A PROFILE OF THE SOUTH AFRICAN TOMATO MARKET VALUE CHAIN

2012

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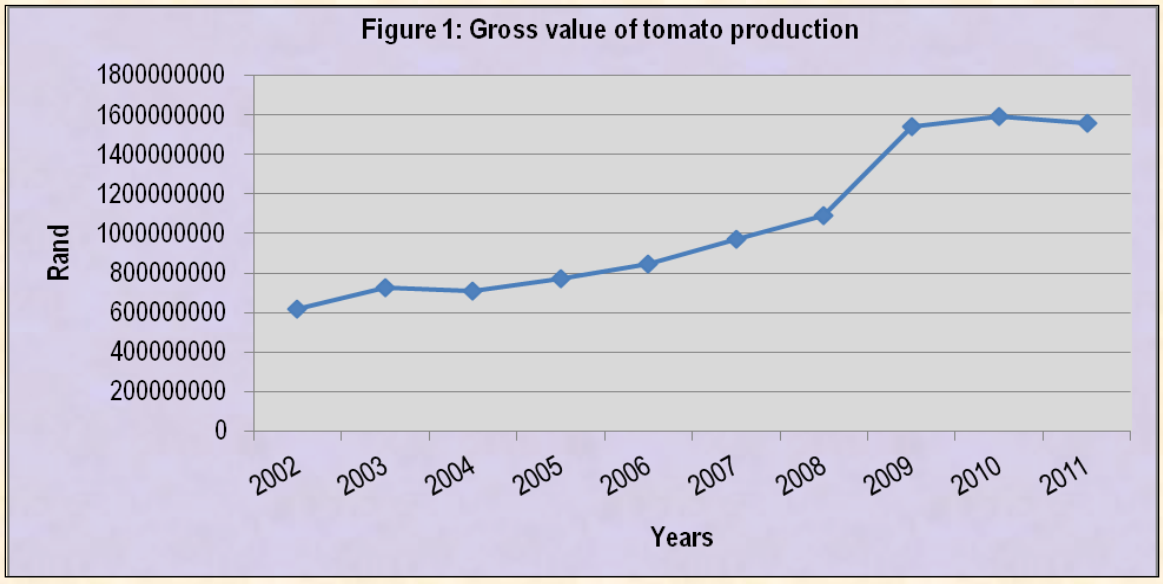
1. DESCRIPTION OF THE INDUSTRY

The tomato *(Solanum lycopersicum)* is the second most important and popular vegetable crop after potatoes in South Africa. It is not only cultivated commercially but also commonly grown by subsistence, resource poor farmers and home gardeners. It contributed approximately 20% (excluding potatoes) to the gross value of vegetable production in 2011. Tomato is consumed in diverse ways including raw, as an ingredient in many dishes and sauces and also in drinks. In South Africa tomatoes are used in stews to complement the staple diet of maize meal. As a result, it is also one of the main vegetables used for hawking by small-scale entrepreneurs in the informal sector. Interestingly, although tomatoes are nutritionally categorized as vegetables, they are botanically classed as fruits. Figure 1 below illustrates the contribution of the tomato industry to the gross value of agricultural production over the period of 10 years.



Source: Statistics and Economic Analysis, DAFF

In 2003 the contribution of tomato industry increased by 18% when compared to 2002 production year. In 2004, there was a 3% decrease in gross value due to increase in production which occurred while the producer price was not favorable. The contribution increased steadily from 2005 to 2008. In 2009 the industry's contribution increased by 42% when compared to the previous year. The highest contribution was recorded in 2010 and the contribution was 3% higher when compared to 2009. The increase in contribution can be attributed to high production volume which occurred while the producer prices were still favorable. During 2011, the contribution dropped by 2% when compared 2010, and this can be attributed to a 6.6% decrease in production output in the same year.

1.1 Production areas

Tomatoes are produced in all South African provinces. Limpopo province is the major production area with 3 590 ha (Northern Lowveld at 2 700 ha and far Northern areas of Limpopo at 890 ha). The province account for more than 75% of the total area planted to tomatoes. The other main producing areas are Onderberg area of Mpumalanga province at 770 ha and Border area of

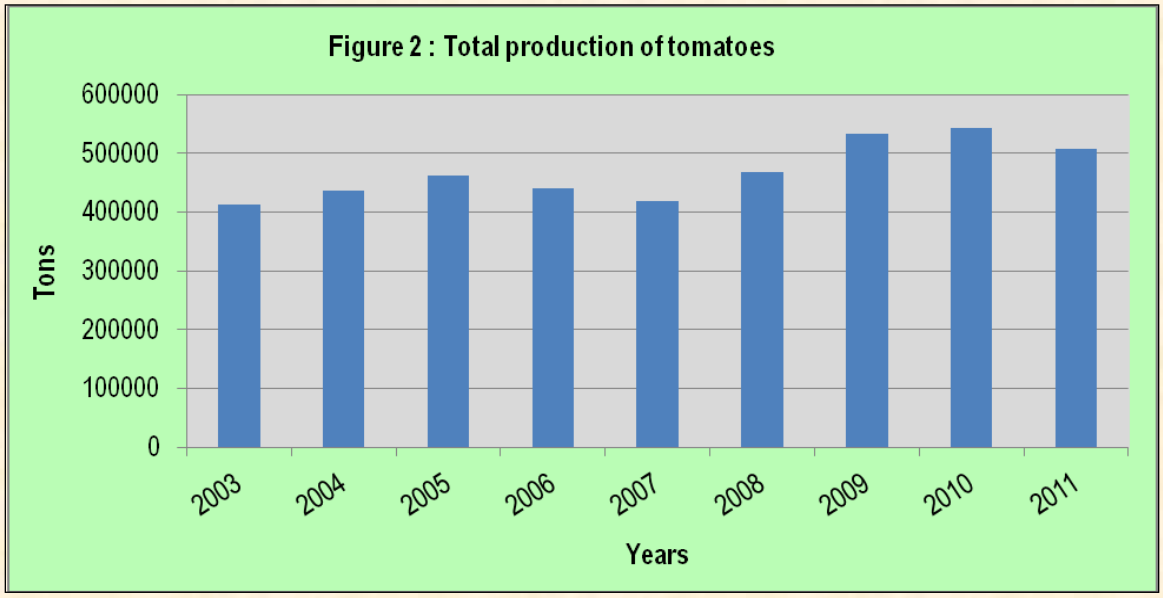
Eastern Cape province at 450 ha. Production is very limited in winter months and tomatoes can only be produced in frost–free areas during winter or under protection like tunnels.

1.2 Production

There are approximately 695 producers in both commercial and emerging sector. The commercial sector contributes 95% of the total produce while the emerging sector contributes only 5%.

In 2011, tomato production decreased by 6.6% from the 2010 figures (see Figure 2 below). Over the past decade tomato production has maintained a fairly stable trend as shown in the Figure 2 below. The highest production volume was recorded in 2010 and the production has increased by 2% when compared to 2009. The drop in production in 2003, 2006 and 2007 can be attributed to unfavorable climatic conditions and high production costs.

According to FAOSTAT, China is the largest producer of tomatoes in the world, followed by United States of America (USA), Turkey, India and Egypt. These countries represent 63% of world tomato production. The tomato producing countries with highest yields per hectare are the United Kingdom (UK), Netherlands, Belgium and Sweden.



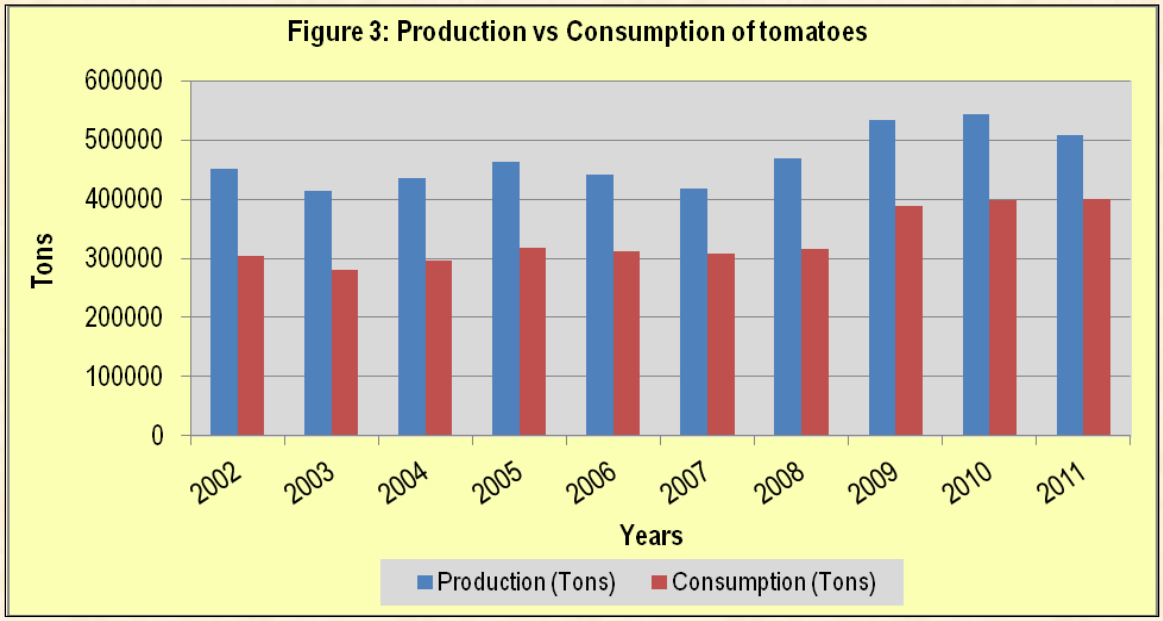
Source: Statistics and Economic Analysis, DAFF

1.3 Employment

The industry employs approximately 22 500 people with at least 135 000 dependents. Multipliers in the supply chains are the transport of the tomatoes to the fresh produce markets and processing plants, processing factories, fresh produce markets, independent traders, supermarket groups, packaging factories, informal traders and fast food outlets. A significant proportion of this total workforce is composed of low skilled, minimum wage labourers.

1.4 Consumption

The per capita consumption of tomatoes in South Africa is 12 kg per annum, compared to 32 kg in Europe. This 12 kg per capita consumption is only for metropolitan areas. Population growth, urbanization, per capita income and the income elasticity of demand for tomatoes are important factors influencing the demand for tomatoes. The average household in South Africa consumes between five and ten tomatoes per week.



Source: Statistics and Economic Analysis, DAFF

Figure 3 above depicts local consumption of tomatoes compared to the production over the period of 10 years. The figure indicates that the production of tomatoes is fairly higher than consumption. This indicates that South Africa is self sufficient in terms of tomato production and surplus is also exported. In 2003 there was a decrease in tomato consumption which can be attributed to the increase in tomato prices in the same year. In 2011, South Africa's annual fresh tomato consumption was approximately 332 337 tons per annum.

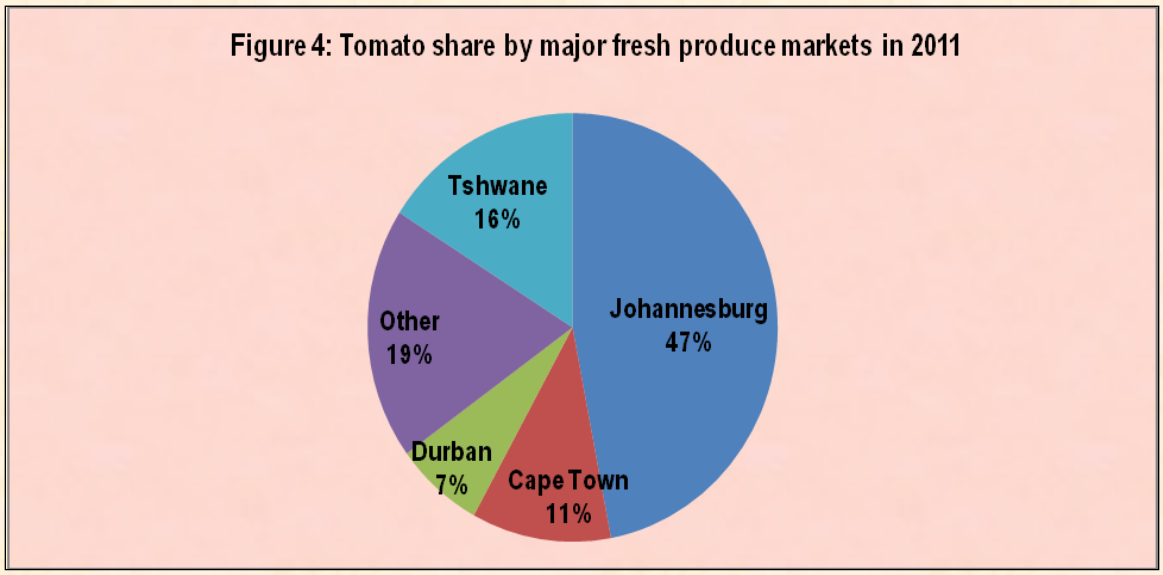
2. MARKET STRUCTURE

The industry uses four existing channels for the marketing of their product. The channels are as follows: local market through fresh produce markets, exports, processing and direct marketing.

2.1 Domestic market and prices

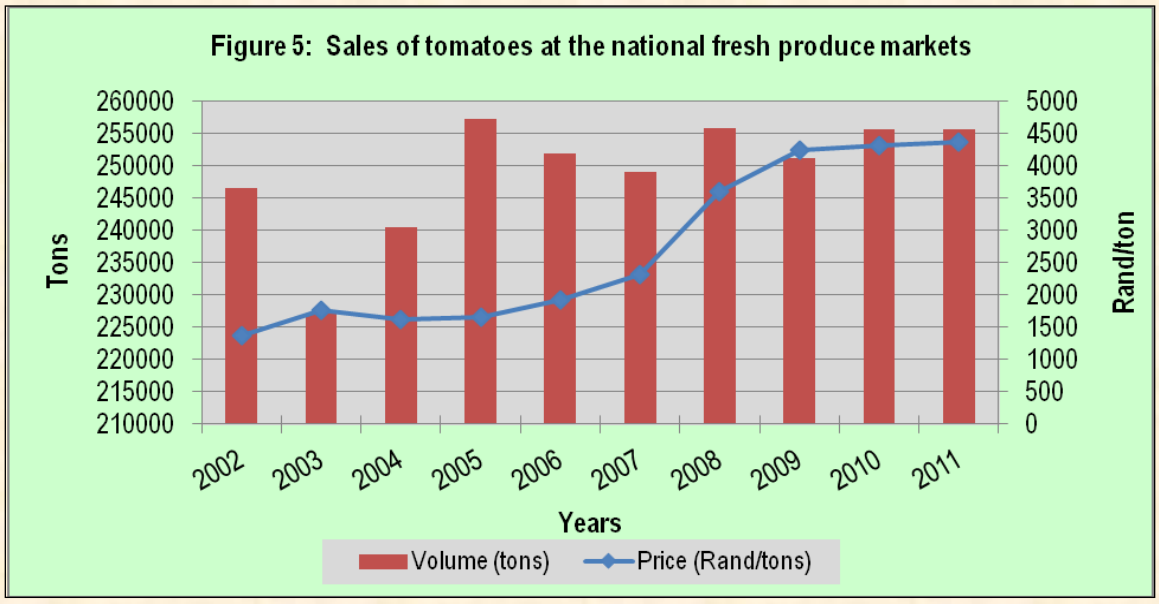
National Fresh Produce Markets (NFPMs) remain an important channel for the sale of tomatoes in South Africa. As a result the NFPMs prices are the benchmark used in all national tomato sales. The NFPMs are regarded as the preferred marketing channel for tomatoes. The Johannesburg Fresh Produce Market is the biggest market followed by Tshwane, Cape Town and Durban markets. In 2011, Johannesburg commanded 47%, Tshwane 16%, Cape Town 11% and Durban

7% of tomato market share sold at major fresh produce markets.



Source: Statistics and Economic Analysis, DAFF

Figure 5 below illustrates sales of tomatoes at the major fresh produce market over ten years. During 2003, tomato volumes dropped by 7.9% and at the same time the price increased by 28.5%. In 2004 there was a 4% decrease in price due to increase in volume supplied across the markets. From 2005 there was a steady increase in tomato price reaching peak price in 2010. The quantity of tomatoes sold on the major NFPMs markets have increased by 1.7% in 2010 when compared to tons sold in 2009. At the same time, there was a 1.3% increase in tomato prices at the NFPMs. Tomato prices eased higher in 2011, despite a slight increased in volumes supplied across the markets. This can be attributed to strong demand of tomatoes in the same year.

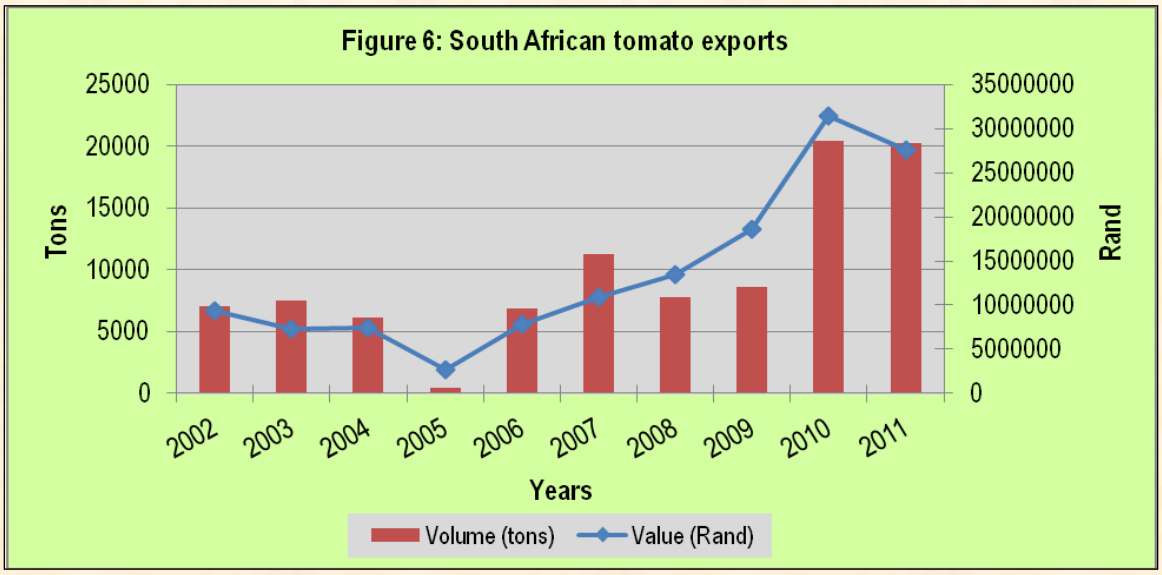


Source: Statistics and Economic Analysis, DAFF

2.2 Exports

South Africa is not a major exporter of tomatoes with 20 216 tons exported in 2011. In 2011, South Africa's tomato exports represented 0.05% of world exports and its ranking was number 45 in world tomato exports. South Africa has decreased its competiveness in terms of export as in 2010, it was ranked number 41. Most tomatoes produced are destined for the domestic market and very little percentage of raw tomatoes and processed tomatoes are exported to others countries. In terms of processed tomatoes, less than one percentage is exported to the other countries.

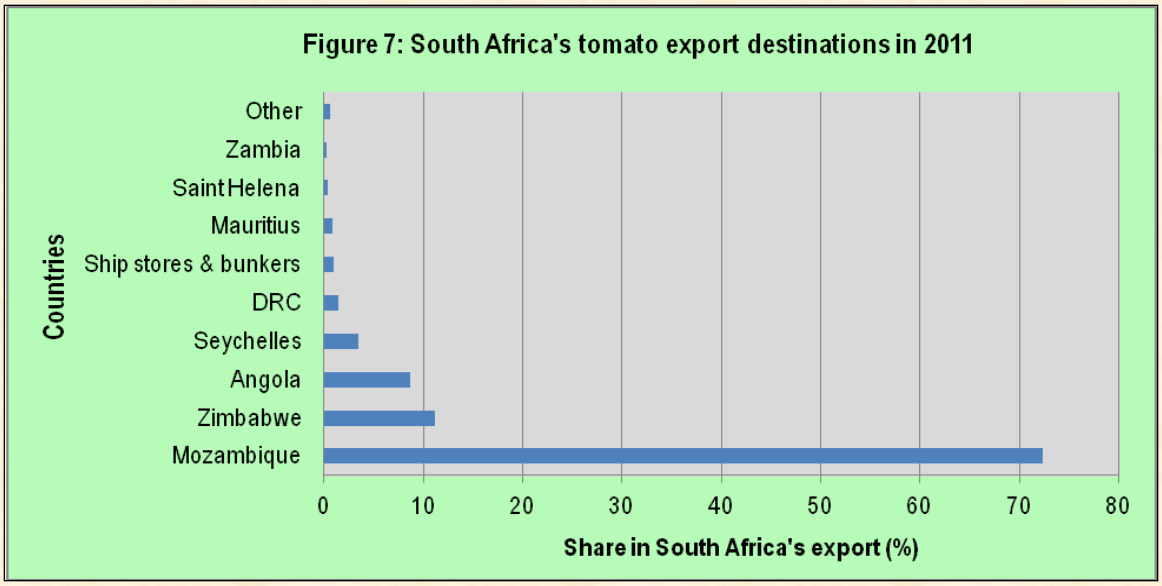
Globally, Mexico was the biggest exporter of tomatoes in 2011, exporting over 1 493 316 tons a year and accounting for 25.2% of world export market in tomatoes. Second was the Netherlands with 18.4% market share followed by Spain (14.1 %) and Morocco (5.4%). In 2011, Morocco was the fourth largest exporter of tomatoes in the world, the only significant exporter of tomatoes in Africa. Morocco has lost market share by 1.6% compared to the previous share of 7%. Figure 6 above shows tomato exports from South Africa over the period of 10 years.



Source: Quantec Easydata

High tomato volumes were exported in 2007, 2010 and 2011. The lowest export volumes were recorded in 2005 despite the high production volumes. In 2005, 2008 to 2010, it was more profitable to export tomatoes since higher export values were recorded for volumes exported. During other years, it was less profitable to export tomatoes since low exports values were recorded for higher volumes exported.

According to Figure 7 below, South Africa exports most of its tomatoes to the Southern African Development Community (SADC) countries. Mozambique is by far the largest market for South African tomato exports with 72.4%. For the South African tomato exports to grow there should be attempts to diversify into other markets. In 2011, 0.9% of South African tomato exports remained in the ship stores and bunkers (This is the place where products without proper documents are held).This is an improvement when comparing to 5% of tomatoes left in ship store and bunker in 2009.



Source: International Trade Centre (ITC)

The performance of the South African tomato exports during the year 2011 is further illustrated in Table 1 below.

Table 1: South Africa's tomatoes exports in 2011

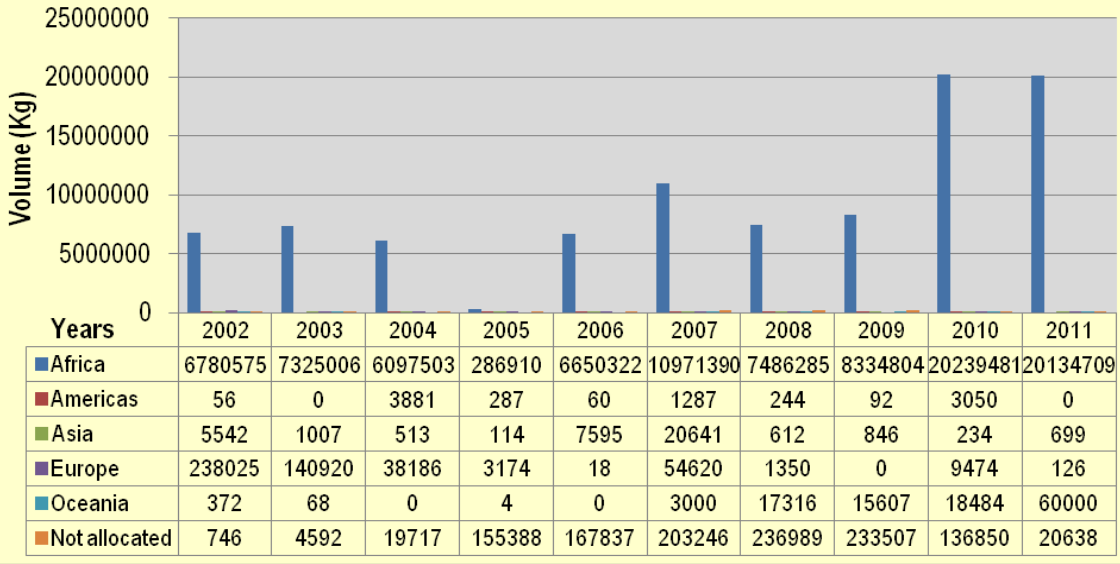
Importers	Exported value 2011 (USD thousand)	Share in South Africa's exports (%)	Exported quantity 2011	Unit value (USD/unit) Tons	Exported growth in value between 2007-2011 (%, p.a.)	Exported growth in quantity between 2007-2011 (%, p.a.)	Exported growth in value between 2010-2011 (%, p.a.)
World	3800	100	20216	188	32	24	-12
Mozambique	2750	72.4	17953	153	44	21	-6
Zimbabwe	420	11.1	1816	231		1008	-30
Angola	330	8.7	200	1650	18	4	11
Seychelles	130	3.4	73	1781	1	3	-6
DRC	52	1.4	36	1444	12	4	-9
Ship stores and bunkers	35	0.9	21	1667	-35	-40	-84
Mauritius	32	0.8	19	1684	123	189	433
Saint Helena	15	0.4	8	1875	6	-3	150
Zambia	10	0.3	20	500	37	5	-47
Malawi	9	0.2	8	1125		87	50
Niue	7	0.2	30	233			
Nigeria	4	0.1	1	4000	-28	-38	-33

Source: International Trade Centre (ITC)

Table 1 above indicates that during 2011 South Africa exported higher quantities of tomatoes to Mozambique, Zimbabwe and Angola. Mozambique commanded the greatest share of South Africa's tomato exports with 72.4% followed by Zimbabwe with 11.1% and Angola with 8.7%. South Africa's tomato exports left in ship store and bunkers have decreased by 40% in quantity and 35% during 2007-2011 period. South Africa tomato exports to the world have decreased by 12% in value during 2010- 2011 period. South Africa tomato exports have increased by 32% and 24% in terms of value and quantity during the 2007 - 2011 period.

Figure 8 below illustrates South Africa's tomato exports to the different regions during the past 10 years. It is clear that South Africa exports high quantities of tomatoes to the African region (Angola, DRC, Mauritius, Mozambique, Seychelles, Zambia, Zimbabwe, Nigeria, Ghana and Saint Helena). South Africa also exported tomatoes to Europe (France, United Kingdom, Germany and Netherlands) and Asia. Considerable volumes of tomato exports were not allocated to any region while from 2007 to 2011, a sizeable amount of tomatoes were exported to Oceania region. During 2011, there were no tomato exports to Americas region while exports to Europe were less significant.

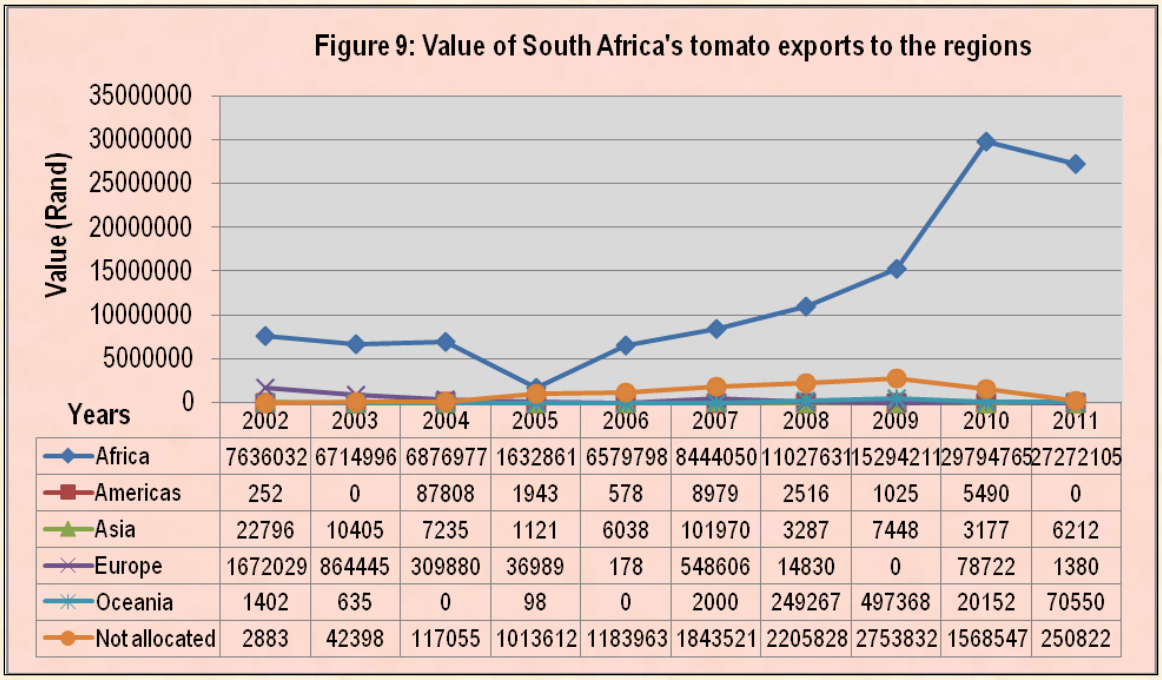
Figure 8: South Africa's tomato exports to the regions



Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Africa	6780575	7325006	6097503	286910	6650322	10971390	7486285	8334804	20239481	20134709
Americas	56	0	3881	287	60	1287	244	92	3050	0
Asia	5542	1007	513	114	7595	20641	612	846	234	699
Europe	238025	140920	38186	3174	18	54620	1350	0	9474	126
Oceania	372	68	0	4	0	3000	17316	15607	18484	60000
Not allocated	746	4592	19717	155388	167837	203246	236989	233507	136850	20638

Source: Quantec Easydata

Figure 9 below illustrates the value of tomato exports to the regions in a period of 10 years. Africa region has recorded high export values since high quantities of tomatoes were exported to that region. In 2010, it was less profitable to export to Oceania region since low values were recorded for high volumes exported. It was more profitable to export to European region since high values were recorded for low volumes exported. During 2011; it was more profitable to export to Europe and Asia.



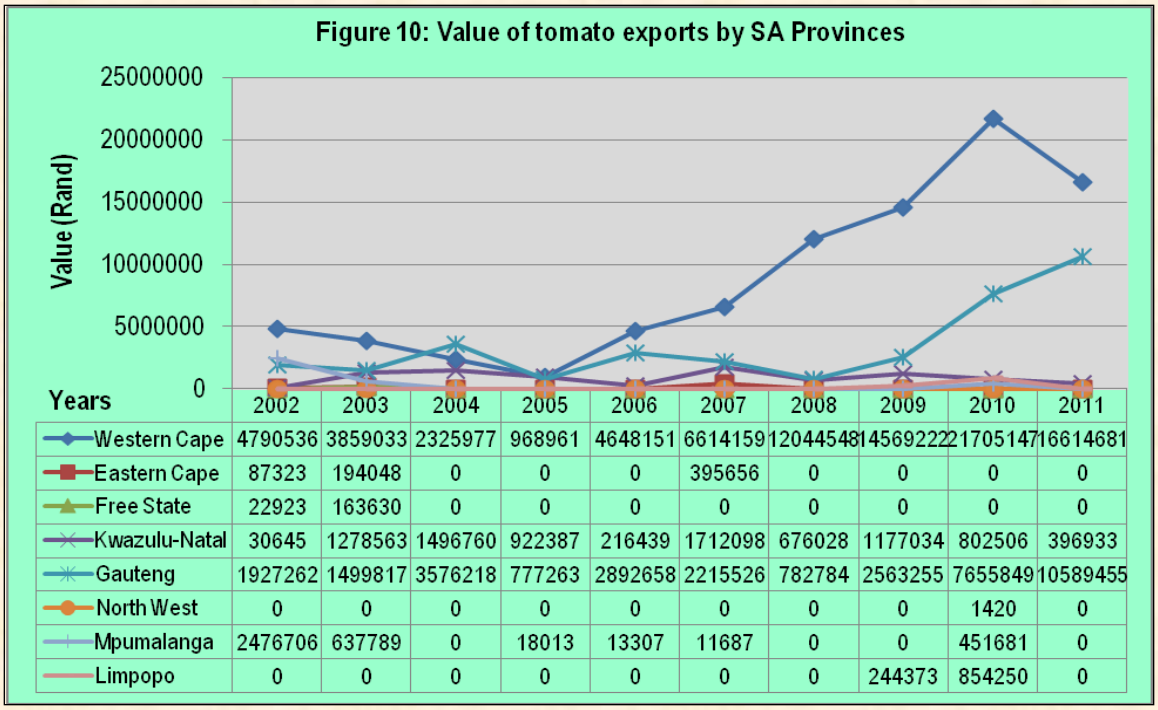
Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Africa	7636032	6714996	6876977	1632861	6579798	8444050	11027631	15294211	29794765	27272105
Americas	252	0	87808	1943	578	8979	2516	1025	5490	0
Asia	22796	10405	7235	1121	6038	101970	3287	7448	3177	6212
Europe	1672029	864445	309880	36989	178	548606	14830	0	78722	1380
Oceania	1402	635	0	98	0	2000	249267	497368	20152	70550
Not allocated	2883	42398	117055	1013612	1183963	1843521	2205828	2753832	1568547	250822

Source: Quantec Easydata

2.3 Provincial and district export values of South African tomatoes

A review of provincial level trade data presents an interesting but somewhat misleading view of the sources of tomatoes destined for the export markets. Firstly, the fact that R10 589 455 worth of tomatoes exported in 2011 was from Gauteng province does not imply that the tomatoes were produced there but that the registered exporters were based in Gauteng. Secondly provinces like Kwa-Zulu Natal and the Western Cape serves as exit points for tomato exports through the Durban harbour and Cape Town harbour respectively.

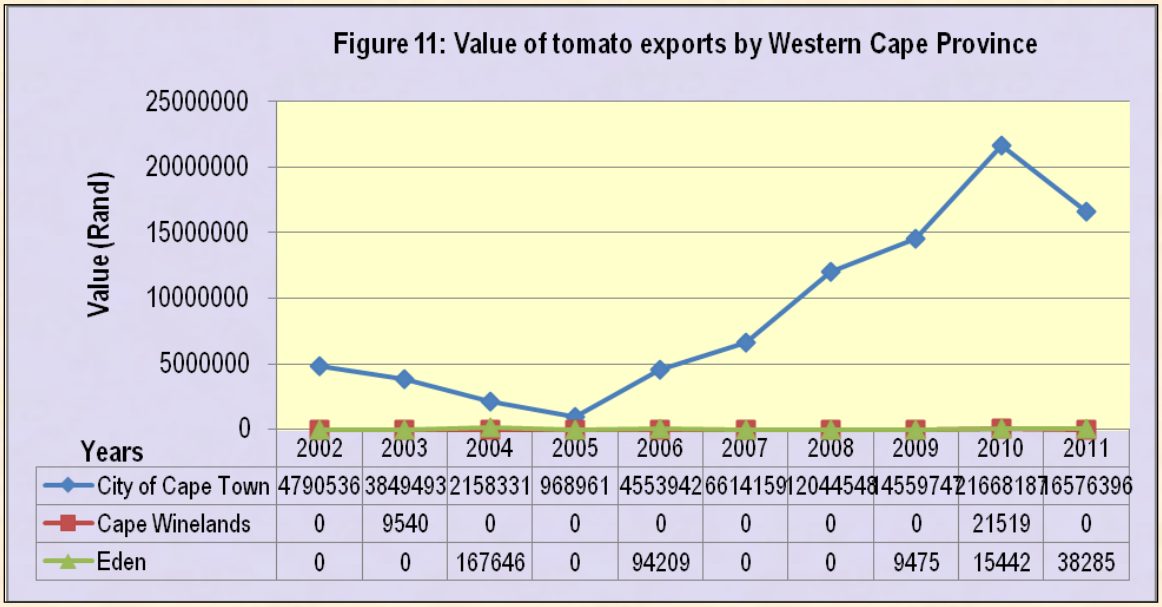
Highlights of the tomato exports in Figure 10 were that the three provinces of Western Cape, Kwazulu Natal and Gauteng were consistently the top tomato exporting provinces of South Africa over the last decade. In 2010, Limpopo and Mpumalanga registered considerable export values. Other provinces featured intermittently but usually registered zero trade. During 2011, Limpopo and Mpumalanga recorded no trade in tomatoes.



Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Western Cape	4790536	3859033	2325977	968961	4648151	6614159	12044548	14569222	21705147	16614681
Eastern Cape	87323	194048	0	0	0	395656	0	0	0	0
Free State	22923	163630	0	0	0	0	0	0	0	0
Kwazulu-Natal	30645	1278563	1496760	922387	216439	1712098	676028	1177034	802506	396933
Gauteng	1927262	1499817	3576218	777263	2892658	2215526	782784	2563255	7655849	10589455
North West	0	0	0	0	0	0	0	0	1420	0
Mpumalanga	2476706	637789	0	18013	13307	11687	0	0	451681	0
Limpopo	0	0	0	0	0	0	0	244373	854250	0

Source: Quantec Easydata

The following figures (Figures 10 - 17) show the value of tomato exports from the various districts in all the provinces of South Africa.



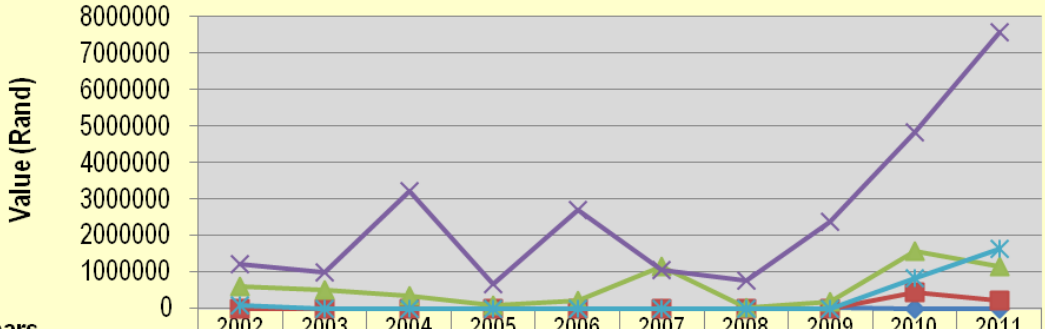
Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
City of Cape Town	4790536	3849493	2158331	968961	4553942	6614159	12044548	14559747	21668187	16576396
Cape Winelands	0	9540	0	0	0	0	0	0	21519	0
Eden	0	0	167646	0	94209	0	0	9475	15442	38285

Source: Quantec Easydata

From Figure 11 above, it is clear that tomato exports from the Western Cape province are mainly from the City of Cape Town Metropolitan Municipality. In 2011, there was a 23.4% decrease in value of tomato exports from the City of Cape Town Municipality. Export values recorded for Eden municipality were insignificantly low during the period under review. In 2010, Cape Winelands also

contributed to tomato exports from Western Cape province. During 2011, export value for Eden has increased significantly while Cape Winelands has recorded zero trade.

Figure 12: Value of tomato exports by the Gauteng Province

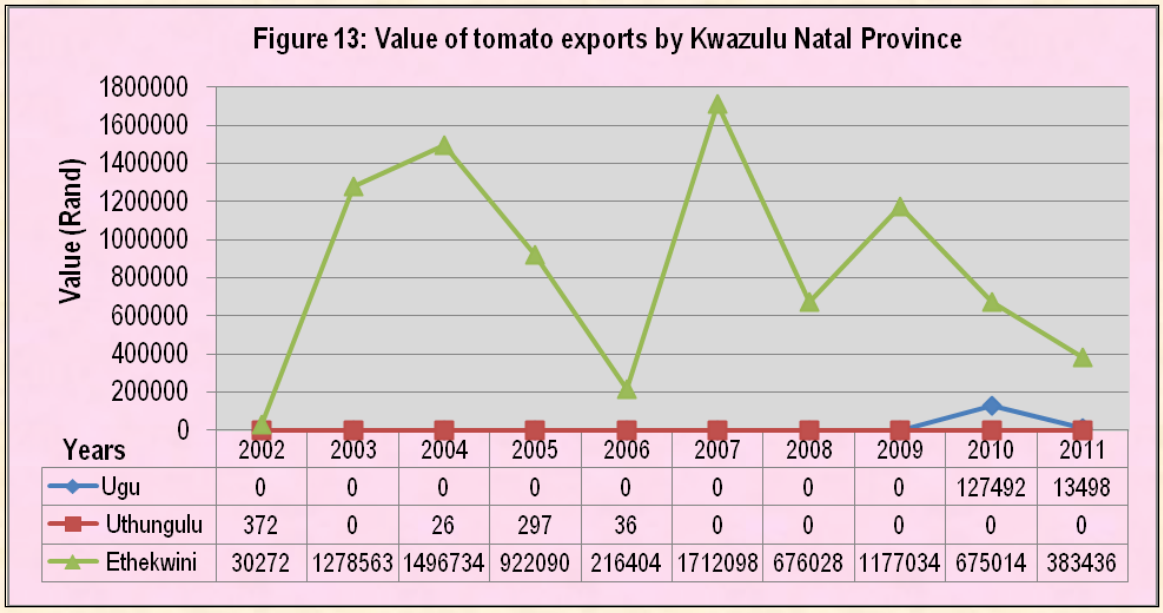


Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Sedibeng	0	0	0	0	2	0		25455	3000	0
West Rand	0	60	0	76	0	0	0	36	433093	217801
Ekurhuleni	605833	504619	348192	98100	206380	1155443	17010	169328	1569489	1151124
City of Johannesburg	1225000	995137	3228026	679087	2686276	1060083	765773	2368010	4833394	7570794
City of Tshwane	96429	0	0	0	0	0	0	425	816874	1649737

Source: Quantec Easydata

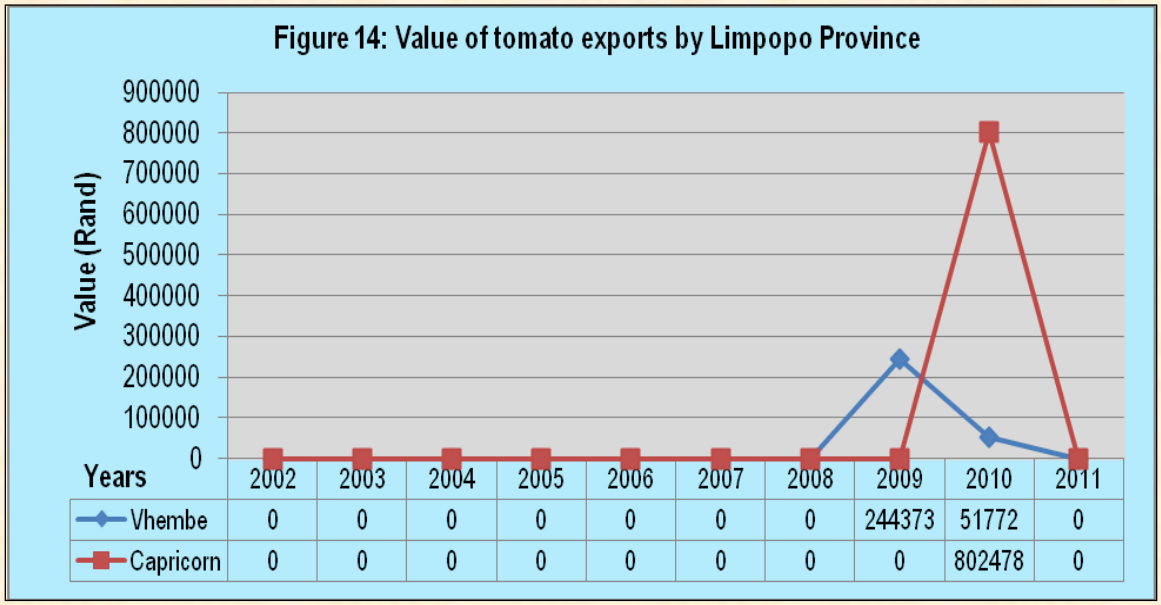
In the Gauteng province, there have been fluctuations in tomato export values for the past ten years (see Figure 10). The leading role players are City of Johannesburg and Ekurhuleni Municipalities. High export values were recorded in 2011 (for the City of Johannesburg) and 2010 (for Ekurhuleni). However, in 2007 and 2008 there has been a significant drop in tomato export values from the City of Johannesburg Metropolitan Municipality. In 2010 the export values recorded for Ekurhuleni and City of Johannesburg municipality were incomparably higher compared to the previous year. In 2010, West Rand and City of Tshwane have contributed significantly to tomato exports from Gauteng Province. During 2011; the export value for the City of Johannesburg was higher while the Ekurhuleni value dropped. City of Tshwane has also increased its export contribution during 2011.

From Figure 13, it is clear that tomato exports from the Kwa-Zulu Natal province are mainly from Ethekwini Metropolitan Municipality. High export values for the leading municipality were recorded in 2007. In 2010 there was a 42.6% decrease in tomato export value from Ethekwini and during 2011, there was a further 43% drop in export value. In 2010, UGu has registered a considerable value for tomato exports and the export value dropped significantly in 2011. The use of the Durban harbour as an exit point may have played a major role in the Ethekwini municipality being a leader in the export of tomatoes from the Kwa-Zulu Natal province.



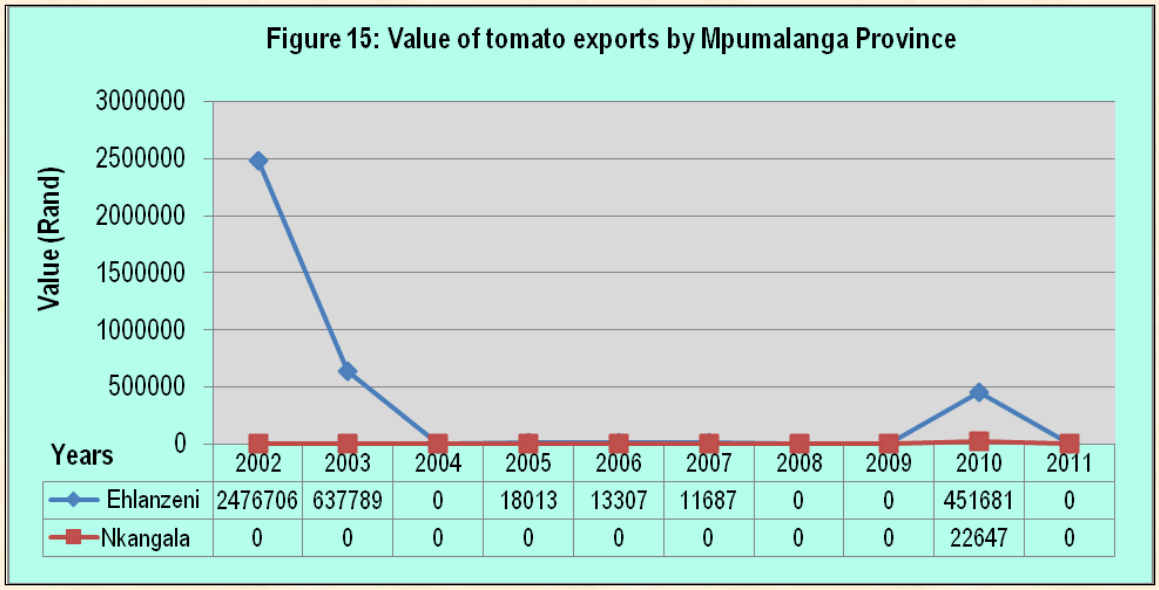
Source: Quantec Easydata

Values of tomato exports from the Limpopo province are shown in Figure 14.



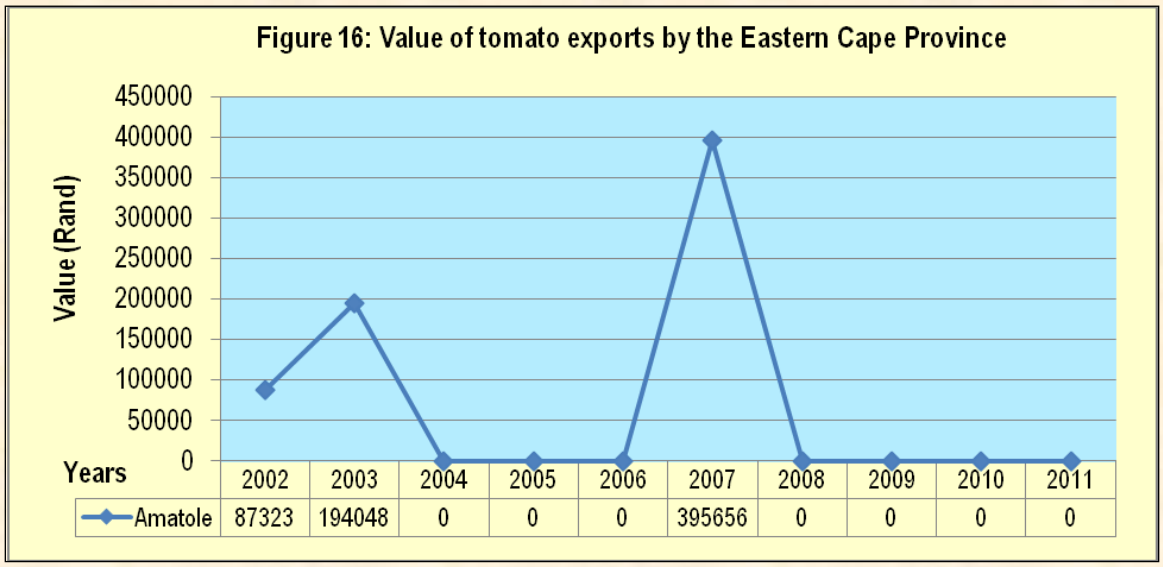
Source: Quantec Easydata

Figure 14 above illustrates that tomato exports from the Limpopo province were recorded in 2009 and 2010. From 2002 to 2008 the province has recorded zero trade. In 2010, Capricorn recorded a considerable export value for the Limpopo province. This is in spite of the fact that the province is one of the leading producers of tomatoes. During 2011, Limpopo has recorded zero trade in tomatoes.



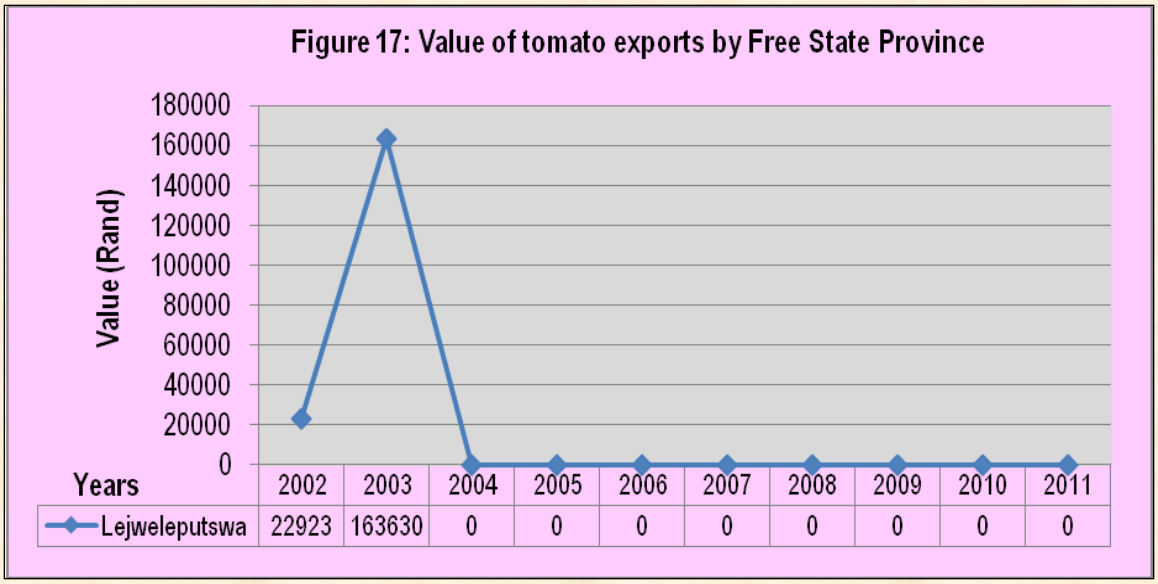
Source: Quantec Easydata

From Figure 15, it is clear that tomato exports from the Mpumalanga province are from Ehlanzeni District Municipality. High export value for the leading municipality was recorded in 2002. In 2004, 2008 and 2011 the province has recorded zero trade. In 2010, Nkangala district has registered tomato export value for the first time in ten years period.



Source: Quantec Easydata

Figure 16 above shows that tomato exports from the Eastern Cape province were from Amatole district municipality and high export values were recorded in 2007. From 2008 to 2011 there was no export values recorded for Eastern Cape province.



Source: Quantec Easydata

Figure 17 shows that tomato exports from the Free State province are from Lejweleputswa District Municipality. High export value for the leading municipality was recorded in 2003. From 2004 to 2011 the province has recorded zero trade.

2.4 Share analysis

Table 2 is an illustration of provincial shares towards national tomato exports. It shows that Western Cape together with Gauteng and Kwa-Zulu Natal provinces have commanded the greatest share of tomato exports for the past ten years. This is in spite of the fact that Limpopo, Mpumalanga and the Eastern Cape provinces are the leading producers of tomatoes. As explained earlier, this means that the leading export provinces (Western Cape, Gauteng and Kwa-Zulu Natal) derive their advantage from the fact that the registered exporters are based in their provinces and they also have exit points for tomato exports. The above scenario raises concerns about the availability of marketing infrastructure and agro-logistics in the major tomato producing provinces of South Africa. In 2011, Western Cape commanded 60.20% and Gauteng commanded 38.37% of the total South African tomato exports.

Table 2: Share of provincial tomato exports to the total RSA tomato exports (%)

Year Province	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Western Cape	51.32	50.56	31.44	36.07	59.82	60.41	89.20	78.52	68.97	60.20
Eastern Cape	0.94	2.54	0	0	0	3.61	0	0	0	0
Free State	0.25	2.14	0	0	0	0	0	0	0	0
Kwazulu-Natal	0.33	16.75	20.23	34.33	2.79	15.64	5.01	6.34	2.55	1.44
Gauteng	20.64	19.65	48.33	28.93	37.23	20.23	5.80	13.82	24.33	38.37
Mpumalanga	26.53	8.36	0	0.67	0.17	0.11	0	0	1.44	0
Limpopo	0	0	0	0	0	0	0	1.32	2.71	0
RSA	100	100	100	100	100	100	100	100	100	100

Source: Calculated from Quantec Easydata

The following tables (Table 3 - 9) show the share of provincial tomato exports to the total national tomato exports.

Table 3: Share of district tomato exports to total Western Cape provincial tomato exports (%)

Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
City of Cape Town	100	99.75	92.79	100	97.97	100	100	99.93	99.83	99.77
Cape Winelands	0	0.25	0	0	0	0	0	0	0.10	0
Eden	0	0	7.21	0	2.03	0	0	0.07	0.07	0.23
Western Cape	100	100	100	100	100	100	100	100	100	100

Source: Calculated from Quantec Easydata

Table 3 above shows that City of Cape Town commanded the greatest share of tomato exports from Western Cape province during the period under review. Eden and Cape Winelands districts contributions were less significant. High export share by City of Cape Town can be attributed to the Cape Town harbour which serves as an exit point. In 2011, City of Cape Town continued to be a leading municipality in tomato exports from Western Cape.

Table 4: Share of district tomato exports to the total Gauteng provincial tomato exports (%)

Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Sedibeng	0	0	0	0	0	0	0	0	0.04	0
West Rand	0	0	0	0.01	0	0	0	0.99	5.66	2.06
Ekurhuleni	31.43	33.65	9.74	12.62	7.13	52.15	2.17	6.61	20.50	10.87
City of Johannesburg	63.56	66.35	90.26	87.37	92.87	47.85	97.58	92.38	63.13	71.49
City of Tshwane	5	0	0	0	0	0	0	0.02	10.67	15.58
Gauteng	100	100	100	100	100	100	100	100	100	100

Source: Calculated from Quantec Easydata

Table 4 above indicates that City of Johannesburg and Ekurhuleni municipalities commanded the greatest share of tomatoes exported from Gauteng province. In 2011, City of Tshwane commanded 15.58% share of tomatoes exported in Gauteng province. Export share for Ekurhuleni has decreased significantly in 2011 when compared to 2010. City of Johannesburg export share has increased to 71.49% in 2010. OR Tambo International Airport serves as an export exit point for exports from these municipalities.

Table 5: Share of district tomato exports to total Kwa-Zulu Natal provincial tomato exports (%)

Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ugu	0	0	0	0	0	0	0	0	15.89	3.40
Uthungulu	1.21	0	0	0.03	0.02	0	0	0	0	0
Ethekwini	98.79	100	100	99.97	99.98	100	100	100	84.11	96.60
Kwa Zulu-Natal	100	100	100	100	100	100	100	100	100	100

Source: Calculated from Quantec Easydata

Table 5 above indicates that Ethekwini municipality commanded the greatest share of all tomato exports from Kwazulu Natal province during the ten year period. In 2011, UGu district has commanded 3.40% and Ethekwini has commanded 96.60% share of tomato exports from Kwazulu Natal. Durban Harbor serves as an exit point for exports from this municipality.

Table 6: Share of district tomato exports to the total Limpopo provincial tomato exports (%)

Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Vhembe	0	0	0	0	0	0	0	100	6.06	0
Capricorn	0	0	0	0	0	0	0	0	93.94	0
Limpopo	0	0	0	0	0	0	0	100	100	0

Source: Calculated from Quantec Easydata

Table 6 illustrates that in 2009 Vhembe commanded 100% of all tomato exports in Limpopo province. From 2002 to 2008, there were no tomato exports from Limpopo province. In 2010 Capricorn district has commanded the greatest share of tomato exports from Limpopo province. During 2011, Limpopo province has recorded zero trade in tomatoes.

Table 7: Share of district tomato exports to total Mpumalanga provincial tomato exports (%)

Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Ehlanzeni	100	100	0	100	100	100	0	0	94.99	0
Nkangala	0	0	0	0	0	0	0	0	5.01	0
Mpumalanga	100	100	0	100	100	100	0	0	100	0

Source: Calculated from Quantec Easydata

Table 7 shows that Ehlanzeni district municipality commanded greatest share for all tomatoes exported in Mpumalanga during the period under review. In 2004, 2008, 2009 and 2011, there was no tomato exports recorded for Mpumalanga province. In 2010, Nkangala commanded 5.01% of tomato exports from Mpumalanga.

Table 8: Share of district tomato exports to total Eastern Cape provincial tomato exports (%)

Years District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Amatole	100	100	0	0	0	100	100	0	0	0
Eastern Cape	100	100	0	0	0	100	100	0	0	0

Source: Calculated from Quantec Easydata

Table 7 shows that Amatole district municipality commanded 100% share for all tomatoes exported by Eastern Cape during the period under review. From 2004 to 2006, 2009 and 2011, there was no tomato exports recorded for Eastern Cape province

Table 9: Share of district tomato exports to total Free State provincial tomato exports (%)

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

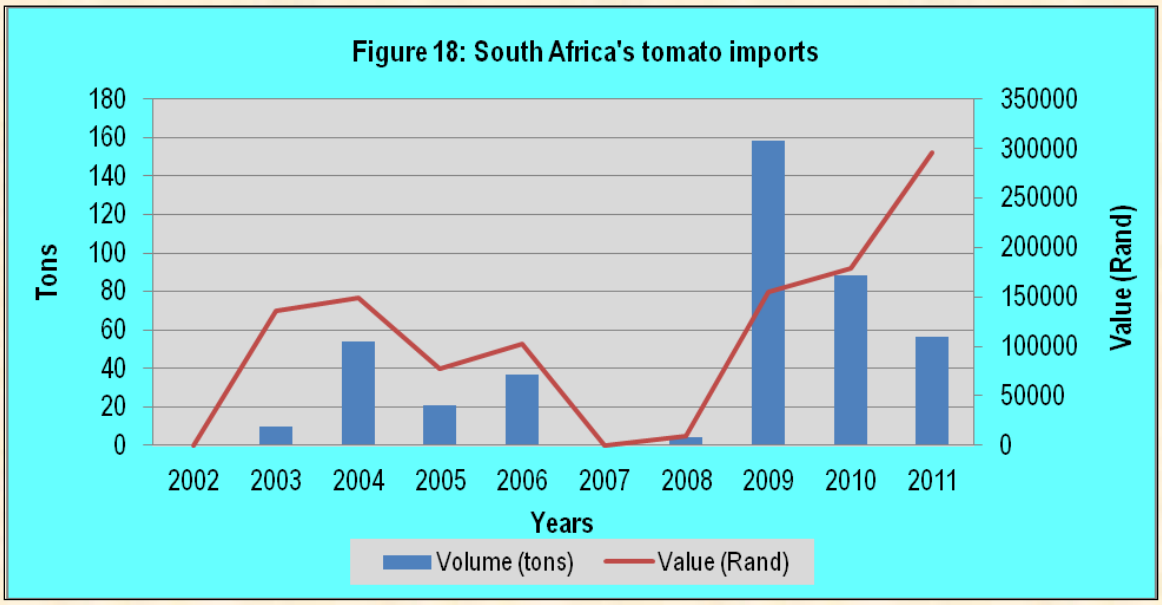
Year District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Free State	100	100	0	0	0	0	0	0	0	0

Source: Calculated from Quantec Easydata

Table 9 above illustrates that in 2002 and 2003, Lejweleputswa district municipality commanded 100% share of tomato exports from Free State province. From 2004 to 2011, there was no tomato exports recorded for Free State province.

2.5 Tomato imports by South Africa

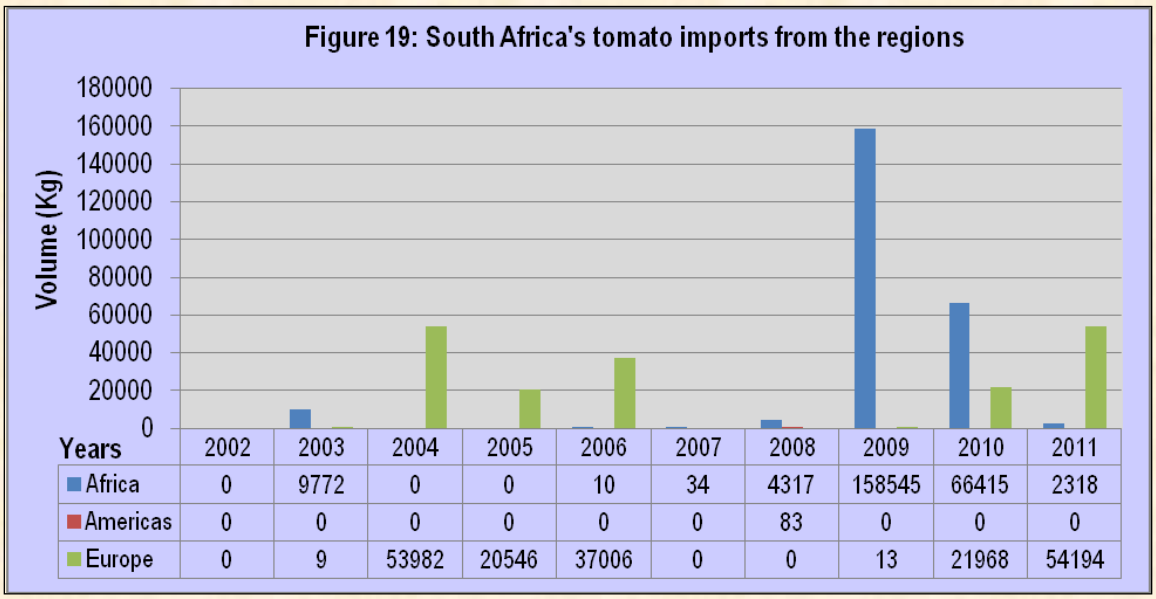
Figure 18 below shows that South Africa is self-sufficient in tomato production hence there are comparatively low levels of tomato imports compared to exports. In 2011, South Africa's tomato imports represented 0% of world imports and its ranking was 129. Highest import volumes were only recorded in 2009, despite high production in the same year. This can be attributed to cheaper tomato import in the same year. During 2011, tomato imports dropped by 36% despite a slight decrease in domestic tomato production. It was also more expensive to import tomatoes from 2003 to 2006, 2010 and 2011, since low volumes were imported at high values. In 2011, South Africa imported tomatoes from Italy, Zimbabwe and Nigeria. Globally, the United States America with 26.4% share, Germany 15.7%, Russian Federation 9.7%, United Kingdom 8.2%, France 6.3% and Canada 3.9% are top countries importing tomatoes.



Source: Quantec Easydata

Figure 19 below illustrates South Africa's tomato imports from the various regions in a period of 10 years. From 2004 to 2006 and 2010, South Africa imported considerable quantities of tomatoes from the European region. In 2003, 2008, 2009 and 2010, South Africa imported high volumes of tomatoes from the African region. Tomato imports from Americas region were only in 2008 and the volumes were insignificantly low. In 2010, South Africa imported 60% of tomatoes from Italy, 36%

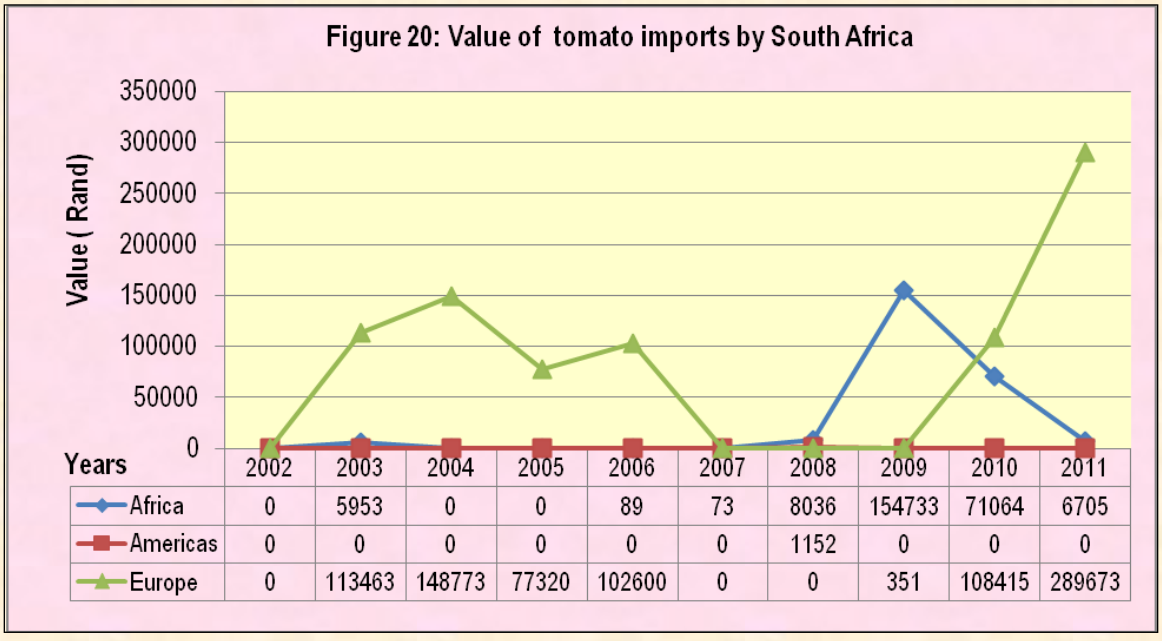
from Zimbabwe, and 4% from Nigeria. During 2011, South Africa's tomato import was sourced mainly from Italy.



Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Africa	0	9772	0	0	10	34	4317	158545	66415	2318
Americas	0	0	0	0	0	0	83	0	0	0
Europe	0	9	53982	20546	37006	0	0	13	21968	54194

Source: Quantec Easydata

Figure 20 below illustrates South Africa tomato import values from the various regions from 2002 to 2011 period.



Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Africa	0	5953	0	0	89	73	8036	154733	71064	6705
Americas	0	0	0	0	0	0	1152	0	0	0
Europe	0	113463	148773	77320	102600	0	0	351	108415	289673

Source: Quantec Easydata

In 2003, 2004, 2010 and 2011, it was expensive for South Africa to import tomatoes from European region. In 2009 and 2010, it was less expensive to import from African region since low value were

recorded for high volume imported. It was also expensive to import tomatoes from Americas region during 2008.

2.6 Processing

Processing of tomatoes consists of canning, freezing, dehydration and juice production. Tomatoes are processed into whole pealed, tomato and onion bruises, pasta, shredded, puree and pasta concentrate. The industry experienced an increase in growth mainly from canning. In 2011 production season, 86 853 tons of tomatoes were canned (see Table 10 below). That represents a 30% decrease from the 124 384 tons canned in 2010. In 2009, there was a significant increase in volume and value in tomato freezing. This can be attributed to increasing consumer demand of convenient ready to eat vegetables. In 2010 there were no volumes recorded for freezing activities. During 2011, there were volumes recorded for juice and freezing while there were no volumes recorded for dehydration activities since 2004. In 2011, total processing accounted for 18% and 5% of tomato's total volume and value respectively.

Table 10: Processed tomatoes

Year	Canning		Juices		Freezing		Dehydration		Total Processing	
	Volume (Tonnes)	Value (Rand)	Volume (Tonnes)	Value (Rand)	Volume (Tonnes)	Value (Rand)	Volume (Tonnes)	Value (Rand)	Volume (Tonnes)	Value (Rand)
2002	138 480	64 508 750	0	0	0	0	58	35 670	138 538	64 544 420
2003	123 539	67 124 388	1 880	1 052 495	0	0	73	53 791	125 492	68 230 675
2004	131 732	73 898 626	1 290	752 084	87	74 113	41	25 946	133 150	74 750 769
2005	141 872	84 081 047	1 877	1 091 804	123	108 203	0	0	143 872	85 281 055
2006	123 081	72 343 889	0	0	80	47 515	0	0	123 161	72 391 404
2007	99 445	61 098 928	0	0	0.4	195	0	0	99 445	61 099 123
2008	144 524	103 058 063	0	0	53	53691	0	0	144 578	103 111 753
2009	135 782	150 828 518	0	0	110	412 54446	0	0	135 892	151 241 064
2010	124 384	128 242 634	0	0	0	0	0	0	124 384	128 242 634
2011	86 853	78 067 003	6	6 442	134	174 249	0	0	86 994	78 247 694

Source: Statistics and Economic Analysis, DAFF

3. MARKET INTELIGENCE

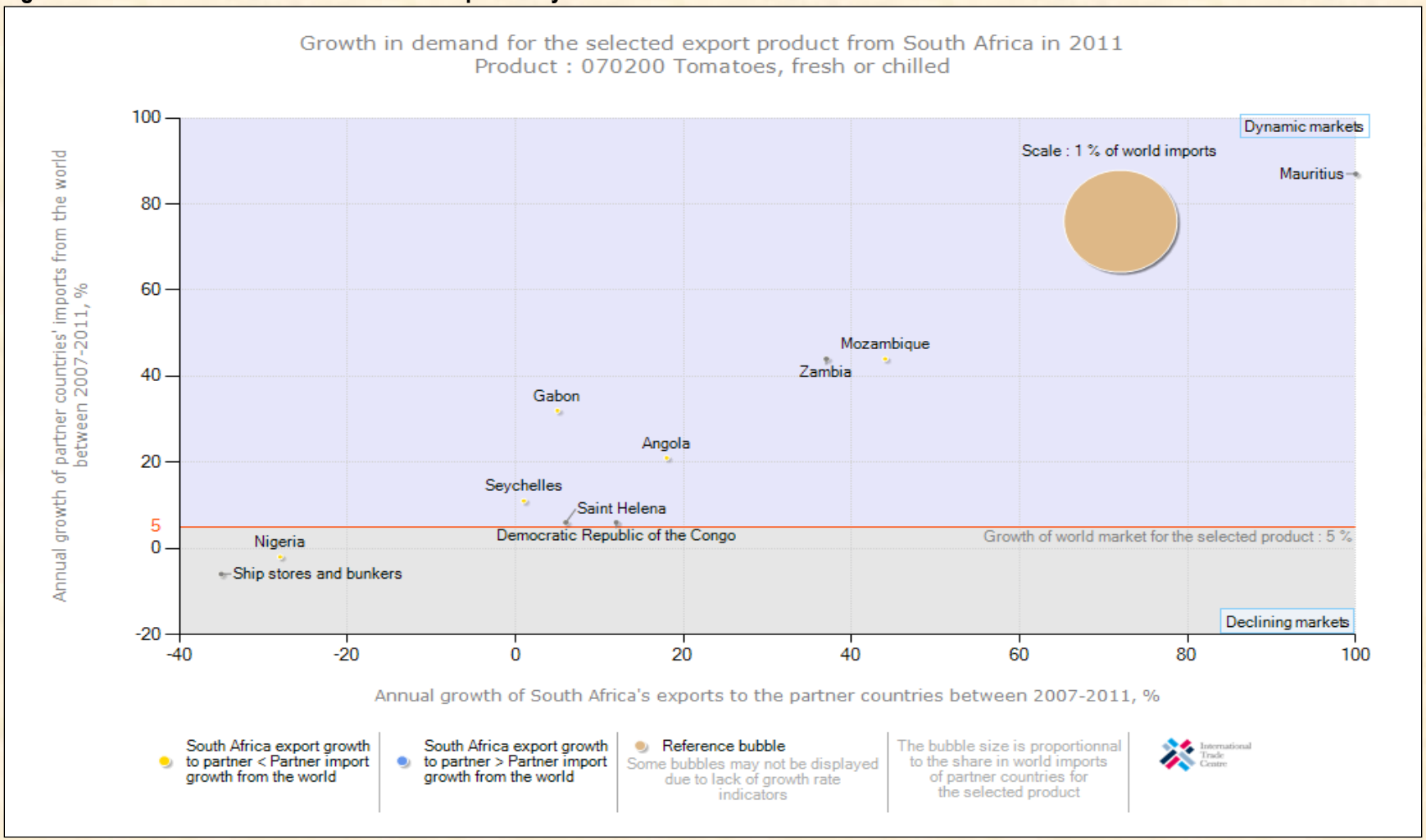
3.1 Competitiveness of South African tomato exports

Competitiveness is described as an industry's capacity to create superior value for its customers and improved profits for the stakeholders in the value chain. The driving force in sustaining a competitive position is productivity that is output efficiency in relation to specific inputs with regard to human, capital and natural resources. In 2011, South African tomato exports represent 0.05% of

world exports and its ranking on the world exports was number 45. South Africa has lost its competiveness as it was ranked number 41 in the previous year.

As depicted on Figure 21 below, South African tomato exports are growing faster than the world imports into Democratic Republic of Congo and Mauritius. South Africa's performance in these countries is regarded as a gain in the dynamic market. South Africa tomato exports to Angola, Mozambique, Saint Helena, Seychelles, Zambia and Gabon are growing slower than the world imports into these countries and South Africa's performance is regarded as a loss in dynamic markets. South Africa tomato exports are declining while the world imports are growing into Nigeria.

Figure 21: Growth in demand for tomatoes exported by South Africa in 2011

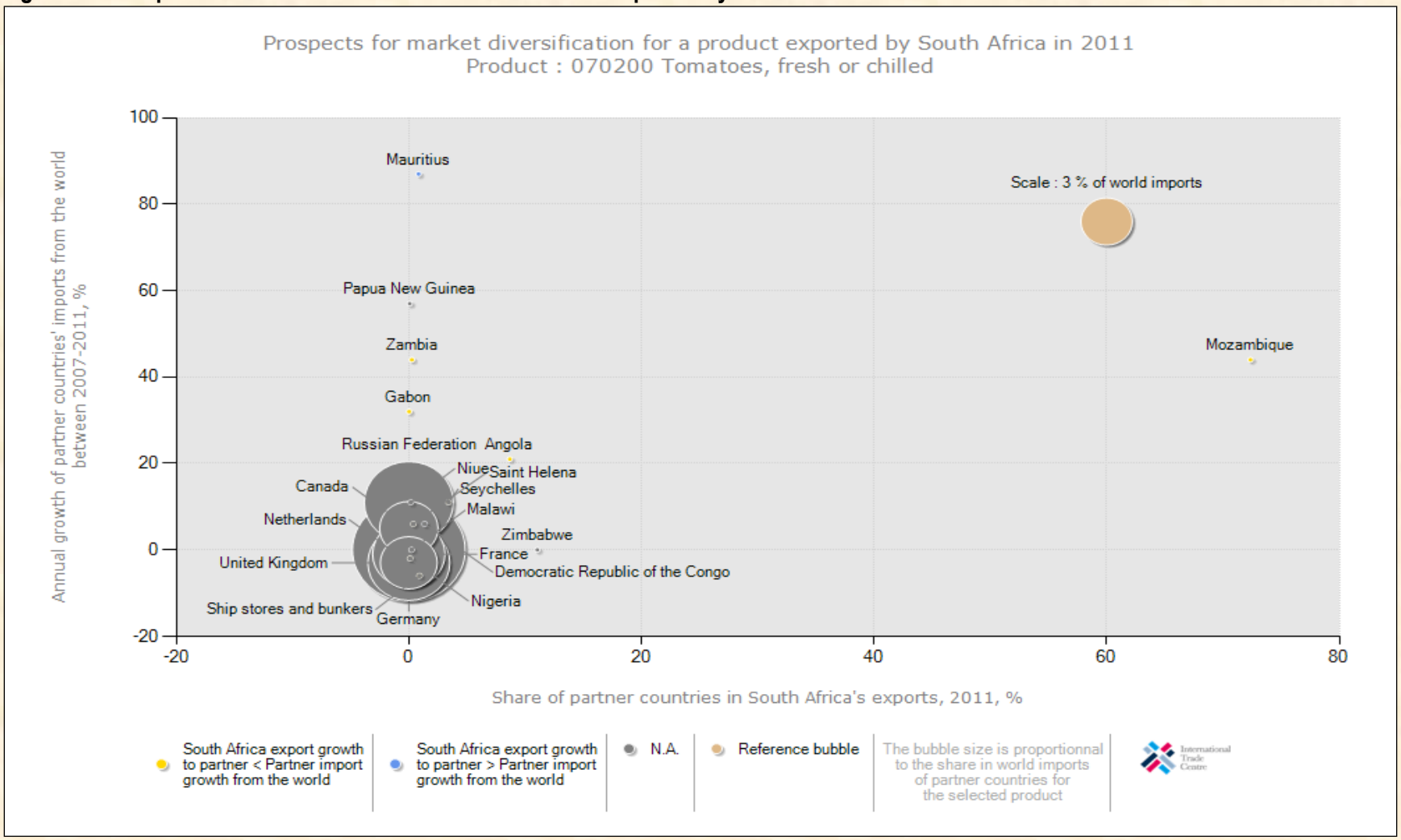


Source: International Trade Map (ITC)

Figure 22 below, illustrates prospects for market diversification by South African exporters of tomatoes. Mozambique holds a bigger market share of South African tomato exports. In terms of market size United States of America (USA), Germany, Russian Federation and United Kingdom (UK) are the leading markets/importers of tomatoes.

Whilst three countries dominate world tomato imports, it is interesting to note that countries like Mauritius, together with Papua New Guinea have experienced higher annual growth rate in value from 2007– 2011. Mauritius experienced an annual growth rate of 87% and Papua New Guinea has experienced an annual growth of 57% annual growth rate. These countries represent possible lucrative markets for South African tomato producers.

Figure 22: Prospects for market diversification for tomatoes exported by South Africa in 2011



Source: International Trade Map (ITC)

4. MARKET ACCESS

Barriers to trade can be divided into tariff barriers (including quotas, ad valorem tariffs, specific tariffs and entry price systems) and non tariff barriers (sanitary and phytosanitary measures, labels, etc). The main markets for vegetables (including tomatoes) employ various measures, both tariff and non tariff to protect the domestic industries. Whilst many of the non tariff measures can be justified under the auspices of issues such as health and standards, the tariff measures are increasingly under the scrutiny of the World Trade Organization (WTO), and as such are gradually being phased out. Nevertheless, exporters need to be aware of all the barriers that they may encounter when trying to get their produce on foreign shelves.

4.1 Tariff, quotas and the price entry system

Tariffs are either designed to earn government revenue from products being imported or to raise the price of imports so as to render local produce more competitive and protect domestic industries.

Quotas can be used to protect domestic industries from excessive imports originating from areas with some form of competitive advantage (which can therefore produce lower cost produce). Tariffs and quotas are often combined, allowing the imports to enter at a certain tariff rate up to a specified quantity. Thereafter, imports from that particular region will attract higher tariffs, or will not be allowed at all.

The entry price system, which is used in many northern hemisphere markets, makes use of multiple tariff rates during different periods when domestic producers are trying to sell their produce, and lower the tariffs during their off-season. Alternatively, the tariff rate can be a function of a market price – if the produce enters at a price which is too low (and therefore likely to be too competitive), it qualifies for a higher tariff schedule.

Whilst tariff regulations can be prohibitive and result in inferior market access, it is often the non tariff barriers that restrict countries like South Africa from successfully entering the large developed markets. Many of these barriers revolve around different types of standards, including sanitary and phytosanitary standards (SPS), food health and safety issues, food labeling and packaging, organic produce certification, quality assurance and other standards and grades. Tariffs applied by the various markets to tomatoes originating from South Africa during 2010 and 2013 are shown in Table 11 below.

Table 11: Tariffs applied by various export markets to tomatoes from South Africa

COUNTRY	PRODUCT DESCRIPTION	TRADE REGIME	APPLIED TARIFFS	TOTAL AD VALOREM EQUIVALENT TARIFF	APPLIED TARIFFS	TOTAL AD VALOREM EQUIVALENT TARIFF
			2010		2011	
Angola	Tomatoes, fresh or chilled:	MNF duties (Applied)	15.00%	15.00%	15.00%	15.00%
Belgium	Tomatoes, fresh or chilled: Cherry tomatoes	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
DRC	Tomatoes, fresh or chilled	MFN duties	10.00%	10.00%	10.00%	10.00%
Germany	Tomatoes, fresh or chilled:	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
Mauritius	Tomatoes fresh or chilled	MFN duties (Applied)	0.00%	0.00%	0.00%	0.00%
Mozambique	Tomatoes, fresh or chilled:	Preferential tariff for South Africa	15.00%	15.00%	15.00%	15.00%
Netherlands	Tomatoes, fresh or chilled: Cherry tomatoes.	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
Mexico	Tomatoes, fresh or chilled	MFN duties (Applied)	0.00%	0.00%	0.00%	0.00%
Russian Federation	Tomatoes, fresh or chilled	General tariff (MFN applied)	104.83$/ ton	21.17%	105.60$/ ton	15.00%
		Preferential tariff for GPS countries	13.16$/ ton	17.55%	79.20$/ ton	11.25%
Seychelles	Tomatoes, fresh or chilled:	General tariff	0.00%	0.00%	0.00%	0.00%
Sweden	Tomatoes, fresh or chilled: Cherry tomatoes.	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
Switzerland	Tomatoes, fresh or chilled: entered during October 21 to April 30	Preferential tariff for SACU countries	0.00%	0.00%	0.00%	0.00%
United Arab Emirates	Tomatoes, fresh or chilled	MFN duties (Applied)	0.00%	0.00%	0.00%	0.00%
United Kingdom	Tomatoes, fresh or chilled:	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
France	Tomatoes, fresh or chilled	Preferential tariff for	0.00%	0.00%	0.00%	0.00%

		South Africa				
Gabon	Tomatoes, fresh or chilled:	MFN duties (Applied)	30.00%	30.00%	30.00%	30.00%
Zambia	Tomatoes, fresh or chilled:	Preferential tariff for South Africa	15.00%	15.00%	5.00%	5.00%
Zimbabwe	Tomatoes, fresh or chilled:	MFN duties (Applied)	40.00%	40.00%	40.00%	40.00%
USA	Tomatoes, fresh or chilled,	Preferential tariff for AGOA countries	0.00%	0.00%	0.00%	0.00%

Source: Market Access Map

The most lucrative export markets for tomatoes from South Africa are the EU countries (Belgium, Germany, Italy, Netherlands, Sweden and United Kingdom) since they apply a preferential tariff of 0.00% to tomato imports originating from South Africa due to EU-SA Free Trade Agreement (FTA). Furthermore, South Africa has access to the US market under the AGOA which significantly lowers the tariff barriers for South African tomatoes. Switzerland also has a GSP system in place, for which South Africa qualifies. Zimbabwe applies 40%, Angola applies 15% tariff to tomato exports from South Africa despite SADC-FTA. Zambia has reduced its tariff from 15% to 5% preferential tariff for tomatoes originating from South Africa.

In reality, the tariffs are likely to be far lower for South Africa when considering the preferential agreements, but at the same time, most tariff structures are particularly complex, with quotas, seasonal tariffs and specific tariffs (an amount per unit than rather than a percentage of value) all contributing to many different tariff lines and often higher duties payable than one might have anticipated initially. One must also bear in mind that most tariffs are designed to protect domestic industries, and as such are likely to discriminate against those attempting to compete with the domestic producers of that country.

5. 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. One can supply vegetables combined, which will then contract out importers/marketers and try to take advantage of economies of scale and increased bargaining power. At the same time combined vegetables might also supply large retail chains. One can also be a member of a private or cooperative export organization which will find agents or importers and market the produce collectively. Similar to combined vegetables, an export organization can either supply wholesale market or retail chains, depending on particular circumstances. Export organizations will wash, sort and package the produce.

They will also market the goods under their own name or on behalf of the member, which includes taking care of labeling, bar-coding, etc. Most of the time, export organizations will enter into a collective agreements with freight forwarders, negotiating better prices and services (more regular transport, lower peak season prices, etc). Some countries have institutions that handle all the produce (membership compulsory) and sell only to a restricted number of selected importers.

Agents will establish contacts between producers/export organizations and buyers in the importing country, and will usually take between 2% and 3% commission. In contrast, an importer will buy and sell in his/her own capacity, assuming the full risk (unless on consignment). They will also be responsible for clearing the produce through customs, packaging and assuring label/quality compliance and distribution of the produce. Their margins lie between 5% and 10%. The contract importers of fruit combines market and distribute the produce of the combines, clear it through customs and in some cases treat and package it.

Only few exporters have long term contracts with wholesale grocers who deliver directly to retail shops, but with the increasing importance of standards (EUREGAP, etc) and the year round availability of fruit, the planning of long term contractual relationship is expected to increase.

6. LOGISTICS

6.1 Mode of transport

The transport of vegetables falls into two categories namely ocean cargo and air cargo. Ocean cargo takes much longer to reach the desired location but costing considerably less. The choice of transportation method depends, for most parts 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 transport have improved considerably. With the increased exports by South Africa, the number and the regularity of maritime routes have increased. These economies of scale could benefit South Africa if more producers were to become exporters and take advantage of the various ports which have special capabilities in handling fruit and vegetable produce.

6.2 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, onto actual shipping vessels and containers, and finally on to the importers and distributors that must clear the produce and transport it to the markets/retail outlets. For every 10 Degree Celsius increase above the recommended temperature, the rate of respiration and ripening of produce can increase twice or even thrice. Related to this are increasing important traceability standards which require an efficient controlled supply chain and internationally accepted business standards.

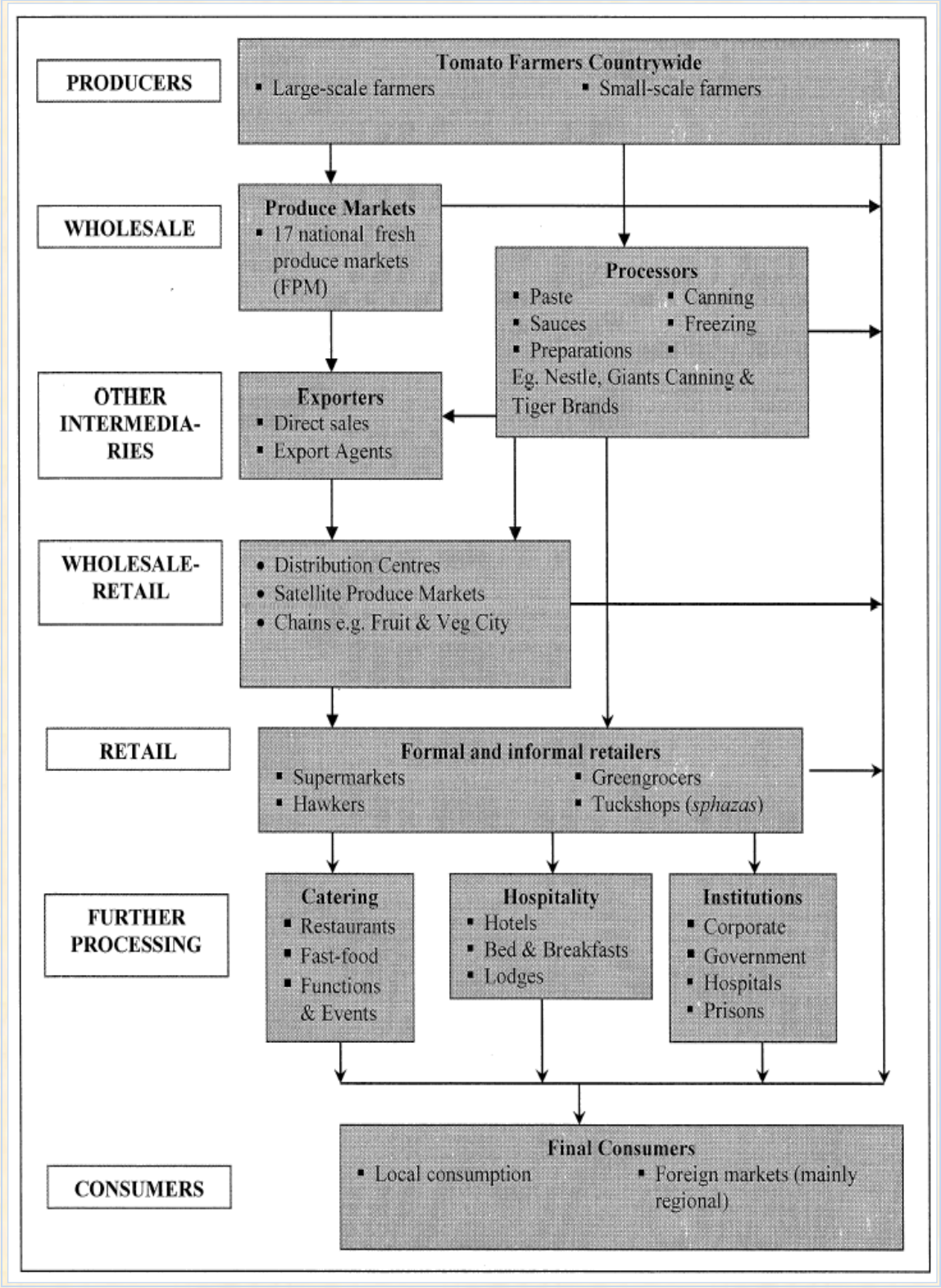
6.3 Packaging

Packaging can also play an important role in ensuring safe and efficient transport of a product and conforming to handling requirements, uniformity recyclable material specifications, phytosanitary requirements, proper storage needs and even attractiveness for marketing purposes.

7. SIMPLIFIED TOMATO FOOD VALUE CHAIN

The simplified tomato food value chain diagram (see Figure 23) is referred to as a simplified model because numerous interconnections were omitted and the size, levels of control and importance of each of the links and flows could not possibly be shown in a single diagram. Also of note is that horticultural produce value chains have a similar structure. The following discussion will focus on the main segments of the tomato value chain i.e. wholesale, wholesale-retail, retail, processing and intermediaries.

Figure 23: Simplified tomato food value chain



7.1 Wholesalers

FPMs are the dominant player and form of wholesaling in the South African tomato and fresh fruit and vegetable (FFV) sector. However other wholesale forms do exist including independent wholesalers, contract buyers, supermarket wholesaling subsidiaries, as well as farmer sales direct to retailers and to consumers.

Being the largest wholesalers, the FPMs have emerged as the FFV price-setters or, as nicknamed, the "fresh produce stock exchange. The prices at the FPMs are arrived at through a bargaining process mediated by market agents who have a dual objective to collect the best prices (and hence commission) for sales while ensuring that the highly perishable stocks are cleared. These prices are then used as reference prices even in private transactions outside the FPMs.

In the wholesale environment tomatoes are typically sold in bulk with a minimum of 10kg cartons and because price is negotiable, high volume buyers generally secure better deals than their small-scale counterparts.

7.2 Wholesale-retailers

These businesses operate in the niche between wholesaler and retailer format stores and are classified as wholesale-retailers because their clientele include both final consumers and smaller retailers and food outlets (e.g. restaurants and caterers). Wholesale-retailing is relatively new in FFV with examples including the Fruit and Veg City chain (established in 1993), Evergreens in Pretoria (since 1994) and FPM satellite markets. Being one of the top FFV lines, tomatoes form a major part of wholesale-retailers' businesses and are sold in a variety of packages from bulk packs to loose singles. Tomato sales here are at predetermined prices.

7.3 Retailers

South African tomato retailers exist in both the formal and informal sectors. In the former this includes formally registered retail chains, supermarkets and neighbourhood stores. The latter covers tuck shops (*sphaza*), and hawkers. In this environments tomato sales are at predetermined prices and typically individually or in small packages.

7.4 Processors

As explained in 2.6, processing of tomatoes consists of canning, freezing, dehydration and juice. Tomatoes are processed into whole pealed, tomato and onion bruises, pasta, shredded, puree and pasta concentrate. The leading players in the tomato processing industry are Tiger Brands, Nestle and Giants Canning.

There is also a set of further processors not captured in the group above. These entities use tomatoes (and tomato products) in food preparations. This includes caterers, hospitality and other institutions such as corporate, government institutions like hospitals, prisons, etc.

7.5 Intermediaries

Intermediaries occur throughout the tomato value chain and perform the important function of facilitating transactions. Prominent examples include export agents, van buyers, contract buyers and market agents. The common element in these businesses is that for a fee, they enable other market players such as farmers or restaurateurs to focus on their core functions (tomato production and food preparation in this case) rather than on the often complex processes of exchange or international trade.

8. STRATEGIC CHALLENGES

With the opening up of markets, tomatoes like all other commodities are influenced by international factors such as:

- Competing against subsidized products from the developed countries;
- The strengthening of the Rand against other major trading currencies like the Euro and the US dollar; and
- Poor climatic conditions over many tomato producing areas.

9. TRANSFORMATION

In Limpopo province, tomato farmers with the assistance of provincial agriculture have organized themselves successfully into Limpopo Tomato Growers Association (LTGA). LTGA is a business association committed in transforming small holder farmers to commercial producers for creation of wealth, employment and ownership of the industry. LTGA facilitates the growth and development of its members through unique training, mentorship programmes, access to finance, access to markets and business exposure.

LTGA members have a major stake in food processing plant that produce a range of products under their brand name. The brand name is APOL, which stands for Agro-Processors of Limpopo. Foods such as APOL whole peeled tomatoes, tomato sauce, puree and onion mix are available on supermarkets shelves.

10. ACKNOWLEDGEMENTS

10.1 The following industries are acknowledged

10.1.1 Tomato Producers Organization
Box 1508
Pretoria
0001
Tel (012) 322 6980
Fax (012) 388 3163
Web: www.satomatoes.com

10.1.2 Directorate: Statistics and Economic Analysis
National Department of Agriculture, Forestry and Fisheries
Private X 246
Pretoria
0001
Tel (012) 319 84 54
Fax (012) 319 8031

10.1.3 Limpopo Tomato Growers Association (LTGA)
Chairperson: Mr. Walter Moketla
Tel (015) 305 3261
Cell No: 083 770 7878

10.1.4 International Trade Centre
www.trademap.org

10.1.5 Quantec Easy Data
www.easydata.co.za

10.2 TOMATO PROCESSORS

10.2.1 Tiger Food Brand Limited
P.O Box 78056
Sandton
Tel (011) 840 4000
Fax (011) 514 0460

10.2.2 Giants Canning
P.O Box 86406
City Deep
2049
Tel (011) 623 2929

Fax (011) 623 2986

10.2.3 Ashton Canning Company (Pty) Ltd

Private Bag x 3
Ashton
6715
Tel (023) 615 1140
Fax (023) 615 1992