A PROFILE OF THE SOUTH AFRICAN MACADAMIA NUTS MARKET VALUE CHAIN

2012

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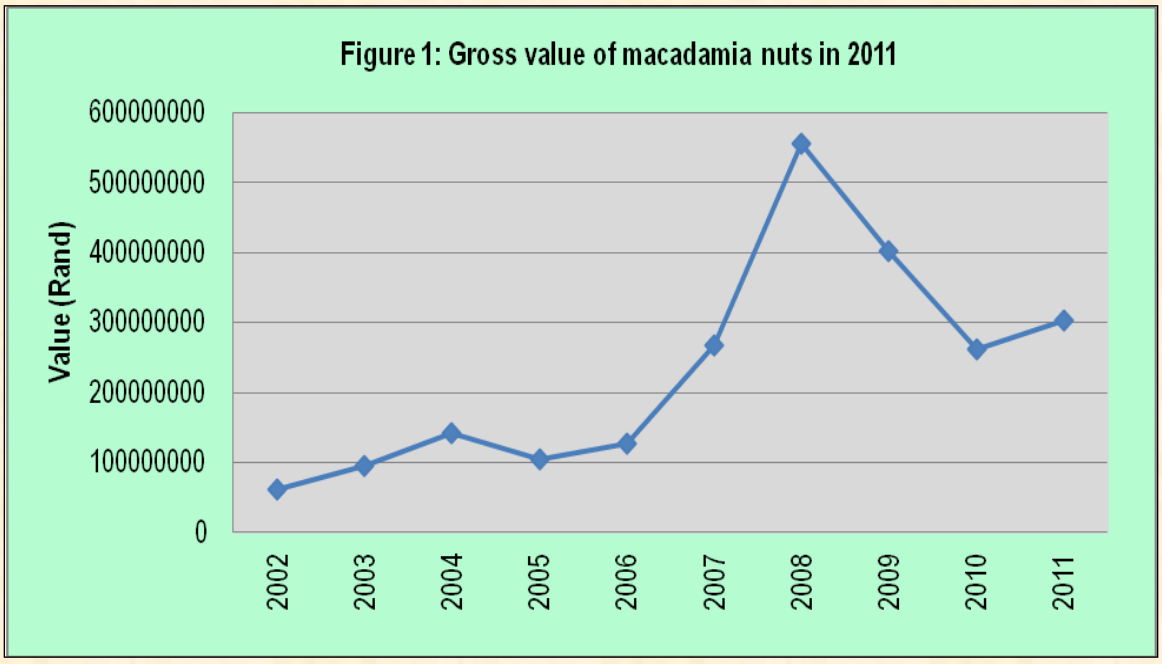
1. DESCRIPTION OF THE INDUSTRY

Macadamia nuts are quickly becoming an important crop in South Africa and are possibly the fastest growing tree crop industry in the country. South Africa is the third largest macadamia nut producer in the world, after Australia (where they originated) and Hawaii. The nuts are a valuable food crop. Only two of the species i.e. *M. integrifolia* and *M. tetraphylla*, are of commercial importance. Macadamia tree takes five to twelve years to produce nuts and a good tree can produce nuts for 40 years. The trees require a hot subtropical climate without much humidity. In South Africa, KwaZulu-Natal, Mpumalanga and Limpopo are ideal areas. Macadamias are now widely used in the confectionery, baking, ice cream and snack food industries. Macadamia oil's rich, cushiony skin feel and high oxidative stability make it especially suitable for heavy creams and sun care formulations. Medical research has shown that the consumption of macadamias may significantly lower the risk of heart disease. The gross value of macadamia nuts is shown in Figure 1 below.



Source: SAMAC data 2011

Figure 1 above illustrates the contribution of the macadamia nuts industry to the total gross value of agricultural production over a 10 year period. The industry's contribution increased steadily from 2003 to 2004. In 2005 the industry's contribution dropped by 26.6% compared to the 2004 production season. This can be attributed to a drop in production volume and market prices in the same season. From 2006 the industry's contribution increased steadily reaching a peak in 2008. In 2009, the industry's contribution decreased by 35% compared to the previous season. This is attributed to a loss of R54 million worth of nuts that were lost due to unsound kernels (SAMAC 2009). In 2010, macadamia nuts gross value declined by 53% compared to gross value in 2009. This can be attributed to a decline in macadamia prices in the same year. During 2011, the gross value of production increased by 15% when compared to the previous season.

1.1. Employment

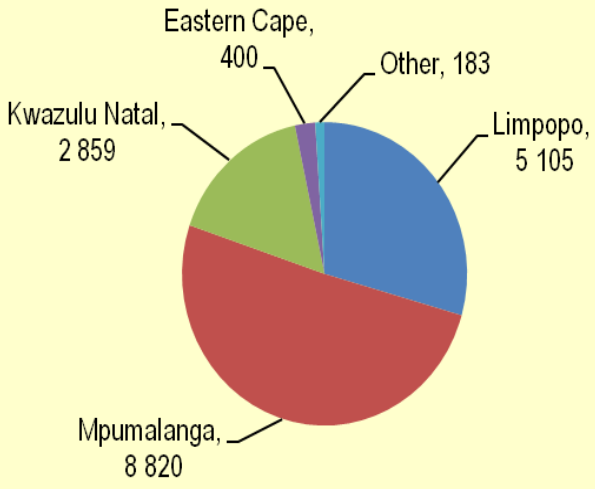
Although most of the workforce in the industry is employed seasonally for harvesting and processing from February to August, it is estimated that at least 3 000 new job opportunities have been created on macadamia farms over the last decade and another 1 000 jobs in cracking facilities. In peak season, the industry presently provides employment for more than 4 500 farm workers and about 1 500 factory workers. Since production is expected to double within the next 5 to 7 years, employment creation will continue to grow at a similar pace.

1.2 Production trends

1.2.1 Production areas

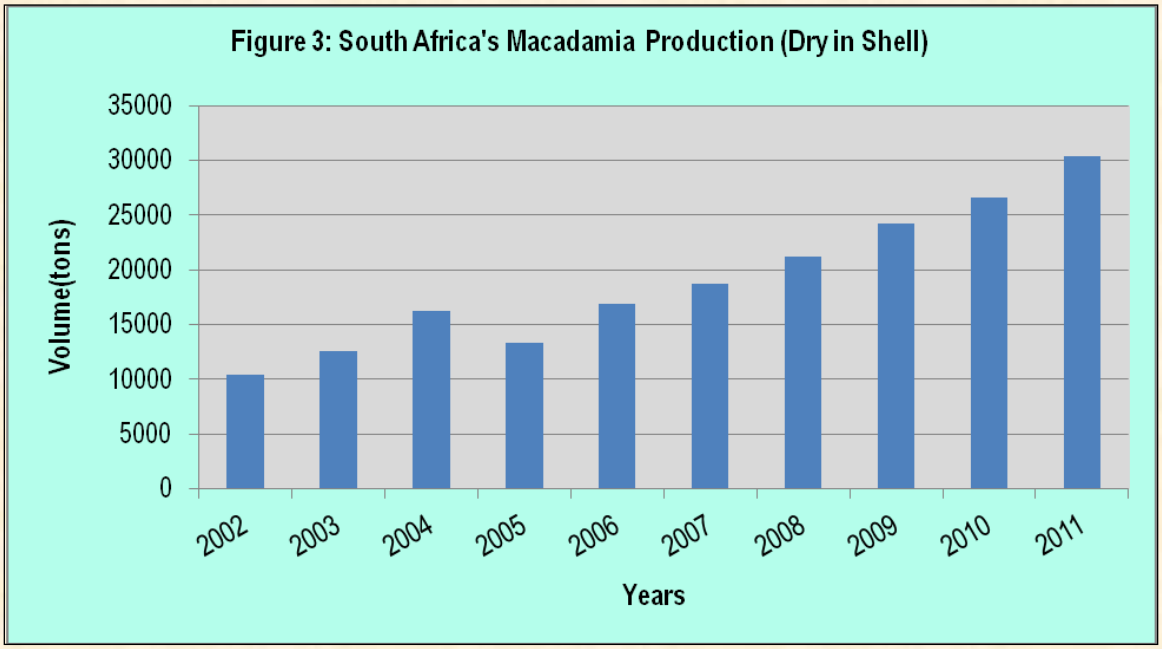
In South Africa, macadamia nuts are mainly grown in three provinces: Limpopo (Tzaneen and Levubu), Mpumalanga (Barberton, Nelspruit and Hazyview), and on the north and south coast of KwaZulu Natal. In the neighboring countries macadamias are produced in Swaziland, Malawi and Zimbabwe. There are close to 1 000 farmers involved in growing macadamia nuts that are supplied to 12 cracking factories. Macadamia nuts are also grown in Brazil, California Israel, Thailand, Kenya, Swaziland, Costa Rica, New Zealand Colombia and Guatemala.

Figure 2: Area under Macadamia nuts in South Africa in hectares



Source: SAMAC data, 2010

Figure 2 above shows that in 2010, Mpumalanga province accounted for 8 820 ha of macadamia nuts, followed by Limpopo with 5 105 ha, Kwazulu Natal with 2 859 ha, Eastern Cape with 400 ha and the other provinces cultivated 183 ha. In terms of number of trees planted, Mpumalanga has over 2 million, followed by Limpopo with over 1.5 million, Kwazulu Natal with approximately 694 000 and Eastern Cape with 150 000.



Source: SAMAC data, 2011

Figure 3 above illustrates the production of macadamia nuts (Dry In Shell -DIS) over a 10 year period (also see Table 1 below). From 2003 to 2004, production increased steadily and in 2005 there was a 17.6% decrease in total tonnages compared to previous year. This is attributed to bad weather during flowering and fruit set in Limpopo province. From 2006 production increased steadily reaching a peak in 2011. In 2009 season, South Africa produced 24 199 tons DIS macadamia (table 1 below). This is a 13.9% increase compared to the previous season. In 2010, production of dry in shell macadamia nuts have increased by 12% when compared to 2009 production year. Production growth is a factor of tree age, climate and production practices. In 2011, DIS output increased by 13.9% when compared to 2010 production season.

Table 1: Macadamia production per production region in 2011

Processed Macadamia	Limpopo	Mpumalanga	KZN	Total RSA
Wet In Shell (WIS) (kg)	9 770 240	20 704 235	2 612 028	33 086 503
Dry In Shell (DIS) (kg)	9 053 648	19 022 693	2 299 293	30 375 634
Sound Kernel (SK) (kg)	1 985 828	5 661 235	772 417	8 419 480
Unsound Kernel (USK) (kg)	320 069	583 839	96 810	1 000 718
Total Kernel (TK) (tons)	2 305 897	6 245 074	869 227	9 420 198
SKR[1]%	21.9%	29.8%	33.6%	27.7%
USKR[2]%	3.5%	3.1%	4.2%	3.3%
TKR[3]%	25.5%	32.8%	37.8%	31.0%

Source: SAMAC DATA, 2011

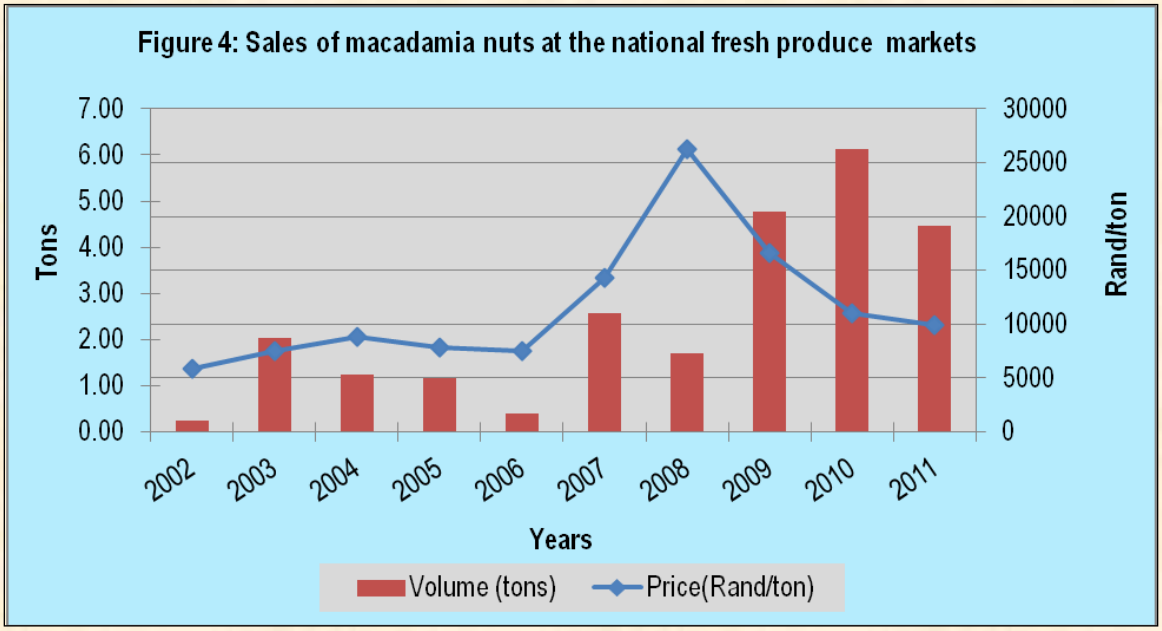
[1] SKR = Sound Kernel Recovery
[2] USKR = Unsound Kernel Recovery
[3] TKR = Total Kernel Recoverry

2. MARKET STRUCTURE

There is no regulation or restriction in the marketing of macadamia nuts. The prices of macadamia are determined by market forces of demand and supply. The industry is export based with more than 95% of annual production shipped to international markets. The United State of America, Europe and Asia are presently the largest markets for macadamias originating from South Africa. There are close to 1 000 farmers involved in growing macadamia nuts that are supplied to 12 cracking factories. A number of these growers have already achieved GLOBALGAP accreditation and many of the cracking facilities are HACCP and/or ISO 9001 accredited.

2.2 Domestic markets

The main buyers of macadamia nuts in South Africa are Spar, Pick 'n Pay and Woolworths. Macadamia nuts are also marketed through national fresh produce markets and directly to processing companies. Volumes of sales of macadamia nuts at the national fresh produce markets (NFPMs) are depicted in Figure 4.



Source: Statistics and Economic Analysis, DAFF

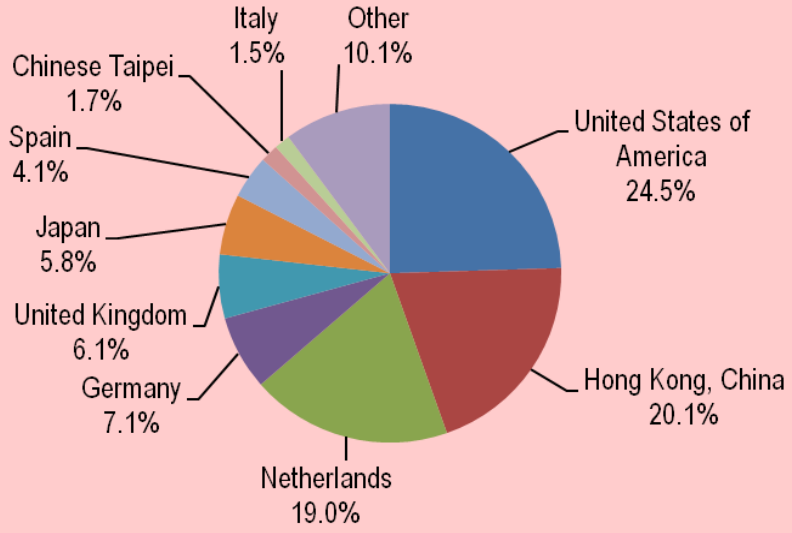
The sales volumes have relatively fluctuated over the years. In 2003, market prices eased higher by 27% despite an 88% increase in macadamia volumes supplied in the market. This can be attributed to strong demand of macadamia nuts in the same year. In 2006 the volumes fell by 66% compared to the previous year and this was accompanied by a 4% decrease in market prices. From 2007 the market prices increased significantly reaching a peak in 2008. In 2009 the market prices dropped by 37% due to the highest volumes supplied across the markets. In 2010, volumes supplied at the market increased by 28% which lead to a 33.8% drop in market prices. During 2011, macadamia nuts prices dropped by 9.4% despite a 27% drop in volumes supplied across the markets. This can be attributed to poor uptake of macadamia nuts at the same year.

3. EXPORTS AND IMPORTS

3.1 Exports

Given the large number of young trees yet to come into production, the industry has tremendous growth and development potential. Over 90% of the production (12% of world production) is exported annually. According to ITC Trademap during 2011, South African macadamia nuts export represented 36.78% of world macadamia nuts exports and it was ranked no 1. In second place was Australia followed by the Netherlands, Kenya, Guatemala and Hong Kong China.

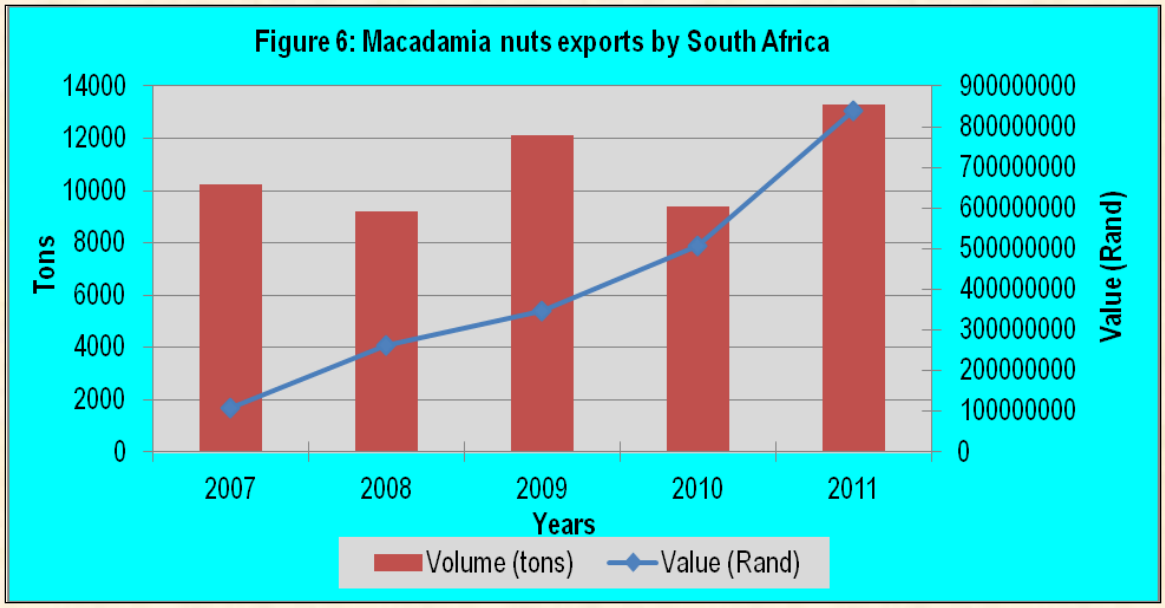
Figure 5: South African macadamia nuts exports destinations in 2011



Source: ITC Trademap

Figure 5 above illustrates South African macadamia nuts export destinations in 2011. The United States of America with 24.5% share is South Africa's largest export market for macadamia nuts, followed by Hong Kong, China with 20.1% and Netherlands with 19% share. South Africa also exported macadamia nuts to Germany, United Kingdom, Japan, Spain, Chinese Taipei, and Italy.

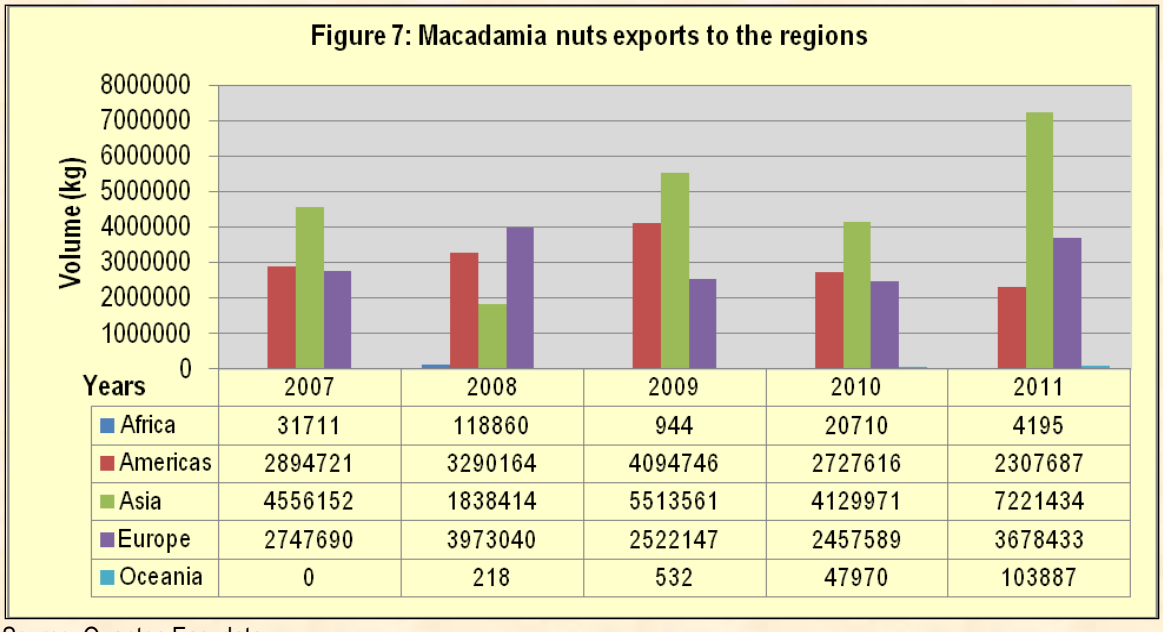
Figure 6 below shows that in 2008 macadamia nuts exports decreased slightly by 9.8% compared to 2007 exports. In 2009, the tonnages exported increased by 31.5% compared to the previous season. This can be attributed to high production volumes in the same year. It was less profitable to export in 2007, since less export values were recorded for high volumes exported. In 2010, the exports declined by 22.6% despite an in increase in production volumes. It was more profitable to export macadamia nuts in 2010, since high value was recorded for less volume exported. During 2011, macadamia nuts exports increased by 42% when compared to the previous season. This can be attributed to a 13.9% increase in domestic production output. In 2011, it was highly profitable to export macadamia nut when compared to other years



Source: Quantec Easydata

* *Macadamia nuts individual HS code was developed in 2007; it was previously classified in total nuts code and the available exports data is only for 5 years.*

Exports of macadamia nuts to various regions of the world during the last five years are presented in Figure 7.

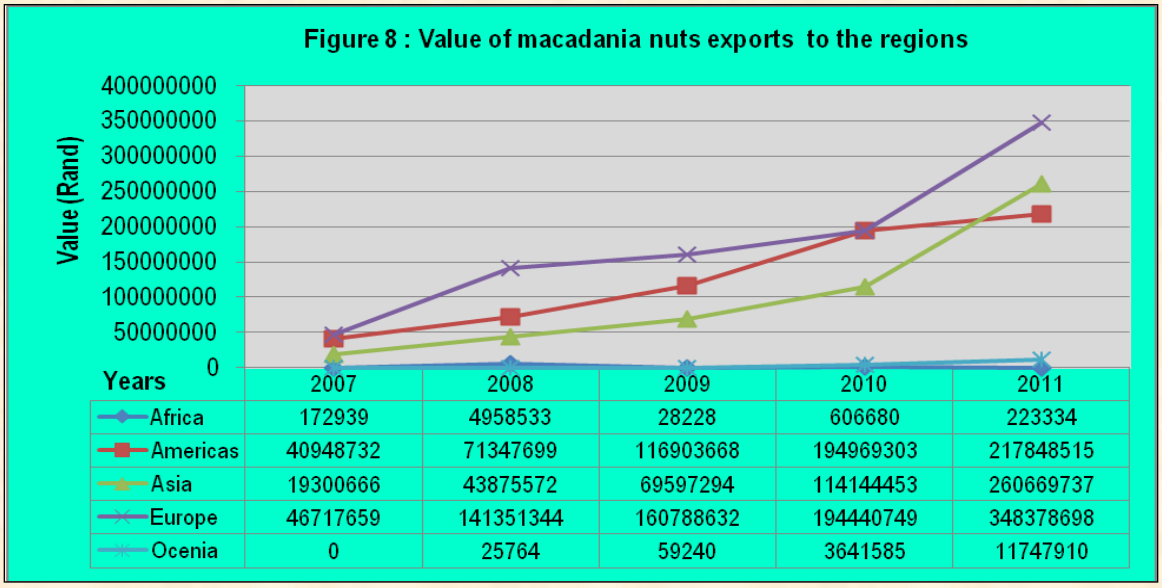


Years	2007	2008	2009	2010	2011
Africa	31711	118860	944	20710	4195
Americas	2894721	3290164	4094746	2727616	2307687
Asia	4556152	1838414	5513561	4129971	7221434
Europe	2747690	3973040	2522147	2457589	3678433
Oceania	0	218	532	47970	103887

Source: Quantec Easydata

Figure 7 above indicates that high quantities of macadamia nuts were exported to Asia, European and Americas regions. In 2008, considerable volumes of macadamia nuts were exported to the African region. Macadamia nuts exports to Oceania were insignificantly low. In 2010, South Africa exported high quantities of macadamia nuts to the Asian region (Hong Kong, China, Japan and Viet Nam) followed by Americas (United States of America) and European region (Netherlands,

Spain, United Kingdom and Germany). During 2011, high quantities of macadamia nuts were exported to Asian region (Hong Kong, China and Japan), European region (Netherlands, Germany and United Kingdom) and Americas (United States of America). Considerable macadamia nuts were also exported to Oceania region (Australia and New Zealand). Values of macadamia exports to the various regions are presented in Figure 8.

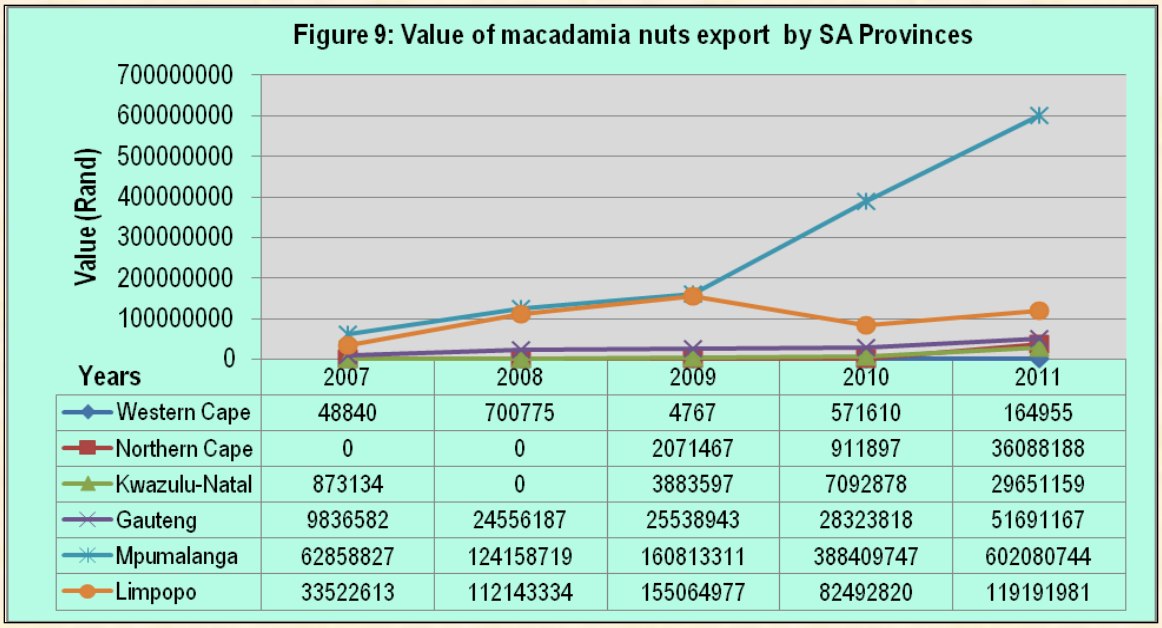


Years	2007	2008	2009	2010	2011
Africa	172939	4958533	28228	606680	223334
Americas	40948732	71347699	116903668	194969303	217848515
Asia	19300666	43875572	69597294	114144453	260669737
Europe	46717659	141351344	160788632	194440749	348378698
Ocenia	0	25764	59240	3641585	11747910

Source: Quantec Easydata

Figure 8 above, shows that it was more profitable to export macadamia nuts to European and Americas markets. It was less profitable to export macadamia nuts to Asian countries when comparing values and the volumes exported to Americas and European countries. During 2011, it was more profitable to export macadamia to Oceania, European and Americas regions. The exports to Africa and Asia were fetch low values.

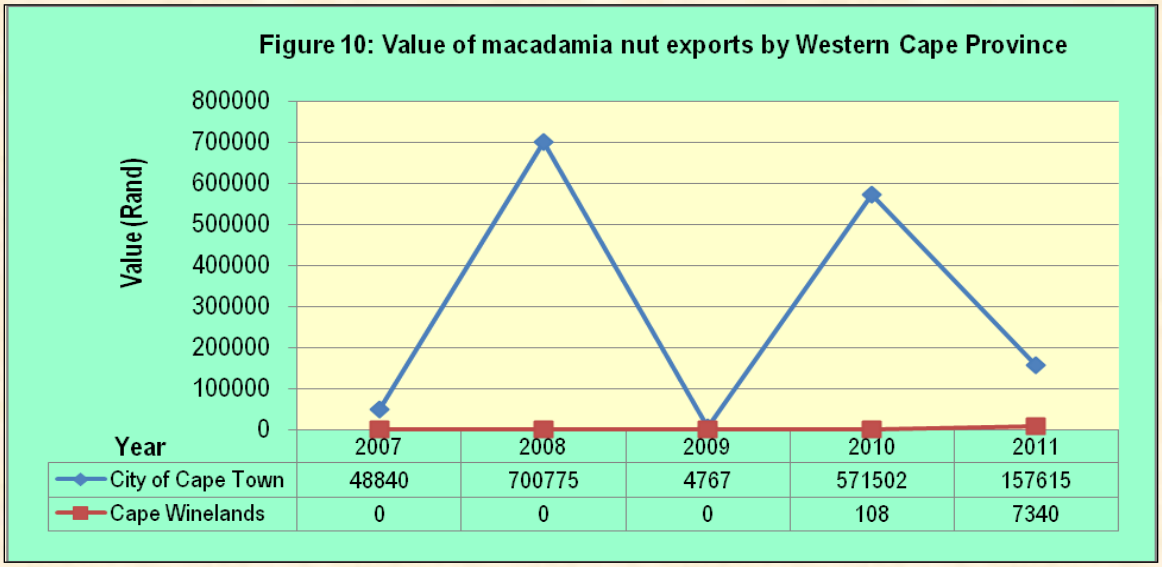
Figure 9 below illustrates the value of macadamia nuts exports from South African provinces for the past five years. The highlights of from the figure were that Mpumalanga and Limpopo are the top exporters of macadamia nuts in South Africa. The value for Kwazulu Natal macadamia nuts exports was low despite the province being one of top producers of macadamia nuts. High values of macadamia nuts for Mpumalanga and Limpopo can be attributed to high production volumes from these provinces and also the cracking factories situated in these provinces. High export values for Gauteng can be attributed to export agents and export exit points situated in this province. In 2011, values of macadamia nuts export for Mpumalanga, Northern Cape, Limpopo and Gauteng have increased significantly when compared to the previous seasons.



Years	2007	2008	2009	2010	2011
Western Cape	48840	700775	4767	571610	164955
Northern Cape	0	0	2071467	911897	36088188
Kwazulu-Natal	873134	0	3883597	7092878	29651159
Gauteng	9836582	24556187	25538943	28323818	51691167
Mpumalanga	62858827	124158719	160813311	388409747	602080744
Limpopo	33522613	112143334	155064977	82492820	119191981

Source: Quantec Easydata

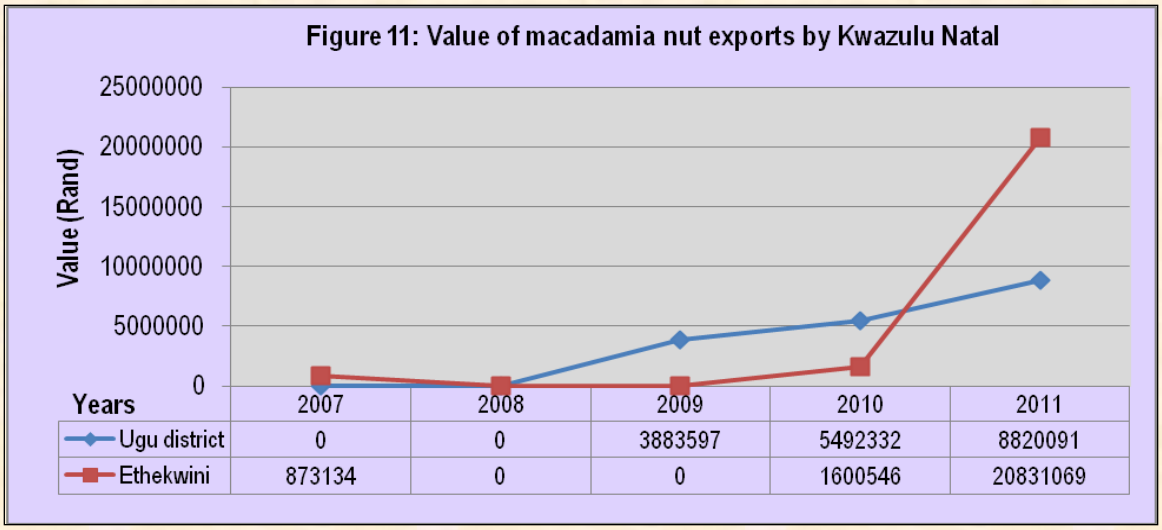
The following figures (Fig. 10 – 14) show the value of macadamia nuts from the various districts in provinces of South Africa.



Year	2007	2008	2009	2010	2011
City of Cape Town	48840	700775	4767	571502	157615
Cape Winelands	0	0	0	108	7340

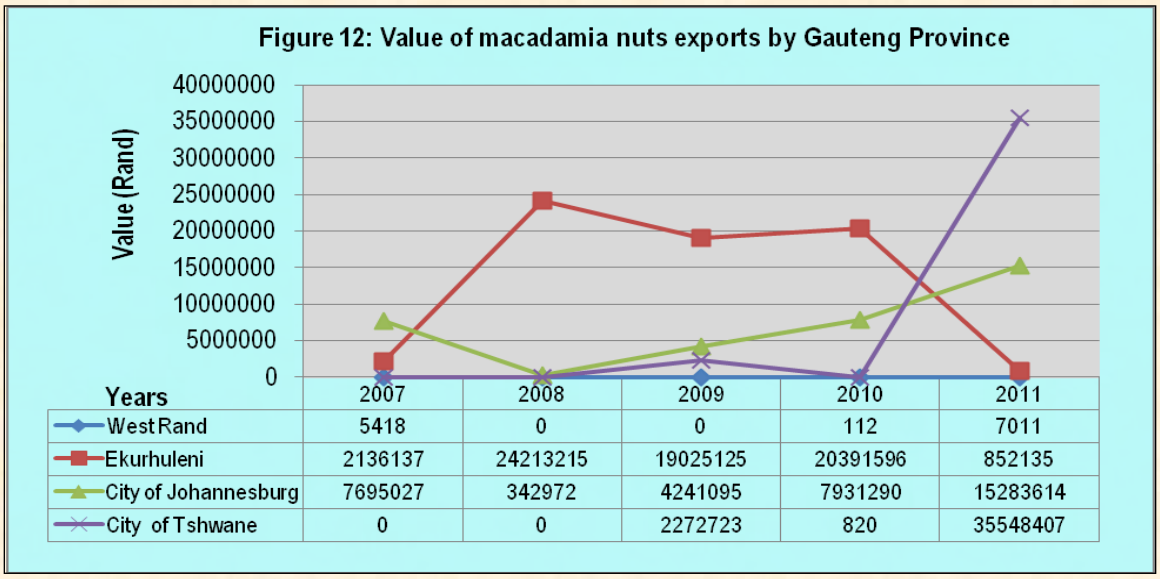
Source: Quantec Easydata

Figure 10 above shows that macadamia nuts from Western Cape Province were exported through the City of Cape Town. High export values were recorded in 2008. In 2010, there was a significant increase in macadamia nuts value originating from the City of Cape Town when comparing to 2009. During 2011, export value recorded for the City of Cape Town has dropped significantly while the value for Cape Winelands has improved.



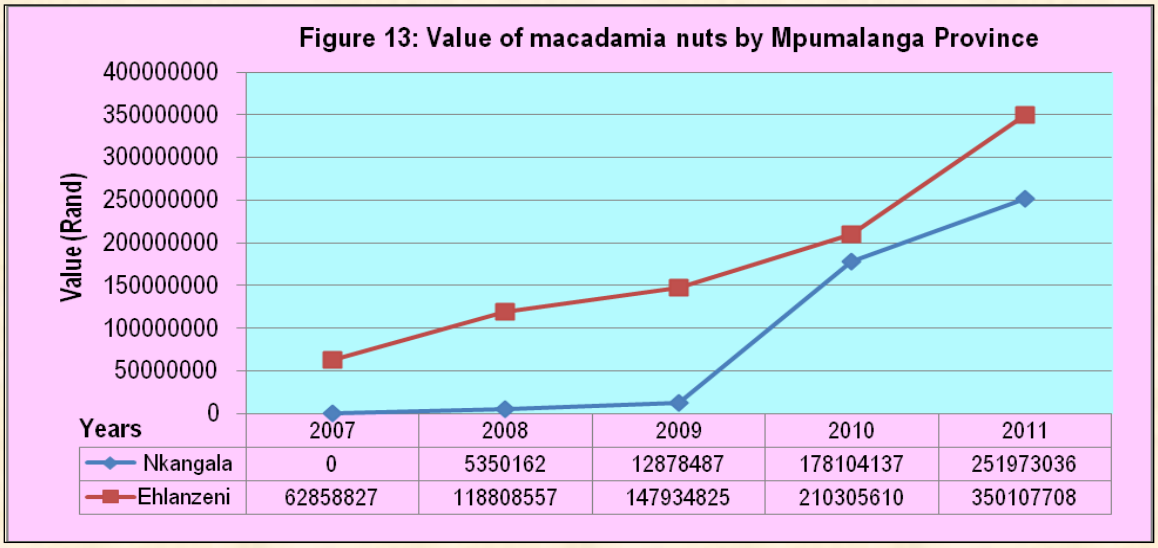
Source: Quantec Easydata

Figure 11 above shows that macadamia nuts from Kwazulu Natal province were exported from Ethekwini in 2007, 2010 and 2011. Exports from Ugu district were recorded in 2009, 2010 and 2011. There were no values of macadamia nuts recorded for Kwazulu Natal in 2008. In 2011, export values recorded for Ethekwini and Ugu districts have increased significantly when compared to 2010 season.



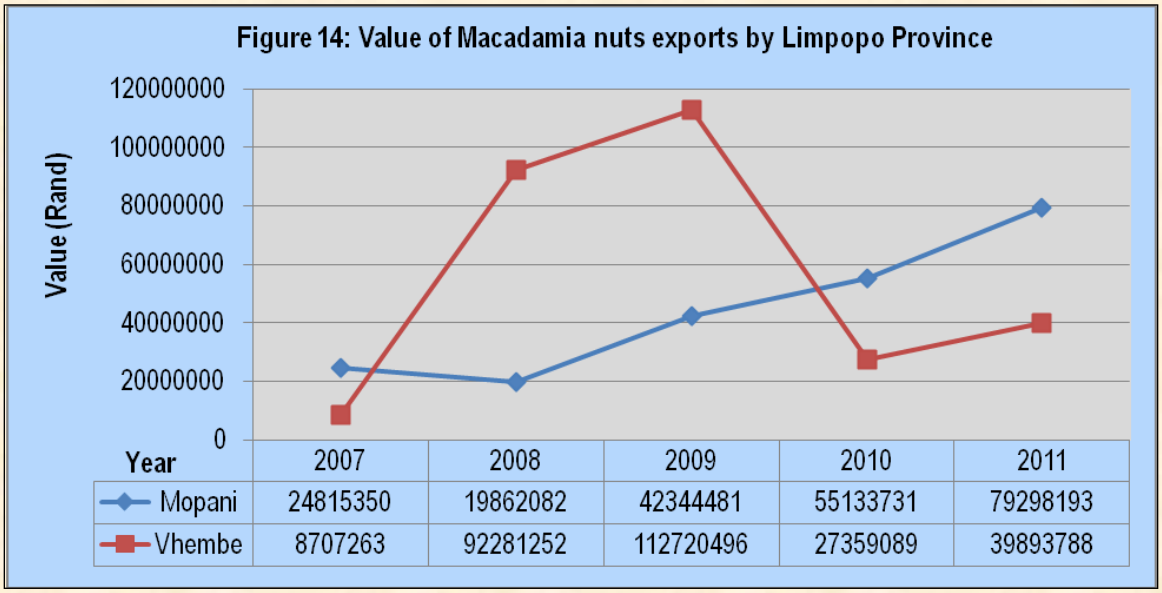
Source: Quantec Easydata

Figure 12 above shows that macadamia nuts exports by Gauteng province were exported through Ekurhuleni, City of Johannesburg and City of Tshwane contributed in 2009 and 2011. The highest export value was recorded in 2008 from Ekurhuleni district. In 2010, export value for West Rand and City of Tshwane were insignificant, while the export value for Ekurhuleni and City of Johannesburg have considerably increased. During 2011, export values for City of Tshwane and City of Johannesburg have increased significantly while export value for Ekurhuleni has declined significantly when compared to 2010 season.



Source: Quantec Easydata

Figure 13 above shows that macadamia nuts exports by Mpumalanga province were exported mainly from Ehlanzeni and Nkangala district municipalities. The highest export values were recorded in 2011 for both Nkangala and Ehlanzeni districts. Export values for Nkangala and Ehlanzeni districts have further increased when compared to 2010.



Source: Quantec Easydata

Figure 14 above illustrate that the macadamia nuts exports by Limpopo province were exported from Vhembe and Mopani districts. The highest export values were recorded in 2009 for Vhembe and in 2011 for Mopani district. In 2010, the export value for Vhembe has significantly dropped while the export value for Mopani district has increased. During 2011, export values from Mopani and Vhembe district has increased significantly when compared to 2010 season.

3.2 Share analysis

Table 2 below is an illustration of provincial shares towards national macadamia nut exports. In 2011, Mpumalanga commanded 71.77%, Limpopo commanded 14.21% and Gauteng commanded 6.16% share of macadamia nuts exports. It is interesting that the greatest share of export was commanded by the provinces that have high production volumes which is mostly not a case in most produce.

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

Year Provinces	2007	2008	2009	2010	2011
Western Cape	0.05	0.27	0	0	0.02
Northern Cape	0	0	0.60	0.18	4.30
Kwazulu-Natal	0.81	0	1.12	1.40	3.54
Gauteng	9.18	9.39	7.35	5.58	6.16
Mpumalanga	58.67	47.47	46.29	76.49	71.77
Limpopo	31.29	42.87	44.64	16.25	14.21
South Africa	**100**	**100**	**100**	**100**	**100**

Source: Calculated from Quantec Easydata

Table 3 below indicates that Ekurhuleni and City of Johannesburg commanded the greatest share of macadamia nuts exports from Gauteng province during the 5 year period. In 2010, Ekurhuleni has commanded 72% share while City of Johannesburg has commanded 28% share of Gauteng macadamia nuts exports. During 2011, City of Tshwane commanded 68.77% share of macadamia nuts exports recorded for Gauteng province. Ekurhuleni export share dropped to 1.65% when compared to 72% share in 2010 season.

Table 3: Share of district exports to the total of Gauteng provincial macadamia nuts exports (%)

Years District	2007	2008	2009	2010	2011
West Rand	0.06	0	0	0	0.01
Ekurhuleni	21.72	98.60	74.49	72.00	1.65
City of Johannesburg	78.23	1.40	16.61	28.00	29.57
City of Tshwane	0	0	8.90	0	68.77
Gauteng	**100**	**100**	**100**	**100**	**100**

Source: Calculated from Quantec Easy data

Table 4 below shows that Vhembe and Mopani commanded the greatest share of macadamia nuts exports from Limpopo province during the 5 years period. In 2010, Mopani has commanded 66.83% and Vhembe has commanded 33.17% share of Limpopo's macadamia exports. Vhembe district is one of the areas producing high quantities of macadamia nuts. In 2011, Mopani continued to lead in macadamia nuts exports from Limpopo province.

Table 4: Share of district exports to the total of Limpopo Provincial macadamia nuts exports (%)

Year District	2007	2008	2009	2010	2011
Mopani	74.03	17.71	27.31	66.83	66.53
Vhembe	25.97	82.29	72.69	33.17	33.47
Limpopo	**100**	**100**	**100**	**100**	**100**

Calculated from Quantec Easydata

Table 5 below indicates that Ehlanzeni commanded greatest share of macadamia nuts exports from Mpumalanga province during the 5 year period. In 2008 and 2009, the share commanded by Nkangala district municipality was less significant. In 2010 Nkangala has commanded 45.85% share of macadamia nuts from Mpumalanga. During 2011, Ehlanzeni continued to command high shares in macadamia nuts exports from Mpumalanga province.

Table 5: Share of district exports to the total of Mpumalanga Provincial macadamia nuts exports (%)

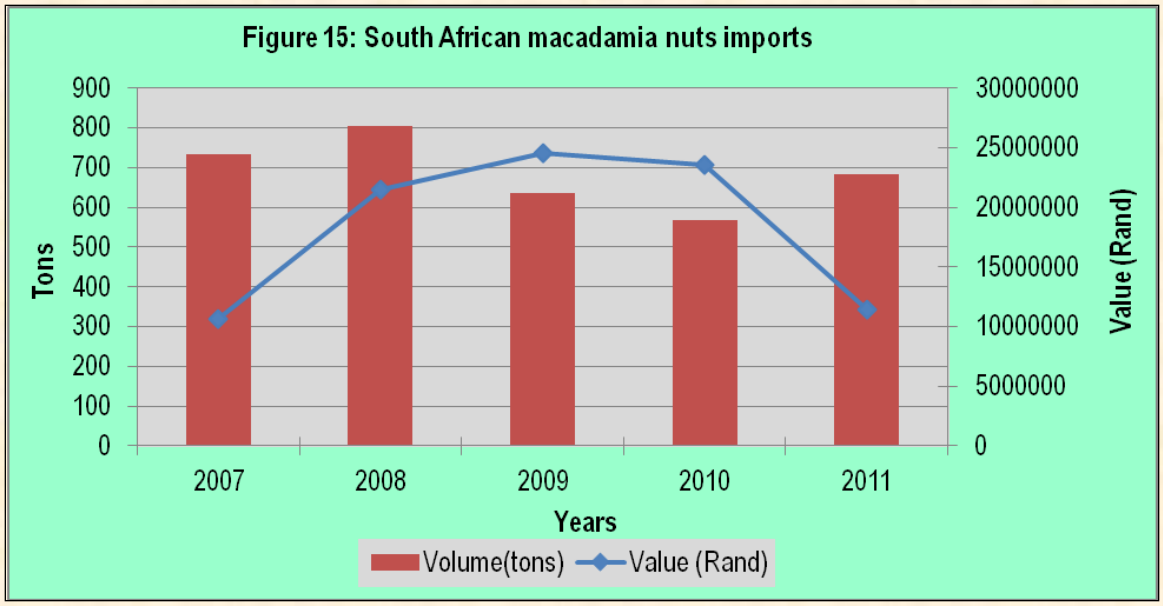
Year District	2007	2008	2009	2010	2011
Nkangala	0	4.31	8.01	45.85	41.85
Ehlanzeni	100	95.69	91.99	54.15	58.15
Mpumalanga	**100**	**100**	**100**	**100**	**100**

Calculated from Quantec Easydata

3.3 South African Macadamia Nuts Imports

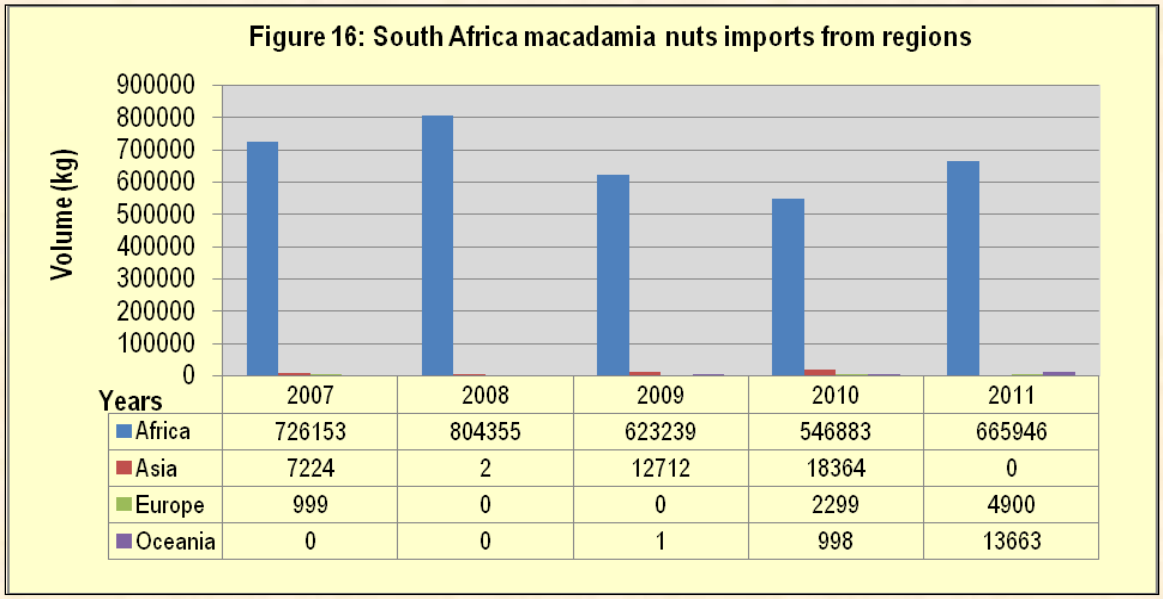
South Africa is not a major macadamia nut importer. The country represented 0.44% of world imports during 2011 and its ranking in the world macadamia nuts imports was 26. This is attributed to high macadamia nuts production by South Africa. In 2011, the United States of America, Netherlands, Hong Kong, Germany, China, Viet Nam, and Luxembourg were top countries importing macadamia nuts.

Figure 15 below illustrates South African macadamia nuts imports for the past 5 years. In 2008, there was a 9.5% increase in macadamia nuts imports while in 2009 the imports decreased by 21%. The decline in imports in 2009 can be attributed to high domestic production in the same year. In 2007 and 2008 it was cheaper to imports since lower values were recorded for higher volumes imported. South Africa macadamia nuts imports have declined by 10.6% when compared to 2009. In 2010, it was also expensive to import macadamia nuts as high values were recorded for lower volumes imported. South African macadamia nuts increased by 20% during 2011 production season when compared to 2010. It was also relatively cheap to import macadamia nuts in 2011 season.



Source: Quantec Easydata

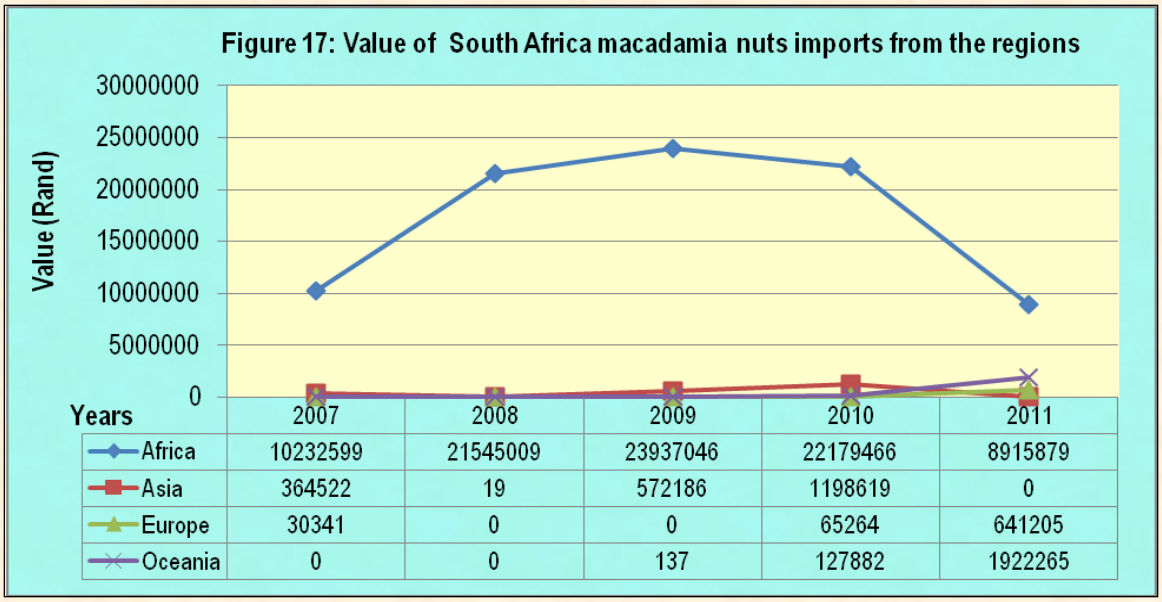
* *Macadamia nuts individual HS code was developed in 2007; it was previously classified in total nuts code and the available import data is only for 5 years.*



Years	2007	2008	2009	2010	2011
Africa	726153	804355	623239	546883	665946
Asia	7224	2	12712	18364	0
Europe	999	0	0	2299	4900
Oceania	0	0	1	998	13663

Source: Quantec Easydata

Figure 16 above illustrates the regions supplying South Africa with macadamia nuts. South Africa generally imports high volumes of macadamia nuts from African countries (Malawi and Zimbabwe). A fraction of macadamia nuts was imported from Asia (Japan). Macadamia nuts from Europe were recorded in 2007 and 2010. In 2010, South Africa imported considerable volumes of macadamia nuts from Oceania region (Australia). During 2011; South Africa imported macadamia nuts mainly from Malawi, Zimbabwe, Australia, Mozambique and Netherlands.



Years	2007	2008	2009	2010	2011
Africa	10232599	21545009	23937046	22179466	8915879
Asia	364522	19	572186	1198619	0
Europe	30341	0	0	65264	641205
Oceania	0	0	137	127882	1922265

Source: Quantec Easydata

Figure 17 above shows high imports value for the African region due to high volumes imported from that region. Import values for Asia and Europe were less significant due to low imports volumes from these regions. In 2010, it was more expensive to import macadamia nuts from Oceania, since high import value was recorded for less volume imported. During 2011, it was cheaper to import from Asia and Africa. In the same year it was more expensive to import from Oceania region.

4. PROCESSING

The kernel is the main product from the macadamia nut tree. After harvesting, the husks covering the nuts are removed. The nuts are fried, the shells are cracked, and the kernels are removed to be oil-roasted or dry-roasted. Kernels are commonly sold as snack nuts and chocolate-covered candy. Ice cream manufacturers and the baking industry also use macadamia kernels as an ingredient. The shell and husk also have uses. Shells can be used as mulch, fuel for processing macadamia nuts, planting medium for anthurium culture, plastic manufacture and as a substitute for sand in the sand-blasting process. Husks are used as mulch or composted for fertilizer. Oil can be extracted from culled nuts. The cosmetic industry, especially in Japan, uses the oil in soaps, sunscreens and shampoos. The remaining press cake might be used for animal feed. The various uses of macadamia nuts are illustrated in Figure 18 while the market value chain is depicted in Figure 19.

Figure 18: Macadamia Value Chain Tree explaining its uses

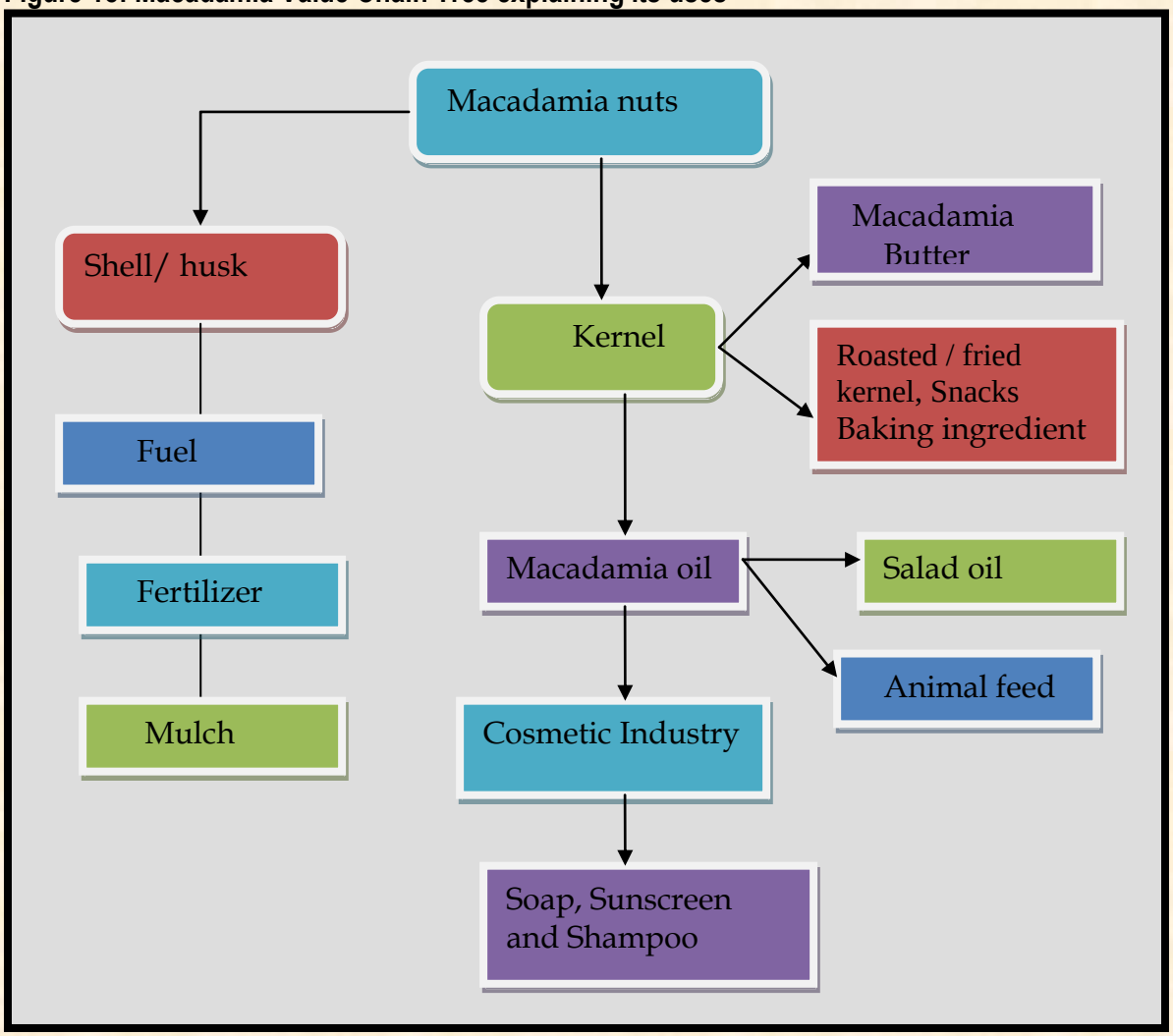
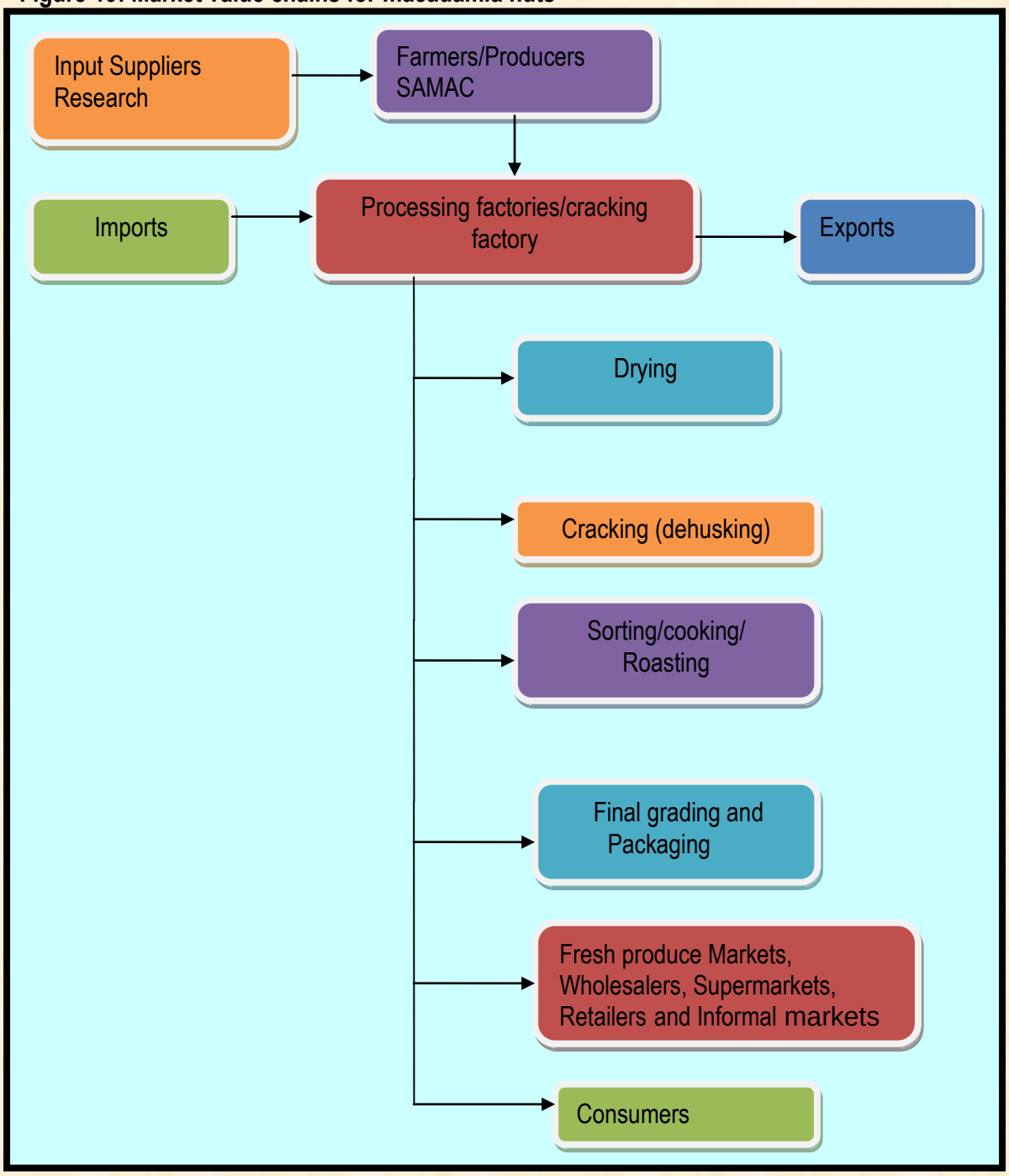


Figure 19: Market value chains for macadamia nuts



Macadamia value chain can be broken down into the following levels: the producer of macadamia nuts (farmers), processing /cracking factory owner (who dry, crack (dehusk), sort, cook, roast, grade, package, store and distribute macadamia nuts). Processing factories also market and sell macadamia nuts to fresh produce markets, wholesalers, supermarkets, retailers and informal markets and then to end users (consumers).

5. LOGISTICAL ISSUES

5.1 Storage

Vacuum packed raw macadamia kernel should be stored in a cool (15°C to 25°C), dry and well ventilated area. Stored under these conditions, raw macadamia kernel which conformed to all the quality specifications at packing, will maintain this quality for 16 to 18 months without any serious quality deterioration. This length of time of quality preservation is of course only achieved if the correct vacuum pouch material, with the oxygen and water vapour transmission rate properties as described below is used:-

5.2 Quality

Minimum quality standards for South African macadamias were first agreed to and implemented by marketers in 1994. These covered the main quality parameters affecting kernel rancidity (free fatty acids and peroxide value), hygiene (Coliforms and E.Coli) and moisture level (moisture content %). These minimum quality standards have now been extended to include additional quality parameters, providing a more comprehensive definition of quality specifications in line with international trends.

5.3 Shelling

For successful shelling, the nuts should be dried to a moisture content of about 1, 5 % to ensure that kernels shrink away from the shells. Therefore, nuts should be dried before shelling. The final drying takes place in large containers through which hot air is circulated. The macadamia nut has a very hard shell, but is easily cracked mechanically between rotating steel rollers. A nutcracker or shelling machine works on the principle that nuts are cracked between a rotating steel roller and a fixed plate. The distance between the roller and the plate is adjustable according to the grading size of the nuts. The kernels of the nuts that have been properly dried drop from the shells when the nuts are cracked.

5.4 Drying

Freshly harvested, dehusked nuts contain 25% moisture and must be dried before they are stored in bulk. Wire frames containing 3 layers of nuts are used for drying. Air must circulate freely between the frames to prevent mould. A fan may be used. The nuts could also be sundried, but if the freshly harvested nuts are exposed to the sun immediately, the shells may crack. These cracks provide access to insects when the nuts are stored. If the nuts are not dried, but immediately stored in bags or other containers, fungal growth could occur.

5.5 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).Macadamia

stored in its original, unopened package in a cool, dry environment, it will normally retain that quality for at least a year from its package date. For longer shelf life, the product should be stored under cold storage with low relative humidity. Macadamia kernels can easily deteriorate during handling and repackaging unless certain principles are kept in mind. Unlike other edible nuts, the macadamia kernel requires a storage environment, which is very low in moisture and oxygen. This is best achieved by a combination of gas flushing with food grade carbon dioxide or nitrogen, and partial vacuuming before hermetically sealing the pouch. Only then will a satisfactory shelf life be attained.

The partial vacuum also helps to stop the kernels rubbing during transit and to prevent puncturing of the protective film. Once the package is opened and the kernels are exposed to the atmosphere for several hours they will absorb moisture and begin to lose their "crunch". Even an increase in moisture from 1.5% to 1.8% makes a significant difference to the texture. If stored open to the air the kernel moisture will continue to rise and the eating quality will decrease markedly. If stored under these conditions at room temperature for several weeks their taste will change as rancidity slowly develops. Deterioration may also occur if kernel is packaged in poor quality packaging materials e.g. Polythene or cellophane bags. The shelf life of kernel packed under these conditions may be considerably less than a month before there is a discernible loss of eating quality. The fried or roasted nuts are packed in airtight bottles, tins or plastic containers for consignment and marketing.

6. MARKET INTELLIGENCE

Tariffs applied by the various markets to macadamia nuts originating from South Africa during 2010 and 2011 are presented in Table 6.

Table 6: Tariffs applied by various export markets for macadamia nuts originating from South Africa.

Country	Product description (H0802600)	Trade regime description	Applied tariff	Estimated total ad valorem equivalent tariff	Applied tariff	Estimated total ad valorem equivalent tariff
			2010		2011	
Canada	Macadamia nuts, fresh or dried	MFN duties (Applied)	0.00%	0.00%	0.00%	0.00%
China	Macadamia nuts, fresh or dried	MFN duties (Applied)	0.00%	0.00%	0.00%	0.00%
France	Macadamia nuts, fresh or dried	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
Germany	Macadamia nuts, fresh or dried	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
Congo	Macadamia nuts, fresh or dried	MFN duties (Applied)	30.00%	30.00%	30.00%	30.00%
Hong Kong	Macadamia nuts, fresh or dried	MFN duties (Applied)	0.00%	0.00%	0.00%	0.00%
Japan	Macadamia nuts, fresh or dried	MFN duties (Applied)	5.00%	5.00%	5.00%	5.00%
		Preferential tariff for GSP countries	2.50%	2.50%	2.50%	2.50%
Luxembourg	Macadamia nuts, fresh or dried	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
Kenya	Macadamia nuts, fresh	MFN duties (Applied)	25.00%	25.00%	25.00%	25.00%

Country	Product description (H0802600)	Trade regime description	Applied tariff	Estimated total ad valorem equivalent tariff	Applied tariff	Estimated total ad valorem equivalent tariff
			2010		2011	
	or dried					
Malawi	Macadamia nuts, fresh or dried	Preferential tariff for South Africa	10.00%	10.00%	10.00%	10.00%
Netherlands	Macadamia nuts, fresh or dried	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
Spain	Macadamia nuts, fresh or dried	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
United Kingdom	Macadamia nuts, fresh or dried	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%
United States of America	Macadamia nuts, fresh or dried	MFN duties (Applied)	13.00$/ton	0.21%	13.00$/ton	0.24%
Zimbabwe	Macadamia nuts, fresh or dried	MFN duties (Applied)	40.00%	40.00%	40.00%	40.00%
Mozambique	Macadamia nuts, fresh or dried	Preferential tariff for South Africa	0.00%	0.00%	0.00%	0.00%

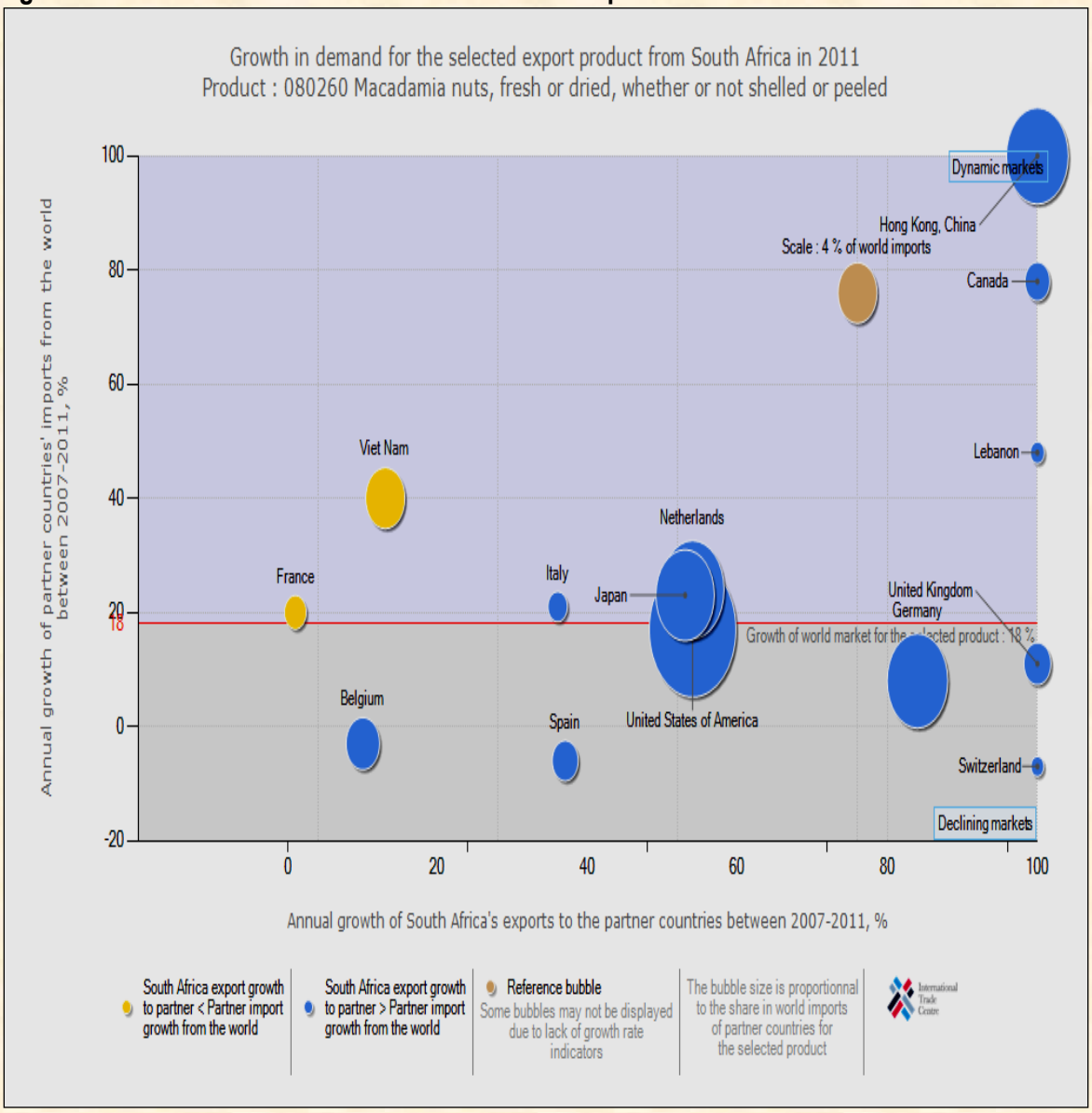
Source: Market Access Map

The lucrative exports markets for macadamia nut are in European countries (France, Belgium, Germany, Netherlands, and United Kingdom) since the countries apply a 0.00% preferential tariff to macadamia nuts originating from South Africa due to EU-SA Free Trade Agreement (FTA). China, Canada and Hong Kong also apply a 0.00% tariff. African markets in Kenya, Malawi and Zimbabwe are protected by 25%, 10% and 40% tariffs respectively in spite of the existence of the SADC-FTA. Zimbabwe is one of the countries producing macadamia nuts; hence a high tariff can be a measure to protect its domestic producers. Mozambique apply 0.00% preferential tariff to macadamia nuts originating from South Africa.

7. MARKET COMPETIVENESS

Figure 20 below presents growth in demand for macadamia nuts exports from South Africa in 2011.

Figure 20: Growth in demand for macadamia nuts exports from South Africa in 2011

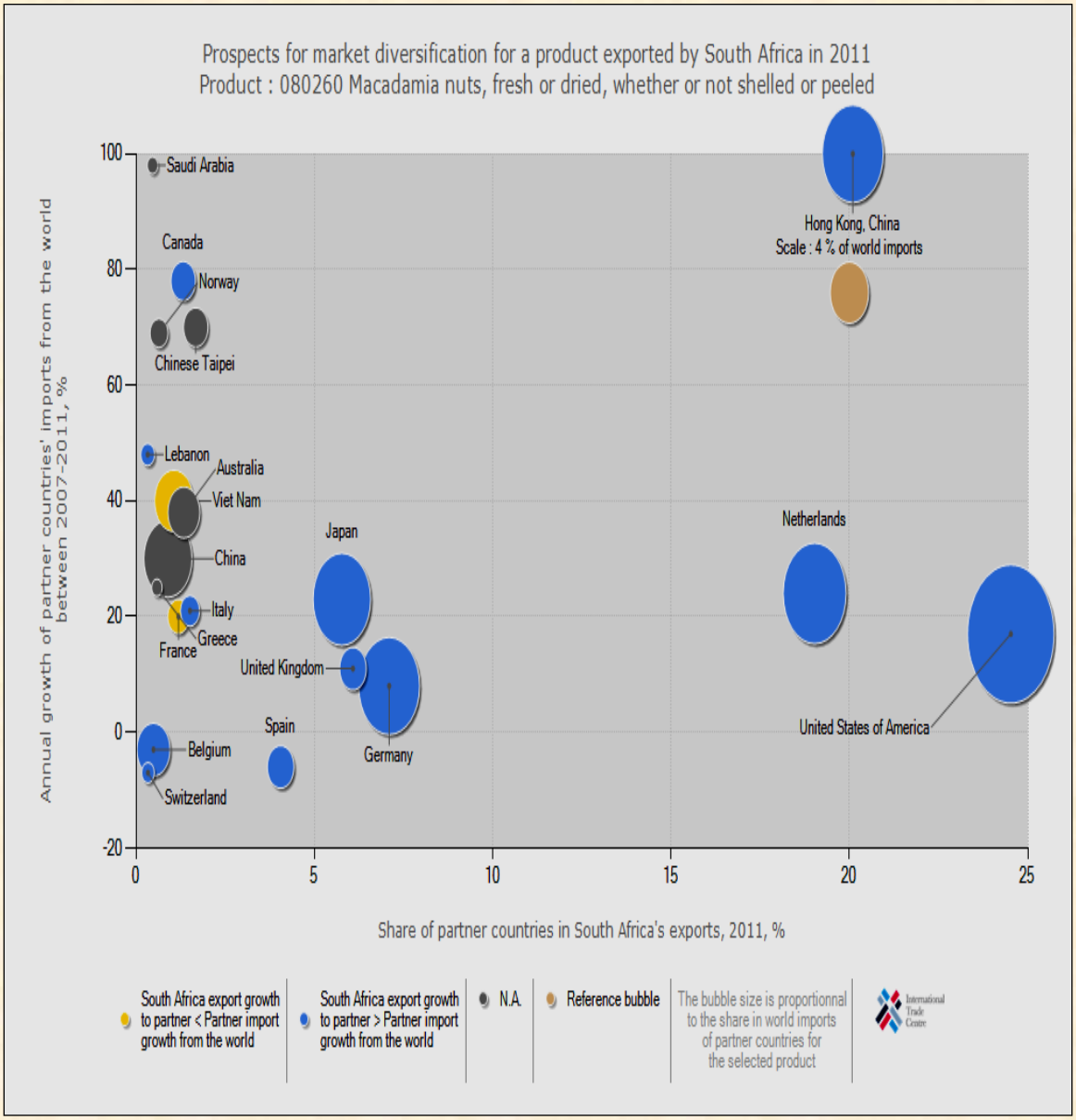


Source: ITC Trade Map

Figure 20 above shows that South Africa's macadamia nuts exports to Hong Kong, Canada, Lebanon, United Kingdom, Germany, Netherlands, Japan and Italy are growing faster than the world imports into these countries. South Africa's performance is regarded as a gain in the dynamic markets. South Africa's macadamia nuts to Viet Nam and France are growing slower than the world imports into these countries. South Africa's performance in these markets is regarded as a

loss in the dynamic markets. Exports to Belgium, Spain and Switzerland are growing while the world imports are declining into these markets. Prospects for market diversification for macadamia nuts exported by South Africa during 2011 are depicted in Figure 21.

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



Source: ITC Trade Map

Figure 21 above shows that United States of America, Hong Kong and Netherlands are the biggest export markets for macadamia nuts from South Africa. Other market exists in Lebanon, Viet Nam, Germany, Japan, United Kingdom, China and Italy. However, if South Africa is to diversify its macadamia nuts exports the most lucrative markets exist in Saudi Arabia, Canada, Chinese Taipei and Norway, which have increased their macadamia nuts imports from the world between 2007

and 2011. Saudi Arabia has experienced an annual growth rate of 90% and Canada has experienced 78% annual growth rate.

8. INDUSTRY ORGANIZATION

The macadamia nuts industry is formally organized through the Southern African Macadamia Growers' Association (SAMAC). The association is comprised of macadamia nut growers, processors and marketers. The association is funded by its grower members who pay a production levy which is collected by the processors. SAMAC uses the funds collected to finance research and the dissemination of research results to growers, processors and marketers.

9. OPPORTUNITIES

The volume of macadamia nuts exported has grown tremendously over the past few years and is expected to increase in the future. South Africa is tapping in new markets in China and Hong Kong. A number of major growers have already received accreditation for Global GAP and the rest of the industry is aware of the need to follow fast in their footsteps. Every effort is being made by the industry to keep pace with, or even ahead of international demands in terms of quality standards, including the judicious use of chemicals at farm level. The South African industry target was set for 95% Global Gap accreditation at farm level in 2004. Most South African processors are HACCP/ISO accredited. Worldwide demand for macadamia nuts exceeds supply and the market is expected to grow. The use of macadamia nut in as an ingredient in confectionary and baking presents a huge opportunity.

10. THREATS

The macadamia industry suffers a high incidence of local and organized theft. Factors' influencing unsound kernel percentage in South Africa is stink bug damage, kernel discolorations and kernel immaturity. The stink bug damage is prevalent. Factors that affect nut quality have to be addressed on continual basis. The integrated pest management is still the most responsible, efficient and cost effective way to control damage caused by these insects.

11. OTHER CHALLENGES

South African macadamia industry indicates that land claims are one of their major issue that raise uncertainties for farmers. Land, as a political and social issue, dates back from the Native Land Act of 1913, which dispossessed blacks and exploited their social domination to the land. The current government of the Republic of South Africa imposed an obligation to land reform by facilitating restorative land justice, increasing access to land and improving tenure security. These pose challenges to farmers in terms of investing on the land.

12. SAMAC AFFILIATED MACADAMIA MARKETING COMPANIES

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13. ACKNOWLEDGEMENTS

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SAMAC (South African Macadamia Growers' Association)
www.samac.org.za

Quantec Easy Data
www.easydata.co.za

Market Access Map
www.macmap.org