage imports surged by 72% relative to the previous year's (2016) imports, and this can be ascribed to a 0.09% drop in domestic production output in the same season. As of 2018, South Africa's cabbage import has sharply dropped by 95% relative to the 2017 cabbage import and it was relatively more expensive to import cabbage. In 2019, South Africa's cabbage import surged and it was relatively cheaper to import cabbage in comparison to 2018 imports. As of 2020, South Africa has imported just 7.5% tons of cabbage and it was 10.7% lower compared to the 2019 import volume. It was relatively more expensive to import cabbage relative to the 2019 import value.



Source: Quantec Easydata

Figure 20 below illustrates South Africa's cabbage imports from regions.



Source: Quantec Easydata

Figure 20 above is the illustration of South Africa's cabbage imports from the regions. In 2011, cabbage imports were sourced from Africa (Zimbabwe) and Asia (Lebanon). In 2012, South Africa imported cabbages only from the African region (Kenya and Ghana). During 2013, the African region (Kenya and Eswatini) remained the main source of cabbage imports by South Africa, and imports from Asia (Lebanon) were less significant. South Africa's cabbage imports were sourced solely from African countries (Namibia, Eswatini, Ghana, Kenya and Lesotho). In 2015, South Africa sourced cabbage primarily from the African region (Eswatini) and a considerable volume of import was unallocated. At the same time, cabbage imports from Europe were insignificant. Africa region continued to be the main supplier of South African cabbage in 2016. However, the import volume decreased by 34.5%. The unallocated cabbage imports have also notably dropped. During 2017, South Africa has sourced cabbage solely from the African region (Eswatini) and the import volume was incomparably higher relative to 2016 volume. As of 2018, South Africa's cabbage import has sharply dropped by 95% relative to 2017 cabbage import. The sharp decline in cabbage import can be attributed to a 7.5% increment in production output. In the same year, it was more expensive to import cabbage relative to the previous year (2017). Eswatini was still the primary supplier of South African cabbage imports, imports from Asia and Europe regions were trivial. During 2019, South Africa cabbage imports sourced from African (Eswatini) countries have surged and unallocated imports have also surged relative to 2018 imports. As of 2020, African region was still the main supplier of cabbage exported from South Africa. In the same year, there was a notable volume of cabbage sourced from the European region whilst the unallocated import volume declined b sharply by 64% relative to 2019 imports.

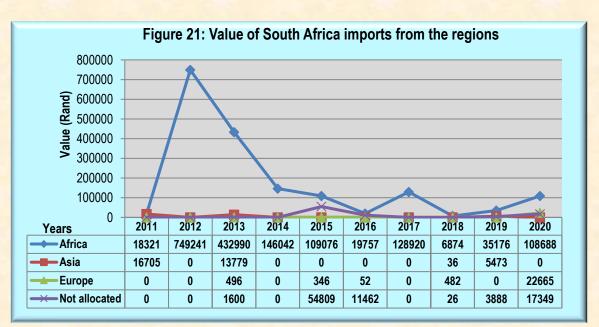


Figure 21 is the illustration of the value of South Africa's provincial cabbage imports.

Source: Quantec Easydata

Figure 21 above is the illustration of the value of South Africa's cabbage imports. It was expensive to import cabbage from Europe, as the high value was recorded for low cabbage volumes. In 2011, it was expensive to import cabbage from the Asian region. In 2012, it was more expensive to import cabbage from the African region as more value was recorded for value imported. During 2013,

cabbage imports from Asia were more expensive than imports sourced from the African region. In 2014, it was cheaper to import cabbage from the African region in comparison to 2013 import value. During 2015, it was more expensive to import cabbage from the Africa region when compared to 2014 imports from the same region. In 2016, it was still relatively cheaper to import cabbage from Africa region. During 2017, it was relatively more expensive to import cabbage from the Africa region relative to 2016 imports. As of 2018, it was fairly more expensive to import cabbage from Africa region relative to 2017 imports value from the same region. In 2019, South Africa's cabbage imports were more expensive when compared to the 2018 import value. Importing cabbage from Europe was more expensive in 2020, followed by Africa, while unallocated imports had a lower import value.

Figure 22: South Africa's cabbage imports Years - Western Cape **Eastern Cape Northern Cape** -Free State **North West** Gauteng Mpumalanga

Figure 22 is the illustration the value of South Africa's provincial cabbage imports.

Source: Quantec Easydata

Figure 22 above illustrates the entry points of South Africa's cabbage imports for 10 years. Gauteng and Western Cape provinces were mostly used as a points of entry for South Africa's cabbage imports. Eastern Cape has recorded a notable import value during 2012. In 2014, Western Cape has recorded notable cabbage import values, whilst Gauteng import values decreased significantly. Gauteng continued to be the primary point of entry for South African cabbage imports during 2015. At the same time, Mpumalanga has recorded its first import value in ten years. In 2016, there was an overall decline in South Africa cabbage import and Gauteng, Mpumalanga and Free State import values were insignificant. Gauteng was still the primary entry point for South Africa's cabbage and the import value was incomparably higher relative to 2016, Mpumalanga import value eased higher while Free State import value was insignificant. As of 2018, Mpumalanga was the primary entry point for South Africa cabbage imports, followed by Western Cape province. During 2019, Western Cape followed by Gauteng province was the primary entry point for South Africa's cabbage imports. In 2020, Gauteng and Western Cape provinces were the leading entry points for cabbage imports into South Africa, while Free State contributed less.

#### 2.5 Processing

Freshly cut cabbage is used raw in salads such as coleslaw and as a cooked vegetable (added to soups or stews). Cabbage is also dehydrated (dried, flaked or powder) for use as a flavouring agent in soups and as an ingredient in other dehydrated foods. Cabbage leaves are used to treat acute inflammation. A paste of raw cabbage may be placed in a cabbage leaf and wrapped around the affected area to reduce discomfort. Cabbage can also be canned, pickled, frozen and cabbage juice can be extracted to make ink. During 2012, canning activities dropped further by 2.9%, when compared to the 2011 canning activities. During 2012, the volumes that were frozen were incomparably higher when compared to 2011 volumes. In 2013, canning activities has gone up by 32.5%, freezing activities decreased by 91.93% and total processing volumes have gone up by 16.9%. Cabbage volumes for canning activities were 105% higher in comparison to 2013 and volume for freezing activities was also higher than the previous year's volumes. In 2015, canning volume grew by 31% and freezing activities dropped by 84%. During 2016, the canning volumes have gone up 17.8% and freezing activities has gone up by 40% in comparison to 2015 volumes. Canning volumes eased higher by 8% during 2017, freezing activities have increased by 25.9% and total processing volume has increased by 9% when compared to 2016. As of 2018, cabbage canning activities have dropped by 16.7%, freezing activities have declined by 86.4% and the total volume of processed cabbage has decreased by 21.4% relative to the 2017 volume. During 2019, cabbage canning activities declined by 2.2% whilst freezing volumes was incomparably higher compared to 2018 volumes. As of 2020, cabbage canning decreased by 20.7 %, while freezing volumes decreased by 33 % to 2019 levels. Volumes of cabbage processed during the past ten years are presented in Table 8.

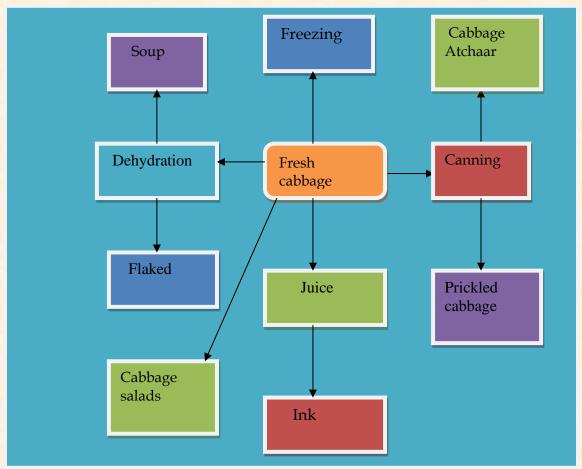
Table 8: Processed cabbages

Year	Canning		Freezing		Total proc	essing
i cui	Volume	Value	Volume	Value	Volume	Value
	(Tons)	( Rand)	(Rand)	(Rand)	( Tons)	( Rand)
2011	895	R2 170 826	14	R37 661	909	R2 208 487
2012	869	R2 146 514	124	R199 528	993	R2 346 042
2013	1 152	R2 771 343	10	R27 544	1 161	R2 798 887
2014	2 361	R5 539 968	851	R2 781 848	3 212	R8 255 816
2015	3 102	R6 710 340	136	R612 735	3 238	R7 323 075
2016	3 655	R9 418 465	227	R1 072 023	3 882	R10 490 488
2017	3952	R9 278 479	286	R1 231 293	4 238	R10 509 772
2018	3 292	R7 374 009	39	R93 208	3 331	R7 467 217
2019	3 218	R7 384 323	118	R445 133	3 335	R7 829 456
2020	2 541	R5 849 565	79	R351 925	2 620	R6 201 489

Source: Statistics and Economic Analysis, DALRRD

The cabbage value chain tree explaining its various uses is illustrated in Figure 23 while the market value chain for cabbage is presented in Figure 24.

Figure 23: Cabbage value chain tree explaining its uses.



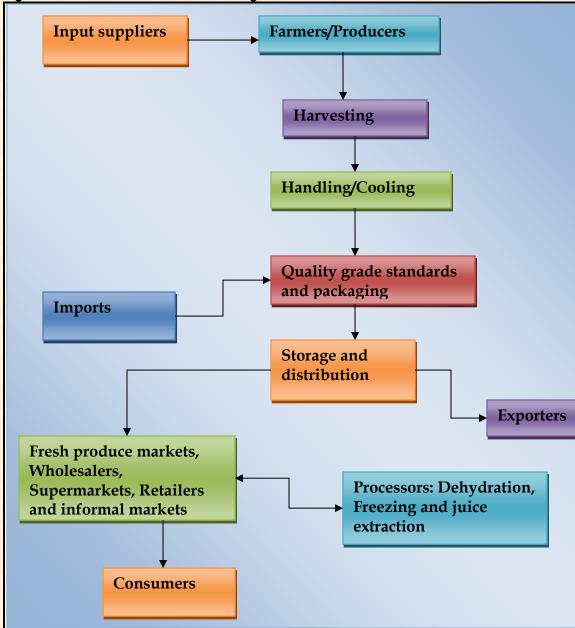


Figure 24: Market value chain for cabbage

The cabbage value chain can be broken down into the following levels: the producers of cabbage (farmers); packhouse owners (cleans, grade and quality control); cold storage and transport facilities (store and transport cabbage on behalf of farmers); traders in cabbage (market and sell cabbages); processors (add value to cabbage and process cabbage to other usable forms); and end-users (consumers).

## 3. MARKET INTELLIGENCE

## 3.1 Tariffs

Tariffs applied by the various markets to cabbages originating from South Africa during 2019 and 2020 are presented in Table 9.

Table 9: Tariffs applied by various export markets to cabbage originating from South Africa.

Occupations	Product description	Trade regime	Applied tariff	Estimated total ad valorem equivalent tariff	Applied tariff	Estimated total ad valorem equivalent tariff
Country	(H07490)	description	2019		2020	
Angola	Cabbage fresh or chilled	MFN duties (Applied)	50.00%	50.00%	50.00%	50.00%
China	Cabbage fresh or chilled	MFN duties (Applied)	13.00%	13.00%	13.00%	13.00%
Democratic Republic of Congo	Cabbage fresh or chilled	MFN duties (Applied)	10.00%	10.00%	10.00%	10.00%
Tropublic of Congo	Cabbago irocii oi oiimoa	THE TY GOLDO (Applied)	10.0070	10.0070	10.0070	10.0070
Botswana	Cabbage fresh or chilled	Intra SACU rate	0.00%	0.00%	0.00%	0.00%
Seychelles	White or red cabbage fresh or chilled	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
Gabon	Cabbage fresh or chilled	MFN duties (Applied)	30.00%	30.00%	30.00%	30.00%
Malawi	White or red cabbage fresh or chilled	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
Nigeria	Cabbage fresh or chilled	MFN duties (Applied)	20.00%	20.00%	20.00%	20.00%
Namibia	Cabbage fresh or chilled	Intra SACU rate	0.00%	0.00%	0.00%	0.00%
Mauritius	Cabbage fresh or chilled	MFN duties (Applied)	0.00%	0.00%	0.00%	0.00%
Lesotho	Cabbage fresh or chilled	Intra SACU rate	0.00%	0.00%	0.00%	0.00%
France	Cabbage fresh or chilled	Preferential tariff for South Africa (EU-SADC)	0.00%	0.00%	0.00%	0.00%

	Product description	Trade regime	Applied tariff	Estimated total ad valorem equivalent tariff	Applied tariff	Estimated total ad valorem equivalent tariff
Country	(H07490)	description	2019		2020	
Mozambique	White or red cabbage fresh or chilled	Preferential tariff for SADC countries	25.00%	25.00%	0.00%	0.00%
Kenya	Cabbage fresh or chilled	MFN duties (Applied)	25.00%	25.00%	25.00%	25.00%
Netherlands	White or red cabbage fresh or chilled	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
India	Cabbage fresh or chilled	MFN duties (Applied)	30.00%	30.00%	30.00%	30.00%
Eswatini	Cabbage and edible brassicas	Intra SACU rate	0.00%	0.00%	0.00%	0.00%
Switzerland	Cabbage fresh or chilled	Preferential tariff for SACU members	0.00%	0.00%	0.00%	0.00%
United Kingdom	White or red cabbage fresh or chilled	Preferential tariff for South Africa (UK- SACUM)	0.00%	0.00%	0.00%	0.00%
United States of America	Cabbage fresh or chilled	Preferential tariff for AGOA countries	0.00%	0.00%	0.00%	0.00%
Zambia	Cabbage fresh or chilled	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
Zimbabwe	Cabbage fresh or chilled	Preferential tariff for South Africa	0.00%	0.00%	0.00%	00.00%

Source: Market Access Map

During 2020, South Africa has exported more than 70.5% of its cabbage exports to Lesotho and Botswana. Lesotho and Botswana apply a 0% Intra SACU rate to cabbage export originating from South Africa, and Mozambique also applies a 0% Preferential tariff for SADC countries. South Africa exported 2.4% of cabbage to Zambia and it applies a 0% preferential tariff to South Africa's cabbage exports. The lucrative export markets for cabbage from South Africa exist in France and United Kingdom since these countries apply a preferential tariff of 0.00% to cabbage exports originating from South Africa. Kenya is the second top cabbage producer in Africa and its domestic production is still protected by a 25% tariff. China and India are the top countries producing cabbage in the world and their domestic producers are still protected by 13% and 30% tariffs.

#### 3.2 Non-tariff barriers

#### 3.2.1 The European Union

Non-tariff barriers can be divided into those that are mandatory and laid out in the EU Commission's legislature, and those that are as a result of consumers, retailers, importers and other distributions' preferences.

## 3.2.2 Product legislation: quality and marketing

There are several pieces of EU legislation that govern the quality of produce that may be imported, marketed and sold within the EU.

**General Food Law** covers matters in procedures of food safety and hygiene (micro-biological and chemical), including provisions on the traceability of food (for example, Hazard Analysis and Critical Control Points, of HACCP).

**EU Marketing Standards**, which govern the quality and labelling of vegetables, are laid out in the CAP framework under regulation EC 2200/96. These regulations include diameter, weight and class specifications, and any produce that does not comply with these standards are not allowed to be sold on the EU markets (detailed lists of products and their standards can be found in the annexes to the directive). The legislation (under EU 1148/2001) also dictates that a Certificate of Conformity must be obtained by anyone wishing to export and sell vegetables in the EU, if that particular vegetable falls under the jurisdiction on the EU marketing standards, Vegetables to be used in further processing needs a Certificate of Industrial Use, whilst another legislative directive covers the Maximum Residue Limits (MRL) of various pesticides allowed.

## 3.2.3 Product legislation: phytosanitary regulations

The international standard for phytosanitary measures was set up by the International Plant Protection Committee (IPPC) to protect against the spreading of diseases or insects through the importation of certain agricultural goods. The EU has its own particular rules formalized under EC 2002/89, which attempts to prevent contact of EU crops with harmful organisms from elsewhere in the world. The crux of the directive is that it authorizes the Plant Protection Services to inspect a large number of vegetable products upon arrival in the EU. This inspection consists of a physical examination of a consignment deemed to have a level of phytosanitary risk, identification of any harmful organisms and certification of the validity of any phytosanitary certificate covering the consignment. If the consignment does not comply with the requirements, it may not enter the EU, although certain organisms can be fumigated at the expense of the exporter.

#### 3.2.4 Product legislation: packaging

The EU commission lays downs rules for materials that come into contact with food and which may endanger people's health or bring about an unacceptable change in the composition of the foodstuffs. The framework legislation for this EC 1935/2004. Recycling packaging materials are also

emphasized under 94/62/EC, whereby member states are required to recycle between 50% and 65% of packaging waste. If exporters do not ship produce in packaging which is reusable, they may be liable for the costs incurred by the importing companies. Wood packaging is subject to phytosanitary controls (see Directive EC 2002/89) and may need to undergo heat treatment, fumigation, etc.

### 3.2.5 Non-legal market requirements: social and environmental accountability

To access a market, importers must not only comply with the legal requirements set out above but also with market requirements and demands. For the most part, these revolve around quality and the perceptions of European consumers about the environmental, social, health and safety aspects of both the products and the production techniques. Whilst supplying vegetables that complies with these issues may not be mandatory in the legal sense, they are becoming increasingly important in Europe and cannot be ignored by existing or potential exporters.

- (i) Social responsibility is becoming important in the industry, not only amongst consumers but also for retail outlets and wholesalers. The Social Accountability 8000 (SA8000) certification is a management system based on International Labour Organization (ILO) conventions, and deals with issues such as a child labour, health and safety, and freedom of association, and requires an on-site audit to be performed annually. The certificate is seen as necessary for accessing any European market successfully. The major retailers in the EU also play an important role in tackling environmental issues, which means that exporters have to take these into account when negotiating exporting arrangements.
- (ii) Environmental issues are becoming increasingly important with European consumers. Consumer movements are lobbying against purchasing non-environmental friendly or non-sustainable produce. To this end, both governments and private partners have created standards (such as ISO 14001 and EUREPGAP) and labels to ensure produce adhere to particular specifications. Labels are an absolute must for exporters attempting to enter the rapidly expanding organic produce market. The EU Commission has recently adopted and EU label for identifying food produced according to EU organic standards in the directive EEC 209/91

## 3.2.6 Consumer health and safety requirements

Increasing consumer conscience about health and safety issues has prompted a number of safety initiatives in Europe, such as EUREPGAP on good agricultural practices (GAP) by the main European retailers, the international management system of HACCP, which is independently certified and required by legislation for European producers as well as food imported into Europe (EC 852/2004), and the ISO 9000 management standards system (for procedures and working methods), which is certified by the International Standards Organization (ISO).

#### 3.3 The United States

The USDA has quality standards for vegetables that provide a basis for domestic and international trade and promote efficiency in marketing and procurement. At the same time the USDA issues quality certificates based on these standards and a comprehensive grading system. Graders are

located around the country at terminal markets. These certification services, which facilitate the ordering and purchasing of products by large-volume buyers, assure these buyers that the product they purchase will meet the terms of the contract in terms of quality, processing, size, packaging and delivery.

#### 3.4 Asian Market Access

Japan's agricultural sector is heavily protected, with calculations from the Organization for Economic Co-operation and Development (OECD) estimating that almost 60% of the value of Japan's farm production comes from trade barriers or domestic subsidies. Japan uses tariff rate quotas (TRQ) to protect its most sensitive products, and reserves the right for trading many of these products (within the quota) for one or two-state trading enterprises. However, these extremely protective measures apply only to some products; others can compete more effectively with outside competition, often on the grounds of higher quality. Perhaps the biggest barrier to trade with Japan in vegetable markets is its strict phytosanitary requirements, which have often been challenged in the WTO as having little or no scientific justification. Other measures that are being challenged include Japan's use of fumigation on agricultural products when cosmopolitan pests (already found in Japan) are detected. Japan is also increasing its labelling requirements.

#### 4. GENERAL DISTRIBUTION CHANNELS

There are roughly three distinct sales channels for exporting vegetables. One can sell directly to an importer with or without the assistance of an agent (usually larger, more established commercial farms/orchards). One can supply a vegetable combine, which will then contract out importers/marketers and try to take advantage of economies of scale and increased bargaining power. At the same time vegetable combines might also supply large retail chains. One can also be a member of a private or co-operate export organization (including marketing boards) which will find agents or importers and market the produce collectively. Similar to a vegetable combine, an export organization can either supply wholesale markets or retail chains depending on particular circumstances. Export organizations and marketing boards will wash, sort and package the produce.

#### 5. LOGISTICAL ISSUES

## 5.1 Mode of transport

The transportation of vegetables falls within two categories – *ocean cargo* and *air cargo* – with ocean cargo taking much longer to reach the desired location but costing considerably less. Of course, the choice of transportation method depends, for the most part, on the fragility of the produce and how long it can remain relatively fresh. With the advent of technology and container improvements, the feasibility, cost and attractiveness of sea transportation have improved considerably. As more developing countries begin to export and supply major developed countries markets, so the number and regularity of maritime routes, and the container vessels travelling these routes, increase.

Presently South American countries like Peru benefit from the asparagus trade, which has led to some level of economies of scale with other vegetable products, and this has enabled cheaper transport prices for their other vegetable varieties. Such economic of scale could benefit SADC countries if more producers became exporters and took advantage of the various ports which have special capabilities in handling vegetable produce (for example, the proposed terminal in Maputo).

## 5.2 Cold chain management

Cold chain management is crucial when handling perishable products, from the initial packing houses to the refrigerated container trucks that transport the produce to the shipping terminals, through to the storage facilities at these terminals (and their pre-cooling capability), onto the actual shipping vessels and their containers, and finally on to the importers and distributors that must clear the produce and transport it to the markets/retail outlets, etc. For every 10°C increase above the recommended temperature, the rate of respiration and ripening of produce can increase twice or even thrice. Related to this are the increasingly important traceability standards, which require an efficiently controlled supply chain and internationally accepted business standards.

## 5.3 Packaging

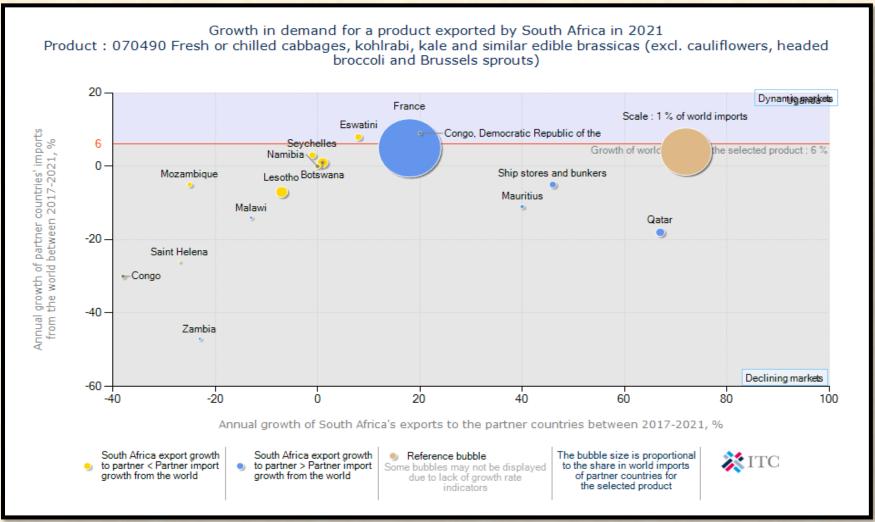
Packaging also plays a vital role in ensuring safe and efficient transport of a product and conforming to handling requirements, uniformity, recyclable materials specifications, phytosanitary requirements, proper storage needs and even attractiveness (for marketing purposes).

#### 6. COMPETITIVENESS OF SOUTH AFRICAN CABBAGE EXPORTS

Figure 25 below, shows that South Africa cabbage exports are growing faster than the world imports into Zambia, France and Democratic Rpublic of the. South Africa's performance in these countries is regarded as gains in the dynamic market. South Africa cabbage exports to Eswatini, Botswana and Seychelles are growing slower than the world imports to these countries. South Africa performance in these countries is regarded as a loss in the dynamic markets. South Africa's cabbage exports are declining faster than the world imports into Congo, Saint Helena and Lesotho. South Africa's exports are growing while the world imports are declining into Mauritius, Malawi and Qatar. South Africa has gained market share in these declining markets.

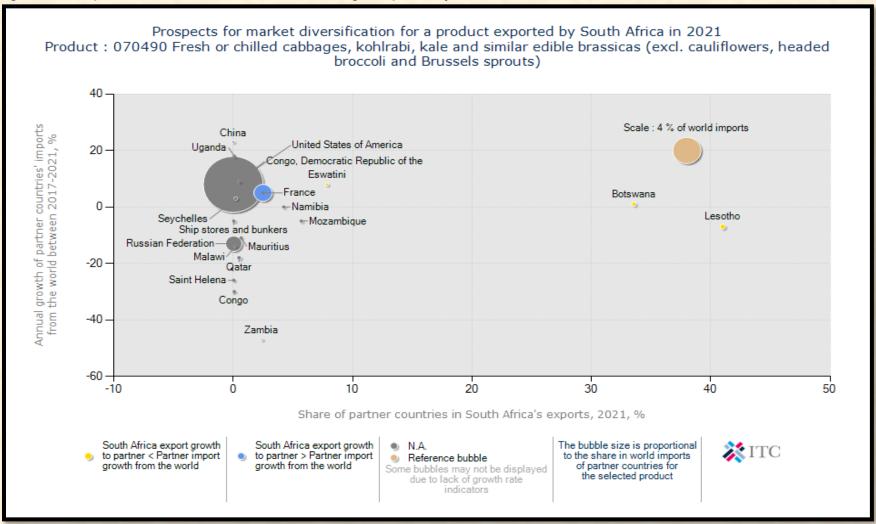
Figure 26 below, shows that Lesotho and Botswana were still the primary export markets for cabbage export originating from South Africa during 2021. These countries together, have commanded 74.58% of South Africa cabbage exports. Prospective exports markets for cabbage from South Africa are mainly in the United States of America. Other smaller markets exist in, France, Seychelles and Eswatini. However, if South Africa is to diversify its cabbage exports, the most lucrative market exists in Uganda as it has increased its cabbage imports from the world by 18% between 2017 and 2021 period. Zambia cabbage imports have decreased by 47%, Congo imports have dropped by 30% and Mozambigue imports eased lower by 5% between 2017 and 2021 period.

Figure 25: Growth in demand for cabbages exported by South Africa in 2021



Source: ITC Trade Map

Figure 26: Prospects for market diversification for cabbages exported by South Africa in 2021



Source: ITC Trade Map

#### 7. CHALLENGES

Cabbage is a difficult crop to grow because it is susceptible to many insects, diseases and pests. Ensuring a quality pack can be a problem for hand harvesters. Cabbage has to be harvested only at optimum maturity to meet potential buyers' quality standards. The amount of profit made from cabbage crop depends on how well it meets market specifications. Cabbage crop quality is frequently measured using physical and sensory criteria. Rising consumer concerns about food safety have come to impact the assessment of cabbage crop quality. Cabbage has been linked to outbreaks of some foodborne illnesses.

#### 8. ACKNOWLEDGEMENTS

#### The following organizations are to be acknowledged

## National Department of Agriculture, Land Reform and Rural Development

Directorate: Statistics and Economic Analysis
Private Bag X246
Pretoria
0001
Tel (012) 930 1134
Fax (012) 319 8031

## Trade and Industrial Policy Strategies (TIPS)

P.O. Box 11214 Hatfield 0028 Tel (012) 431 7900 Fax (012) 431 7910

### **Quantec Easy Data**

www.easydata.co.za

#### **Market Access Map**

www.macmap.org

www.trademap.org

**Disclaimer:** This document and its contents have been compiled by the Department of Agriculture, Land Reform and Rural Development for the purpose of detailing the cabbage industry. Anyone who uses this information does so at his/her own risk. The views expressed in this document are those of the Department of Agriculture, Land Reform and Rural Development with regard to the agricultural industry unless otherwise stated. The Department of Agriculture, Land Reform and Rural Development accepts no liability that can be incurred resulting from the use of this information