

A PROFILE OF THE SOUTH AFRICAN SWEET POTATO MARKET VALUE CHAIN 2010

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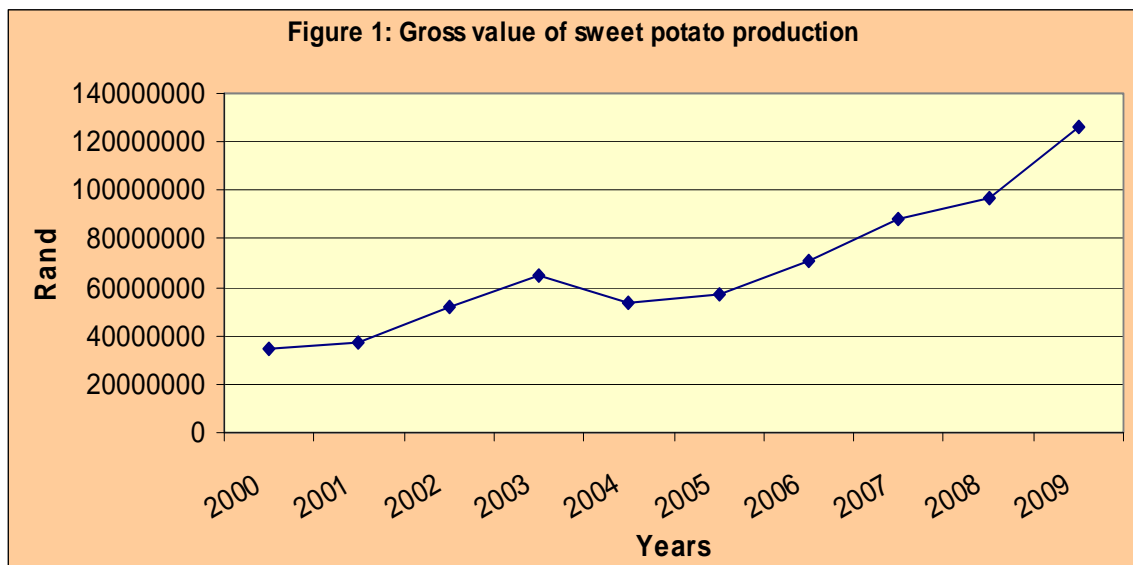
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1. DESCRIPTION OF THE INDUSTRY

Sweet potato, commonly called a yam in parts of the United States is a crop plant whose large, starchy sweet tasting tuberous roots are an important root vegetable. The edible tuberous root is long and tapered, with a smooth skin whose colour ranges from white through yellow, orange and purple. Although the leaves are also edible, the starchy tuberous roots are by far the most important product. In some tropical areas, they are a staple food crop. The roots are mostly frequently boiled, fried or baked. Besides simple starches, sweet potatoes are rich in complex carbohydrates, dietary fiber, beta carotene and Vitamin C. Industrial uses include the production of starch and industrial alcohol. Sweet potato can also be processed to make starch and a partial flour substitute.



Source: Agricultural Statistics

Figure 1 above illustrates contribution of the sweet potato industry to the gross value of agricultural production over the period of 10 years. The industry contribution has been increasing steadily from 2000 to 2003. In 2004 the contribution of sweet potato contribution dropped by 17% due to high production that occurred while the producer prices were not favorable to producers. From 2005 the contribution increased steadily reaching the peak in 2009. In 2009, the contribution increased by 30%, this can be attributed to high production that occurred while the prices are still favorable to producers.

1.1 Production Areas

Sweet potatoes are cultivated throughout tropical and warm temperature regions wherever there is sufficient water to support their growth. Sweet potato plant does not enjoy frost. Depending on the cultivar and conditions, tuberous roots mature in two to nine months. The main producing regions are Northern Cape, Western Cape, Limpopo, Free State, Eastern Cape and Gauteng. Globally, China is the largest grower of sweet potatoes; providing about 80% of the world supply. Uganda is the third largest sweet potato grower after Indonesia.

1.2 Production Trends

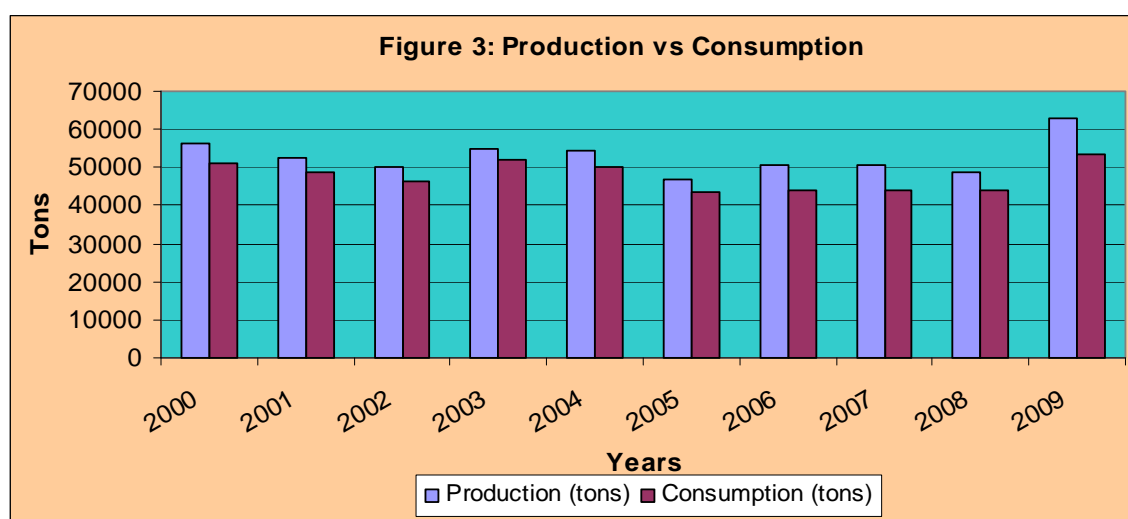


Source: Agricultural Statistics

Figure 2 above, illustrates the production volumes over the past ten years. Over the past decade sweet potato production was relatively unstable. The production decreased in 2002 and 2003 and then increased by 9.3% in 2004. In 2006, the production dropped by 14% and the production volumes was found to be the lowest in ten year period. The drop in production can be attributed to climatic conditions and increased cost of production. In 2008, there was also a 4% decline in production compared to 2007. In 2009, the production increased by 41% and the production was the highest in review period.

1.3 Production vs. Consumption of sweet potato

Figure 3 below, depicts local consumption of sweet potato compared to the production over 10 year period. South African average sweet potato consumption is approximately 47 766 tons per annum. The figure below illustrates that the production of sweet potato is higher than the consumption. This indicates that South Africa is self sufficient in terms of sweet potato production and the surplus sweet potatoes are also exported. The Salomon Islands in the South Pacific has the world's highest per capita consumption of sweet potatoes.



Source: Agricultural Statistics

2. MARKET STRUCTURE

There is no regulation or restriction in the marketing of sweet potato. The prices of sweet potato are determined by market forces of demand and supply. The industry uses fresh produce market, informal market, processor and direct selling to wholesalers and retailers. Sweet potatoes are also exported to other countries through export agents and marketing companies. South Africa also imports sweet potato from other countries.

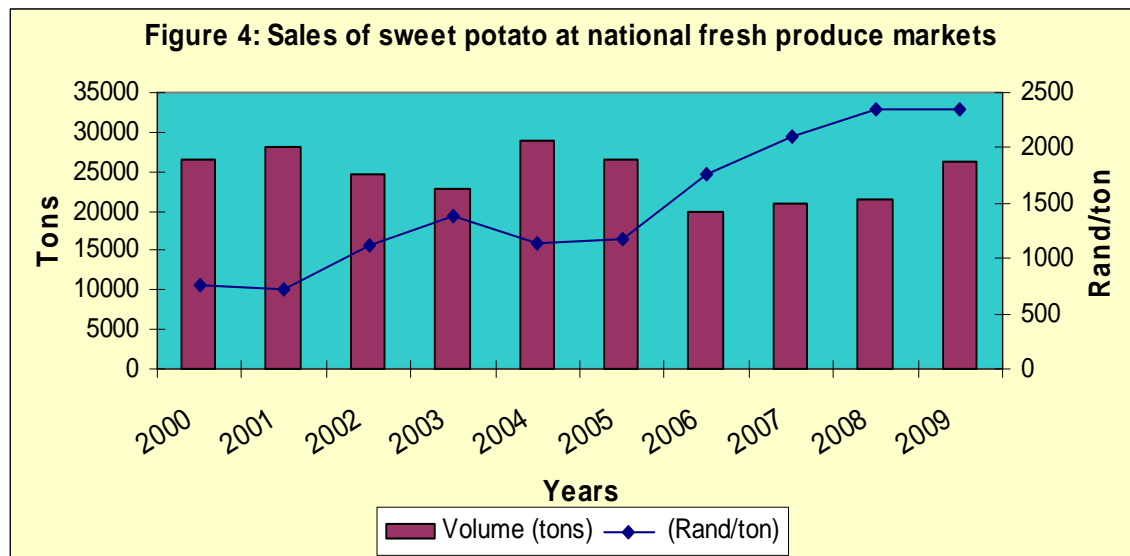
2.1 Domestic market and prices

Table 1: Sweet Potato sold through different marketing channels

| Years | National fresh produce market (Tons) | Exports (Tons) | Total Processing |
|-------|--------------------------------------|----------------|------------------|
| 2000 | 26441 | 2165 | 347 |
| 2001 | 28076 | 2968 | 2087 |
| 2002 | 24705 | 1702 | 1939 |
| 2003 | 22682 | 1941 | 1890 |
| 2004 | 28825 | 470 | 2154 |
| 2005 | 26541 | 1161 | 3132 |
| 2006 | 20003 | 931 | 2534 |
| 2007 | 20893 | 2357 | 4039 |
| 2008 | 21391 | 1721 | 3067 |
| 2009 | 26368 | 6838 | 2295 |

Source: Agricultural Statistics

Table 1 above, illustrates that National Fresh Produce Markets (NFPMs) remains an important channel for the sale of fresh sweet potato in South Africa. In 2009, 74% of all sweet potatoes were distributed through fresh produce markets. The remaining 26% represent direct sales from producer to wholesalers, retailers, processors and informal traders.



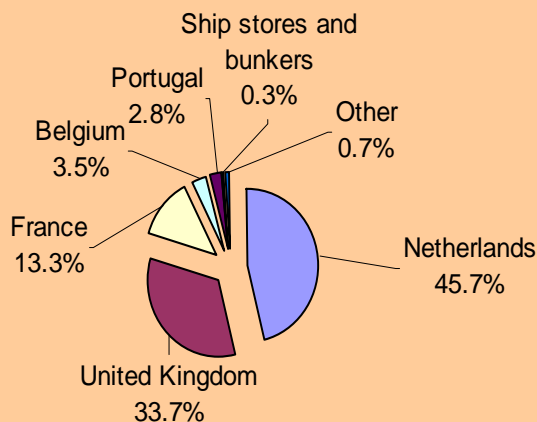
Source: Agricultural Statistics

Figure 4 above illustrates the sales of sweet potato in the national fresh produce markets over the period of 10 years. Sweet potato volumes and prices were fairly unstable from 2000 to 2009 period. From 2000 and 2001, the fresh produce markets prices were very low due to high volumes supplied across the markets. In 2002 and 2003 prices started to increase due to significant decline of supplies across the markets. In 2004 and 2005 prices declined as more volumes are supplied and from 2006 the price eased marginally higher reaching the peak in 2009, despite high volumes supplied. The high price in 2009 can be attributed to strong demand of sweet potato in the same year.

2.2 Sweet potato exports by South Africa

South Africa is not a major sweet potato exporter, it represents 1.39% of world exports and is ranked number 14 in the world. Most of sweet potatoes produced were destined for domestic markets. South African sweet potato exports were destined to Netherlands, United Kingdom, France, Portugal, Mozambique and Zimbabwe. Globally, United States of America, China, Viet Nam, Netherlands, Indonesia and Israel are major sweet potato exporters. Figure 5 below illustrates South African sweet potato export destinations.

Figure 5: South Africa sweet potato export destinations in 2009



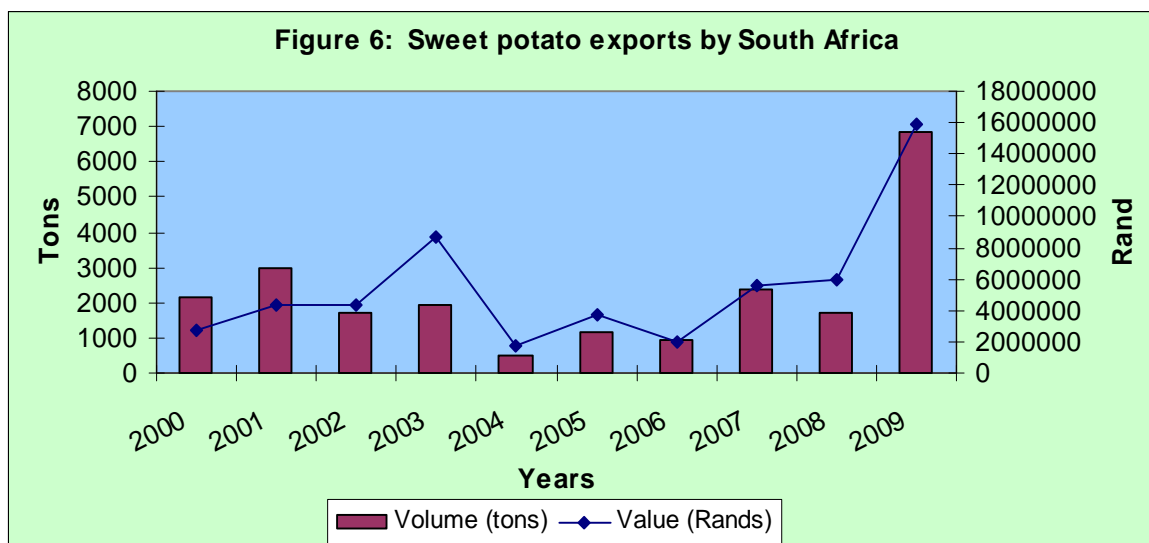
Source: ITC Trade Map

Table 2: South African sweet potato exports in 2009

| Importers | Exported value 2009, USD thousand | Share in South Africa's exports, % | Exported quantity 2009 (tons) | Unit value, (USD/unit) | Exported growth in value between 2005-2009, %, p.a. | Exported growth in quantity between 2005-2009, %, p.a. | Exported growth in value between 2008-2009, %, p.a. |
|-------------------------|-----------------------------------|------------------------------------|-------------------------------|------------------------|---|--|---|
| World | 1871 | 100 | 2618 | 715 | 49 | 26 | 20 |
| Netherlands | 855 | 45.7 | 1287 | 664 | 34 | 16 | 23 |
| United Kingdom | 630 | 33.7 | 951 | 662 | 80 | 47 | -7 |
| France | 248 | 13.3 | 150 | 1653 | 9 | 6 | |
| Belgium | 65 | 3.5 | 45 | 1444 | 35 | 5 | 44 |
| Portugal | 53 | 2.8 | 157 | 338 | | | -54 |
| Ship stores and bunkers | 6 | 0.3 | 5 | 1200 | 27 | 12 | 20 |
| Mozambique | 4 | 0.2 | 7 | 571 | 45 | 61 | -20 |
| Zimbabwe | 4 | 0.2 | 11 | 364 | | | |
| Singapore | 3 | 0.2 | 2 | 1500 | | | |
| DRC | 2 | 0.1 | 3 | 667 | | | |

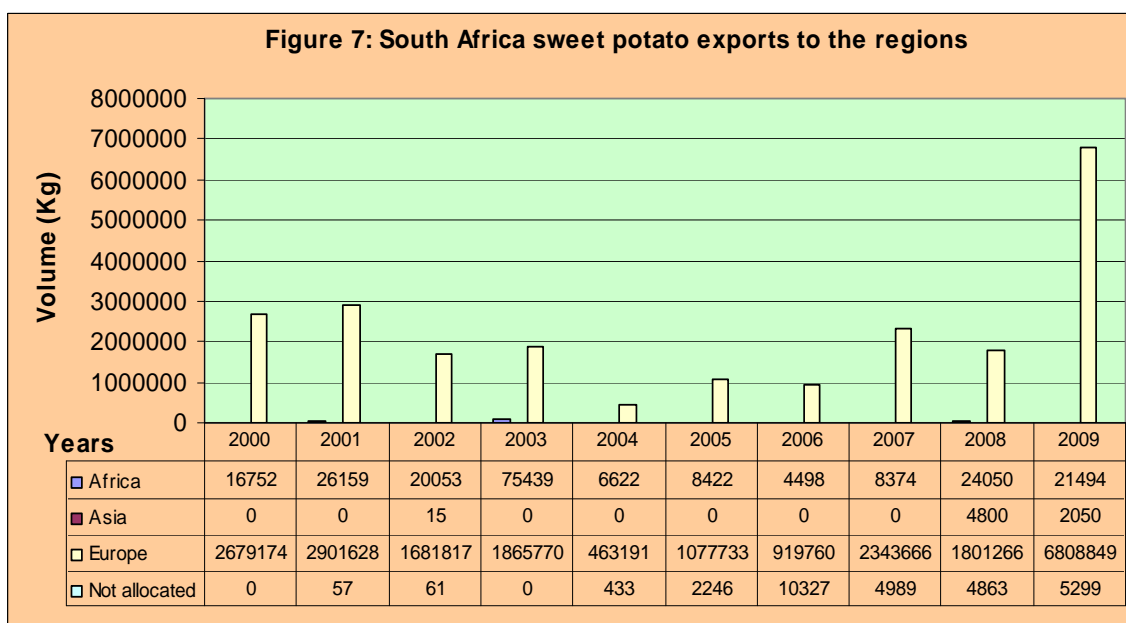
Source: ITC Trade Map

Table 2 indicates that during 2009, South Africa exported higher quantities of sweet potato to Netherlands, United Kingdom and France. Netherlands commanded the greatest share of South African sweet potatoes exports with 45.7% share, followed by United Kingdom with 33.7% share and France with 13.3%. South African sweet potato exports to United Kingdom and Portugal have decreased by 7% and 54% in value between 2008 and 2009 period.



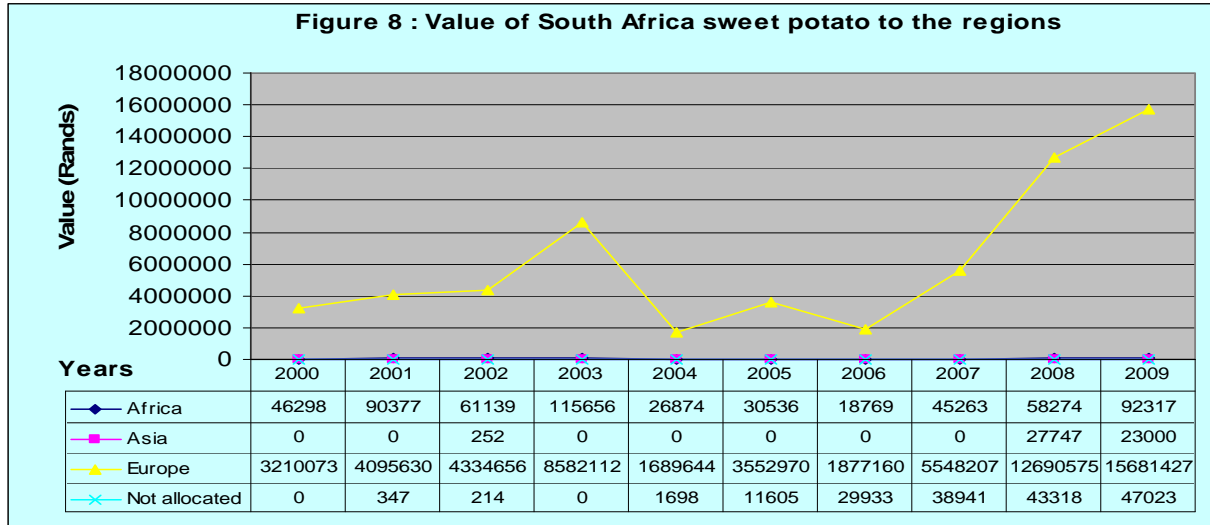
Source: Agricultural Statistics

Figure 6 illustrates sweet potato exports from South Africa over the past 10 years. The highest export volumes were recorded in 2001 and this can be attributed to the highest production volume in the same year. From 2004 to 2006 the exports decrease significantly which can be attributed to decline in production volumes in the same years. In 2009, the sweet potato exports increased by 297% and this are attributed to high production volume in the same year. Generally, it appears that it was less profitable to export sweet potatoes except in 2003 and 2008 since less export values were recorded for higher volumes exported.



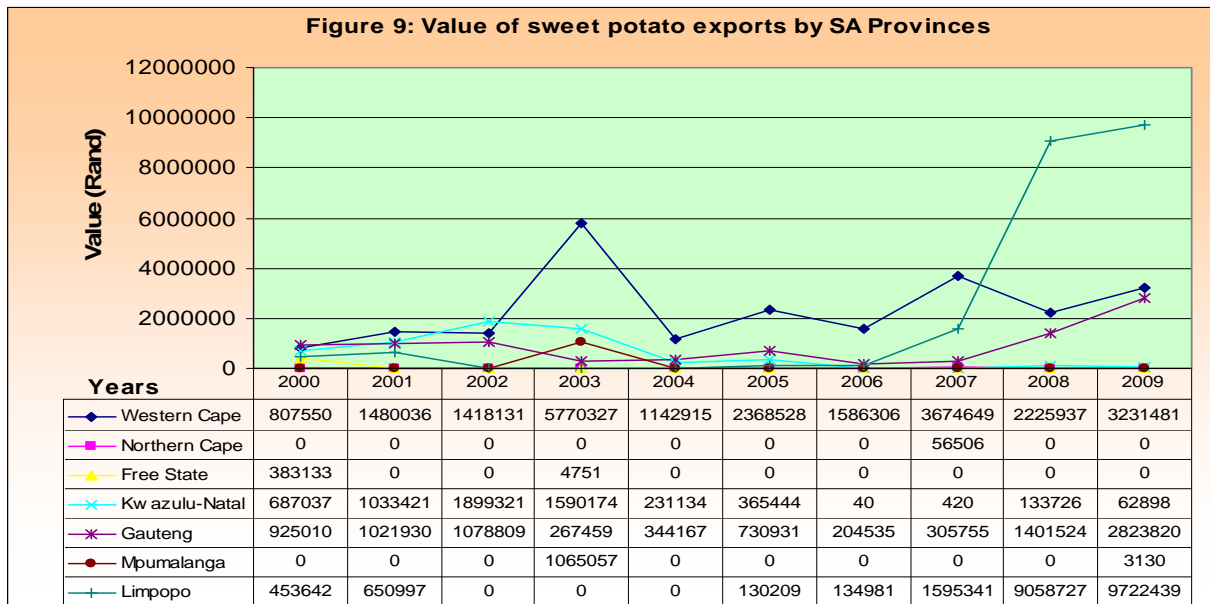
Source: Quantec Research

Figure 7 above indicate that South Africa sweet potato exports market in mostly in European Countries (United Kingdom, Netherlands, Belgium and France). South also exports small quantities of sweet potatoes to African countries (Mozambique, Zimbabwe, Democratic Republic of Congo, Ghana and Malawi). A small fraction of exports were exported to Asia and other exports were not allocated.



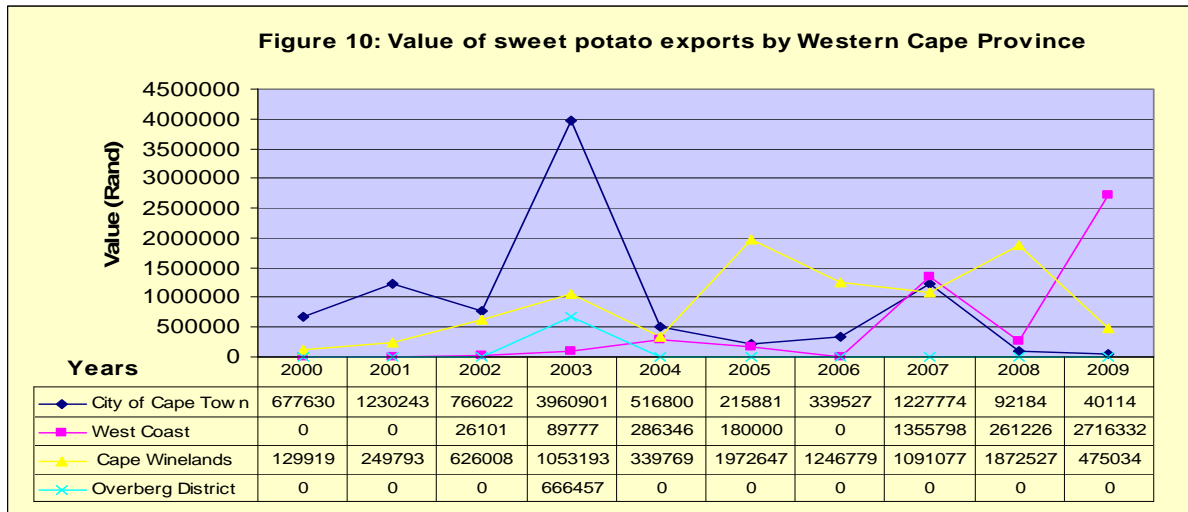
Source: Quantec Research

Figure 8 above, indicate that the exports to Europe have higher value than exports to other region. The value to Asia, Africa and the unallocated exports were insignificant due to low volume exported to those regions.



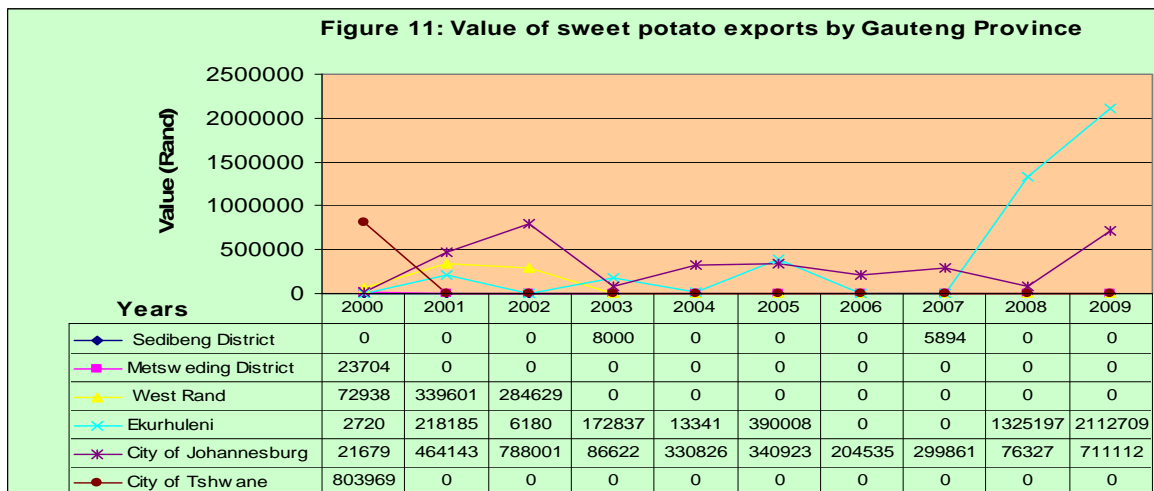
Source: Quantec Research

Figure 8 above, illustrates the sweet potato exports by provinces for the past ten years. In 2009, the highlight sweet potato exports were that of Western Cape, Gauteng, Mpumalanga and Limpopo. The high exports values from Western Cape and Gauteng can be attributed to the exports exit points and the registered exporters located in these provinces. The following figures (figure 10-16) shows the value of sweet potato exports from the various districts, provinces of South Africa.



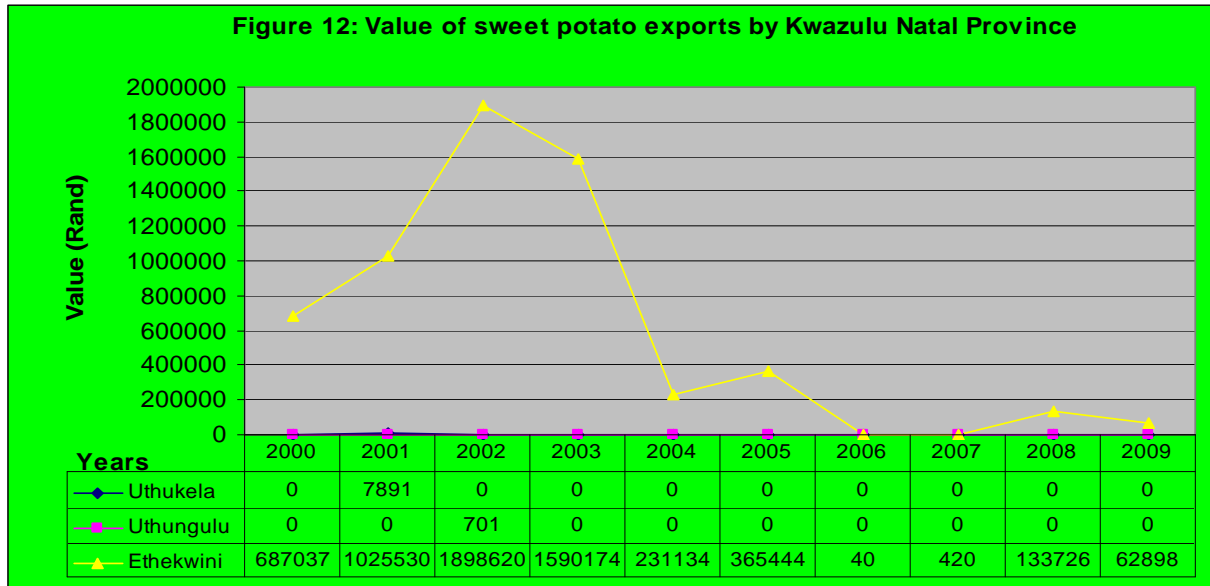
Source: Quantec Research

Figure 10 above, indicates that, in 2009 sweet potato exports by Western Cape Province were from West Coast, Cape Winelands, and City of Cape Town to a lesser extent. Cape Town harbor renders exports exit point for exports from these municipalities. In 2009 there was a significant increase in value of sweet potato exports by West Coast district municipality.



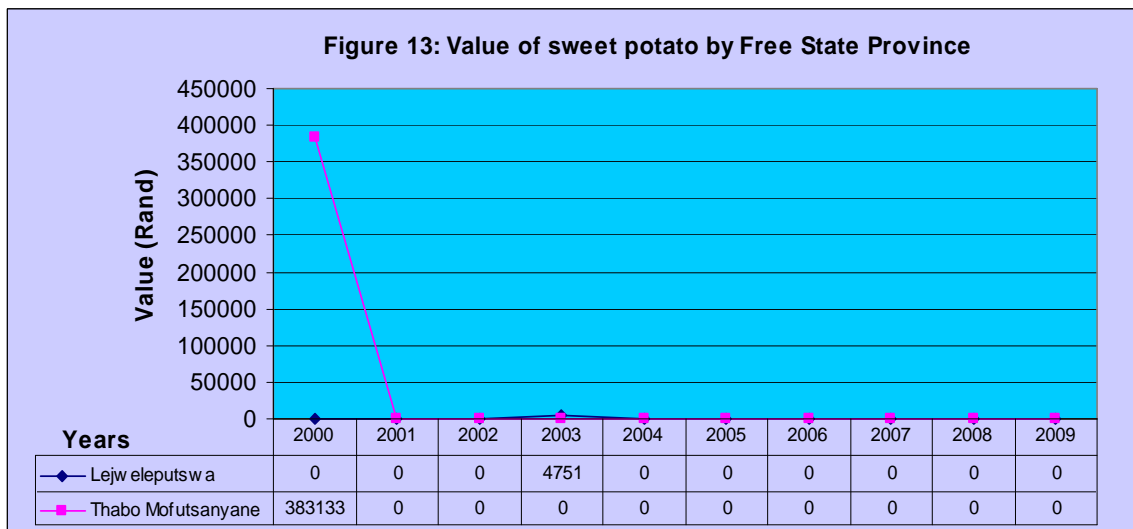
Source: Quantec Research

As can be seen from figure 11 above, in 2009 sweet potato export by Gauteng Province was from the City of Johannesburg and Ekurhuleni district municipality. The high export values were recorded in 2009 for the Ekurhuleni and in 2002 for the City of Johannesburg municipality.



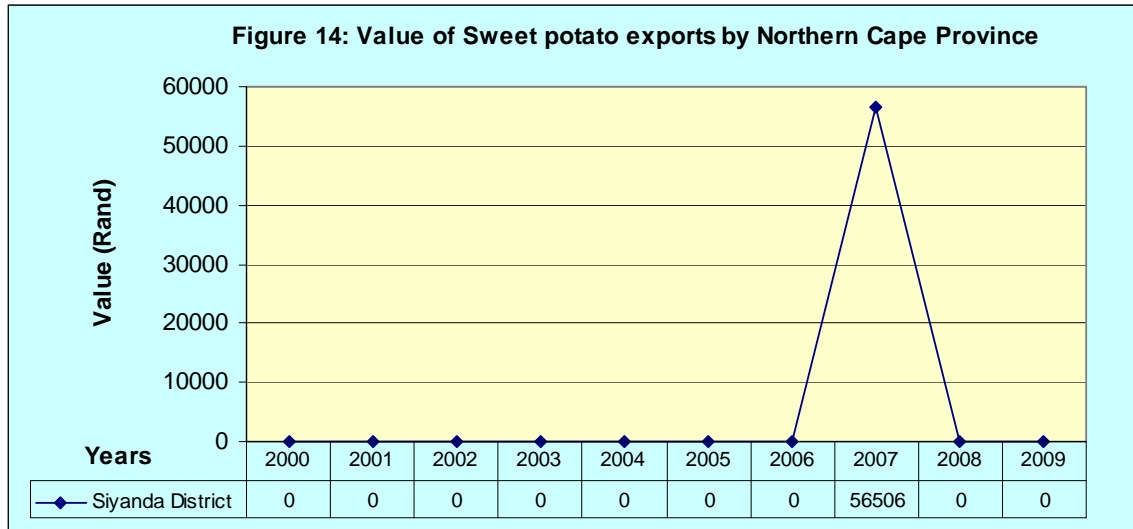
Source: Quantec Research

Figure 12 above, indicates that in 2009 sweet potato exports by KwaZulu-Natal Province were from Ethekewini and the highest export value was recorded in 2002. From 2004, the exports values have decreased significantly.



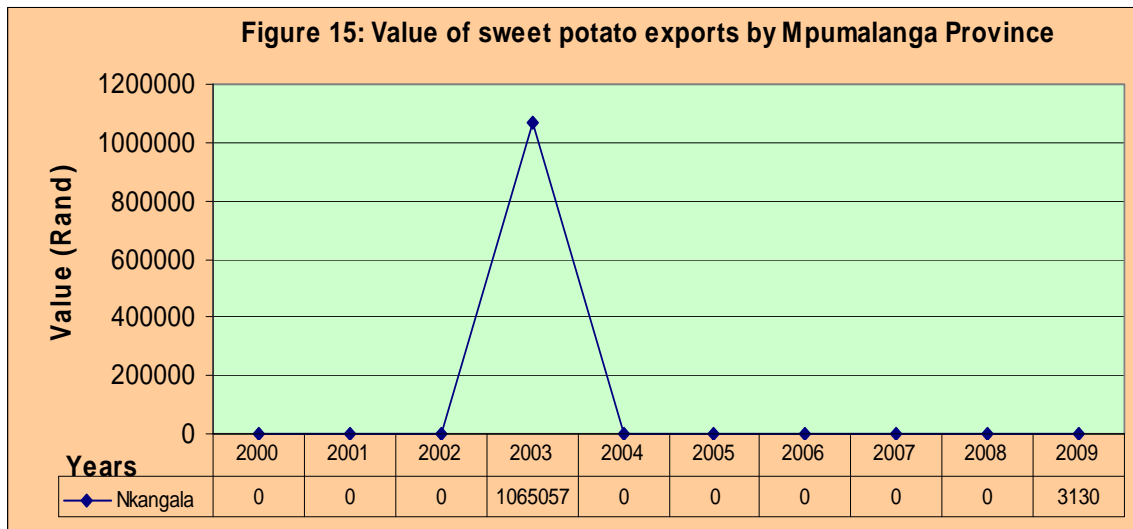
Source: Quantec Research

Figure 13 above, indicates that sweet potato exports by Free State Province were in 2000 and 2003 from Thabo Mofutsanyane and Lejweleputswa districts. The highest export value was in 2000 from Thabo Mofutsanyane district. From 2004 to 2009 the province has recorded zero trade on sweet potatoes.



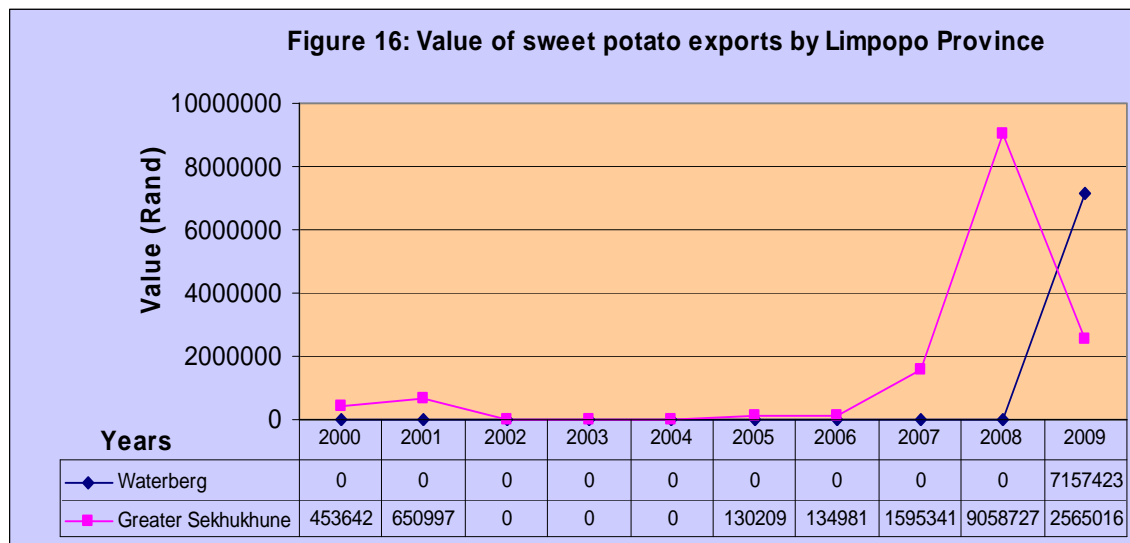
Source: Quantec Research

Figure 14 above, indicates that sweet potato export by Northern Cape Province was in 2007 from Siyanda Districts. In 2008 and 2009 there was no exports value recorded for Northern Cape Province.



Source: Quantec Research

Figure 15 above, illustrates that sweet potato exports by Mpumalanga Province were in 2003 and 2009 from Nkangala. The highest export value was recorded in 2003 from Nkangala district.



Source: Quantec Research

Figure 16 above; illustrate that sweet potato exports by Limpopo Province were in from Greater Sekhukhune and Waterberg Districts. There was a significant decline in value of sweet potato exported through Greater Sekhukhune, while Waterberg recorded export value for the first time in period under review.

2.3 Share Analysis

Table 3, below is an illustration of provincial share towards national exports. Western Cape, KwaZulu-Natal, Gauteng, Mpumalanga and Limpopo to a lesser extent have commanded the greatest share of sweet potato exports. The high export shares in Western Cape, KwaZulu-Natal and Gauteng can be attributed to registered exporters and exports exit points based in these provinces. In 2008 Limpopo Province commanded 70.66% of sweet potatoes exports. In 2008 and 2009 Limpopo Province has commanded marginally higher share than that of Gauteng, Kwazulu Natal and Cape Town. This can be attributed to high production of sweet potato in Limpopo and exports to neighboring countries like Zimbabwe and Mozambique which are situated near Limpopo Province.

Table 3: Share of provincial sweet potato exports to the total RSA sweet potato exports (%)

| Year | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|------|------|------|------|------|------|------|------|------|------|------|
|------|------|------|------|------|------|------|------|------|------|------|

| Provinces | | | | | | | | | | |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Western Cape | 24.80 | 35.35 | 32.26 | 66.34 | 66.52 | 65.88 | 82.37 | 65.24 | 17.36 | 20.40 |
| Free State | 11.77 | 0 | 0 | 0.05 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kwazulu-Natal | 21.10 | 24.69 | 43.20 | 18.28 | 13.45 | 10.17 | 0 | 0.01 | 1.04 | 0.40 |
| Gauteng | 28.41 | 24.41 | 24.54 | 3.08 | 20.03 | 20.33 | 10.62 | 5.43 | 10.93 | 17.82 |
| Mpumalanga | 0 | 0 | 0 | 12.25 | 0 | 0 | 0 | 0 | 0 | 0.02 |
| Limpopo | 13.93 | 15.55 | 0 | 0 | 0 | 3.62 | 7.01 | 28.32 | 70.66 | 61.36 |
| South Africa | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Research

Table 4: Share of sweet potato exports to the total Western Cape Provincial sweet potato exports (%)

| Year District | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| City of Cape Town | 83.91 | 83.12 | 54.02 | 68.64 | 45.22 | 9.11 | 21.40 | 33.41 | 4.14 | 1.24 |
| West Coast | 0 | 0 | 1.84 | 1.56 | 25.05 | 7.60 | 0.00 | 36.90 | 11.74 | 84.06 |
| Cape Winelands | 16.09 | 16.88 | 44.14 | 18.25 | 29.73 | 83.29 | 78.60 | 29.69 | 84.12 | 14.70 |
| Overberg | 0 | 0 | 0 | 11.55 | 0 | 0 | 0 | 0 | 0 | 0 |
| Western Cape | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Research

Table 4 above, indicates that City of Cape Town, Cape Winelands and West Coast to a lesser extent commanded the greatest share of sweet potato exports from Western Cape Province during the 10 year period. In 2008 and 2009 there has been a significant decrease in sweet potato export value for City of Cape Town. Cape Town harbour renders exit point of sweet potato exports from the Western Cape Province. In 2009, there was a significant increase in value of sweet potato export value for West Coast district municipality.

Table 5: Share of sweet potato exports to the total Gauteng Provincial sweet potato exports (%)

| Year District | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------|------|------|------|------|------|------|------|------|------|------|
|---------------|------|------|------|------|------|------|------|------|------|------|

| | | | | | | | | | | |
|-----------------------------|-------|-------|-------|-------|-------|-------|-----|-------|-------|-------|
| Sedibeng | 0 | 0 | 0 | 2.99 | 0 | 0 | 0 | 1.93 | 0 | 0 |
| Metsweding | 2.56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Rand | 7.89 | 33.23 | 26.38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ekurhuleni | 0.29 | 21.35 | 0.57 | 64.62 | 3.88 | 53.36 | 0 | 0 | 94.55 | 74.82 |
| City of Johannesburg | 2.34 | 45.42 | 73.04 | 32.39 | 96.12 | 46.64 | 100 | 98.07 | 5.45 | 25.18 |
| City of Tshwane | 86.91 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gauteng | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Research

Table 5 above, indicates that Ekurhuleni and City of Johannesburg commanded the greatest share of sweet potato exports from Gauteng Province. . OR Tambo International Airport renders exit point of sweet potato exports from Gauteng Province. In 2008 and 2009, there has been a significant increase in value of sweet potato for Ekurhuleni while City of Johannesburg value has declined.

Table 6: Share of sweet potato exports to the total Kwazulu Natal Provincial sweet potato exports (%)

| Year District | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------------|------|-------|-------|------|------|------|------|------|------|------|
| Uthukela | 0 | 0.76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Uthungulu | 0 | 0 | 0.04 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ethekwini | 100 | 99.24 | 99.96 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Kwazulu Natal | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Research

Table 6 above, shows that Ethekwini commanded the greatest share of sweet potato exports from KwaZulu-Natal Province. The greatest share by Ethekwini can be attributed to Durban harbour which renders exports exit point.

Table 7: Share of sweet potato exports to the total Free State Provincial sweet potato exports (%)

| Year District | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------------|------|------|------|------|------|------|------|------|------|------|
| Lejweleputswa | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 |
| Thabo Mofutsanyane | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Free State | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: Calculated from Quantec Research

Table 7, illustrates that Thabo Mofutsanyane commanded 100% share in 2000 and Lejweleputswa commanded 100% share of sweet potato exports from Free State Province. From 2004 to 2009, province recorded zero trade in sweet potatoes

Table 8: Share of sweet potato exports to the total Mpumalanga Provincial sweet potato exports (%)

| Years District | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|------|------|
| Nkangala | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 |
| Ehlanzeni | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mpumalanga | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 100 |

Source: Calculated from Quantec Research

Nkangala district commanded 100% share of sweet potato exports from Mpumalanga province in 2003 and 2009. In other years, the province recorded zero trade in sweet potatoes.

Table 9: Share of sweet potato exports to the total Limpopo Provincial sweet potato exports (%)

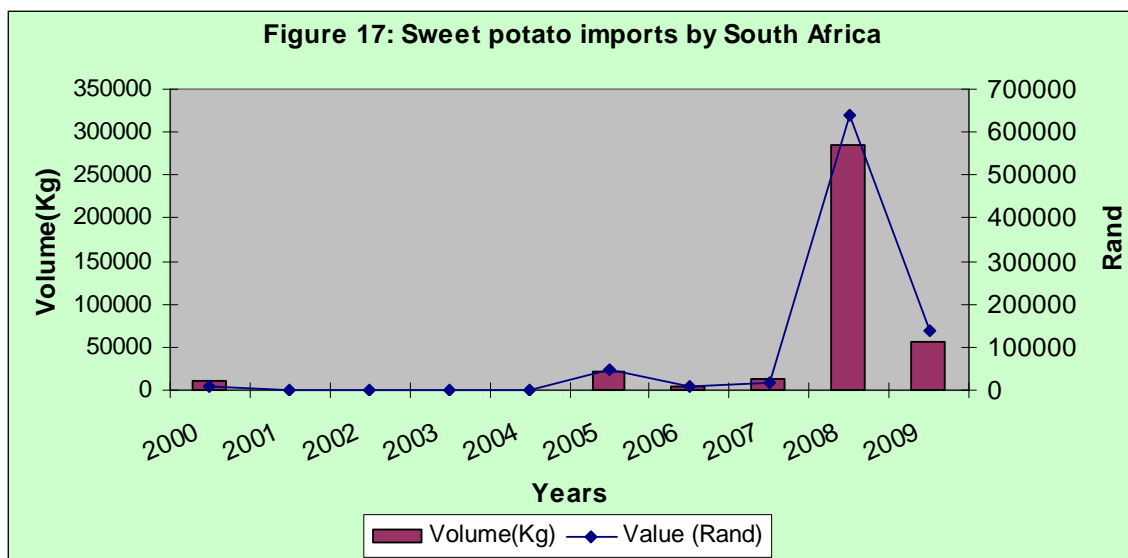
| Year District | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--------------------|------|------|------|------|------|------|------|------|------|-------|
| Mopani | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73.62 |
| Greater Sekhukhune | 100 | 100 | 0 | 0 | 0 | 100 | 100 | 100 | 100 | 26.38 |
| Limpopo | 100 | 100 | 0 | 0 | 0 | 100 | 100 | 100 | 100 | 100 |

Source: Calculated from Quantec Research

Table 10 above, indicates that Greater Sekhukhune commanded the greatest share of sweet potato exports from Limpopo Province. In 2009, Mopani commanded 73.62% of sweet potato exports from Limpopo province. From 2000 to 2008 Mopani district has recorded zero trade.

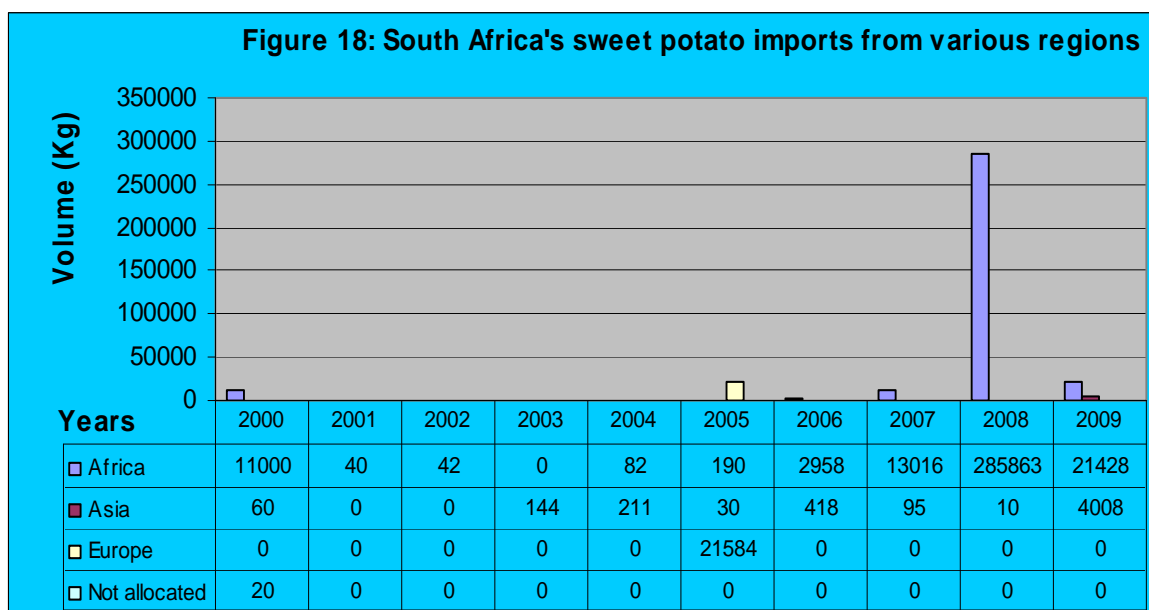
2.4 Sweet potato imports by South Africa

South Africa is not a major sweet potato importer, it represents 0.01% of the world imports for this product, and its ranking in world imports is 69. South Africa imports sweet potatoes from Ghana, China, Gabon and Nigeria. Ghana commanded 75% of sweet potato imports by South Africa. Globally, Canada, United Kingdom, Netherlands, United States of America, Japan and France are major sweet potato importers.

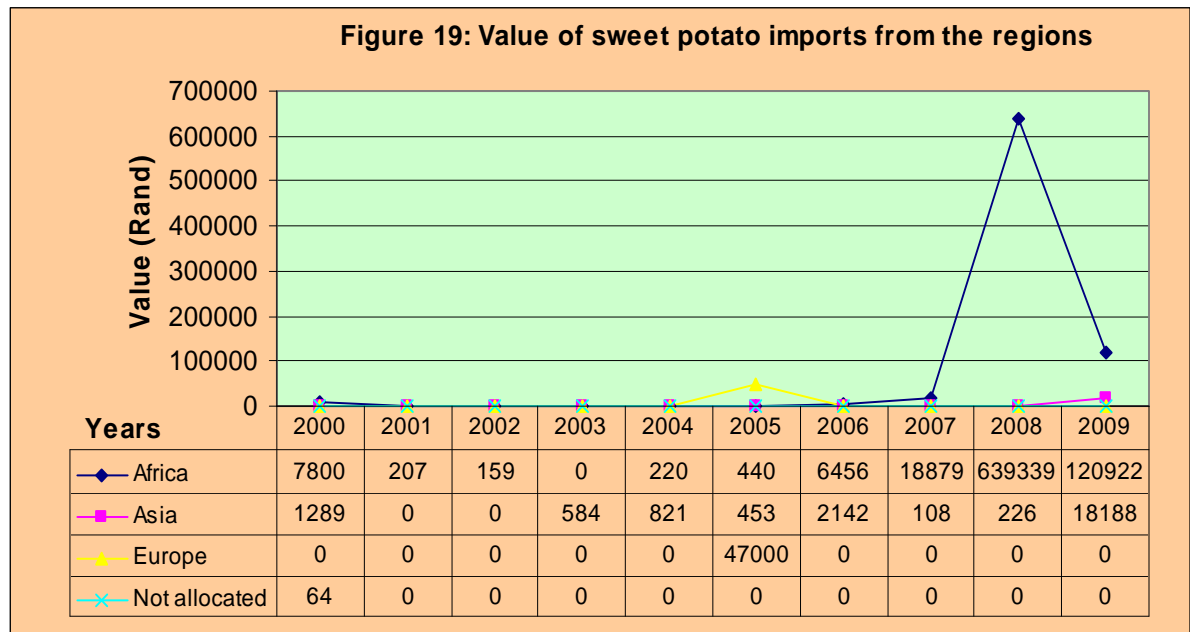


Source: Quantec Research

Figure 17 above; illustrate the sweet potato imports by South Africa. The Considerable sweet potato imports volumes were in 2000, 2005, 2007 and the highest imports were recorded in 2008. The increase in import volumes can be attributed to decline in production volumes in the same years. In 2009, there was a significant decline in imports and this can be attributed to high domestic production in the same year.



Source: Quantec Research



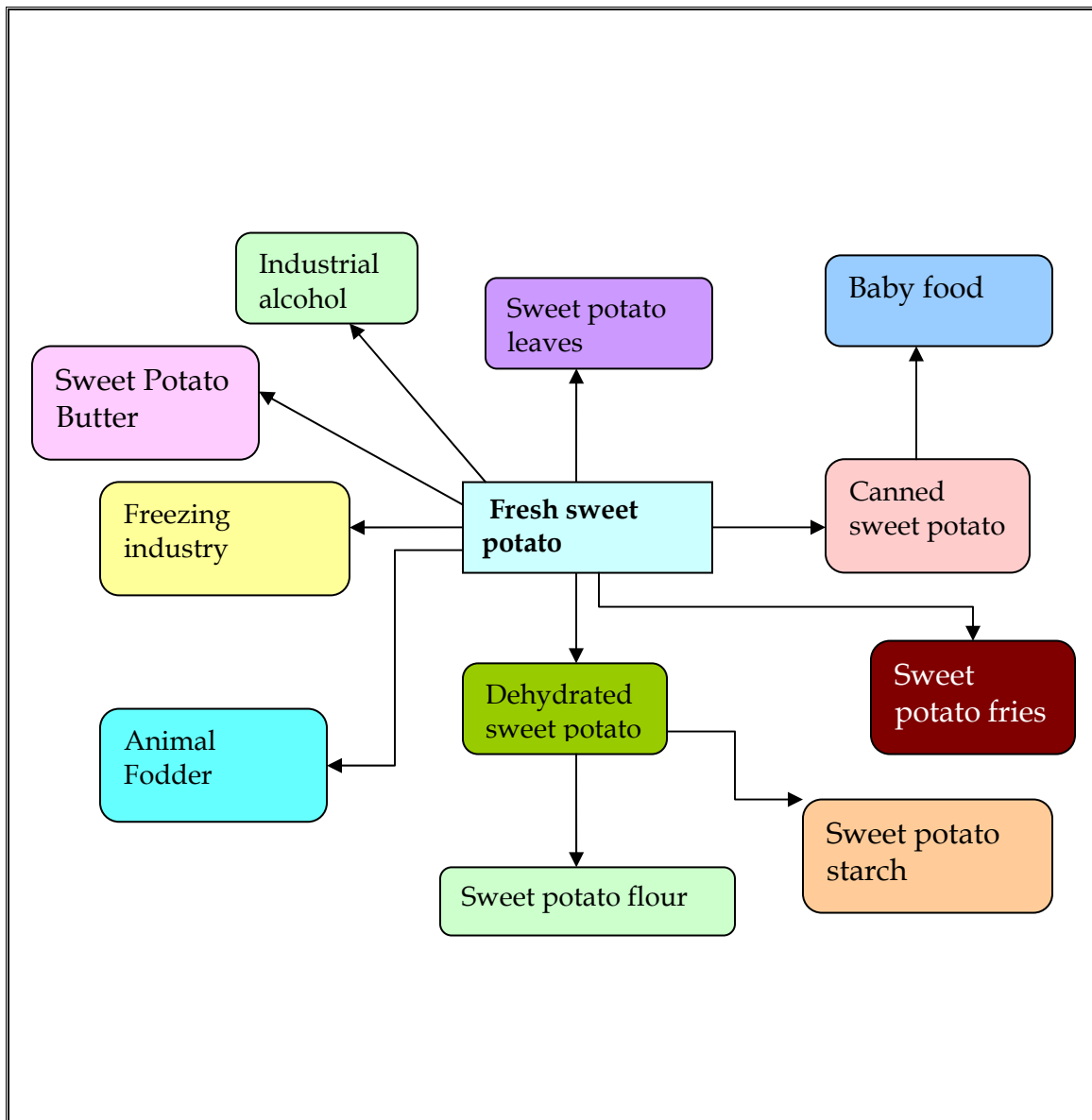
Source: Quantec Research

Figure 19 above indicates the value of South Africa sweet potato imports. The figure shows that it was mostly cheaper to import from African countries. In 2005, a considerable import value for sweet potato from European region was recorded.

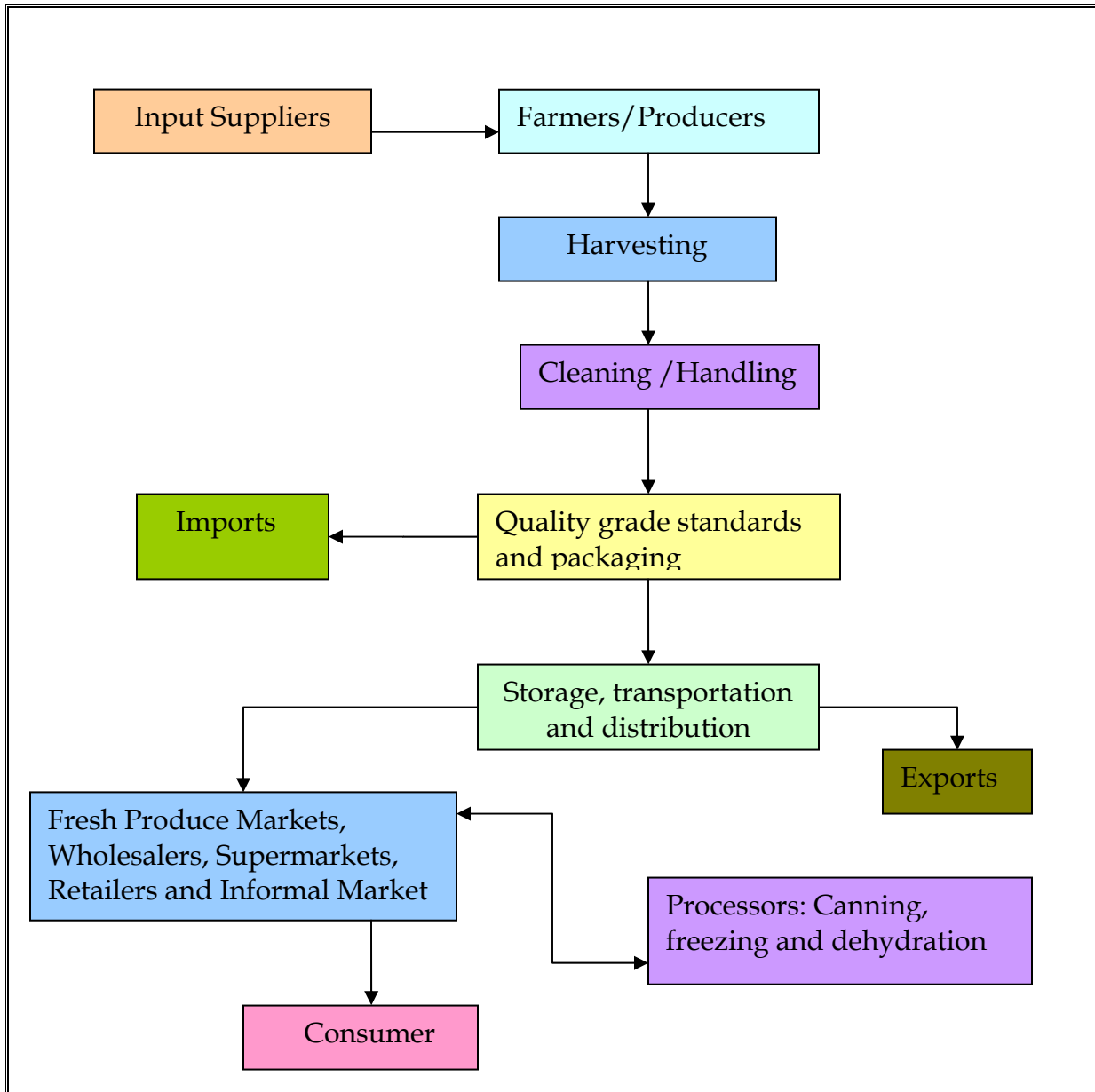
2.5 Processing

The roots are frequently boiled, fried or baked. They can also be processed to make starch, and partial flour substitute. Industrial uses include the production of starch and industrial alcohol. Baked sweet potatoes are sometimes offered in restaurant as an alternative for potatoes. Sweet potatoes can be sliced, fried and eaten just like potato chips. Raw sweet potato can be eaten as well, mostly in chip form. Sweet potato butter can be cooked into a gourmet spread. Taiwanese companies are making alcohol fuel from sweet potato. Sweet potato leaves are also common side dish.

2.6 Sweet potato value chain tree explaining its uses



2.7 Market value Chain for sweet potato



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

3. MARKET INTELLIGENCE

3.1 Tariffs

Table 11: Tariffs applied by various exports markets to sweet potato from South Africa

| Country | Product description (H0714200) | Trade regime description | Applied tariff | Estimated total ad volorem equivalent tariff | Applied tariff | Estimated total ad volorem equivalent tariff |
|--------------------------|--|--------------------------------------|-------------------|--|-------------------|--|
| | | | 2009 | | 2010 | |
| United Kingdom | Sweet potato, fresh for human consumption | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Canada | Sweet potato fresh or chilled | MFN duties (Applied) | 0.00% | 0.00% | 0.00% | 0.00% |
| France | Sweet potato, fresh for human consumption | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Netherlands | Sweet potato, fresh, whole for human consumption | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Japan | Sweet potato fresh, chilled or dried | MFN duties (Applied) | 12.80% | 12.80% | 12.80% | 12.80% |
| United States of America | Sweet potato fresh or frozen | MFN duties (Applied) | 6.00% | 6.00% | 6.00% | 6.00% |
| Albania | Sweet potato fresh or chilled | MFN duties (Applied) | 10.00% | 10.00% | 10.00% | 10.00% |

| | | | | | | |
|----------------------|---|--------------------------------------|--------|--------|--------|--------|
| Belgium | Sweet potato, fresh for human consumption | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Ireland | Sweet potato, fresh for human consumption | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Germany | Sweet potato, fresh for human consumption | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Switzerland | Sweet potato, fresh for human consumption | MFN duties (Applied) | 0.00% | 0.00% | 0.00% | 0.00% |
| Sweden | Sweet potato, fresh for human consumption | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| Denmark | Sweet potato, fresh for human consumption | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |
| United Arab Emirates | Sweet potato and similar root and tuber | MFN duties (Applied) | 5.00% | 5.00% | 5.00% | 5.00% |
| Republic of Korea | Sweet potato frozen or dried | MFN duties (Applied) | 45.00% | 45.00% | 45.00% | 45.00% |
| Portugal | Sweet potato, fresh for human consumption | Preferential tariff for South Africa | 40.00% | 40.00% | 40.00% | 40.00% |
| Thailand | Sweet potato frozen | MFN duties | 40.00% | 40.00% | 40.00% | 40.00% |

| | | | | | | |
|------------|-------------------------------|--------------------------------------|-------|-------|-------|-------|
| | or dried | (Applied) | | | | |
| Mozambique | Sweet potato fresh or chilled | Preferential tariff for South Africa | 0.00% | 0.00% | 0.00% | 0.00% |

Source: Market Access Map

The lucrative exports markets for sweet potato from South Africa are United Kingdom, France, Italy, Belgium, Ireland, Portugal and Germany. These countries apply preferential tariff of 0.00% due to EU-SA Free Trade Agreement (FTA). Asian markets in Thailand and Republic of Korea are highly protected by 40.00% and 45.00% tariff respectively. In African markets Mozambique applies a 0.00% preferential tariff to sweet potatoes from South Africa due to the SADC-FTA.

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 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 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 lead 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). For some products, in order to reach the destination market with an acceptable degree of freshness, air transport is the only option (asparagus, for example, is flown from Peru to the sufficient to cover the transport costs, and collective agreements between farmers of different commodities with different harvest periods can become particularly important.

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.

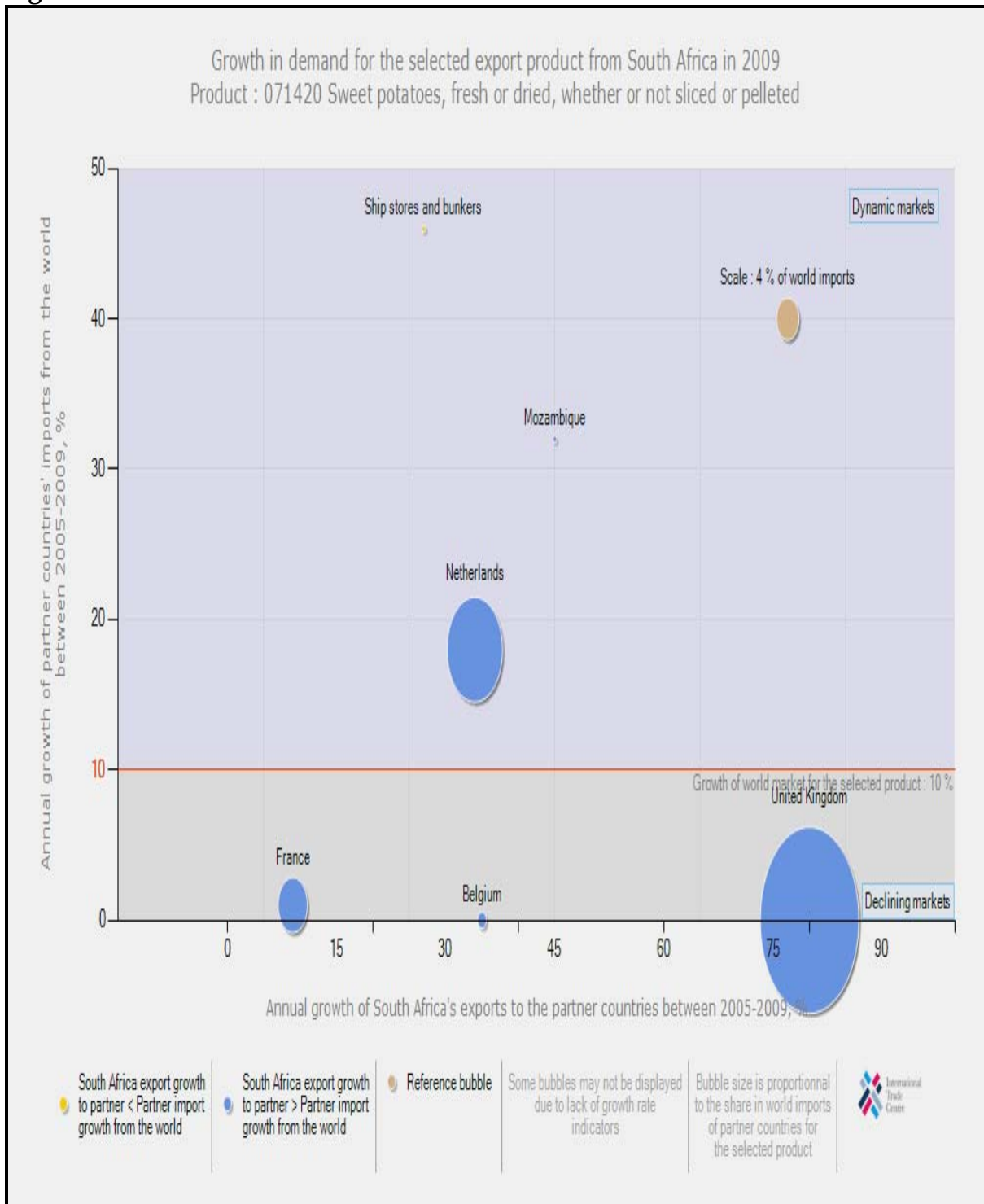
5.3 Packaging also plays a vital role in ensuring safe and efficient transport of a product and conforming to handling requirements, uniformity, recyclable materials specifications, phytosanitary requirements, proper storage needs and even attractiveness (for marketing purposes).

6. COMPETIVENESS OF SOUTH AFRICA SWEET POTATO EXPORTS

Figure 20 below illustrate that South Africa sweet potato export to Mozambique and Netherlands are growing faster than the world sweet potato imports to these countries. South Africa's performance in these countries is regarded as a gain in dynamic market. South Africa sweet potato exports to France, Belgium and United Kingdom are growing while world imports are declining into these countries.

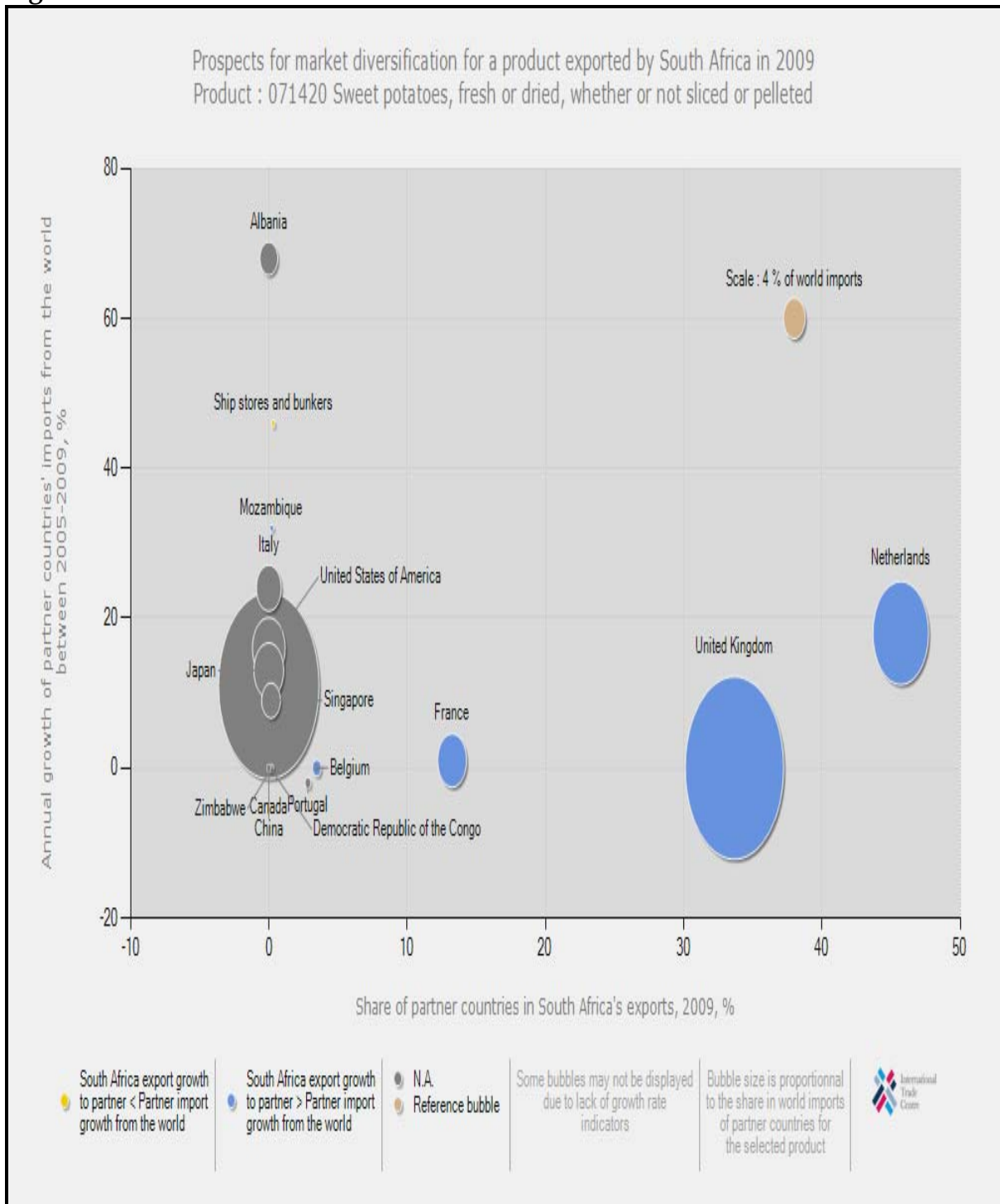
Figure 21 below shows that United Kingdom and Netherlands are the main sweet potato exports markets for South Africa. Prospective markets for exports of sweet potato are mainly Canada, Japan and United States of America, Italy and France. However, if SA is to diversify its sweet potato exports, the most lucrative market exists in Albania and Mozambique which has increased its imports of sweet potato from the world between the periods 2005 and 2009. Albania has experienced 68% and Mozambique has experienced 32% annual growth rate.

Figure 20



Source: ITC Trade Map

Figure 21



Source: ITC Trade Map

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Quantec Research

[www. quantec.co.za](http://www.quantec.co.za)

Market Access Map

www.macmap.org

Economic Research Service/USDA

www.wikipedia.co.za

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