A PROFILE OF THE SOUTH AFRICAN LETTUCE MARKET VALUE CHAIN

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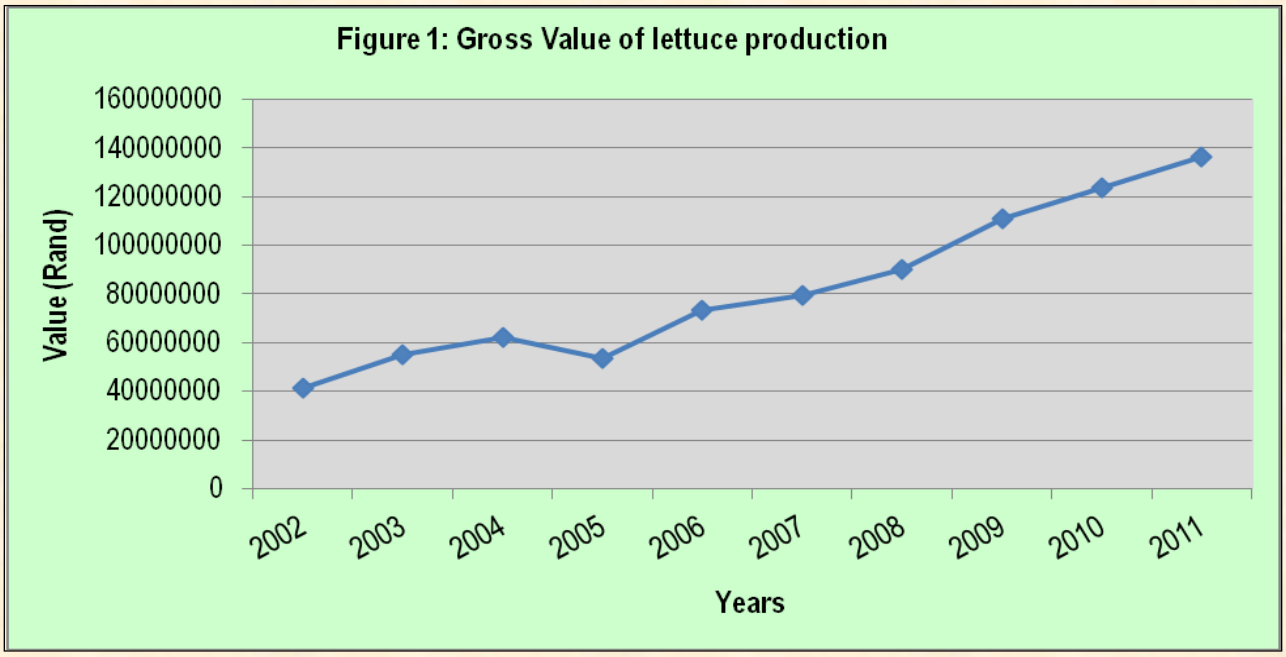
1. DESCRIPTION OF THE INDUSTRY

The Lettuce (*Lactuca sativa*) is a temperate annual or biennial plant of the daisy family Asteraceae. It is most often grown as a leaf vegetable. In many countries, it is typically eaten cold and raw, in salads, hamburgers, tacos, and many other dishes. In South Africa, lettuce has caught vegetable growers' attention since it has become increasingly popular in salads. In some places, including China, lettuce is typically eaten cooked and use of the stem is as important as use of the leaf. Mild in flavour, it has been described over the centuries as a cooling counterbalance to other ingredients in a salad. Lettuce is a fat free, low calorie and saturated fat free food. It is a valuable source of vitamin A and folic acid, potassium, and fiber. The darker green leaves provide more nutrition than light green or yellow. As with most vegetables lettuces are marketed through the national fresh produce markets, restaurants and chain stores. Figure 1 below illustrates the contribution of the lettuce industry to the gross value of agricultural production over the period of a decade.



Source: Statistics and Economic Analysis, DAFF

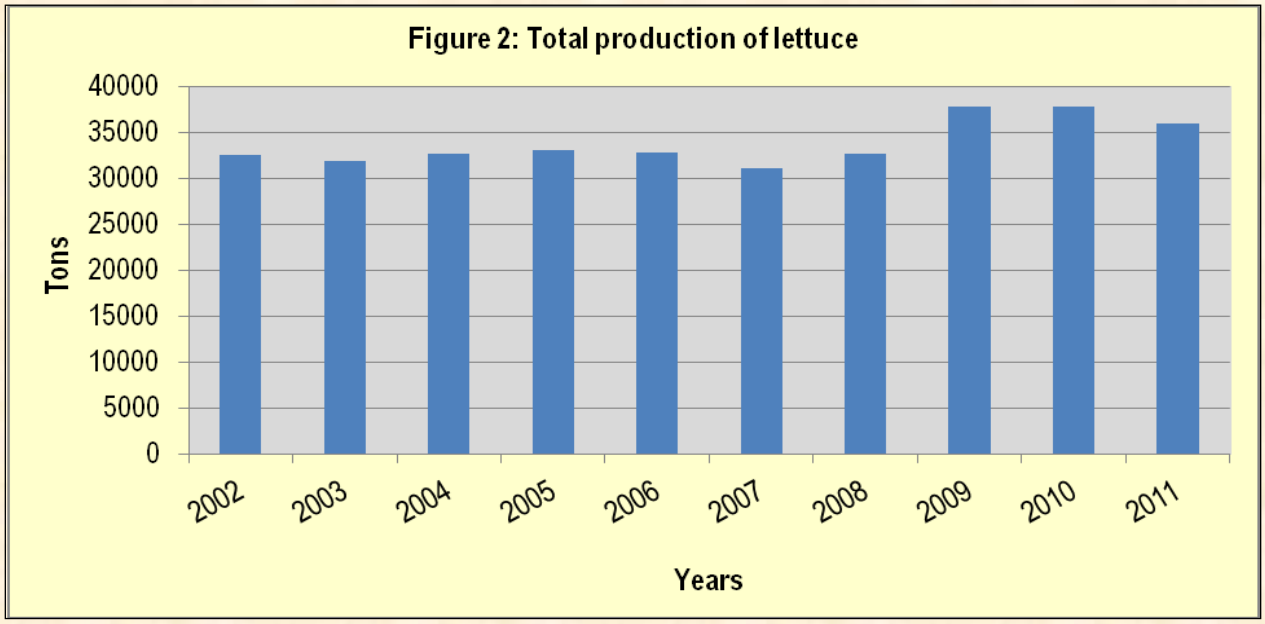
The industry's contribution has increased steadily in 2003 and 2004. There was a 16% decrease in gross value in 2005 due to decline in prices in the same year. Gross value of lettuce increased by 37.5% during 2006 and during 2009 the industry contribution surged by 23%. The gross value increased by 11% during 2010 production season. The highest gross value was in 2011, and this can be attributed to strong producer prices that occurred in the same production season.

1.1 Production areas

Lettuce is a cool-weather annual crop which is not badly damaged by winter cold and light frosts, although differences in tolerance to cold (or heat) may vary appreciably among cultivars. Heavy frosts will, however, severely scorch the leaves. Lettuce production is concentrated in the Western Cape, KwaZulu-Natal, Mpumalanga, Gauteng, Eastern Cape, Limpopo and North West provinces. China, United States of America, India, Italy and Spain are top countries producing lettuce.

1.2 Production Trends

Figure 2 illustrates the total production of lettuce nationally over the period of a decade.

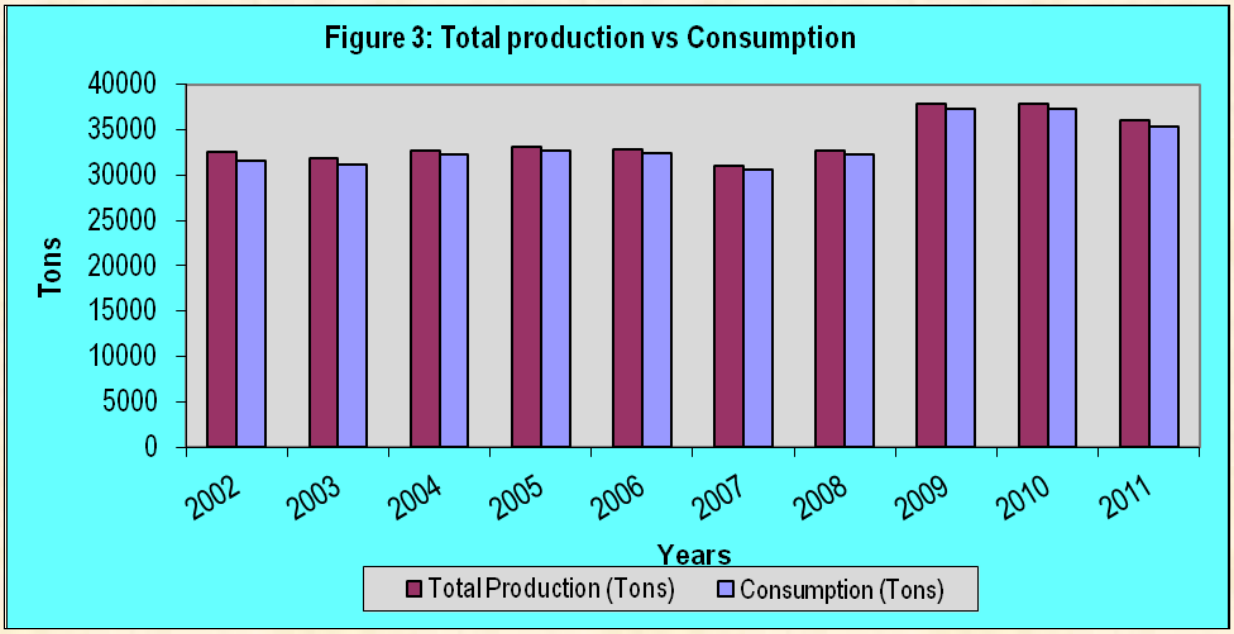


Source: Statistics and Economic Analysis, DAFF

Lettuce production was fairly stable during the period under review. In 2003 there was a 2% drop in production volumes and in the following year production output rose by 2.3%. Production output dropped by 0.6% and 5.5% during 2006 and 2007 production years. In 2009, production output rose by 15.5% when compare to 2008 production output. In 2010, production output increased slightly and during 2011, the production output dropped by 5% when compared to 2010 production year. For the past 10 years the production was fairly unstable, as there was less difference in lettuce production outputs.

1.3 Production vs. Consumption of lettuce

Figure 3 below depicts local consumption of lettuce compared to the production over 10 year period. The figure indicates that the production of lettuce is higher than the consumption. This shows that South Africa is self sufficient in terms of lettuce production and the surplus is also exported to the other countries. South African average lettuce consumption is approximately 33 303 tons per annum. The average lettuce consumption has increased when compared to 32 689 tons recorded for 2010.



Source: Statistics and Economic Analysis, DAFF

2. MARKET STRUCTURE

There is no regulation or restriction in the market of lettuce. The prices of lettuce are determined by market forces of demand and supply. Fresh lettuce is sold through fresh produce markets, restaurants, hawkers, retailers and chain stores. Lettuces are also exported to other countries through export agents and marketing companies. South Africa also imports lettuce from other countries. In 2011, there was a 5% decrease in lettuce sold through fresh produce market. Lettuce exports rose by 16.8% during 2011, despite 4.9% decrease in domestic lettuce production output.

2.1 Domestic Market and prices

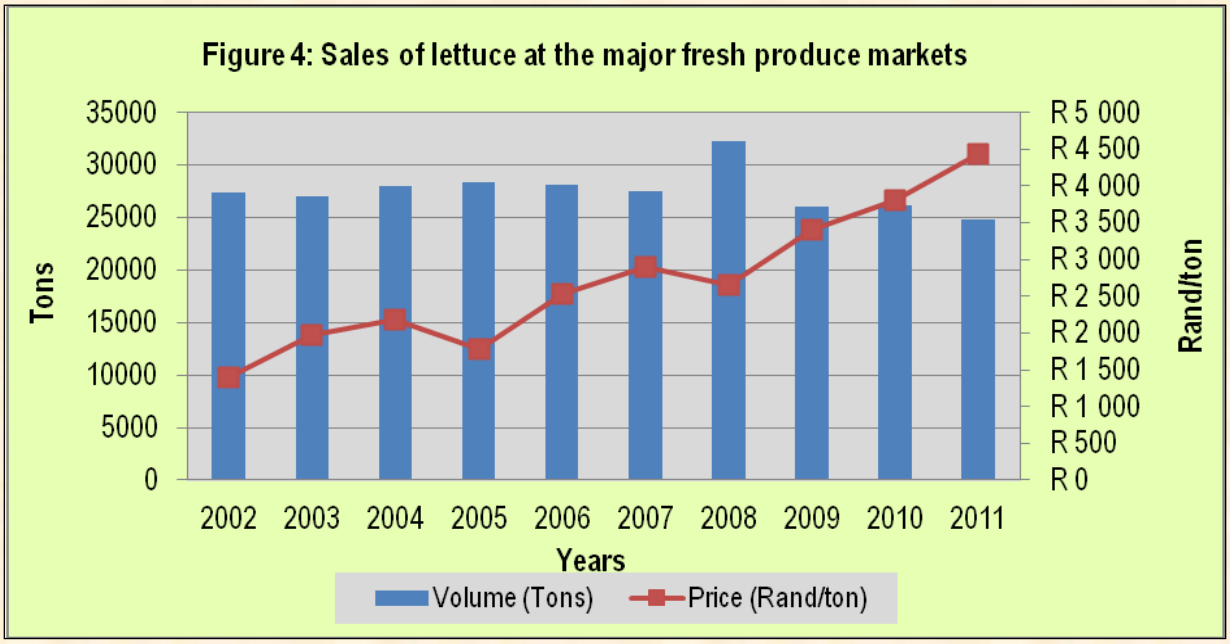
The distribution of total local lettuce production between NFPMs and exports is presented in Table 1.

Table 1: Lettuce sold through different markets channels

Years	National Fresh Produce Markets (Tons)	Exports (Tons)
2002	27 384	1002
2003	27 009	762
2004	27 996	358
2005	28 320	397
2006	28 129	399
2007	27 515	408
2008	32 266	302
2009	37 259	341
2010	26 109	382
2011	24 841	446

Source: Statistics and Economic Analysis, DAFF

It can observed in Table 1 that the local lettuce producers are highly dependent of the local fresh produce market (NFPMS) for distribution. The proportion exported each year is minimal when compared to local sales.

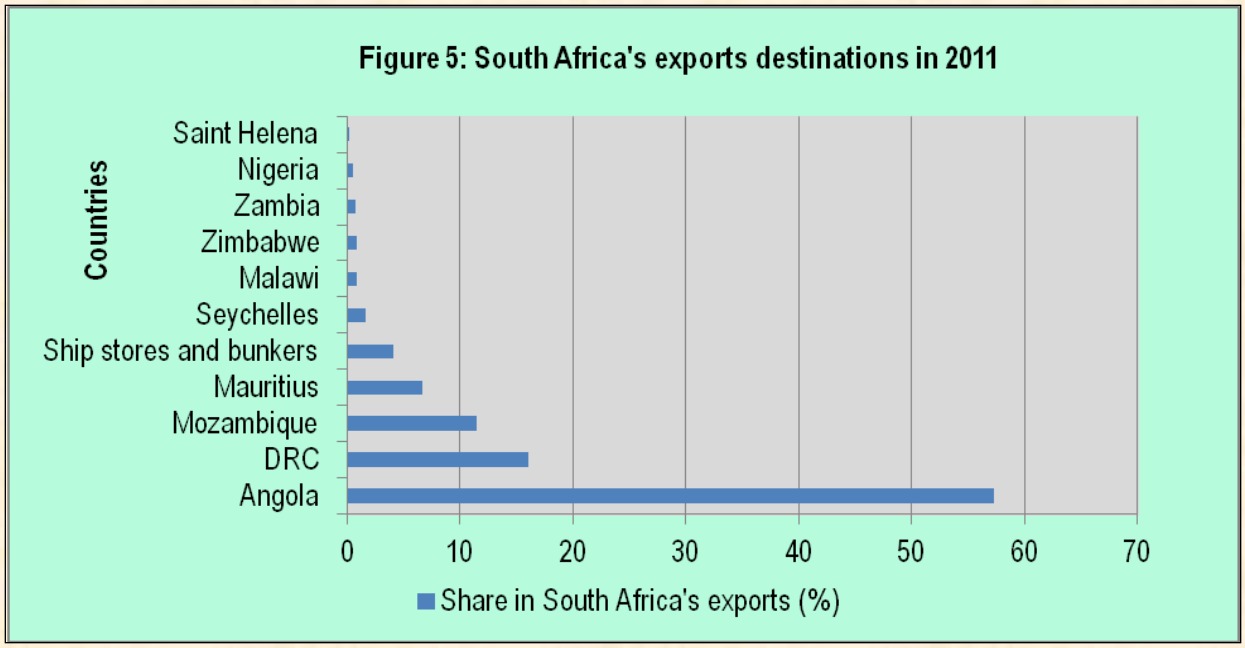


Source: Statistics and Economic Analysis, DAFF

Figure 4 above illustrates the sales of lettuce in the fresh produce markets over the period of 10 years. Lettuce volumes have been fluctuating over the years with peak volumes recorded in 2008. The lowest prices were recorded in 2002 due to high volumes supplied across to the markets. In 2003, lettuce prices increased by 41% compared to the previous year due slight drop in volumes supplied. In 2005, lettuce prices declined by 18% due to an increase in volume supplied. From 2006 to 2007 the prices increased steadily as volumes supplied declines across the markets. In 2009, the lettuce prices eased higher due to low volumes of lettuce supplied across the market. During 2010, market price eased higher by 11.5% despite an increase in the lettuce volumes supplied to the market. These can be attributed to strong demand of lettuce. In 2011, market price surged by 16% due to 4.8% decrease in lettuce volumes supplied at the markets.

2.2 South Africa's Lettuce Exports

South Africa is not a major lettuce exporter. In 2011, it represented 0, 08% of world exports and its ranking in the world was number 31 in the world. South Africa was ranked number 33 in the previous year. South Africa is self sufficient in terms of lettuce production. Almost 99% of lettuce produced in South Africa is for domestic consumption. In 2011, South African lettuce exports were mainly destined to Angola, Democratic Republic of Congo, Mozambique and Mauritius. In 2011, South Africa lettuce exports which were left in ship stores and bunkers has dropped from 12.7% to 4.1%. According to ITC (Trade Map), Spain, United States of America, Mexico, Belgium, Italy, Netherlands and Sweden are the top countries exporting lettuce. Figure 5 below illustrates South African lettuce export destinations in 2011.



Source: ITC Trademap

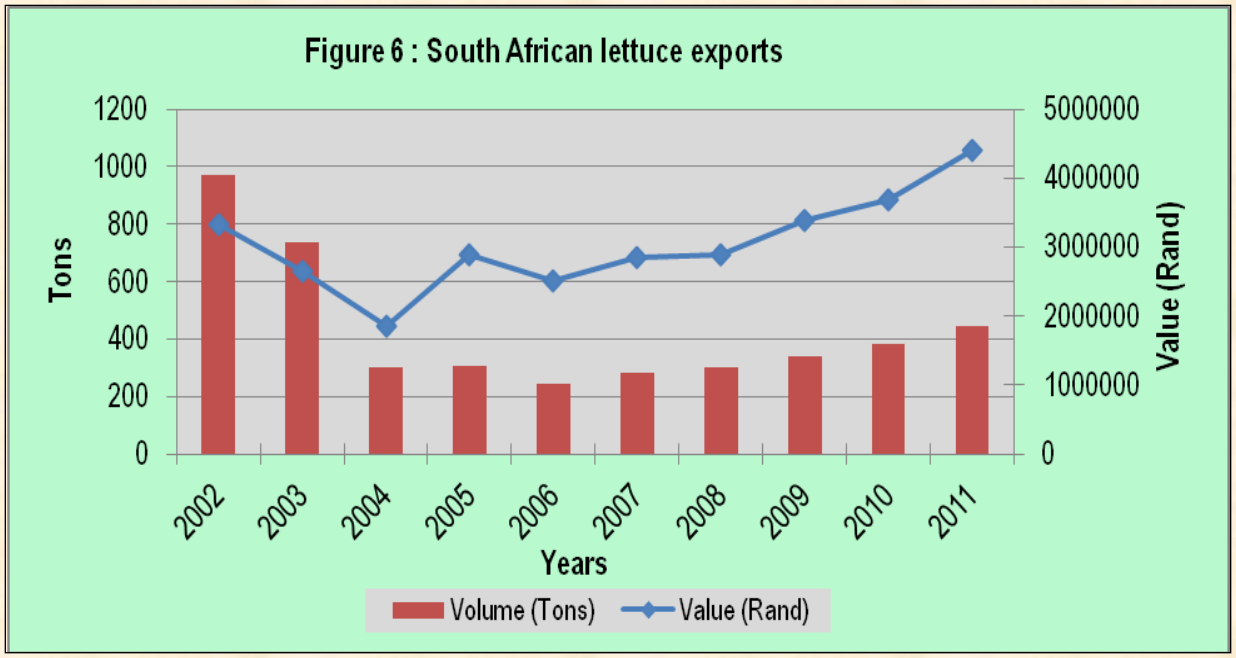
Further details relating to the exports of lettuce in 2011 are presented in Table 2.

Table 2: South African lettuce 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.)
World	607	100	446	1361	12	12	21
Angola	348	57.3	226	1540	27	24	31
DRC	97	16	44	2205	14	5	64
Mozambique	69	11.4	114	605	37	31	53
Mauritius	40	6.6	22	1818	34	28	0
Ship stores and bunkers	25	4.1	11	2273	-23	-29	-61
Seychelles	10	1.6	15	667	9	48	43
Malawi	5	0.8	2	2500			
Zimbabwe	5	0.8	7	714			67
Zambia	4	0.7	1	4000			-56
Nigeria	3	0.5	2	1500	-14	-4	0
Saint Helena	1	0.2	1	1000	0	-19	

Source: ITC Trademap

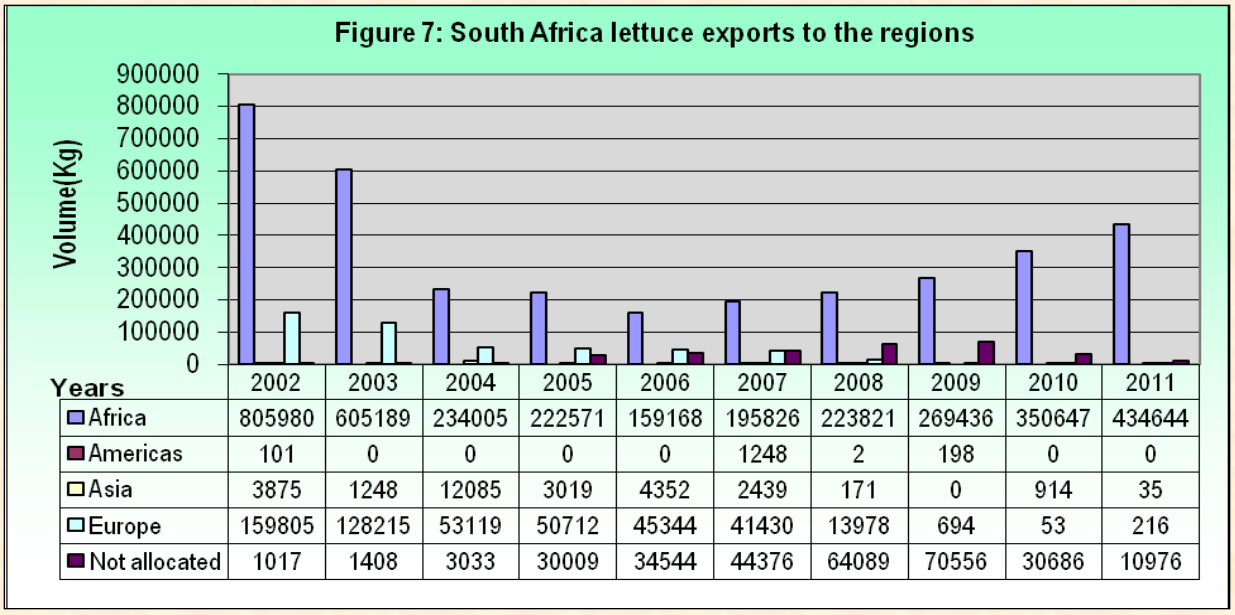
Table 2 indicates that during 2011, Angola commanded 57.3% of lettuce exports and only 4.1% of South Africa's lettuce exports were left in ship stores and bunkers. The Democratic Republic of Congo and Mozambique commanded 16% and 11.4% respectively. South African lettuce export left in ships stores and bunkers has decreased by 61% in value between 2010 to 2011 period. South African lettuce exports to Nigeria have decreased by 14% and 4% in value and in quantity respectively during 2007-2011 period. Figure 6 depicts South African lettuce exports from 2002 to 2011.



Source: Quantec Easydata

The most significant exports volumes were recorded in 2002 and 2003. High exports in 2002 can be attributed to high production volumes recorded in the same year. From 2004 to 2008 there was a significant decline in lettuce exports. In 2009, there was a 13% increase in export volumes and during 2010 lettuce exports increased by 12%. In 2011, lettuce exports increased by 16.6% despite a 4.9% drop in domestic production output in the same year. It appears that it was relatively less profitable to export in 2002 and 2003 since less export values were recorded for higher volumes exported. From 2004 to 2011, it was more profitable to export lettuce since higher exports values were recorded for smaller volumes exported.

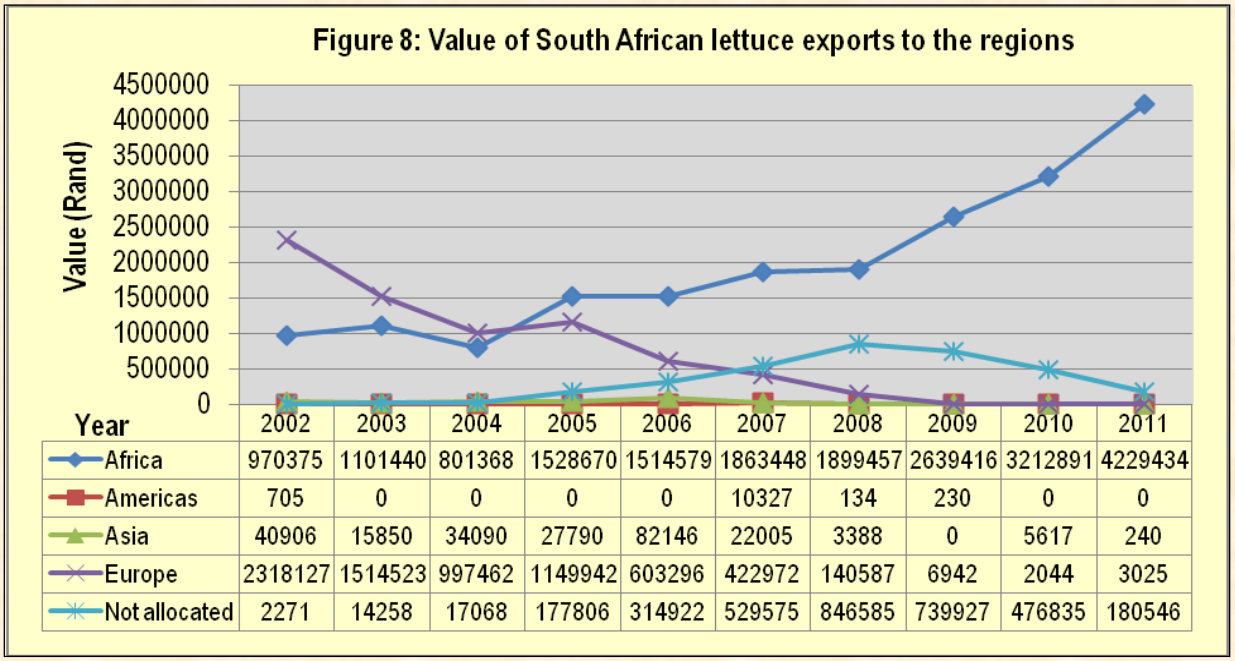
Figure 7 below illustrates South Africa's lettuce exports to the various regions. South Africa exports lettuce mainly to African countries. This can be attributed largely to lettuce being a highly perishable vegetable. From 2002 to 2008, South Africa has exported a fraction of lettuce to European countries. From 2002 to 2010 a fraction of South African lettuce exports were not allocated to any region. In 2009 there was no recorded lettuce trade between South Africa and Asian region. South Africa's exports to the Americas were insignificant. In 2011, the African region remained South Africa's biggest market for lettuce and exports to Asia and Europe were less significant.



Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Africa	805980	605189	234005	222571	159168	195826	223821	269436	350647	434644
Americas	101	0	0	0	0	1248	2	198	0	0
Asia	3875	1248	12085	3019	4352	2439	171	0	914	35
Europe	159805	128215	53119	50712	45344	41430	13978	694	53	216
Not allocated	1017	1408	3033	30009	34544	44376	64089	70556	30686	10976

Source: Quantec Easydata

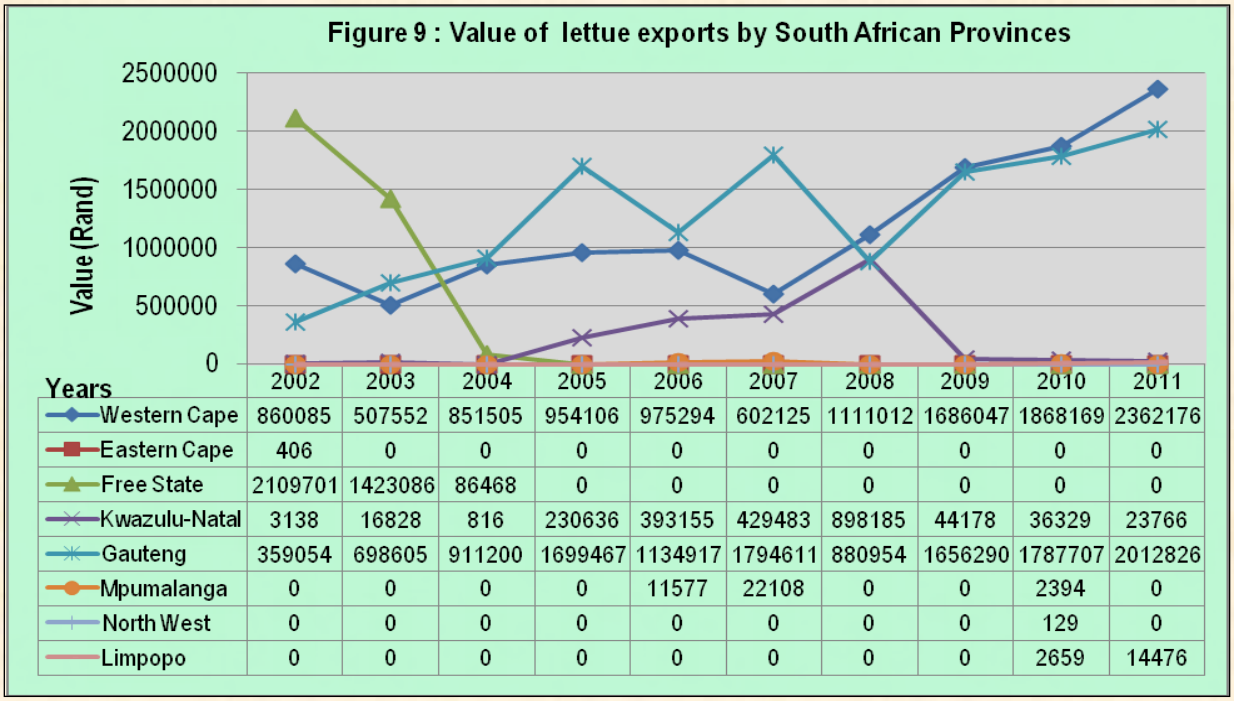
The values of South African lettuce exports during the past ten years are presented in Figure 8 below.



Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Africa	970375	1101440	801368	1528670	1514579	1863448	1899457	2639416	3212891	4229434
Americas	705	0	0	0	0	10327	134	230	0	0
Asia	40906	15850	34090	27790	82146	22005	3388	0	5617	240
Europe	2318127	1514523	997462	1149942	603296	422972	140587	6942	2044	3025
Not allocated	2271	14258	17068	177806	314922	529575	846585	739927	476835	180546

Source: Quantec Easydata

Figure 8 shows that the lettuce exported to European countries have high value than the lettuce exported to African countries. In 2002 and 2003, lettuce exports to African countries were less profitable. From 2005 to 2011, exports to African countries recorded high export values. From 2007 to 2009 unallocated lettuce exports has also earned considerable values. During 2011, it was still more profitable to export lettuce to European region. Values of lettuce exports by various provinces are illustrated in Figure 9.

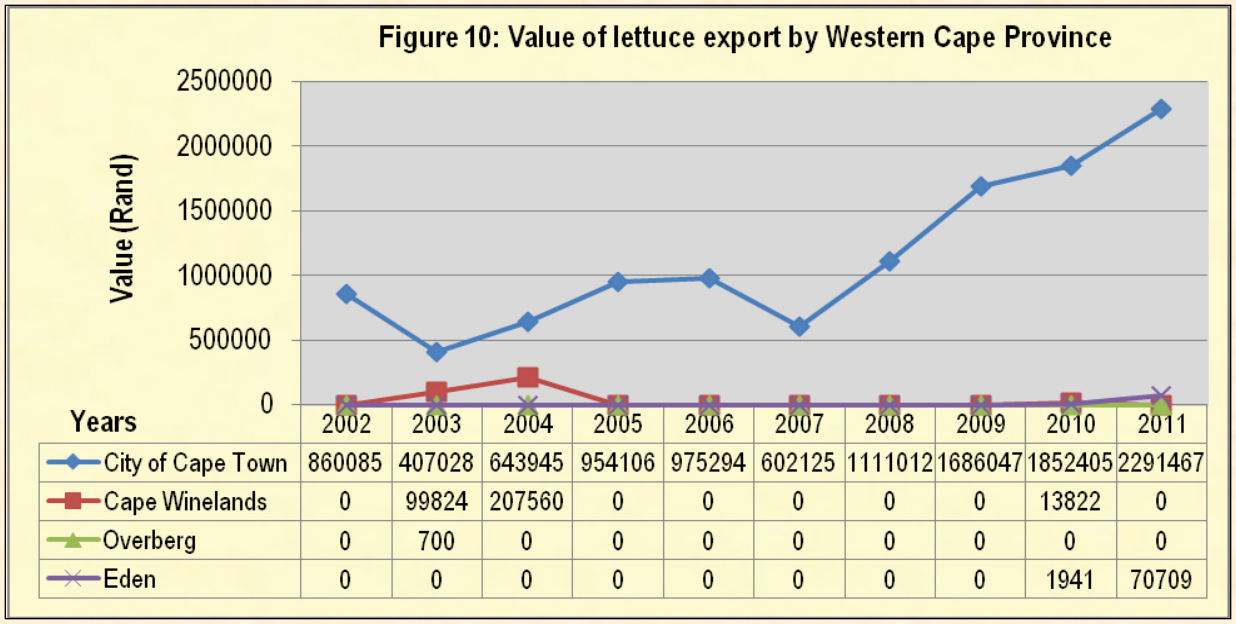


Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Western Cape	860085	507552	851505	954106	975294	602125	1111012	1686047	1868169	2362176
Eastern Cape	406	0	0	0	0	0	0	0	0	0
Free State	2109701	1423086	86468	0	0	0	0	0	0	0
Kwazulu-Natal	3138	16828	816	230636	393155	429483	898185	44178	36329	23766
Gauteng	359054	698605	911200	1699467	1134917	1794611	880954	1656290	1787707	2012826
Mpumalanga	0	0	0	0	11577	22108	0	0	2394	0
North West	0	0	0	0	0	0	0	0	129	0
Limpopo	0	0	0	0	0	0	0	0	2659	14476

Source: Quantec Easydata

The highlights from Figure 9 were that Gauteng, Western Cape and KwaZulu-Natal provinces were consistently the leaders in the exports of lettuce. Free State province contributed from 2001 to 2004 and from 2005 there were no lettuce exports from this province. In 2011, Limpopo value of exports have increase significantly compare to 2010. The high export values of Gauteng, Western Cape and KwaZulu-Natal can be attributed to the Durban harbour, OR Tambo International Airport, Cape Town harbour located in these provinces as they serve as exports exists points. The following figures (Figure 10-14) show the value of lettuce exports from the various districts in provinces of South Africa.

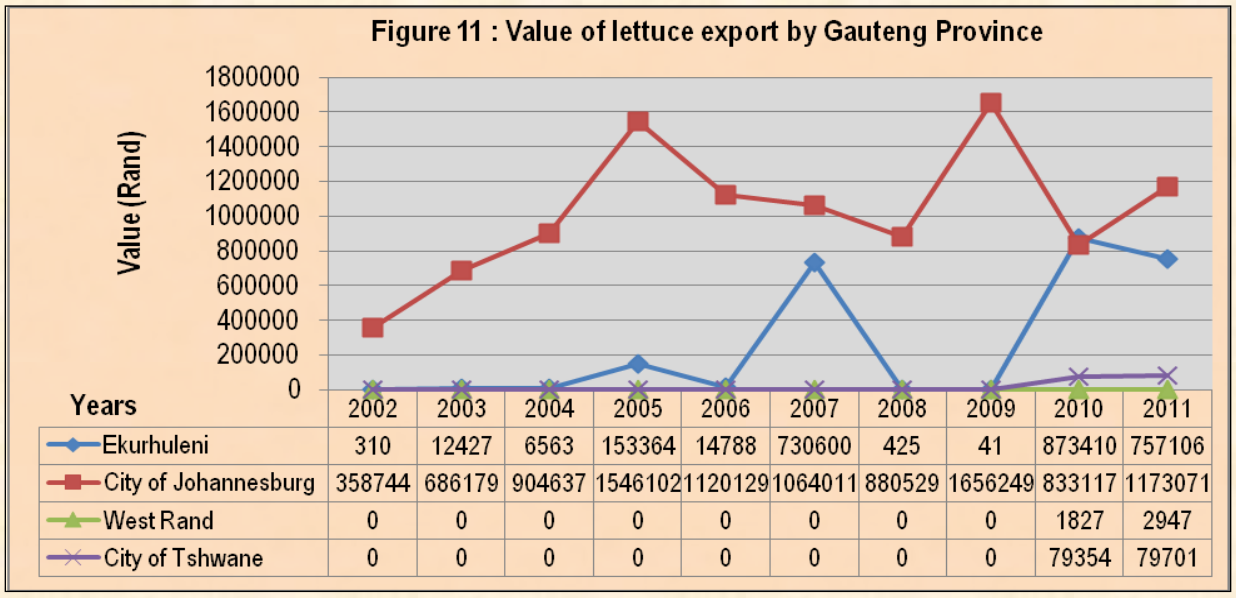
Figure 10 below indicates that lettuce exports from Western Cape province were mainly from the City of Cape Town district municipality and highest export value was recorded in 2011 and the export value was 23% higher compared to export value in 2010. Cape Winelands district municipality has recorded export value in 2003, 2004 and 2009. In 2011, Eden district municipality's value of exports have increased significantly when compared to the export value recorded for 2010.



Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
City of Cape Town	860085	407028	643945	954106	975294	602125	1111012	1686047	1852405	2291467
Cape Winelands	0	99824	207560	0	0	0	0	0	13822	0
Overberg	0	700	0	0	0	0	0	0	0	0
Eden	0	0	0	0	0	0	0	0	1941	70709

Source: Quantec Easydata

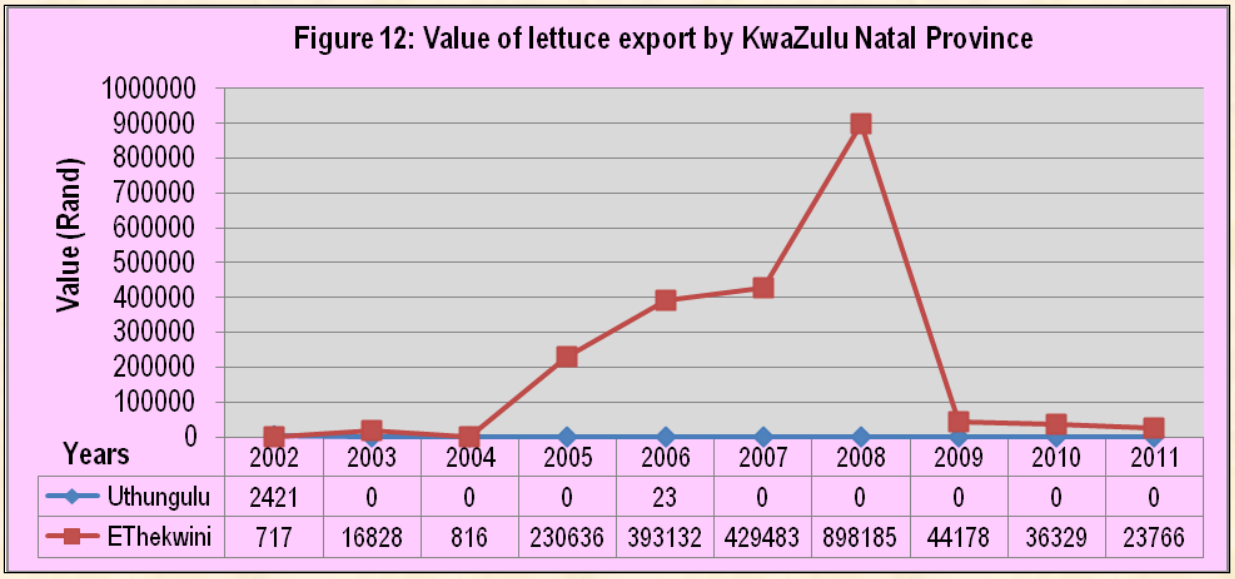
Values of lettuce exports from the Gauteng province are presented in Figure 11.



Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ekurhuleni	310	12427	6563	153364	14788	730600	425	41	873410	757106
City of Johannesburg	358744	686179	904637	1546102	1120129	1064011	880529	1656249	833117	1173071
West Rand	0	0	0	0	0	0	0	0	1827	2947
City of Tshwane	0	0	0	0	0	0	0	0	79354	79701

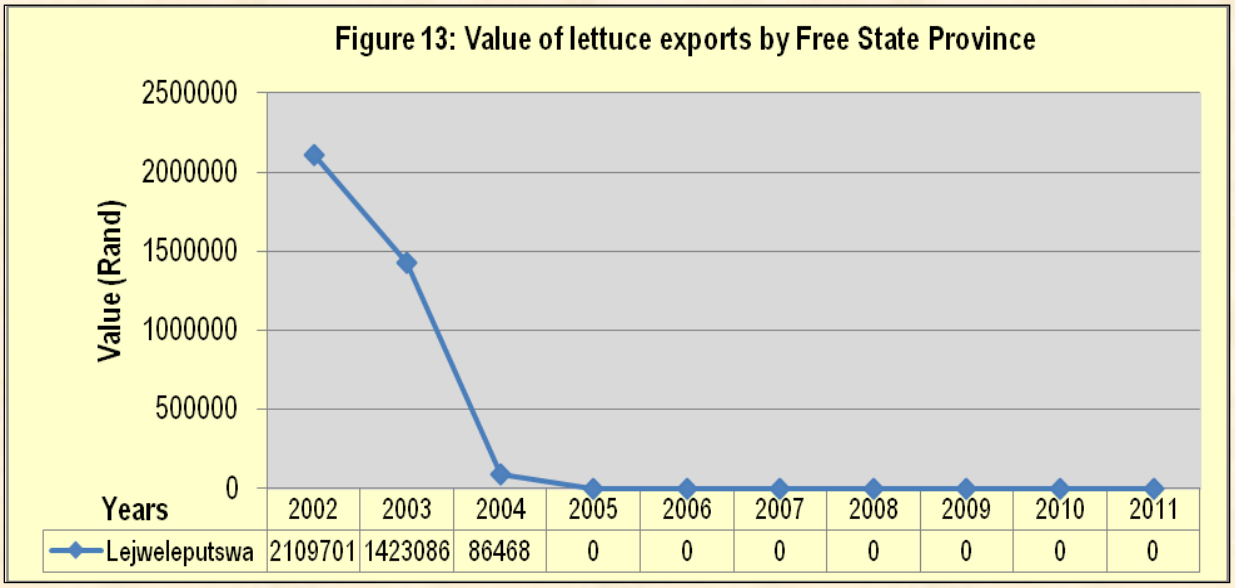
Source: Quantec Easydata

Figure 11 above illustrates that lettuce exports from Gauteng province were mainly from City of Johannesburg and Ekurhuleni. Export value recorded for Ekurhuleni municipality was less significant compared to City of Johannesburg export value, but the district has recorded the high lettuce export value in 2007, 2010 and 2011. In 2010, City of Tshwane has recorded considerable lettuce export value for the first time during the period under review. In 2010, West Rand has recorded an insignificant export value and during 2011, the value has increase by 61%. OR Tambo International Airport serve as an exit point for exports from these municipalities.



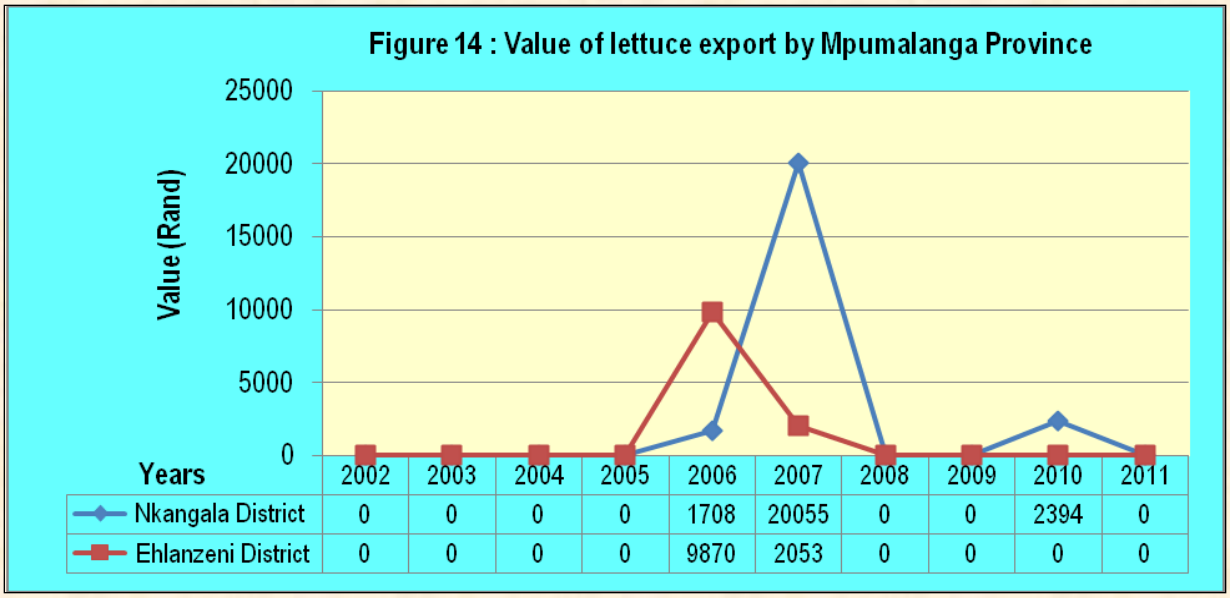
Source: Quantec Easydata

Figure 12 above indicates that lettuce exports from KwaZulu-Natal Province were from Ethekwini district municipality. The highest export value was recorded in 2008 and there was a 95% decrease in value of lettuce export recorded for Ethekwini municipality in 2009. In 2010 and 2011, there was a further decline in value of exports recorded for Ethekwini district. Uthungulu recorded lettuce export value in 2002 and 2006 and in other years, the district has recorded zero trade. Durban harbour serves as an exit point for exports from Ethekwini municipality.



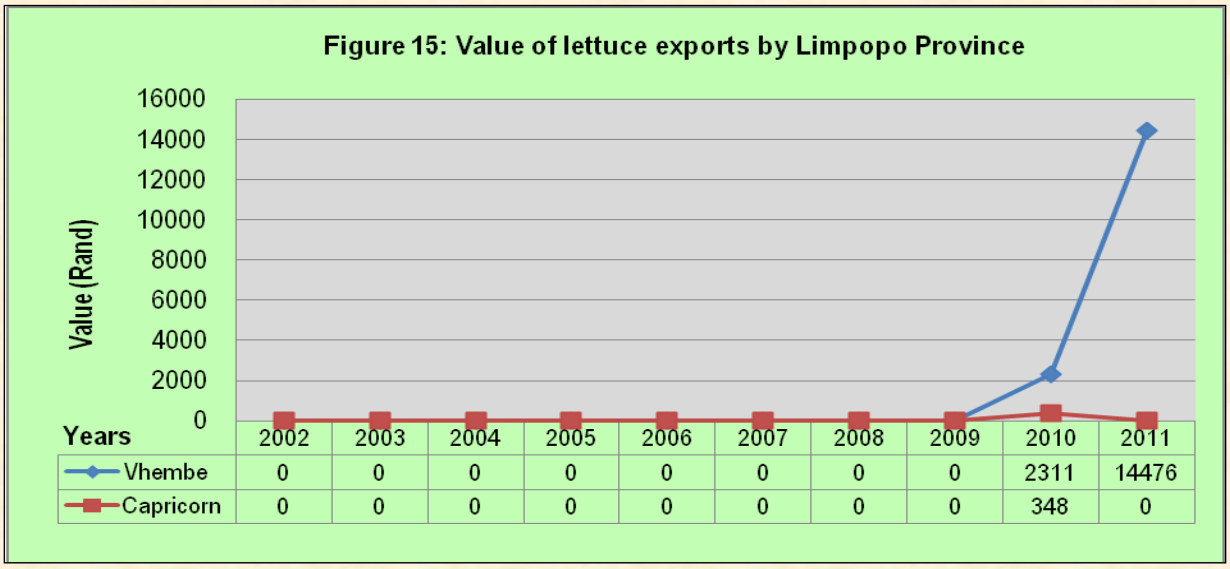
Source: Quantec Easydata

Figure 13 above illustrate that lettuce exports by Free State province were from Lejweleputswa district municipality. The highest export value was recorded in 2002 and from 2005 to 2011 the province has registered zero trade of lettuce.



Source: Quantec Easydata

Figure 14 above indicates that lettuce exports from Mpumalanga province were from Ehlanzeni and Nkangala district municipalities .The highest export value was in 2007 from Nkangala district municipality. In 2008, 2009 and 2011, the province has registered zero trade on lettuce.



Source: Quantec Easydata

Figure 15 above indicates that lettuce exports from Limpopo province began in 2010 and the exports were from Vhembe and Capricorn district municipalities .The highest export value was recorded in 2011.

2.3 Share Analysis

Table 3 below illustrates the provincial shares towards national lettuce exports. Western Cape and Gauteng have commended the greatest share of South Africa lettuce exports. Free State and KwaZulu-Natal has contributed South Africa exports to a lesser extent. The high export share in Western Cape and Gauteng can be attributed to the registered exporters and exports exit points based in these provinces. In 2011, Western Cape has commanded 53.52% and Gauteng has commended 45.61% share of South Africa lettuce exports.

Table 3: Share of Provincial lettuce exports to the total South African lettuce exports (%)

Year Province	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Western Cape	25.81	19.18	46.03	33.08	38.78	21.14	38.44	49.79	50.53	53.52
Eastern Cape	0.01	0	0	0	0	0	0	0	0	0
Free State	63.31	53.78	4.67	0	0	0	0	0	0	0
Kwazulu-Natal	0.09	0.64	0.04	8	15.63	15.08	31.08	1.30	0.98	0.54
Gauteng	10.77	26.40	49.25	58.92	45.13	63.01	30.48	48.91	48.35	45.61
Mpumalanga	0	0	0	0	0.46	0.78	0	0	0.07	0
Limpopo	0	0	0	0	0	0	0	0	0.07	0.33
RSA	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Calculated from Quantec Easydata

Table 4 shows that City of Cape Town districts municipality commanded greatest share of lettuce exports from the Western Cape province. Cape Winelands commanded considerable share of lettuce exports in 2003 and 2004. From 2005 to 2009, City of Cape Town has commanded 100% share of lettuce exports from Western Cape Province. In 2011, Overberg district municipality has contributed to Western Cape provincial lettuce share for the first time in 10 year period.

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

Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
City of Cape Town	100	80.19	75.62	100	100	100	100	100	99.16	97.01
Cape Winelands	0	19.67	24.38	0	0	0	0	0	0.74	0
Eden	0	0	0	0	0	0	0	0	0.10	0
Overberg	0	0	0	0	0	0	0	0	0	2.99
Western Cape	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Calculated from Quantec Easydata

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

Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ekurhuleni	0.09	1.78	0.72	9.02	1.30	40.71	0.05	0	48.86	37.61
City of Johannesburg	99.91	98.22	99.28	90.98	98.70	59.29	99.72	100	46.60	58.28
City of Tshwane	0	0	0	0	0	0	0	0	4.44	0.15
West Rand	0	0	0	0	0	0	0	0	0.10	3.96
Gauteng	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Calculated from Quantec Easydata

Table 5 illustrates that City of Johannesburg commanded the greatest share of exports from the Gauteng province. In 2011, Ekurhuleni district has commanded 37.61% and City of Johannesburg has

commanded 58.28% share of lettuce exports. During 2011, West Rand has increased its export share while the export share for the City of Tshwane has dropped significantly. The OR Tambo International Airport serves as export exit point from these municipalities.

Table 6: Share of district lettuce exports to the total KwaZulu-Natal provincial lettuce exports (%)

Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Uthungulu	77.15	0	0	0	0.01	0	0	0	0	0
Ethekwini	22.85	100	100	100	99.99	100	100	100	100	0
KwaZulu Natal	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**0**

Source: Calculated from Quantec Easydata

Table 6 shows that Ethekwini district municipality commanded a greatest share of exports from the KwaZulu-Natal province. From 2003 to 2005 and from 2007 to 2010, Ethekwini has commanded 100% share of lettuce exports from Kwazulu Natal province. Uthungula district contributed significantly to lettuce exports in 2002. In 2011, KwaZulu Natal has recorded zero trade on lettuce.

Table 7: Share of District lettuce exports to the total Free State provincial lettuce exports (%)

Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Lejweleputswa	100	100	100	0	0	0	0	0	0	0
Free State	**100**	**100**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Source: Calculated from Quantec Easydata

Lejweleputswa district municipality has commanded 100% share of lettuce exports from Free State province (see Table 7). From 2005 to 2010 and 2011, the province has recorded zero trade for lettuce.

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

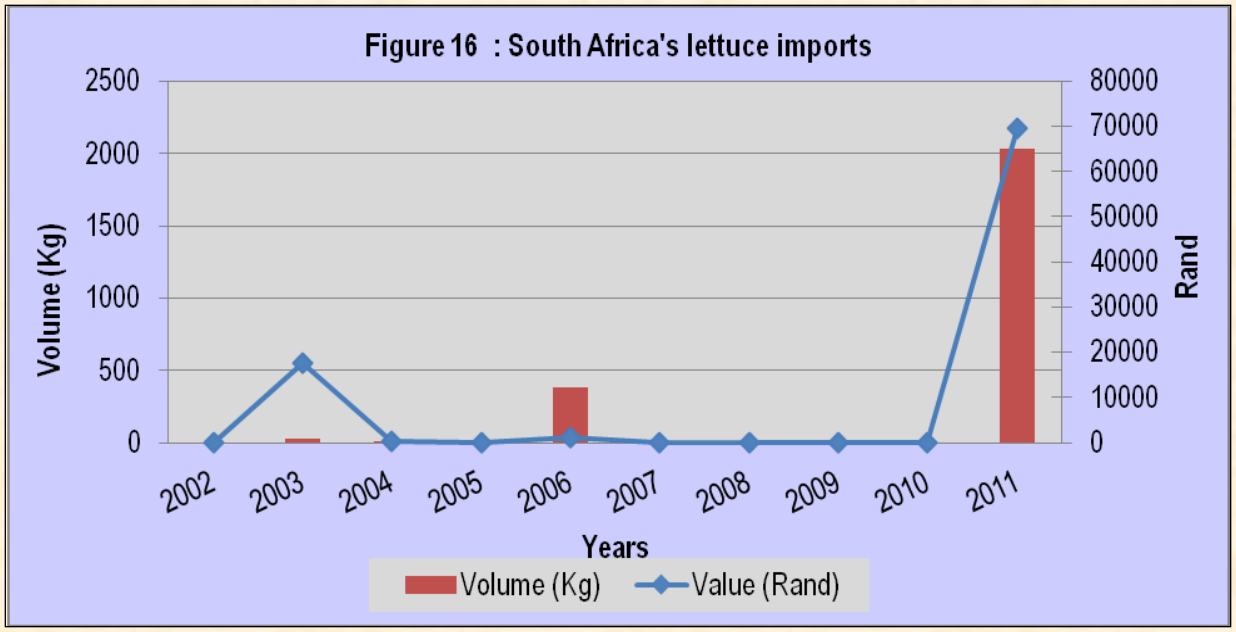
Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nkangala	0	0	0	0	14.75	90.71	0	0	100	0
Ehlanzeni	0	0	0	0	85.25	9.29	0	0	0	0
Mpumalanga	**0**	**0**	**0**	**0**	**100**	**100**	**0**	**0**	**100**	**0**

Source: Calculated from Quantec Easydata

Table 8 above indicates that Nkangala and Ehlanzeni district municipalities commanded the greatest shares of lettuce exports in 2006 and 2007 from Mpumalanga province. In 2010, Nkangala has commanded 100% share of lettuce exports. In 2011, Mpumalanga province has recorded zero trade for lettuce.

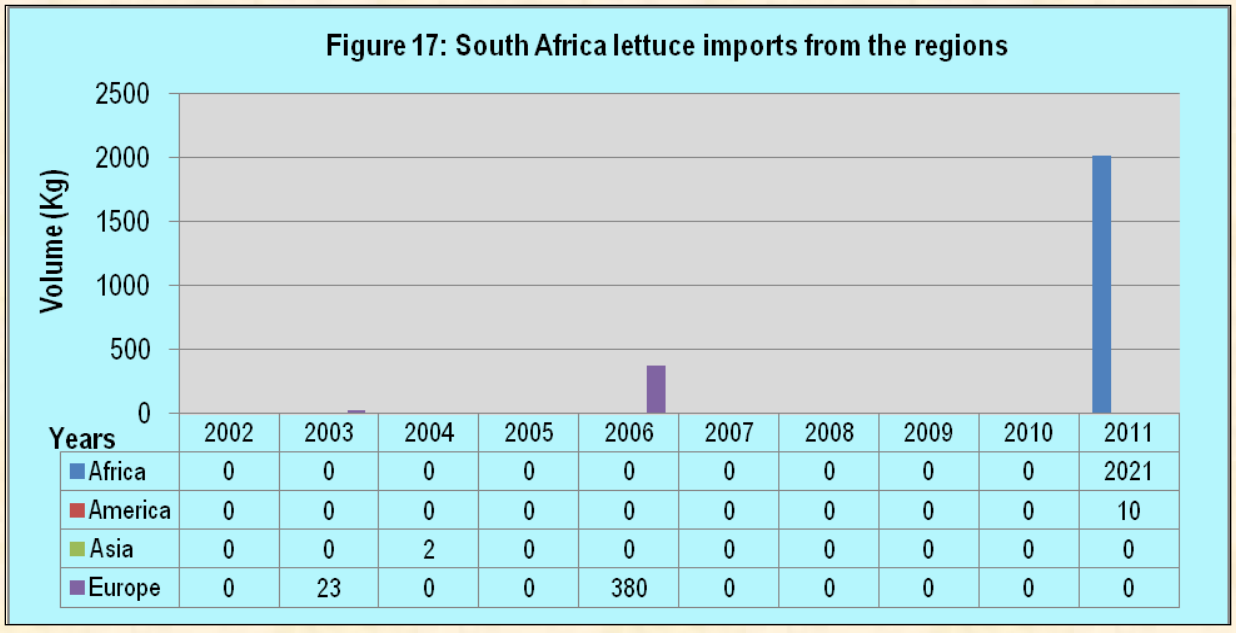
2.4 South Africa's lettuce imports

South Africa is not a major lettuce importer. In 2011 it represented 0% of world imports and its ranking in world imports was 109. Germany, United States of America, Canada, United Kingdom, Italy and Sweden are top countries importing lettuce.



Source: Quantec Easydata

Figure 16 shows that South Africa's first significant imports of lettuce were recorded in 2006. The increase in imports in 2006 can be attributed to the decline in lettuce production volume in the same years. It also appears that it was cheaper to import in 2006 since higher volumes were imported at a lesser value. It was relatively more expensive to import in 2003 since less volumes were imported at a relatively higher value. From 2007 to 2010, there were no lettuce imports by South Africa and this can be attributed to sufficient domestic lettuce production. During 2011, South Africa's lettuce import surged (see Figure 17) and this can be attributed to a drop in domestic production in the same year.

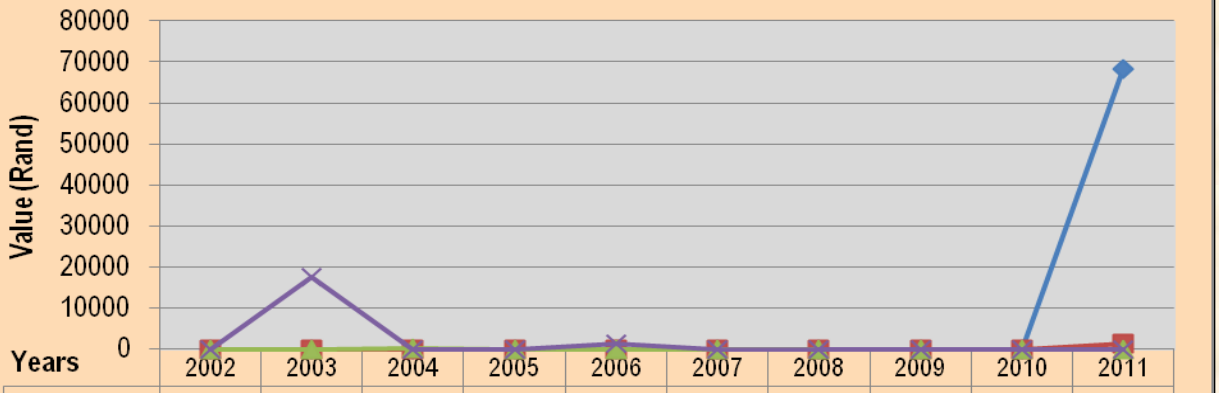


Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Africa	0	0	0	0	0	0	0	0	0	2021
America	0	0	0	0	0	0	0	0	0	10
Asia	0	0	2	0	0	0	0	0	0	0
Europe	0	23	0	0	380	0	0	0	0	0

Source: Quantec Easydata

Figure 17 above shows that in 2006 South Africa imported considerable amounts of lettuce from European countries (Germany and France). Lettuce imports from Asia were recorded only in 2004 and the volumes were insignificant. From 2007 to 2010, South Africa has recorded zero trade from all regions. In 2011, South Africa imported lettuce from African region (Kenya) and Americas region (United States of America).

Figure 18: Value of South Africa's lettuce from the regions



Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Africa	0	0	0	0	0	0	0	0	0	68168
America	0	0	0	0	0	0	0	0	0	1397
Asia	0	0	229	0	0	0	0	0	0	0
Europe	0	17478	0	0	1219	0	0	0	0	0

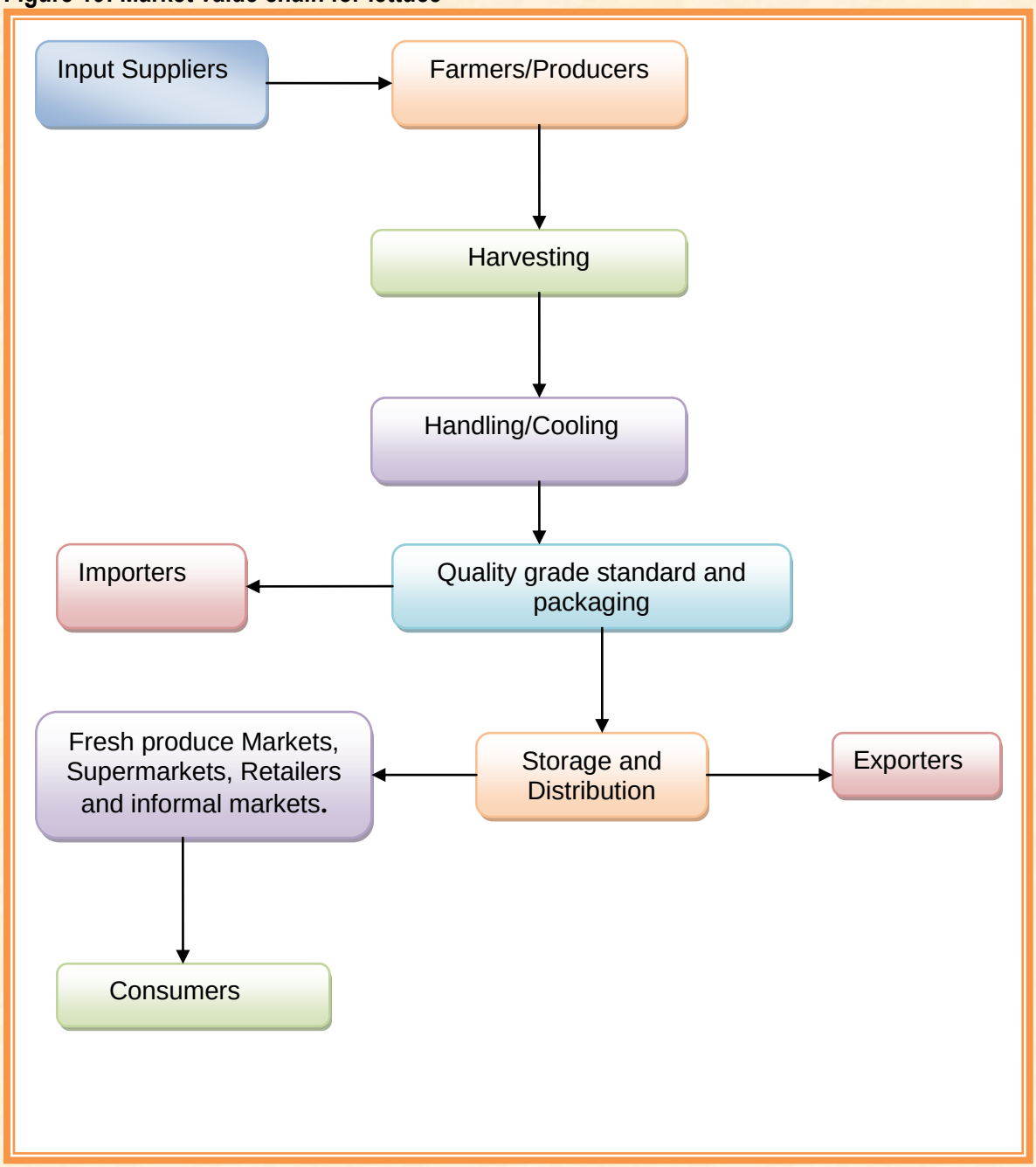
Source: Quantec Easydata

Figure 18 above shows that it was expensive to import lettuce from Europe in 2003 since less volume were imported at a higher value and in 2006 it was cheaper to import since high volumes were imported at a lesser value. In 2011, it was more expensive to import lettuce from Americas region and the imports from African region were much cheaper.

2.5 Market value chain for lettuce

The market value chain for lettuce is presented in Figure 19. The lettuce value chain can be broken down into the following levels: the producer of lettuce (farmers), pack house owner (cleans, grade and quality control); cold storage and transport facilities (store and transport lettuce on behalf of the farmers); traders in lettuce (market and sell lettuce); and consumers.

Figure 19: Market value chain for lettuce



3. MARKET INTELLIGENCE

3.1 Tariffs

Tariffs applied by the various markets for lettuce originating from South Africa during 2010 and 2011 are presented in Table 10.

Table 10: Tariffs applied by various export markets to lettuce from South Africa

Country	Product Description(H070511)	Trade Regime description	Applied Tariff	Estimated total ad valorem equivalent tariff	Applied Tariff	Estimated total ad valorem equivalent tariff
			2010		2011	
Angola	Lettuce (Head Lettuce Fresh or chilled	MFN duties Applied	15.00%	15.00%	15.00%	15.00%
DRC	Lettuce (Head Lettuce Fresh or chilled	MFN duties Applied	10.00%	10.00%	10.00%	10.00%
Belgium	Lettuce (Head Lettuce Fresh or chilled	Preferential Tariffs for South Africa	0.00%	0.00%	0.00%	0.00%
China	Lettuce (Head Lettuce Fresh or chilled	MFN duties Applied	10.00%	10.00%	10.00%	10.00%
France	Lettuce (Head Lettuce Fresh or chilled	Preferential Tariffs for South Africa	0.00%	0.00%	0.00%	0.00%
Finland	Lettuce (Head Lettuce Fresh or chilled	Preferential Tariffs for South Africa	0.00%	0.00%	0.00%	0.00%
Germany	Lettuce (Head Lettuce Fresh or chilled	Preferential Tariffs for South Africa	0.00%	0.00%	0.00%	0.00%
Italy	Lettuce (Head Lettuce Fresh or chilled	Preferential Tariffs for South Africa	0.00%	0.00%	0.00%	0.00%
Kenya	Lettuce (Head Lettuce Fresh or chilled	MFN duties Applied	25.00%	25.00%	25.00%	25.00%
Mozambique	Lettuce (Head Lettuce Fresh or	Preferential Tariffs for	15.00%	15.00%	15.00%	15.00%

Country	Product Description(H070511)	Trade Regime description	Applied Tariff	Estimated total ad valorem equivalent tariff	Applied Tariff	Estimated total ad valorem equivalent tariff
	chilled	South Africa				
Mexico	Lettuce (Head Lettuce Fresh or chilled	MFN duties Applied	10.00%	10.00%	10.00%	10.00%
Nigeria	Lettuce (Head Lettuce Fresh or chilled	MFN duties Applied	20.00%	20.00%	20.00%	20.00%
Netherlands	Lettuce (Head Lettuce Fresh or chilled	Preferential Tariffs for South Africa	0.00%	0.00%	0.00%	0.00%
Sweden	Lettuce (Head Lettuce Fresh or chilled	Preferential Tariffs for South Africa	0.00%	0.00%	0.00%	0.00%
Switzerland	Lettuce (Head Lettuce Fresh or chilled	MFN duties Applied	61.11$/ton	4.27%	61.11$/ton	4.27%
Zambia	Lettuce (Head Lettuce Fresh or chilled	Preferential Tariffs for South Africa	0.00%	0.00%	0.00%	0.00%
United Arab Emirates	Lettuce (Head Lettuce Fresh or chilled	MFN duties Applied	0.00%	0.00%	0.00%	0.00%
United Kingdom	Lettuce (Head Lettuce Fresh or chilled	Preferential Tariffs for South Africa	0.00%	0.00%	0.00%	0.00%
United States of America	Lettuce (Head Lettuce Fresh or chilled	Preferential Tariffs for GSP countries	0.00%	0.00%	0.00%	0.00%
Zimbabwe	Lettuce (Head Lettuce Fresh or chilled	MFN duties Applied	40.00%	40.00%	40.00%	40.00%

Source: Market Access Map

The lucrative exports markets for lettuce from South Africa are in France, Germany, Denmark, Italy, Netherlands and United Kingdom since they apply 0.00% preferential tariffs to lettuce originating from South Africa due to EU-SA Free Trade Agreement (TDCA). African markets in Angola and Zimbabwe apply 15% and 40% respectively in spite of the existence of the SADC-FTA. Zambia apply 0% preferential tariff to lettuce originating from South Africa. China is one of top lettuce producers and their markets are protected by a 10% tariff.

3.2 Non tariff barriers

3.2.1 The European Union

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

3.2.1 (a) 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 downs rules for materials that come into contact with food and which may endanger people's health or bring about an unacceptable change in the composition of the foodstuffs. The framework legislation for this EC 1935/2004. Recycling packaging materials are also emphasized under 94/62/EC, whereby member states are required to recycle between 50% and 65% of packaging waste. If exporters do not ship produce in packaging which is reusable, they may be liable for the costs incurred by the importing companies. Wood packaging is subject to phytosanitary controls (see Directive EC 2002/89) and may need to undergo heat treatment, fumigation, etc.

3.2.1 (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 requirement s 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 and 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/orchards). One can supply a vegetable combine, which will then contract out importers/marketers and try to take advantage of economies of scale and increased bargaining power. At the same time vegetable combines might also supply large retail chains. One can also be a member of a private or co-operate export organization (including marketing boards) which will find agents or importers and market the produce collectively. Similar to a vegetable combine, an export organization can either supply wholesale markets or retail chains depending on particular circumstances. Export organizations and marketing boards will wash, sort and package the produce.

5. LOGISTICAL ISSUES

5.1 Mode of transport

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

Presently South American countries like Peru benefit from the asparagus trade, which has 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.

Transportation of lettuce to the market, travelling should preferably be done in the evening (lower temperatures) and the crop must be protected from the drying breezes caused by movement.

5.2 Cold chain management

Cold chain management is crucial when handling perishable products, from the initial packing houses to the refrigerated container trucks that transport the produce to the shipping terminals, through to the storage facilities at these terminals (and their pre-cooling capability), onto the actual shipping vessels and their containers, and finally on to the importers and distributors that must clear the produce and transport it to the markets/retail outlets, etc. For every 10^{o}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. At home, store lettuce in a plastic bag in the refrigerator crisper. Iceberg lettuce should be cored, rinsed lightly and drained thoroughly before storing. Lettuce should keep in the refrigerator from two to five days or more.

5.3 Packaging

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

5.3.1 Packaging of lettuce - It is most important to grade the heads by size, with each size grouping being packed separately. The crop is usually packed in either 2 or, occasionally, 4 layered crates or cartons. The lowest layer is packed with the cut ends down; the next with the cut ends facing up, and so on. This result in the butt ends facing outwards, with the heads being better protected. Care must be taken in packing not to damage the wrapper leaves, as this detracts from the appearance of the consignment, and can result in lower prices. In KZN, lettuce is often packed into either the lids or bases of banana boxes, where a count of 12 - two layers of six - is ideal. It is advisable not to harvest directly after rain, or while the plants are still wet, because leaves that have absorbed much water are particularly crisp and brittle, and thus break easily. Wet foliage is also more likely to commence rotting in transit. Lettuce is highly perishable and wilts easily under hot or windy conditions.

5.4 Storage

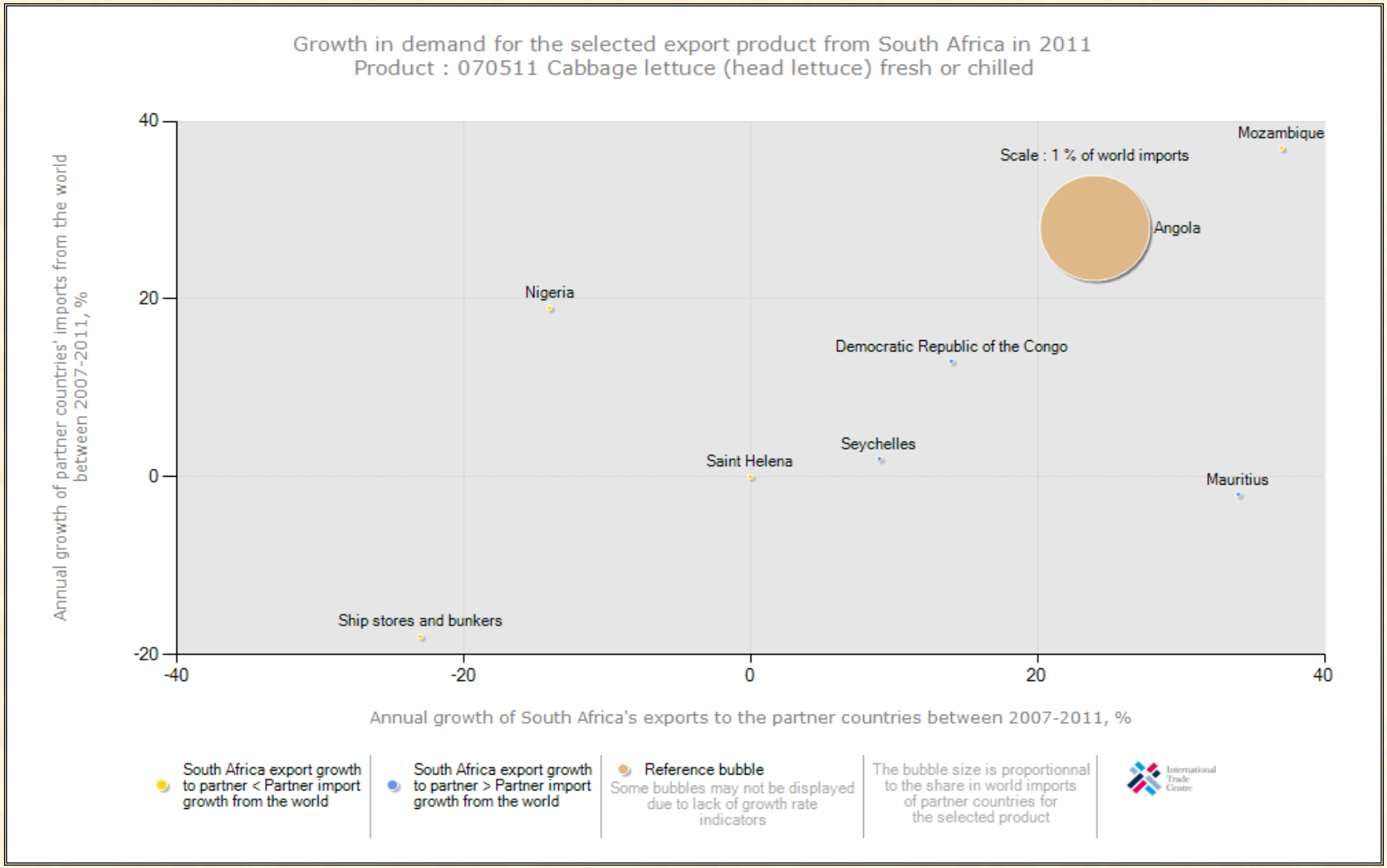
Lettuce is a delicate vegetable and great care should be taken when selecting and storing. Most lettuce is showcased on ice or in refrigeration. When selecting your leaves, be sure that they are fresh and crisp, with no signs of wilting, slim, or dark spots or edges. Remember when selecting your lettuce that the darker outer leaves are the most nutritious. Lettuce tends to keep well in plastic bags in the crisper section of the refrigerator. Iceberg lettuce keeps the best, lasting around two weeks, while Romaine, ten days, and butterheads types and endives lasts approximately four days. The very delicate greens don't last very long, so it's best to buy only as much as you need at one time and use immediately.

Salad greens should not be stored near fruits that produce ethylene gases (like apples) as this will increase brown spots on the lettuce leaves and increase spoilage. Greens that are bought in bunches should be checked for insects. Those leaves that have roots should be placed in a glass of water with a bag over the leaves and then placed in the refrigerator.

6. COMPETITIVENESS OF SOUTH AFRICAN LETTUCE EXPORTS

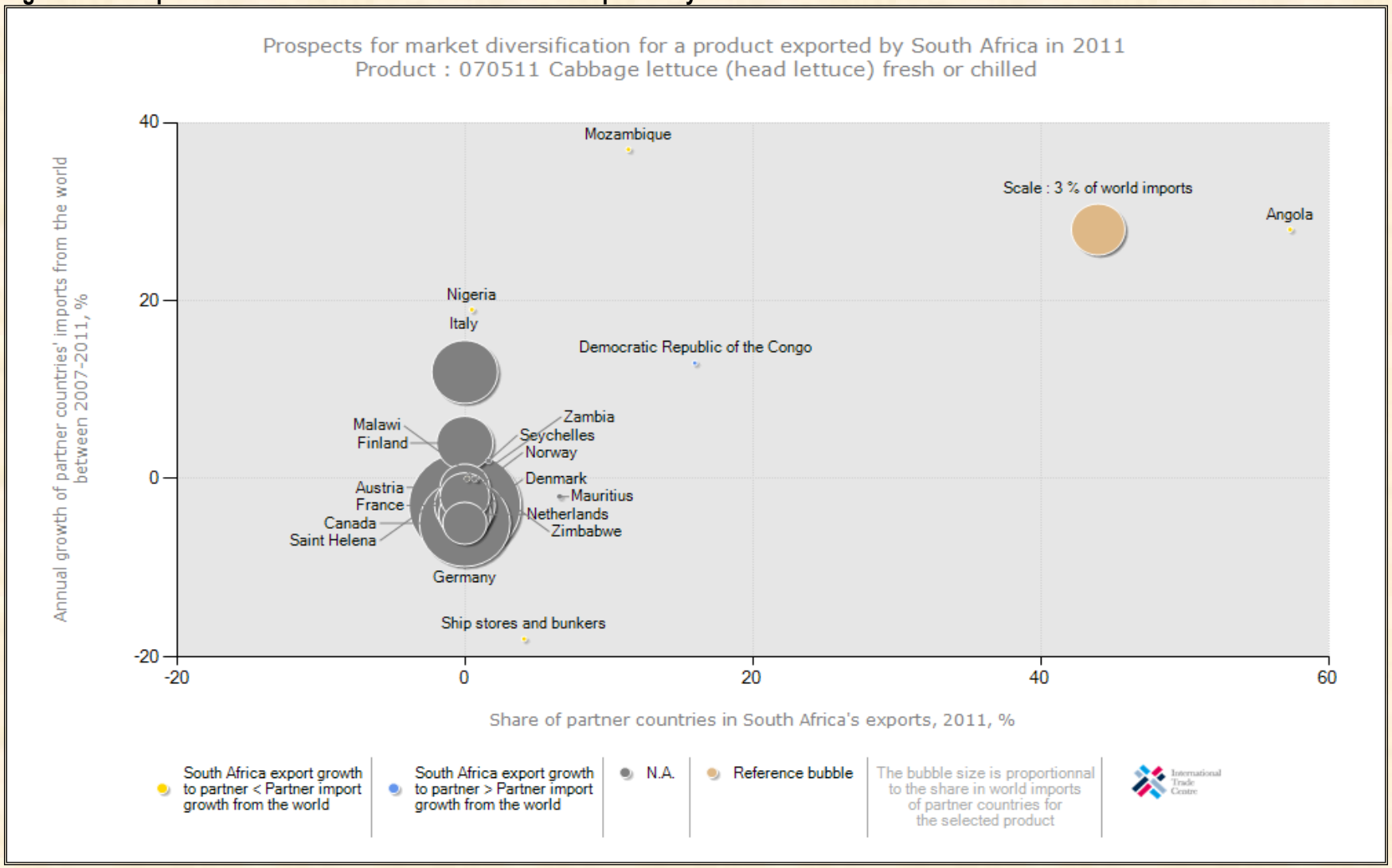
Figure 20 below shows that South Africa's lettuce exports to Democratic Republic of Congo and Seychelles are growing faster than the world imports into these countries. South Africa has gained a market share in dynamic markets. South Africa's lettuce exports to Mozambique are growing slower than the world imports into this country. South Africa's performance in this country can be regarded as a loss in the dynamic market. South Africa's exports to Nigeria are declining while the world imports are growing. South Africa's lettuce exports to Mauritius are growing while the world imports into this country are declining. South Africa's performance in this country can be regarded as a gain in declining markets.

Figure 20: Growth in demand for lettuce exported by South Africa in 2011



Source: International Trade Centre (ITC)

Figure 21: Prospects for market diversification for lettuce exported by South Africa in 2011



Source: International Trade Centre (ITC)

Figure 21 above shows the prospective export markets for lettuce from South Africa. Angola holds a bigger market share of South African lettuce exports. In terms of market size Germany and United States of America are the leading markets/importers of lettuce. However, if South Africa is to diversify its lettuce exports the most lucrative markets exist in Mozambique and Nigeria which have increased their lettuce imports from the world between 2007 and 2011. Mozambique has experience an annual growth rate of 37% and Nigeria has experience 19% annual growth rate.

7. ACKNOWLEDGEMENTS

The following organizations are acknowledged

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