

A PROFILE OF THE SOUTH AFRICAN ONION MARKET VALUE CHAIN

2012

Directorate Marketing

Private Bag X 15

ARCADIA

0007

Tel: 012 319 8455/6

Fax: 012 319 8131

Email: MogalaM@daff.gov.za

www.daff.gov.za



**agriculture,
forestry & fisheries**

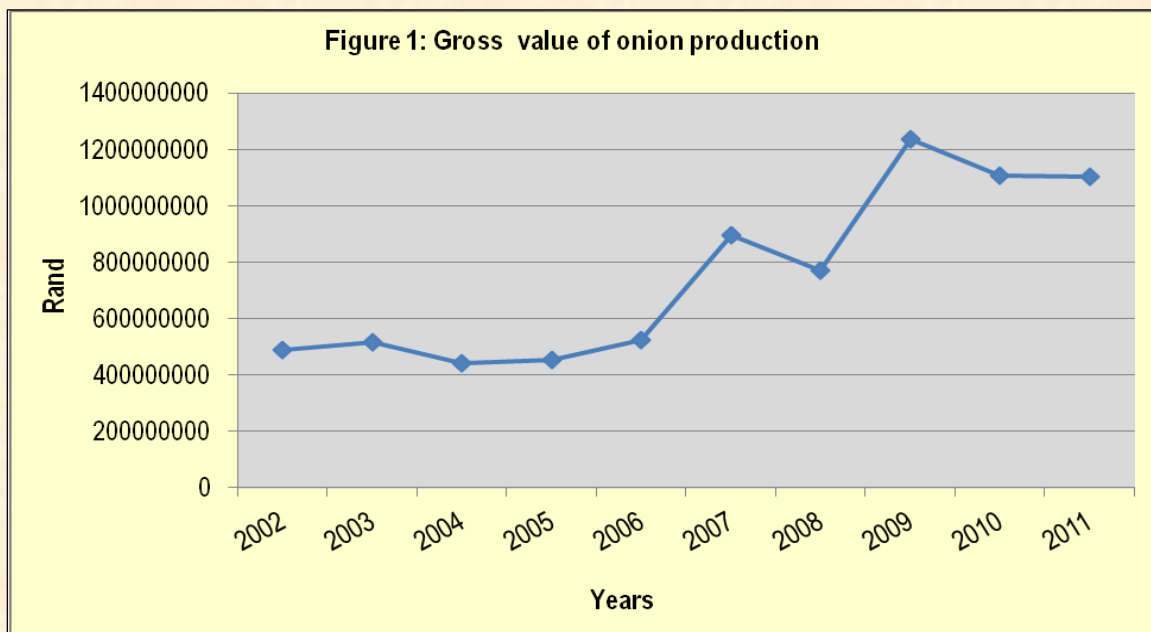
Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

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1. DESCRIPTION OF THE INDUSTRY

Onions are the third most popular vegetable in South Africa, after potatoes being first and tomatoes being second. Onion is widely used in cooking, they add flavor to dishes such as stew, soup and salads. Dry onion can be divided into two categories, which are fresh onion and storage onion. Fresh onion are available in late May or early June and can be purchased until end November. These onions have a higher water and sugar and lower pyruvate content. Consumers can recognize this onion by their lighter colour and thinner skin. The storage onion is available in the market in November just as the fresh onions are coming to an end. These onions have a darker and much thicker skin than that of fresh onion. Storage onions are firm, compact and are much less susceptible to bruising and shipping damage. Both of these types are commercially available in three colours; red, yellow and white.



Source: Statistics and Economic Analysis, DAFF

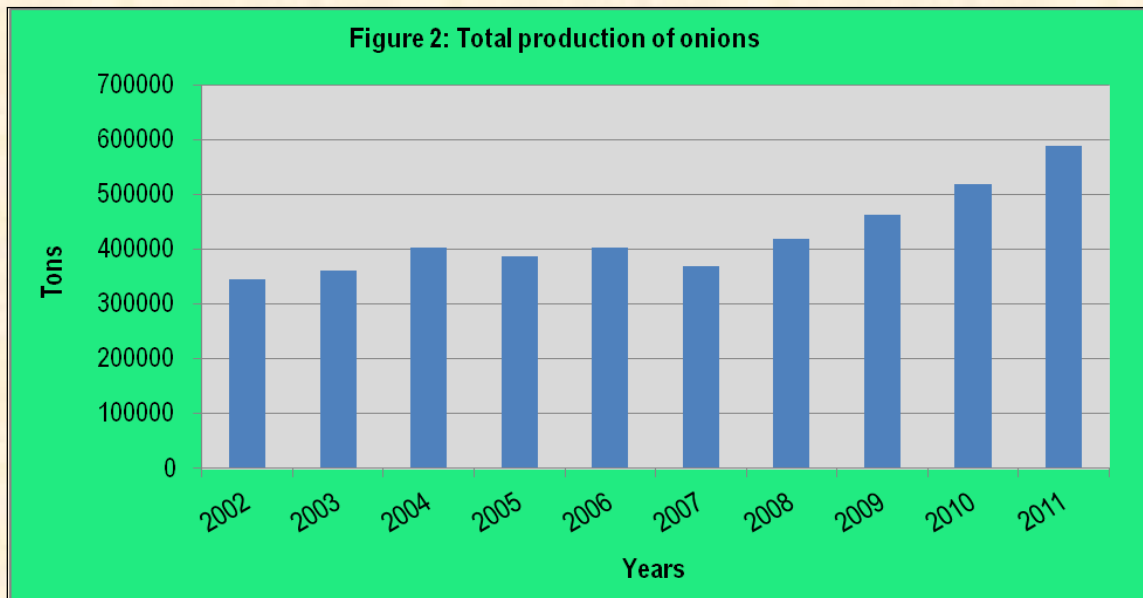
Figure 1 above illustrates the contribution of the onion industry to the gross value of agricultural production over 10 years period. From 2002 to 2003 onion industry contributions have increased by 6.3%. In 2004, the contribution dropped by 14.6% when compared to previous year and this can be attributed to the decline in prices received by the producers. The contribution increased steadily from 2005 to 2007. The contribution declined by 13% in 2008 due to significant decline in producer prices in the same year. In 2009, the onion contribution increased sharply by 60% due to high production volume which occurred while the prices were still favorable to the producers. Onion industry gross value has decreased by 10.5% in 2010 when compared to the previous year. There was a 0.4% drop in onion industry contribution during 2011 when compared to 2010 contribution.

1.1 Production areas

Onions are produced in almost all the provinces of the RSA, mainly in the Western Cape (Ceres), Northern Cape, North West and Limpopo province. According to the United Nations Food and Agriculture Organization (FAO), the leading onion producing countries are China, India, Australia, United States and Pakistan respectively

1.2 Production trend

Figure 2 below illustrates the production of onion for the past 10 years.

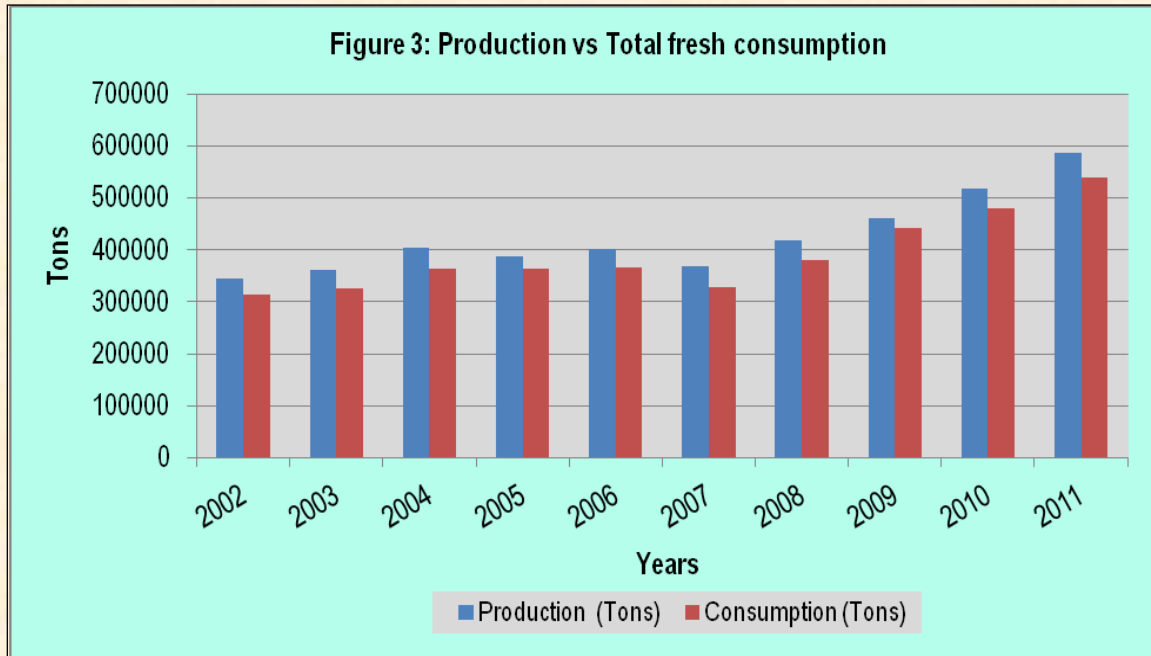


Source: Statistics and Economic Analysis, DAFF

The production of onion was fairly unstable over the period under review. Production increased steadily from 2003 to 2004 then declined slightly in 2005. In 2006 the production increased by 4% and decline by 8.5% in 2007. The decline in production can be attributed to increasing input costs and unfavorable weather conditions. From 2008, the production volumes increased steadily reaching a peak in 2011 production season. The production volumes increased by 13.5% during 2011, when compared to 2010 production season.

1.2 Consumption

Figure 3 below depicts local consumption of onion compared to the production over 10 years. The average onion consumption is approximately 390 659 tons per annum. This indicates that South Africa is self sufficient in terms of onion production and the surplus is also exported. From 2003 to 2006 the onion consumption per capita has been increasing steadily. In 2008 the consumption increased by 13.6% and this can be attributed to increase in production in the same year. In 2010, the consumption increased by 8% compared to the previous year. During 2011, the consumption volumes increased by 12.7% which can be contributed to 13.5% increase in production output. Globally, Libya has the highest consumption of onions.



Source: Statistics and Economic Analysis, DAFF

2. MARKET STRUCTURE

The onion industry operates in the deregulated environment where the prices are determined by the forces of demand and supply and there are no restrictions in the marketing of onions. The industry uses fresh produce markets, informal market, processors and direct selling to wholesalers and retailers as marketing channels. Onions are also exported to other countries through export agents and marketing companies. South Africa also imports onions from other countries.

2.1 Domestic markets and prices

The various modes through which onions are marketed are presented in Table 1.

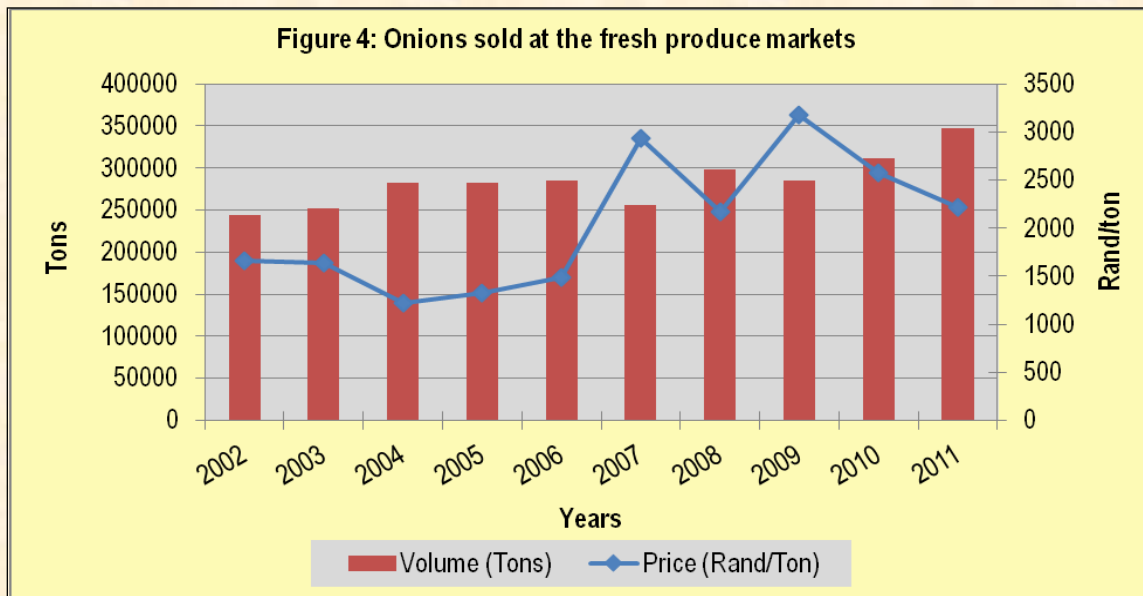
Table 1: Onion sold through different marketing channels

| Years | National Fresh Produce Market (Tons) | Exports (Tons) | Total Processing (Tons) |
|-------|---------------------------------------|----------------|-------------------------|
| 2002 | 244 661 | 25 969 | 3 278 |
| 2003 | 252 038 | 31 967 | 3 535 |
| 2004 | 282 718 | 34 736 | 4 400 |
| 2005 | 283 038 | 18 756 | 4 026 |
| 2006 | 284 958 | 32 571 | 4 144 |
| 2007 | 255 789 | 36 031 | 3 515 |
| 2008 | 298 721 | 31 382 | 5 424 |
| 2009 | 284 591 | 24 855 | 4 362 |

| Years | National Fresh Produce Market (Tons) | Exports (Tons) | Total Processing (Tons) |
|-------|---------------------------------------|----------------|-------------------------|
| 2010 | 311 117 | 35 347 | 3 594 |
| 2011 | 346 675 | 44 021 | 4 056 |

Source: Statistics and Economic Analysis, DAFF

Table 1 above illustrates that National Fresh Produce Markets remains an important channel for the sale of onions in South Africa. In 2011, 62% of onions were distributed through fresh produce markets and the remaining 38% represent direct sales to wholesalers, retailers, exports, processors and informal traders. The sales through national fresh produce market have increased by 2% when compared to 2010. In 2011, the onion exports increased by 24.5% compared to the previous year while the processed onion has also increased by 11.4%. The increase in exports and processing activities can be attributed to 13.5% increase in production output.

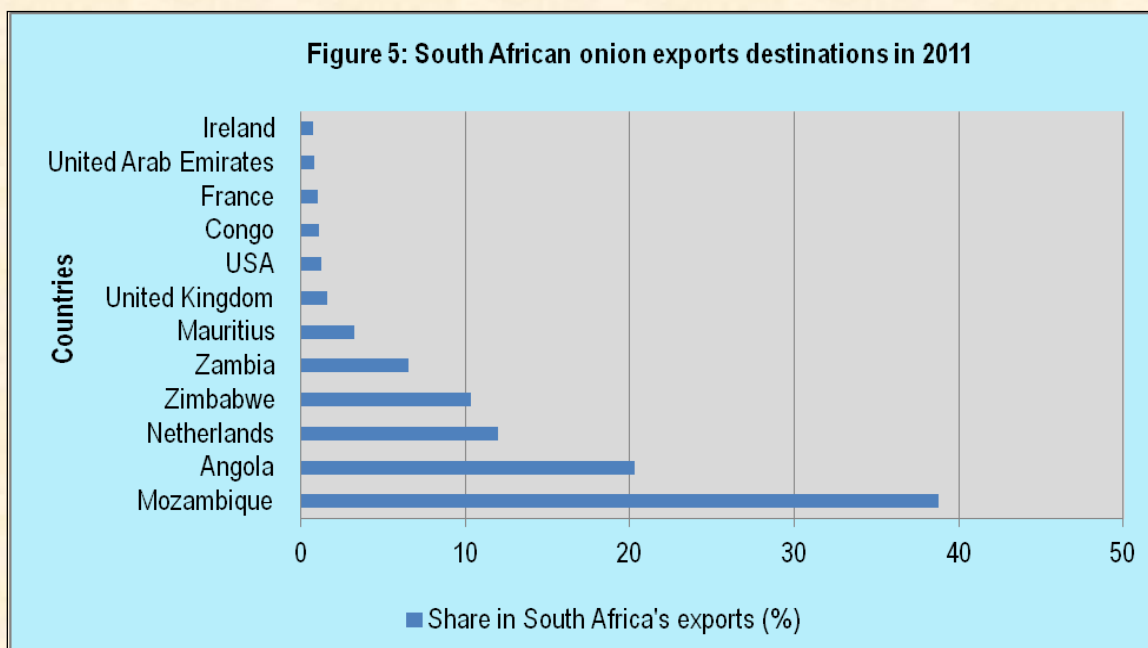


Source: Statistics and Economic Analysis, DAFF

Figure 4 above illustrates the sales of onions in the national fresh produce market for the past ten years. The market prices at the national fresh produce markets were relatively unstable. In 2004, the average price of onion dropped by 25% due to 12% increases in volumes supplied to the markets. Onion price traded higher in 2007 and the prices increased by 97% compared to 2006. The increase in prices can be attributed to 10% decrease in volumes of onion supplied in the same year. In 2008 the market prices dropped by 26% compared to the previous year. This can be attributed to increase in volumes supplied across the markets. The highest price was recorded in 2009 as onion volumes declines across the market. In 2010, market prices dropped by 19% due to 9.3% increase in volumes in the same year. The price continued to drop during 2011 as volumes supplied increased by 11.4%.

2.2 South Africa Onion Exports

In 2011, South Africa's onion exports represented 0.44% of world exports and its ranking in the world exports was 26. South Africa has increased its onion exports to the world but the ranking remained in the same at number 26. The South Africa onion exports were mainly destined for Mozambique, Zimbabwe, France, Mauritius, Angola, Netherlands and Zambia. More than 75% of South African onions were exported to neighboring African countries. Figure 5 below illustrate the major onion export destinations. Globally Netherlands, India, Mexico, China, United States of America and Egypt are top countries exporting onions. Egypt is the only African country which is among top ten onion exporters in the world. Figure 5 presents the various destinations for South Africa onion exports in 2011.



Source: Trade Map

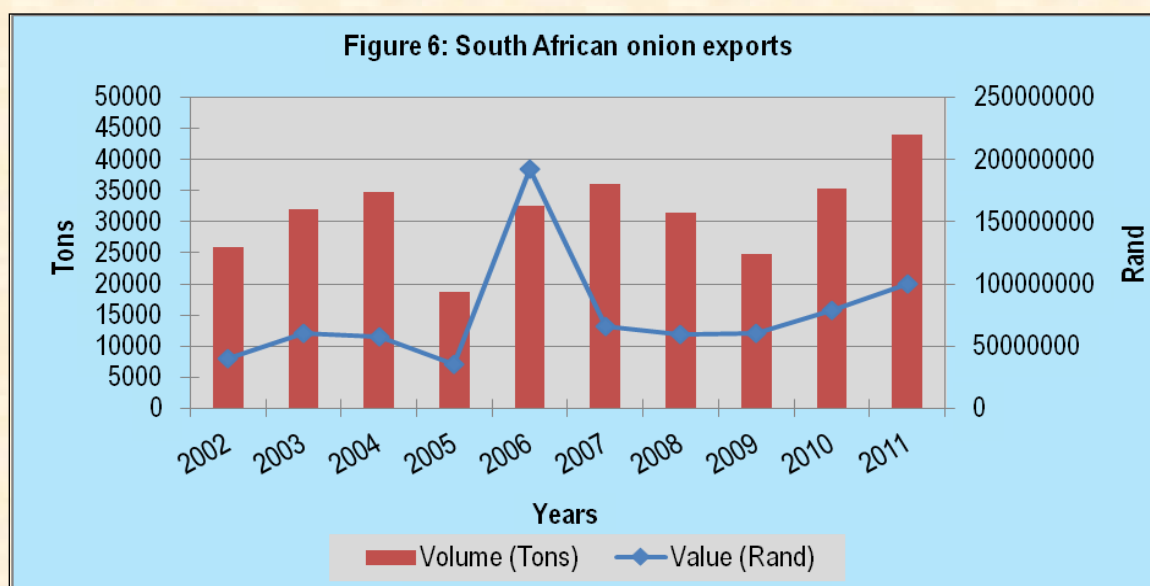
Table 2: South Africa's onion exports in 2011

| Importers | Exported value 2011 (USD thousand) | Share in South Africa's exports (%) | Exported quantity 2011 (tons) | Unit value (USD/unit) | Exported growth in value between 2007-2011 (% p.a.) | Exported growth in quantity between 2007-2011 (% p.a.) | Exported growth in value between 2010-2011 (% p.a.) | Ranking of partner countries in world imports |
|-------------|------------------------------------|-------------------------------------|-------------------------------|-----------------------|---|--|---|---|
| World | 13825 | 100 | 44063 | 314 | 12 | 5 | 28 | |
| Mozambique | 5364 | 38.8 | 19289 | 278 | 31 | 20 | 16 | 97 |
| Angola | 2812 | 20.3 | 6740 | 417 | 7 | -4 | 186 | 61 |
| Netherlands | 1658 | 12 | 5320 | 312 | 0 | -1 | 107 | 7 |
| Zimbabwe | 1419 | 10.3 | 5077 | 279 | 79 | 91 | -27 | 117 |

| Importers | Exported value 2011 (USD thousand) | Share in South Africa's exports (%) | Exported quantity 2011 (tons) | Unit value (USD/unit) | Exported growth in value between 2007-2011 (% p.a.) | Exported growth in quantity between 2007-2011 (% p.a.) | Exported growth in value between 2010-2011 (% p.a.) | Ranking of partner countries in world imports |
|----------------------|------------------------------------|-------------------------------------|-------------------------------|-----------------------|---|--|---|---|
| Zambia | 896 | 6.5 | 4128 | 217 | 24 | 14 | 25 | 172 |
| Mauritius | 444 | 3.2 | 748 | 594 | 213 | 205 | -59 | 60 |
| United Kingdom | 225 | 1.6 | 953 | 236 | -35 | -35 | 56 | 2 |
| USA | 163 | 1.2 | 7 | 23286 | | | | 1 |
| Congo | 157 | 1.1 | 284 | 553 | 18 | 32 | 101 | 76 |
| France | 138 | 1 | 516 | 267 | 10 | 24 | -2 | 13 |
| United Arab Emirates | 114 | 0.8 | 191 | 597 | -23 | 11 | | 14 |
| Ireland | 100 | 0.7 | 193 | 518 | -9 | -23 | 525 | 20 |
| Saint Helena | 65 | 0.5 | 72 | 903 | 13 | 2 | 14 | 182 |
| DRC | 47 | 0.3 | 82 | 573 | 14 | 6 | -8 | 82 |

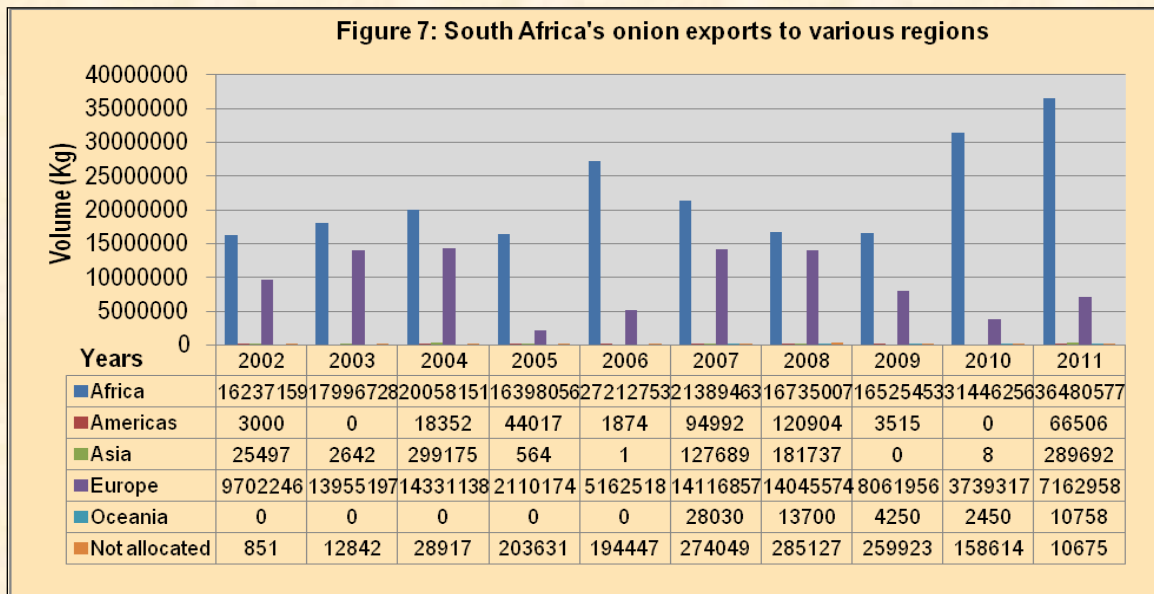
Source: ITC Trade Map

Table 2 indicates that during 2011, South Africa exported higher quantities of onions to Mozambique, Angola, Netherlands and Zimbabwe. South Africa's onion exports to the Angola have decreased by 4% in quantity between 2007 and 2011. South Africa's exports to United Kingdom have decreased by 35% in value and 35% in quantity between 2007 and 2011 period. South Africa's onion exports to Zimbabwe have increased by 79% in value and 91% quantity between 2007 and 2011 period. This shows that Zimbabwe has started trading again.



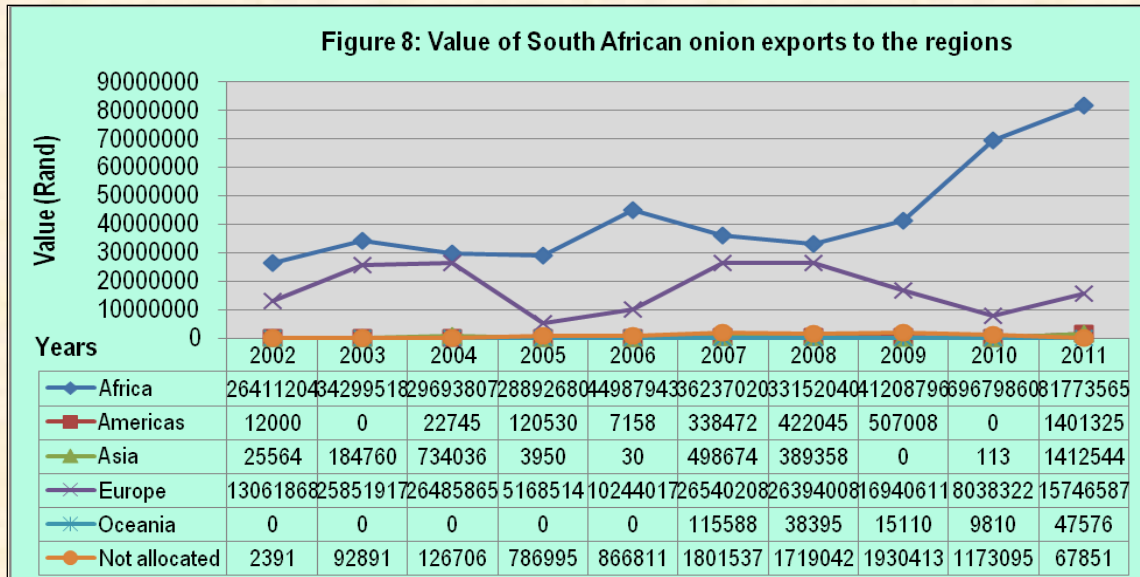
Source: Quantec Easydata

Figure 6 above illustrates onion exports from South Africa for the past 10 years. From 2003 to 2004 onion export increased steadily. The lowest export volume was recorded in 2005 due to a drop in production output in the same year. In 2006, onion exports significantly increased by 74% it was also more profitable to export in the same year. There was a 6% decrease in export volume in 2009, despite the high production volumes. In 2010 onion exports have increased by 42.2% when compared to 2009. Onion exports increased by 24% during 2011, the increase in exports can be attributed to 13.5% increase in the domestic production output. Generally, it was relatively less profitable to export onions except for 2006, 2009 to 2011 since higher export values were recorded for smaller volumes exported.



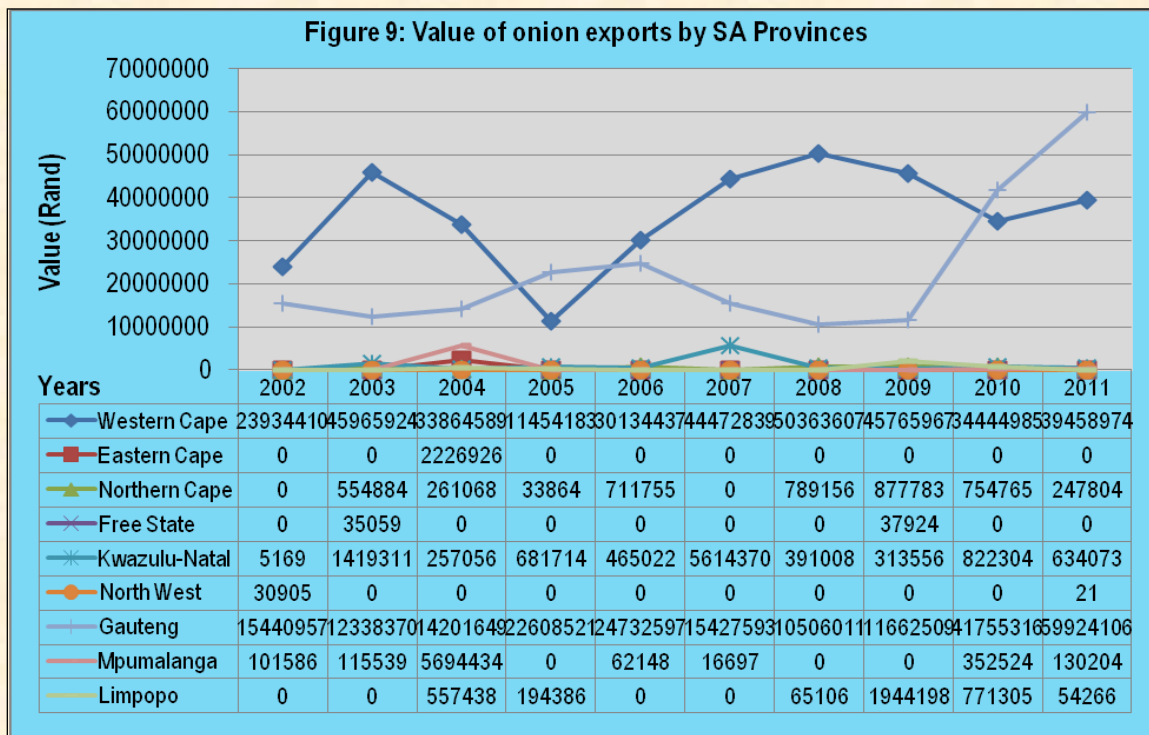
Source: Quantec Easydata

Figure 7 above illustrates the onion exports from the regions in 10 year period. South Africa exports high quantities of onion to African countries (Mozambique, Mauritius, Kenya, Congo, Angola, Seychelles, Zambia and Zimbabwe). European countries (Netherlands, Belgium, Germany, Spain, France, United Kingdom, Ireland, Italy and Poland) are the second export market for onion originating from South Africa. Considerable amount of onion were exported to Americas countries (Caribbean, Antigua and Barbuda, Brazil, Argentina and United States) and Asian countries (India, United Arab Emirates and Qatar). A fraction of South Africa onion exports was not allocated to any region. In 2011, South Africa exports market was still in African and European market. The exports to Americas, Asia and Oceania were less significant when compared to Africa and European regions



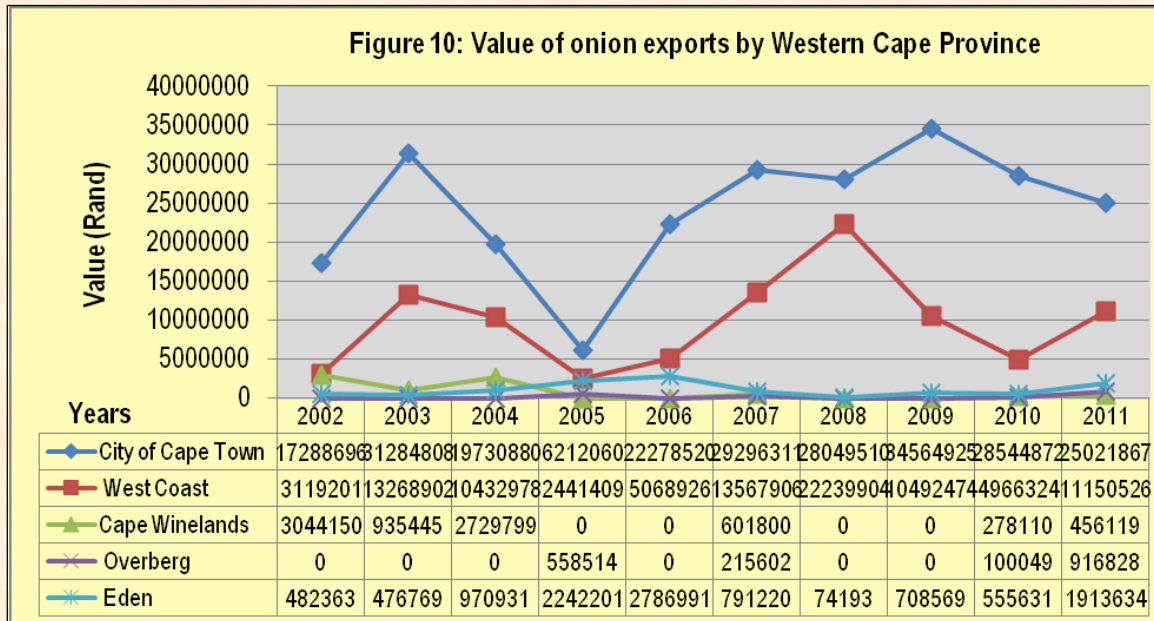
Source: Quantec Easydata

Figure 8 above illustrate the value of South Africa onion exports earned from the regions. It was more profitable to export onion to European region since high export value was recorded for low volumes exported. African region has also recorded high exports values as high volumes were exported to the region. During 2011, it was more profitable to export to Americas region when compared to the other regions.



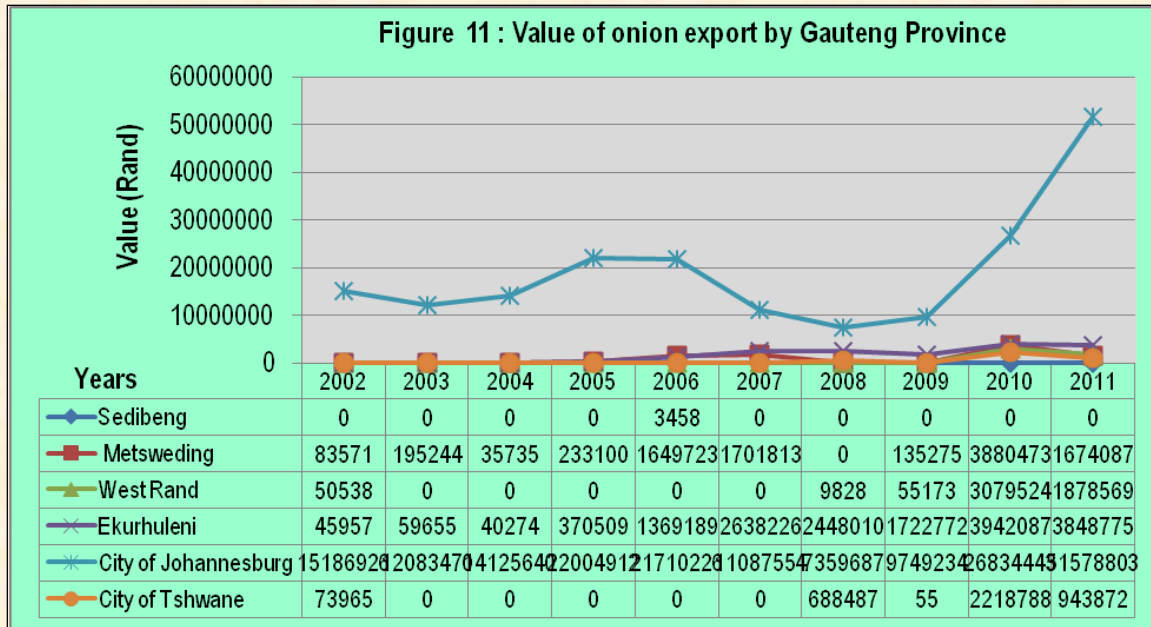
Source: Quantec Easydata

Figure 9 above illustrates that the highlight of onion exports were that of Western Cape and Gauteng. Northern Cape, Kwa-Zulu Natal and Limpopo province who contributed to onion exports to a lesser extent. The high exports by Western Cape and Gauteng province can be attributed to the export exit points, situated in these provinces. In 2010, onion exports for Western Cape has decrease while the export value for Gauteng province has increased significantly. The highest export value was recorded in 2008 for Western Cape Province. In 2011, export values for Western Cape and Gauteng provinces has increased while the export values for Northern Cape, Kwazulu Natal , Mpumalanga and Limpopo have considerably dropped. The following figures (Figure 10-18) show the value onion exports from the various districts in all the provinces in South Africa.



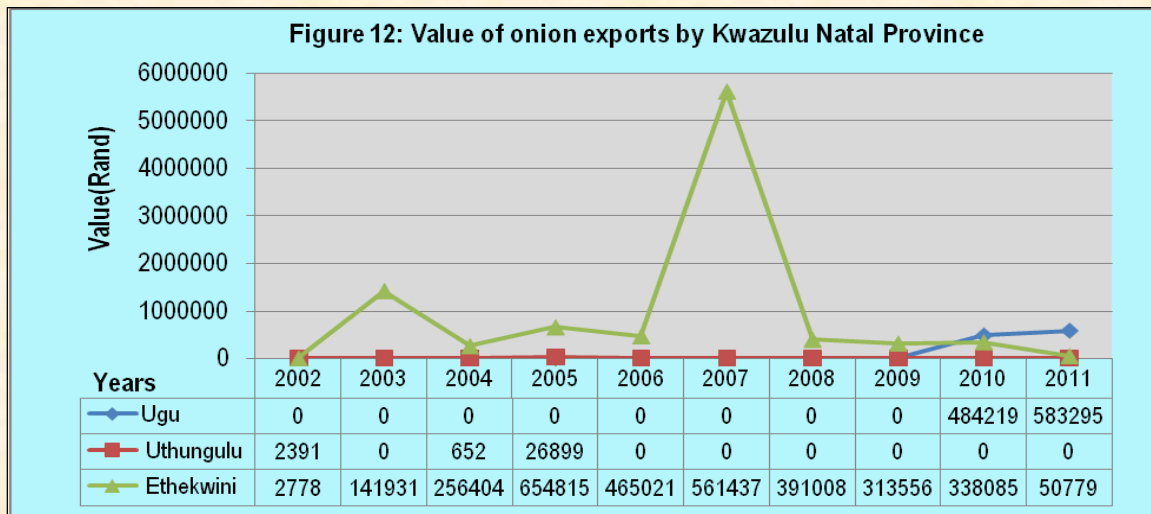
Source: Quantec Easydata

Figure 10 above indicates that onion exports by Western Cape province were mainly from City of Cape Town and West Coast. Eden, Cape Winelands and Overberg district municipalities have contributed to lesser extent. High export from Cape Town municipality can be attributed to the Cape Town harbour export exit point. The highest export value was in 2009 for the City of Cape Town and in 2008 for West Coast district municipality. In 2011, Export value for City of Cape Town has decreased while West Coast, Cape Winelands and Eden municipalities have increased their export values.



Source: Quantec Easydata

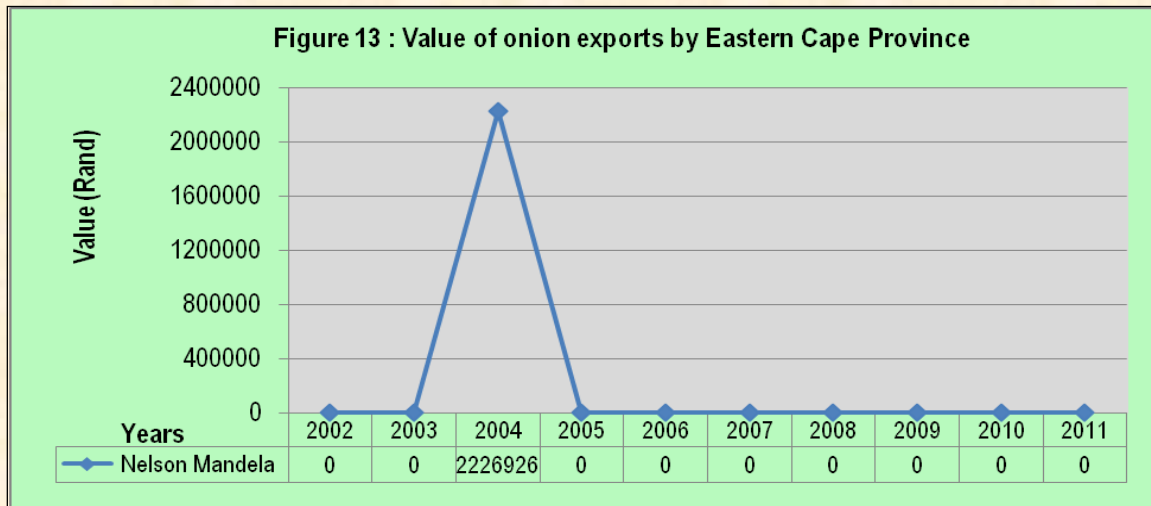
Figure 11 above shows that onion exports by Gauteng province were mainly from City of Johannesburg, Ekurhuleni and Metsweding district. OR Tambo International Airport serves as exports exit point from Gauteng province. In 2010, export values for Metsweding, West Rand, Ekurhuleni and City of Tshwane have increased significantly. In 2011, City of Johannesburg continued to be a leading municipality in onion export and the municipality has recorded its highest value in a period of 10 years.



Source: Quantec Easydata

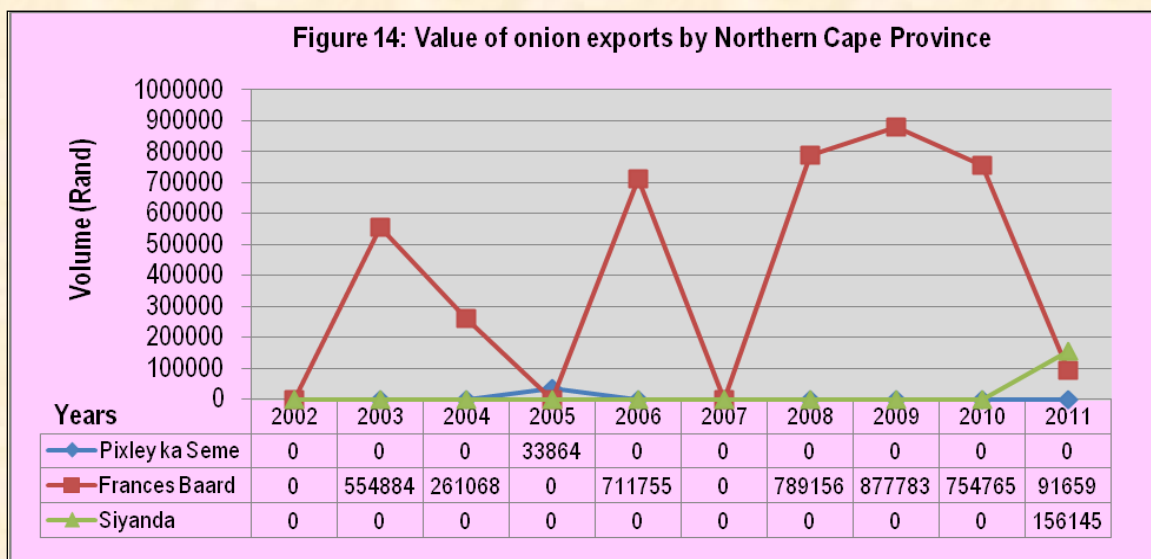
As can be seen on the above Figure 12, it is clear that onion exports from the Kwazulu Natal province were mainly from Ethekwini district which can be attributed to Durban Harbour export exit point and the highest exports were recorded in 2007. In 2008 and 2009 there was a significant decline in export value recorded for Ethekwini district. Uthungulu district contributed to onion exports to a lesser extent. Ugu district has recorded an export value for the first time in 2010 and

during 2011, the export value recorded for this municipality has increased significantly. Export value for Ethekwini municipality has dropped significantly during 2011.



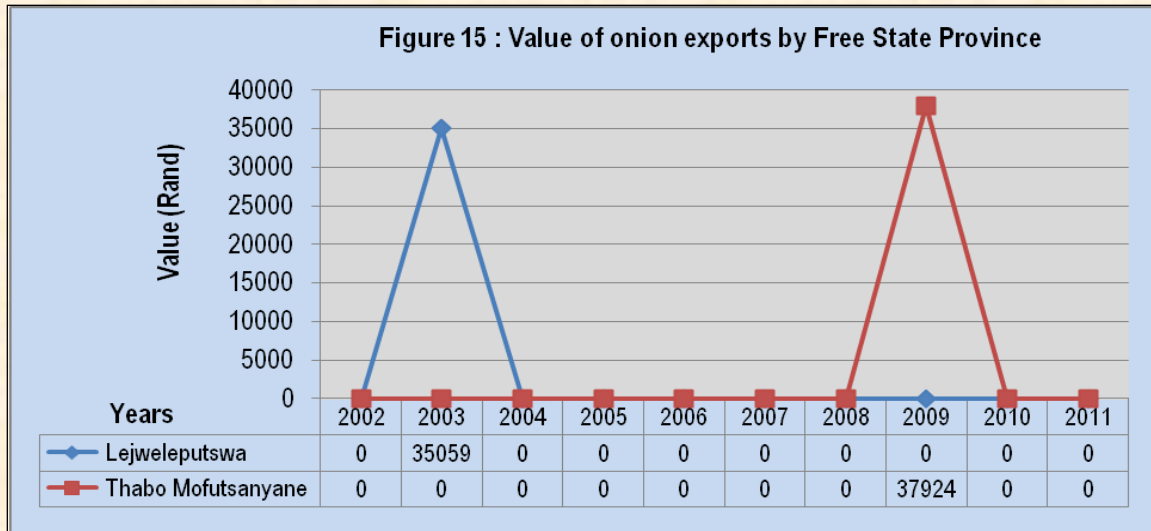
Source: Quantec Easydata

Figure 13 above, indicates that Eastern Cape province exported onion in 2004 from Nelson Mandela district municipality and in other years the province has recorded zero trade.



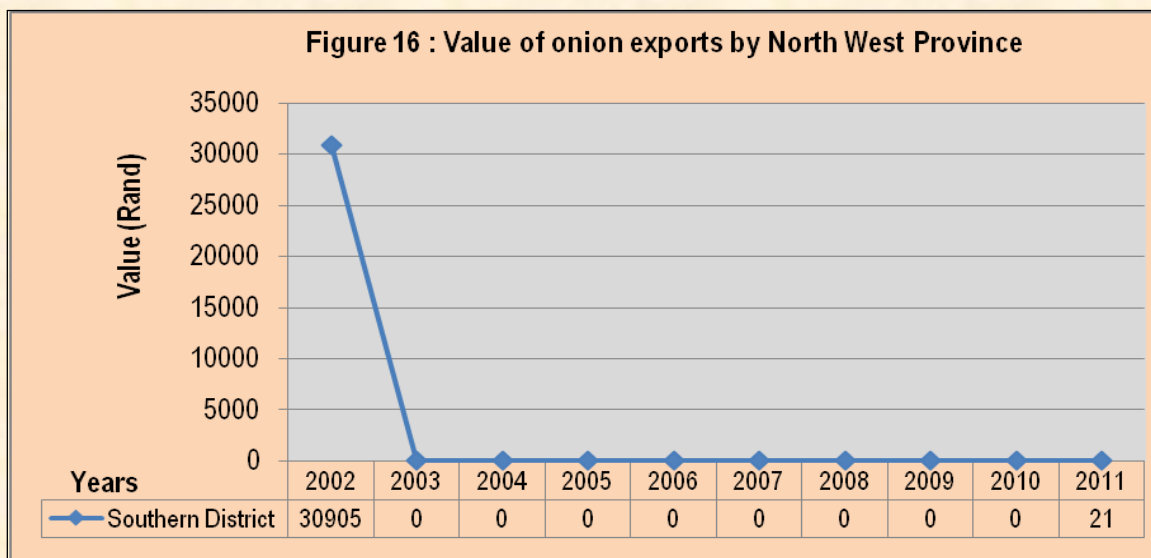
Source: Quantec Easydata

From Figure 14 above, it is clear that onion exports from Northern Cape province were from Frances Baard district. Pixley ka Seme has recorded onion export value only in 2005. The highest export value was recorded in 2009 for Frances Baard. In 2011, onion export value for Frances Baard has significantly dropped while Siyanda has recorded its first export value.



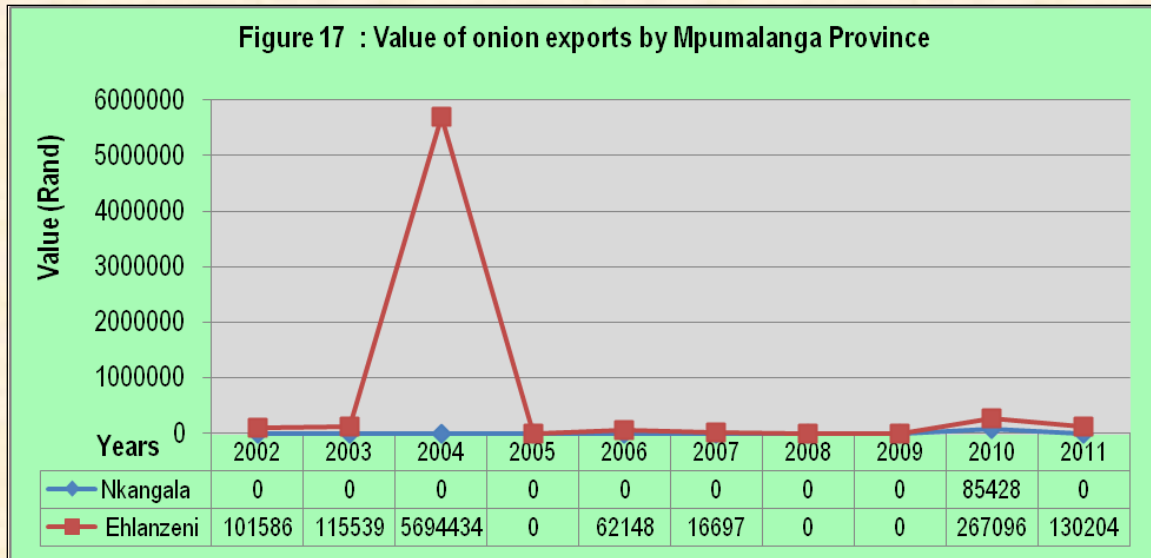
Source: Quantec Easydata

Figure 15 above shows that onion exports by Free State province were from Thabo Mofutsanyane in 2003 and Lejweleputswa district municipalities in 2009. In the other years Free State province has recorded zero trade for onions.



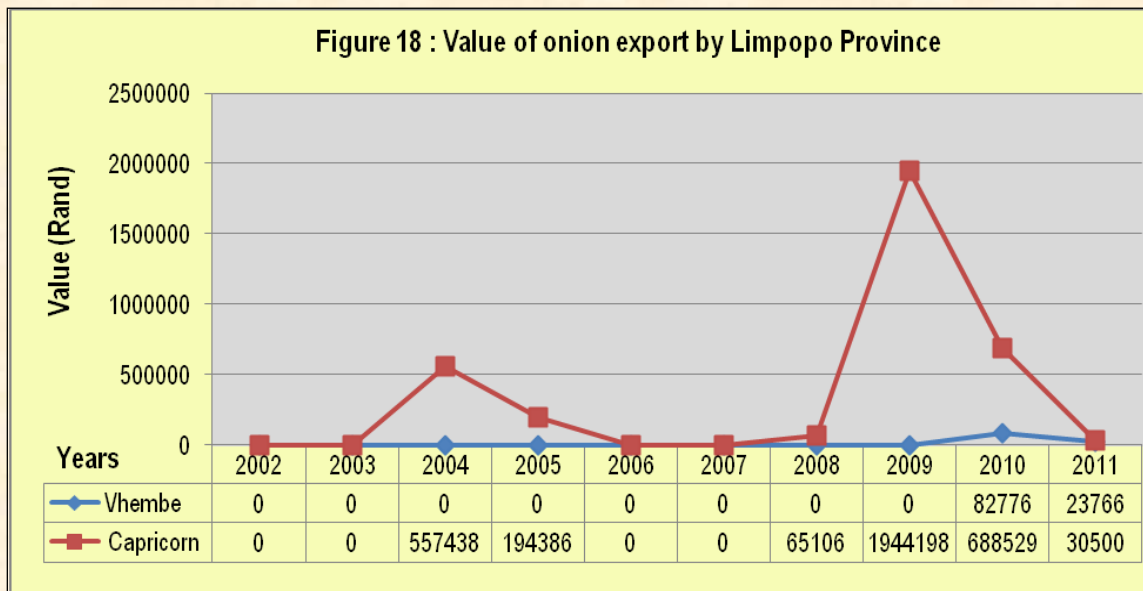
Source: Quantec Easydata

Figure 16 above illustrates that the onion exports from North West province were recorded in 2002 from Southern district municipality. From 2003 to 2010 the province has recorded a zero trade for onions. Onion export value recorded during 2011 was insignificant.



Source: Quantec Easydata

Figure 17 above shows that onion exports by Mpumalanga province were mainly from Ehlanzeni district municipality and highest exports value was recorded in 2004. In 2008 and 2009 the province has recorded a zero trade. In 2010, Nkangala district municipality has recorded its first export value in 10 year period. In 2011, export value was recorded for Ehlanzeni municipality.



Source: Quantec Easydata

Figure 18 above shows that the onion exports by Limpopo province originated mainly from Capricorn District and the highest export value was recorded in 2009. In 2010, Limpopo province onion exports originated from Capricorn and Vhembe districts. In 2011, export values for both Vhembe and Capricorn districts have significantly dropped.

2.3 Share analysis

Table 3 below illustrates the provincial share towards national onion exports. The Western Cape and Gauteng provinces recorded the greatest shares of onion exports from South Africa. Kwazulu Natal, Mpumalanga and Limpopo provinces have contributed to a lesser extent. High onion exports shares by Western Cape and Gauteng provinces can be attributed to registered exporters and export exit point located in these provinces. In 2010, Gauteng onion export share has increased from 19.24% to 52.92% while Western Cape share has decreased from 75.52% to 43.66% when comparing to 2009 export shares. In 2011, Gauteng export share has increased by 6.74% while Western Cape export share has dropped by 4.38% when compared to 2010 export share.

Table 3: Share of provincial onions exports to the RSA onion exports

| Years Province | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Western Cape | 60.57 | 76.07 | 59.35 | 32.75 | 53.71 | 67.86 | 81.08 | 75.52 | 43.66 | 39.28 |
| Eastern Cape | 0 | 0 | 3.90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Northern Cape | 0 | 0.92 | 0.46 | 0.10 | 1.27 | 0 | 1.27 | 1.45 | 0.96 | 0.25 |
| Free State | 0 | 0.06 | 0 | 0 | 0 | 0 | 0 | 0.06 | 0 | 0 |
| Kwazulu-Natal | 0.01 | 2.35 | 0.45 | 1.95 | 0.83 | 8.57 | 0.63 | 0.52 | 1.04 | 0.63 |
| North West | 0.08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gauteng | 39.08 | 20.42 | 24.89 | 64.65 | 44.08 | 23.54 | 16.91 | 19.24 | 52.92 | 59.66 |
| Mpumalanga | 0.26 | 0.19 | 9.98 | 0 | 0.11 | 0.03 | 0 | 0 | 0.45 | 0.13 |
| Limpopo | 0 | 0 | 0.98 | 0.56 | 0 | 0 | 0.10 | 3.21 | 0.98 | 0.05 |
| RSA | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Easydata

The following tables (Table 4-12) show the share of provincial district onion exports to the total national onion exports.

Table 4: Share of district onion exports to the Western Cape provincial onion exports (%)

| Years District | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| City of Cape Town | 72.23 | 68.06 | 58.26 | 54.23 | 73.93 | 65.87 | 55.69 | 75.53 | 82.87 | 63.41 |
| West Coast | 13.03 | 28.87 | 30.81 | 21.31 | 16.82 | 30.51 | 44.16 | 22.93 | 14.42 | 28.26 |
| Cape Winelands | 12.72 | 2.04 | 8.06 | 0 | 0 | 1.35 | 0 | 0 | 0.81 | 1.16 |
| Overberg | 0 | 0 | 0 | 4.88 | 0 | 0.48 | 0 | 0 | 0.29 | 2.32 |
| Eden | 2.02 | 1.04 | 2.87 | 19.58 | 9.25 | 1.78 | 0.15 | 1.55 | 1.61 | 4.85 |
| Western Cape | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Easydata

Table 4 above indicates that City of Cape Town and West Coast commanded highest shares of onion exports from Western Cape province. Cape Winelands and Eden districts contributed to onion exports to a lesser extent. Cape Town harbour serves as an exit point of onion export from the Western Cape province. In 2010, City of Cape Town has increased its onion export share from 75.53 to 82.87% while West Coast onion export share has decline from 22.93% to 14.42%. During 2011, City of Cape export share has dropped by 19.46% while West Coast has increase its export share by 13.84%.

Table 5: Share of district onion exports to the Gauteng provincial onion exports (%)

| Year Districts | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Sedibeng | 0 | 0 | 0 | 0 | 0.01 | 0 | 0 | 0 | 0 | 0 |
| Metsweding | 0.54 | 1.58 | 0.25 | 1.03 | 6.67 | 11.03 | 0 | 1.16 | 9.71 | 2.79 |
| West Rand | 0.33 | 0 | 0 | 0 | 0 | 0 | 0.09 | 0.47 | 7.71 | 3.13 |
| Ekurhuleni | 0.30 | 0.48 | 0.28 | 1.64 | 5.54 | 17.10 | 23.30 | 14.77 | 9.87 | 6.42 |
| City of Johannesburg | 98.35 | 97.93 | 99.46 | 97.33 | 87.78 | 71.87 | 70.05 | 83.59 | 67.16 | 86.07 |
| City of Tshwane | 0.48 | 0 | 0 | 0 | 0 | 0 | 6.55 | 0 | 5.55 | 1.58 |
| Gauteng | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Easydata

Table 5 above shows that City of Johannesburg commanded the greatest share of onion exports from Gauteng province. Ekurhuleni and Metsweding district Municipalities has commanded low shares of onion exports from Gauteng province. OR Tambo international Airport renders exit point of onions exports from Gauteng Province. Metsweding, West Rand and City of Tshwane have increased their onion export share in 2010 when comparing to 2009 production year. In 2011, City of Johannesburg continued to dominate in onion exports by commanding 86.07%.

Table 6: Share of district onion exports to the Kwazulu Natal provincial onion exports (%)

| Year District | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---------------|-------|------|-------|-------|------|------|------|------|-------|-------|
| Ugu | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58.89 | 91.99 |
| Uthungulu | 46.26 | 0 | 0.25 | 3.95 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ethekwini | 53.74 | 100 | 99.75 | 96.05 | 100 | 100 | 100 | 100 | 41.11 | 8.01 |
| KwaZulu Natal | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Easydata

Table 6 above illustrates that Ethekwini districts commanded the greatest share of onions export from Kwazulu Natal province. The greatest share by Ethekwini can be attributed to Durban harbour which renders exports exit point. In 2010, Ugu district municipality has commanded 58.89% share for onion export. This was Ugu district first record of onion exports in 10 year period. In 2011, Ugu commanded 91.99% share of onion export which was an increase of 33.1% when compared to 2010 share. From 2006 to 2009 Ethekwini has commanded 100% share in onion export share but in 2010, the district export share has dropped from 100% to 41.11%. Ethekwini export share continued to drop during 2011, and the municipality has commanded only 8.01% share.

Table 7: Share of district onion exports to the Eastern Cape Provincial onion exports (%)

| Year Province | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|----------------|------|------|------|------|------|------|------|------|------|------|
| Nelson Mandela | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eastern Cape | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Calculated from Quantec Easydata

In 2004, Nelson Mandela municipality commanded 100% share of onion exports from Eastern Cape Province. In other years, the province has recorded zero trade.

Table 8: Share of district onion exports to the Northern Cape provincial onion exports (%)

| Year District | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|----------------|------|------|------|------|------|------|------|------|------|-------|
| Pixley ka Seme | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 |
| Frances Baard | 0 | 100 | 100 | 0 | 100 | 0 | 100 | 100 | 100 | 36.99 |
| Siyanda | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63.01 |
| Northern Cape | 0 | 100 | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Easydata

Table 8 above indicates that, Frances Baard district municipality commanded 100% share of onion exports from Northern Cape province except for 2002, 2005, 2007 and 2011. In 2005, Pixley Ka Seme commanded 100% share of onion exports from Northern Cape province. In 2011, Siyanda district commanded 63.01% share and Frances Baard has commanded 36.99% share of onion exports from Northern Cape.

Table 9: Share of district onion exports to the Free State provincial onion exports (%)

| Year Province | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------------|------|------|------|------|------|------|------|------|------|------|
| Lejweleputswa | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Thabo Mofutsanyane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |
| Free State | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 |

Source: Calculated from Quantec Easydata

Table 9 above illustrates onion exports share from Free State province. In 2003, Lejweleputswa has commanded 100% and from 2004 to 2011, this district has recorded zero trade. Thabo Mofutsanyane district commanded a 100% share of onion exports in 2009 while from 2004 to 2008 and 2011; this district has recorded zero trade.

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

| Year Province | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-------------------|------|------|------|------|------|------|------|------|------|------|
| Southern District | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| North West | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |

Source: Calculated from Quantec Easydata

Table shows that in 2002 and 2011 Southern district has commanded 100% share of onion export share from North West province, in other years the province has recorded zero trade in onion.

Table 11: Share of district onion exports to the Mpumalanga provincial onion exports (%)

| Year Province | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---------------|------|------|------|------|------|------|------|------|-------|------|
| Nkangala | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.23 | 0 |
| Ehlanzeni | 100 | 100 | 100 | 0 | 100 | 100 | 0 | 0 | 75.77 | 100 |

| | | | | | | | | | | |
|-------------------|-----|-----|-----|---|-----|-----|---|---|-----|-----|
| Mpumalanga | 100 | 100 | 100 | 0 | 100 | 100 | 0 | 0 | 100 | 100 |
|-------------------|-----|-----|-----|---|-----|-----|---|---|-----|-----|

Source: Calculated from Quantec Easydata

Figure 11 above indicates that from 2002 to 2004 and in 2006, 2007 and 2011, Ehlanzeni commanded 100% share of onion exports from Mpumalanga province. In 2010 Ehlanzeni has commanded 75.77% while Nkangala has commanded 24.23% share of onion exports from Mpumalanga province.

Table 12: Share of district onion exports to the Limpopo provincial onion exports (%)

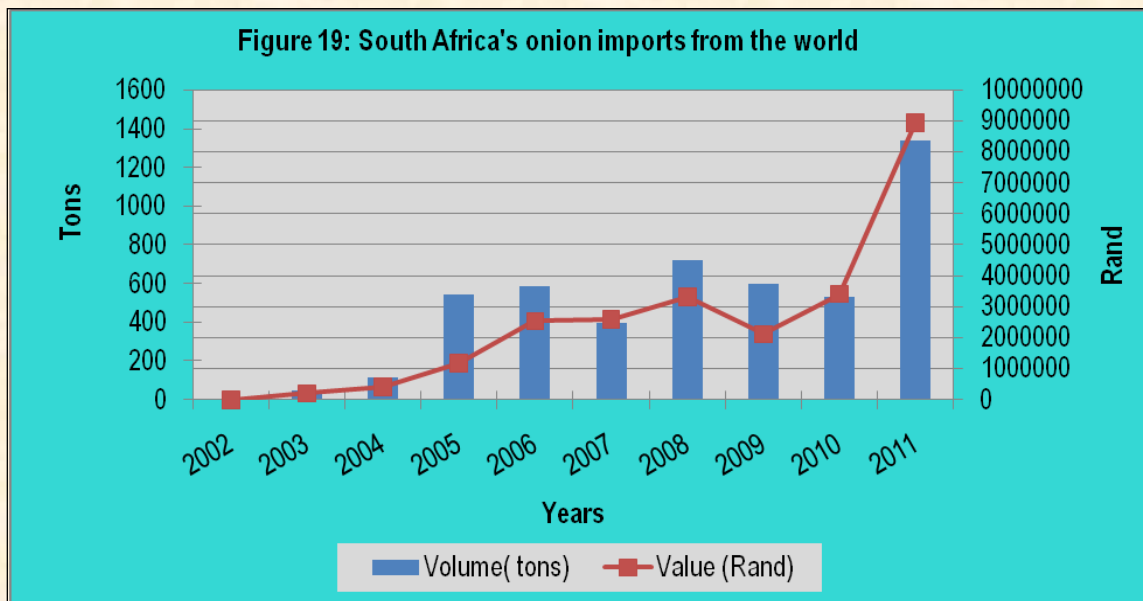
| Year Province | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---------------|------|------|------|------|------|------|------|------|-------|-------|
| Vhembe | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10.73 | 43.80 |
| Capricorn | 0 | 0 | 100 | 100 | 0 | 0 | 100 | 100 | 89.27 | 56.20 |
| Limpopo | 0 | 0 | 100 | 100 | 0 | 0 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Easydata

Figure 12 above indicates that in 2004, 2005, 2008 and 2009, Capricorn district municipality has commanded 100% share of onion export from Limpopo province. In 2011, Vhembe district commanded 43.80% share and Capricorn has commanded 56.20% of onion exports from Limpopo province.

2.4 South Africa's onion imports

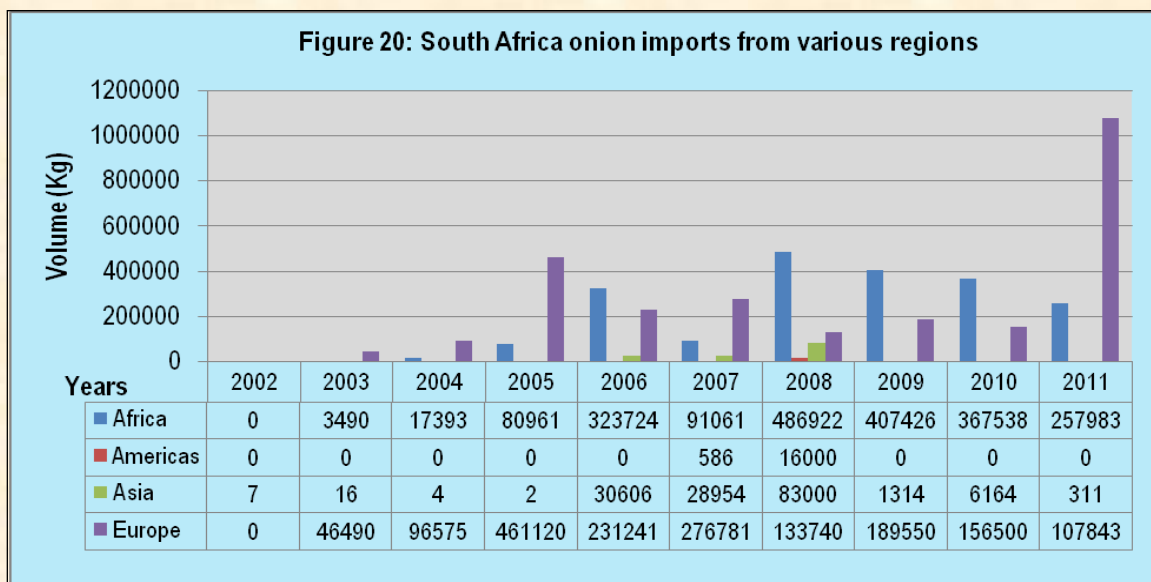
In 2011, South Africa's imports represented 0.04% of world imports for onion and its ranking in world imports was 121. In 2011, South Africa imported onions mainly from Spain, Kenya, Egypt, Netherlands, France and, United Kingdom. Globally, United States of America, United Kingdom, Russian Federation, Germany, Malaysia and Japan are top onion importers.



Source: Quantec Easydata

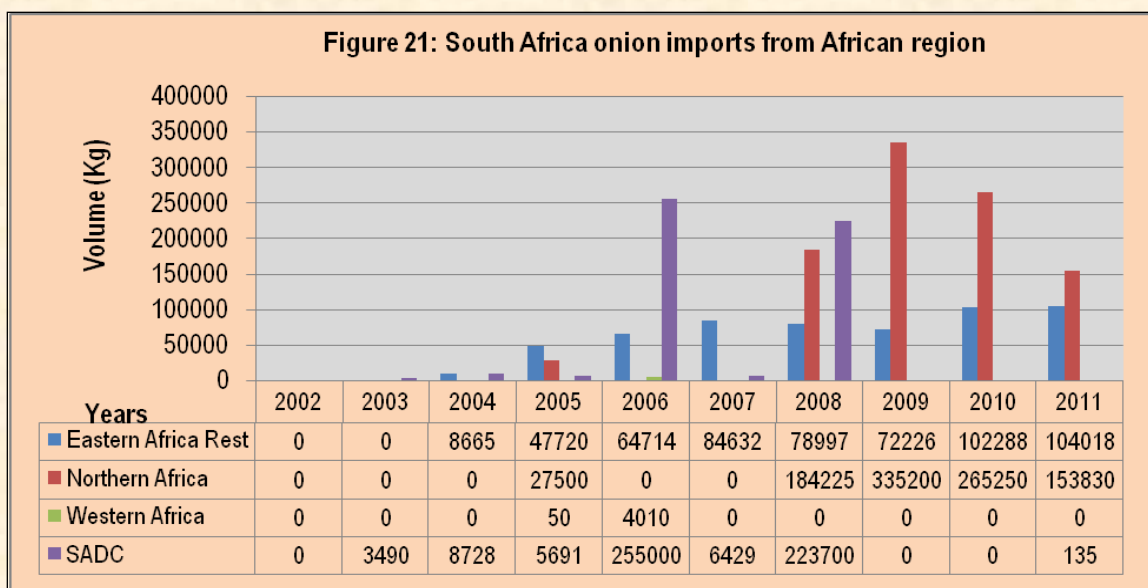
Figure 19 shows that onion imports fluctuated from 2002 until 2011. From 2002 to 2004 onion imports were significant low, which can be attributed to high domestic production in the same years. In 2005, onion imports increased by 376% when compared to 2004 imports and this can be attributed to slight decline in domestic output in the same year. In 2008, onion import increased by 81% despite high domestic production. This can be attributed to cheaper in imports in the same year. In 2009, onion imports decreased by 16.8% and this can be attributed to increased domestic production in the same year.

In 2010, South Africa onion imports have decreased by 11% compared to 2009. This can be attributed to a 12% increase in the domestic production of onions. Onion imports increased by 152% in 2011 despite a 13.5% increase in the domestic production. It was more expensive to import onions in 2002, 2007, 2010 and 2011 as fewer volumes were imported at a higher value.



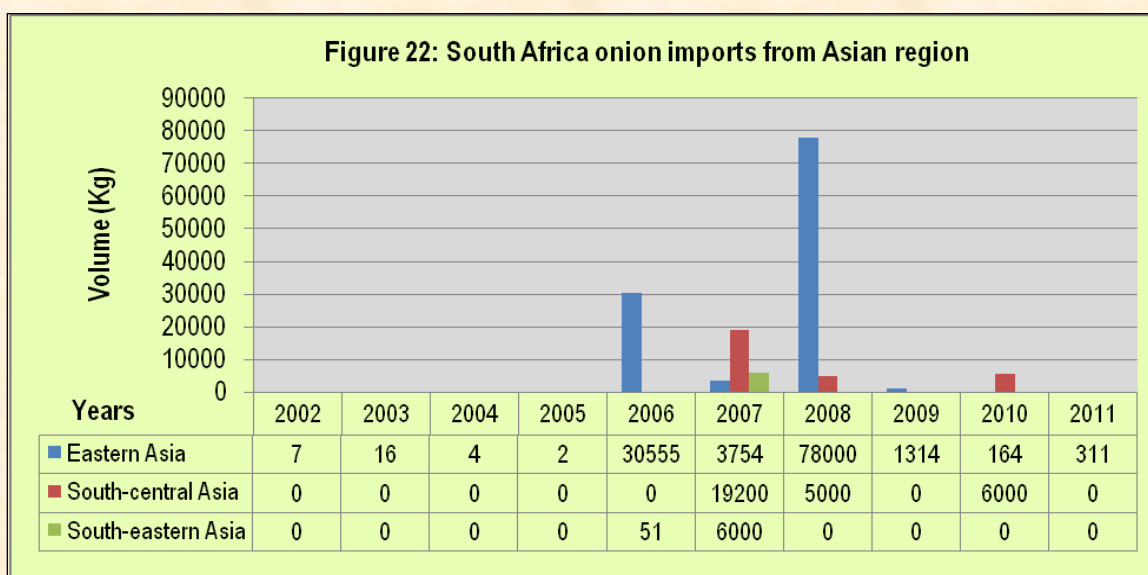
Source: Quantec Easydata

Figure 20 above illustrates the regions that supplied onions to South Africa over 10 years period. South Africa imports most of onions from African region and Europe. Asia supplied considerable volumes of onion from 2006 to 2008. Americas supplied South Africa with onion in 2007 and 2008, in other years there were no trade between South Africa and Americas region. In 2010, South Africa's onion imports from Africa and Europe have dropped. In 2011, imports from Europe have significantly increased while the imports from Asia were less significant.



Source: Quantec Easydata

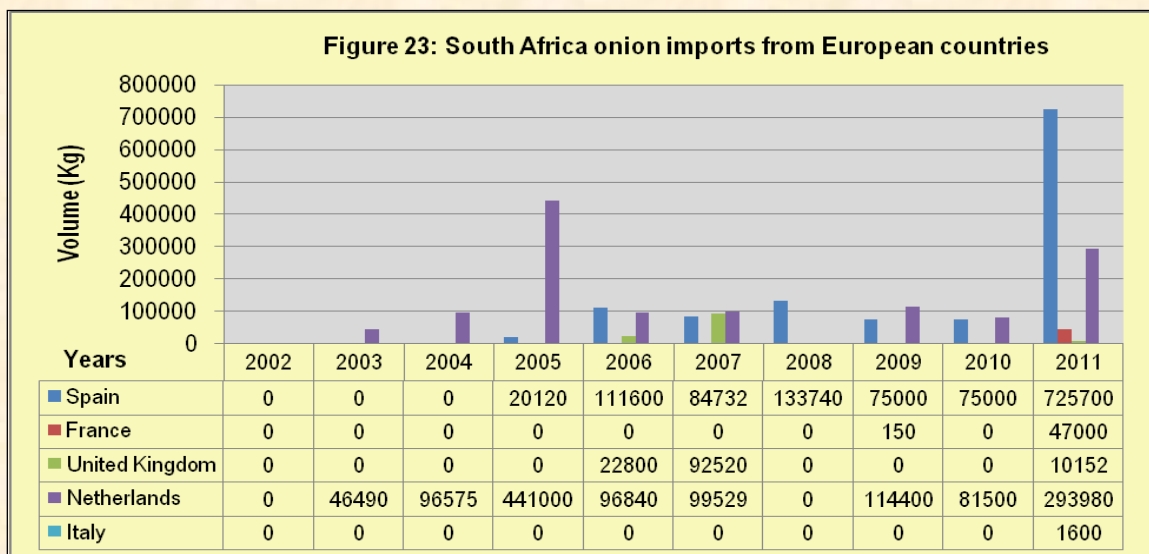
The above Figure 21 illustrates South Africa's onion import from African region. From 2008 to 2010, South Africa imports high quantities of onion from Northern African countries (Egypt and Ghana). In 2001, 2006 and 2008 high volumes of onions were imported from SADC countries (Zambia, Zimbabwe and Angola). From 2005 to 2010 South Africa onion imports were sourced from East African country (Kenya). In 2011, onion imports were mainly from Eastern Africa (Kenya) and Northern Africa regions (Egypt).



Source: Quantec Easydata

Figure 22 above shows South Africa's onion imports from Asian region. In 2006 and 2008, South Africa imported high volumes of onion from Eastern Asian countries (Japan, China and Taiwan). In 2007, 2008 and 2010, South Africa imported considerable volumes of onion from South Central

Asian country (India). South Eastern Asia supplied South Africa with 6000 Kg of onion in 2007. South Africa imported only 311Kg from Eastern Asia during 2011.



Source: Quantec Easydata

Figure 23 above illustrates that from European countries, South Africa imported high quantities of onion from Netherlands and Spain. The highest export volume was recorded in 2005 for Netherlands and for Spain it was recorded in 2008. In 2006 and 2007, a considerable volume of onion was imported from United Kingdom. In 2011, Netherlands and Spain remained the main suppliers of onion imported from European countries. France and Italy also supplied onions to South Africa for the first time in ten year period.

2.5 Processing

Processing of onions consists of canning, oil extraction, freezing and dehydration. Onions are the most often used to enhance flavour and a wide range of recipes such as casseroles, pizzas, soups, and stews. As a garnish onions are used on sandwiches and salads. In addition onions are used as a cooking ingredient in countless recipes, and are frequently used as a condiment, on sandwich, side dish and appetizer. Over the year there has been an increase in onion dehydration and freezing activities. The overall increase in onion processing activities can be attributed increase in demand of convenience ready to eat food. Figure 24 below shows the onion value chain tree explaining its uses while Figure 25 below illustrates the market value chain for onion.

Figure 24: Onion value chain tree explaining its uses.

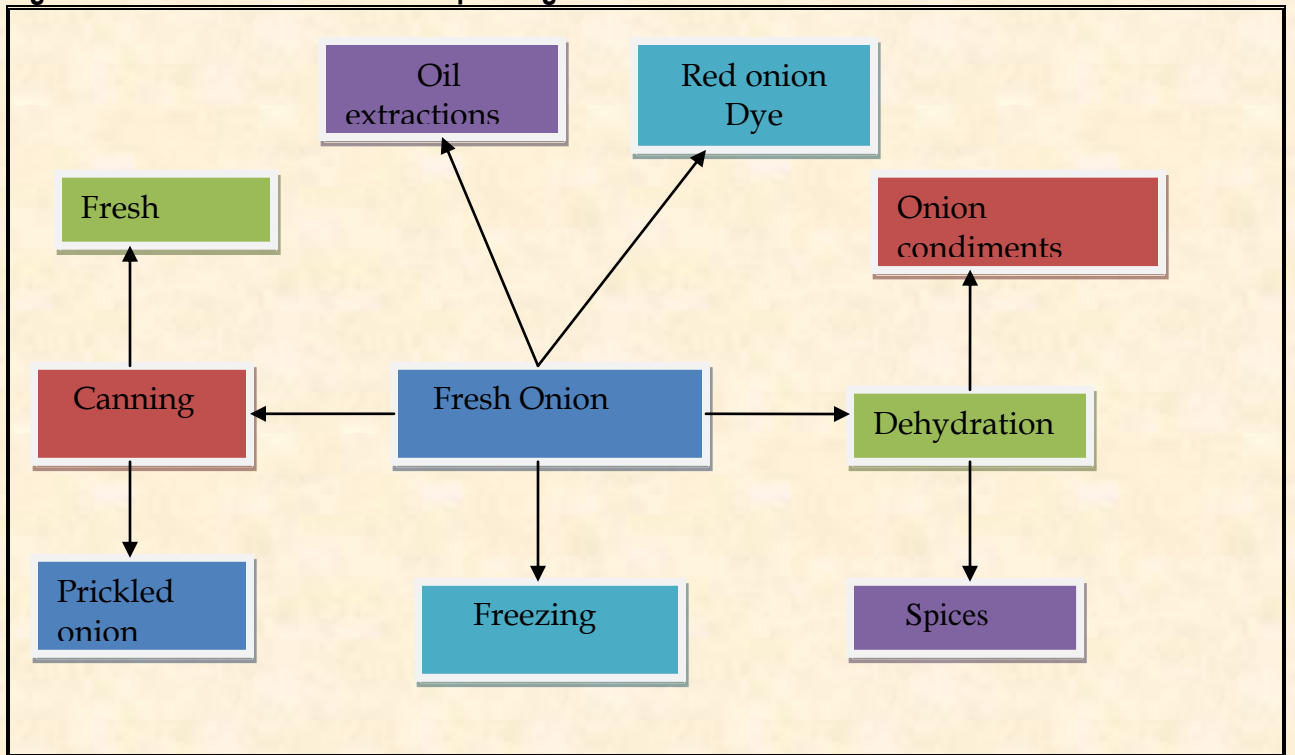
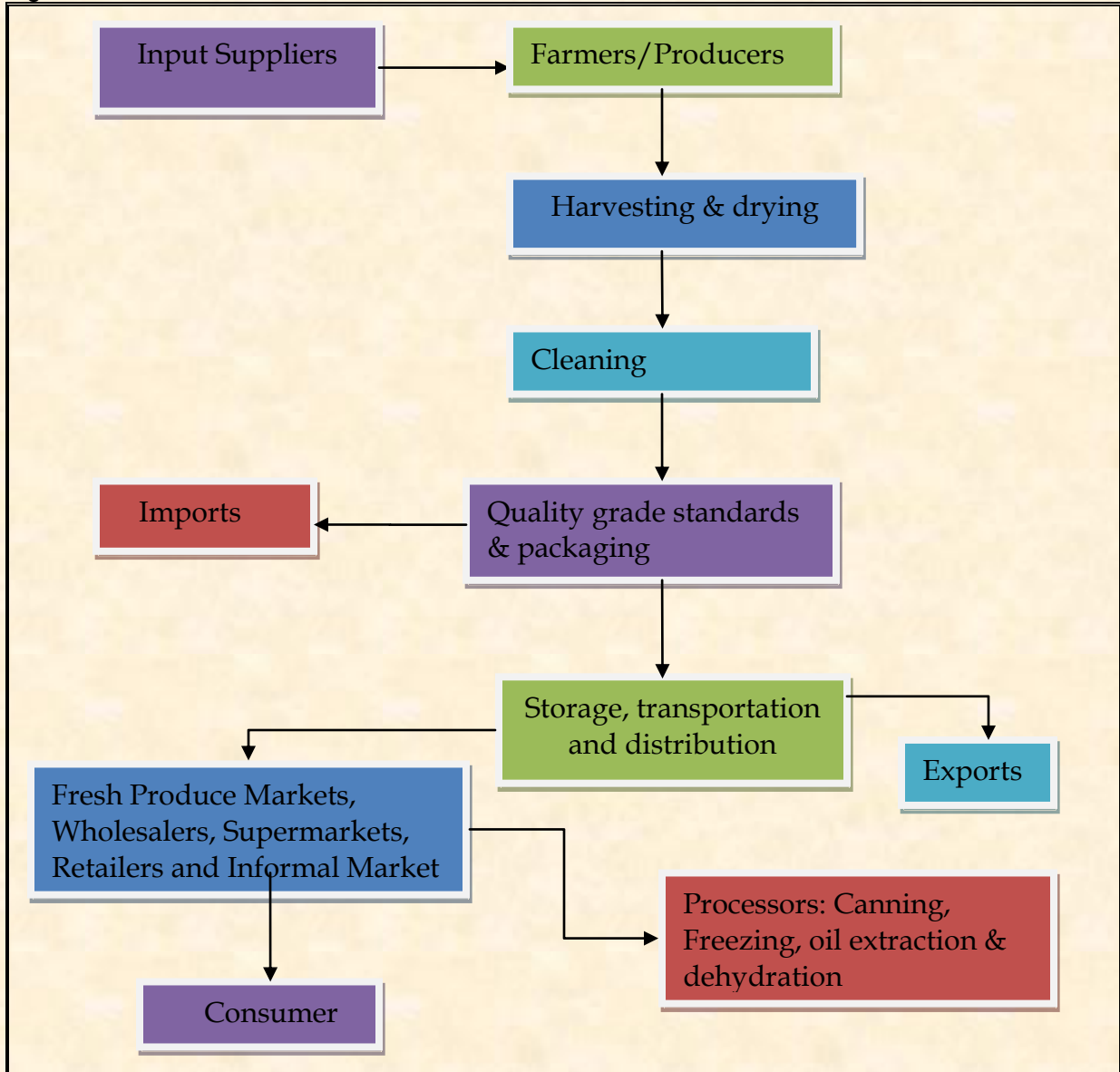


Figure 25: Market value chain for onion



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

3. MARKET INTELLIGENCE

3.1 Tariffs

Tariffs applied by the various countries to onion originating from South Africa during 2010 and 2011 are presented in Table 12.

Table 12: The following tariffs were applied by various export markets to onions from South Africa

| Country | Product description | Trade regime description | Applied tariff | Estimated total ad valorem equivalent tariff | Applied tariff | Estimated total ad valorem equivalent tariff |
|------------|-----------------------------------|--------------------------------------|----------------|--|----------------|--|
| | | | 2010 | | 2011 | |
| Angola | Onion & shallots fresh or chilled | MFN duties (Applied) | 15.00% | 15.00% | 15.00% | 15.00% |
| Bangladesh | Onion fresh or chilled | MFN duties (Applied) | 5.00% | 5.00% | 5.00% | 5.00% |
| Belgium | Onion fresh or chilled | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Congo | Onion fresh or chilled | MFN duties (Applied) | 30.00% | 30.00% | 30.00% | 30.00% |
| China | Onion & shallots fresh or chilled | MFN duties (Applied) | 13.00% | 13.00% | 13.00% | 13.00% |
| France | Onion fresh or chilled | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Germany | Onion fresh or chilled | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Egypt | Onion & shallots fresh or chilled | MFN duties (Applied) | 5.00% | 5.00% | 5.00% | 5.00% |
| Ireland | Onion fresh or chilled | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Japan | Onion fresh or chilled | MFN duties (Applied) | 8.50% | 8.50% | 8.50% | 8.50% |
| Malaysia | Onion & shallots fresh or chilled | MFN duties (Applied) | 0.00% | 0.00% | 0.00% | 0.00% |

| Country | Product description | Trade regime description | Applied tariff | Estimated total ad valorem equivalent tariff | Applied tariff | Estimated total ad valorem equivalent tariff |
|----------------|-------------------------------------|--------------------------------------|----------------|--|----------------|--|
| | | | 2010 | | 2011 | |
| Mozambique | Onion and shallots fresh or chilled | Preferential tariff for South Africa | 15.00% | 15.00% | 15.00% | 15.00% |
| Netherlands | Onion fresh or chilled | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Zambia | Onion and shallots fresh or chilled | Preferential tariff for South Africa | 5.00% | 5.00% | 5.00% | 5.00% |
| Italy | Onion & shallots fresh or chilled | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Seychelles | Onion & shallots fresh or chilled | General tariff | 0.00% | 0.00% | 0.00% | 0.00% |
| Kenya | Onion fresh or chilled | MFN duties (Applied) | 25.00% | 25.00% | 25.00% | 25.00% |
| United Kingdom | Onion sets fresh or chilled | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Mexico | Onion fresh or chilled | MFN duties (Applied) | 10.00% | 10.00% | 10.00% | 10.00% |
| Zimbabwe | Onion & shallots fresh or chilled | MFN duties (Applied) | 40.00% | 40.00% | 40.00% | 40.00% |

Source: Market Access Map

South African onion market exporters can look for onion export market in European countries (Belgium, France, Germany, Ireland, Netherlands, Italy and United Kingdom) as they apply 0.00% preferential tariff to onion exports originating from South Africa, this is due to EU-Free Trade Agreement (FTA). African markets the tariffs applied to onion exports from South Africa have not changed. Angola, Congo and Mozambique are protected by 15%, 30% and 30% respectively in spite of the existence of SADC-FTA. Zimbabwe, Kenya and Congo markets are highly protected by 40%, 25% and 20% tariff respectively.

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.

Product legislation: quality and marketing

There are a number of 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 labeling 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.

3.2.1 (b) 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.

3.2.1(c) Product legislation: packaging

The EU commission lays down 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.

3.2.1. (d) 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 successful. 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 an EU label for identifying food produced according to EU organic standards in the directive EEC 209/91.

3.2. 1(e) 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).

3.2.2 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.

3.2.3 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 are able to 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 labeling 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). 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 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.

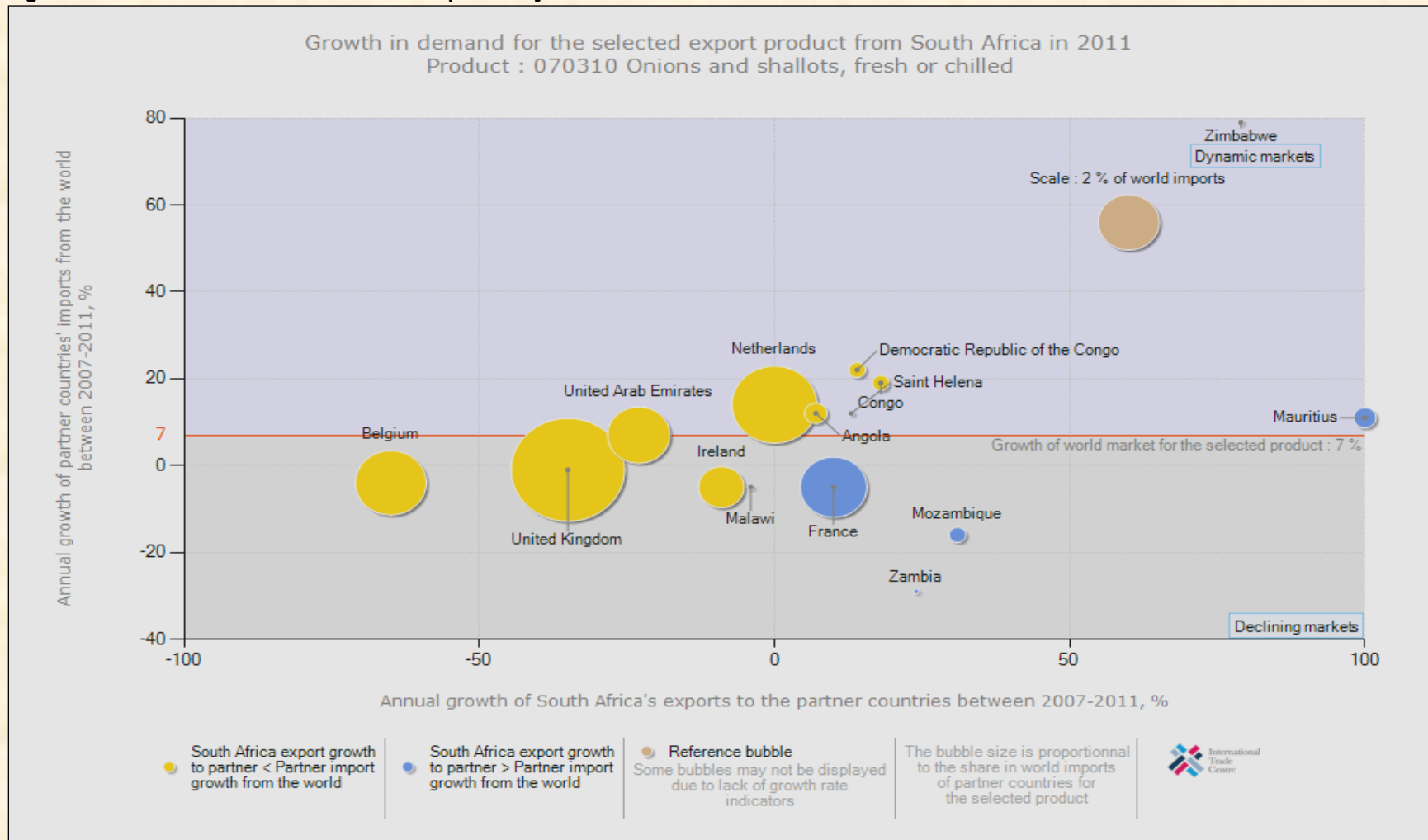
5.3 Packaging also plays a vital role in ensuring safe and efficient transport of a product and conforming to handling requirements, uniformity, recyclable materials specifications, phytosanitary requirements, proper storage needs and even attractiveness (for marketing purposes).

6. COMPETITIVENESS OF SOUTH AFRICAN ONION EXPORTS.

Figure 26 below, it is evident that South Africa onion exports are growing faster than the world imports into Democratic Republic of Congo, Saint Helena and Mauritius. South Africa has gained market share in these dynamic markets. South Africa's onion exports to Angola, Congo, Zimbabwe, and Netherlands, are growing slower than the world imports into these countries. This is regarded as a loss in the dynamic market. South Africa's onion exports to Belgium and United Kingdom and Ireland are declining faster than the world imports in these countries. South Africa exports to France, Zambia and Mozambique are growing while as the world imports are declining. South Africa's performance is regarded as a gain in a declining market.

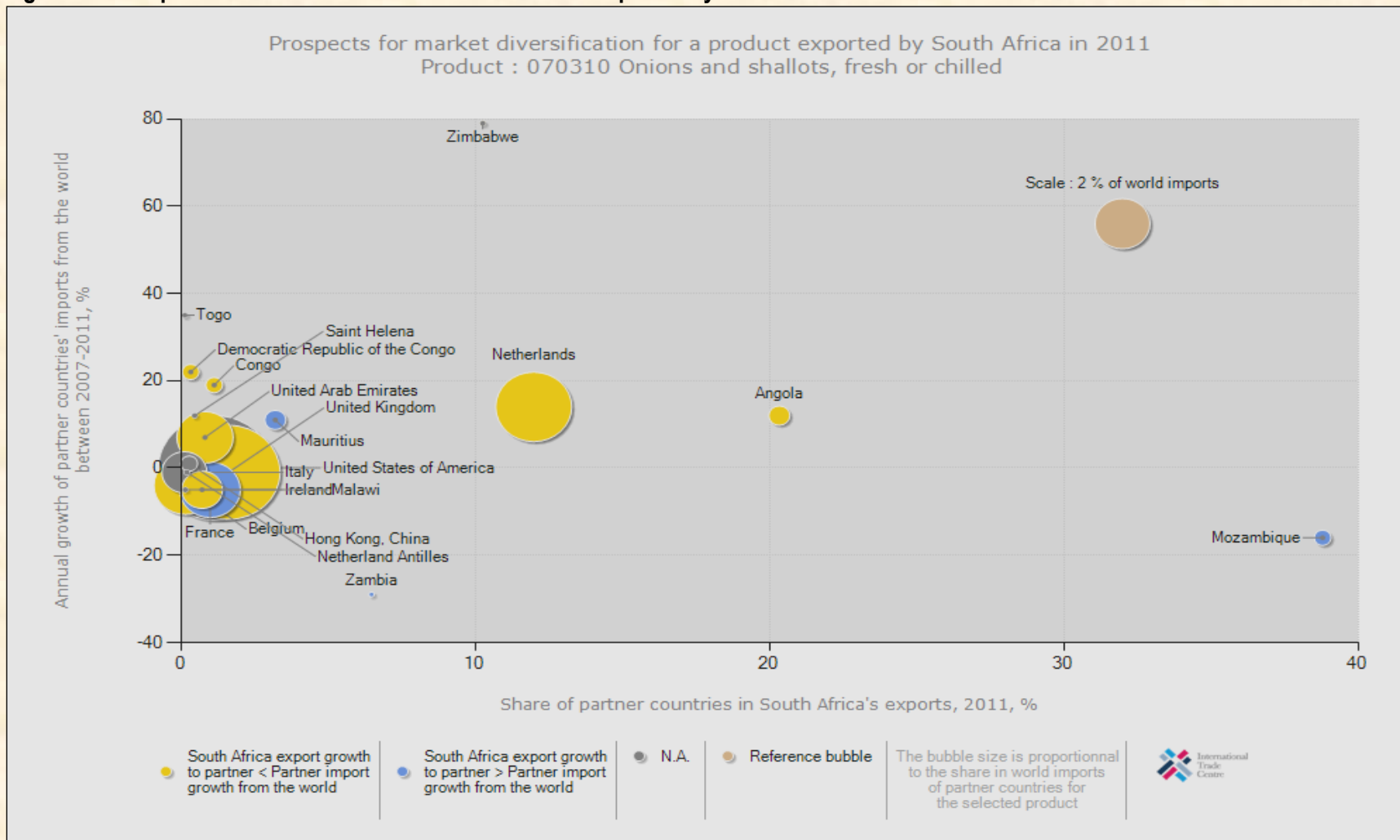
Figure 27 below, shows that Mozambique and Angola are the current largest markets for onion exports originating from South Africa. Prospective markets for exports of onion are mainly in Togo, and Democratic Republic of Congo. Other small markets exist in Mauritius, Netherlands and United Arab Emirates. However if South Africa has to diversify its onion exports, the most lucrative market exist in Zimbabwe, which has increased their onion imports from the world by 79% respectively between 2007-2011 period. France and Zambia have experienced a negative growth during 2007-2011 period.

Figure 26: Growth in demand for onions exported by South Africa in 2011



Source: ITC Trade Map

Figure 27: Prospects for market diversification for onions exported by South Africa in 2011



Source: ITC Trade Map

7. OPPORTUNITIES AND CHALLENGES

7.1 Opportunities

Onion has natural qualities that make them attractive to consumers, particularly in today's health-conscious market. For centuries, onions have been thought to have certain medicinal and disease prevention powers; modern science has begun to show that there may be capable on inhibiting growth of certain cancer. Onions also contain compounds that reportedly reduce blood cholesterol levels and also contain Vitamin C. The above development can increase onion demand

Changing consumer trends are considered to be creating further opportunities for the onion industry. South African biggest onion producer Wildeklawer, in Northern Cape will be producing sweet onion variety which does not cause tears and they contain variety of elements which are beneficial to health. The sweet onion has successfully tempted millions in America, Europe and Australia. Sweet onion is said to contain the nutrients of serving vegetables, fat free, high in fibre, natural sugar, Calcium, Potassium, Phosphorus and Vitamin C. The producer has travelled around the world to find suitable sweet onion cultivar for South African market and is sure the sweet onion will have a major impact in South Africa.

7.2 Challenges

A major challenge for onion industry is to keep competitive against the pressure of rising production cost. The industry is also subjected to intense international competition in the market place. For most of the year, the storage onion crops set the pricing tone on the market. Since storage onions represent a majority of the crop, prices tend to be lowest around the peak of harvest.

8. INDUSTRY NEW DEVELOPMENTS

Dutoit Vegetables, based in Ceres in Western Cape, has added a new exclusive shallot to their portfolio of onions varieties which will offer South African consumers a whole food experience. Dutoit Vegetable is South Africa's leading producer of onion. The new shallot is called Shanion, and has been developed by Dutoit Vegetables as a uniquely South African product and is expected to bring about new exquisite tastes when used in the preparation of food. Shallots are a distinct sub-species of the onion family group (*Allium cepa*) and although the product is very popular in other parts of the world, it has been relative scare in South Africa.

9. ACKNOWLEDGEMENTS

The following industries are acknowledged:

National Department of Agriculture, Forestry and Fisheries

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 Research

www.easydata.co.za

Market Access Map

www.macmap.org

Economic Research Service/USDA

Wildeklawer Farm

www.wildeklawer.com

Mayford Seeds

Dutoit

www.dutoit.com

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