PROFILE OF THE SOUTH AFRICAN PEAR MARKET VALUE CHAIN

2020

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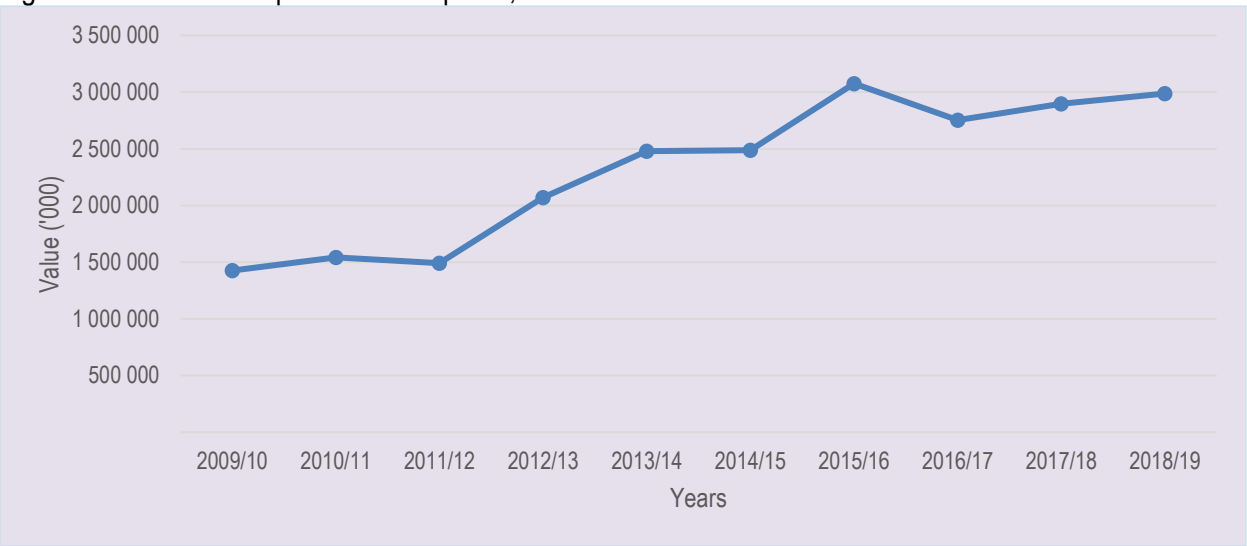
1. DESCRIPTION OF THE PEAR INDUSTRY

Pears are one of the most important deciduous fruits grown in South Africa, taking into consideration their foreign exchange earnings, employment creation and linkages with support institutions. During the 2018/19 season, pears contributed approximately 16% (R2.9 billion) of the total gross value for deciduous fruits (R18 billion) in South Africa. Per capita consumption of deciduous and subtropical fruit in South Africa during 2019 was 24.4 kilograms per year. This represented 2.3 percentage change from the 2018 figure of 24.98 kilograms per year.

The South African pear industry is export oriented with approximately half of pears being absorbed by the export market. The industry operates in a deregulated environment where prices are determined by the market forces of demand and supply. The total value of production for pears for the seasons 2009/10 to 2018/19 is shown in Figure 1.

Figure 1: Total value of production for pears, 2009/10– 2018/19



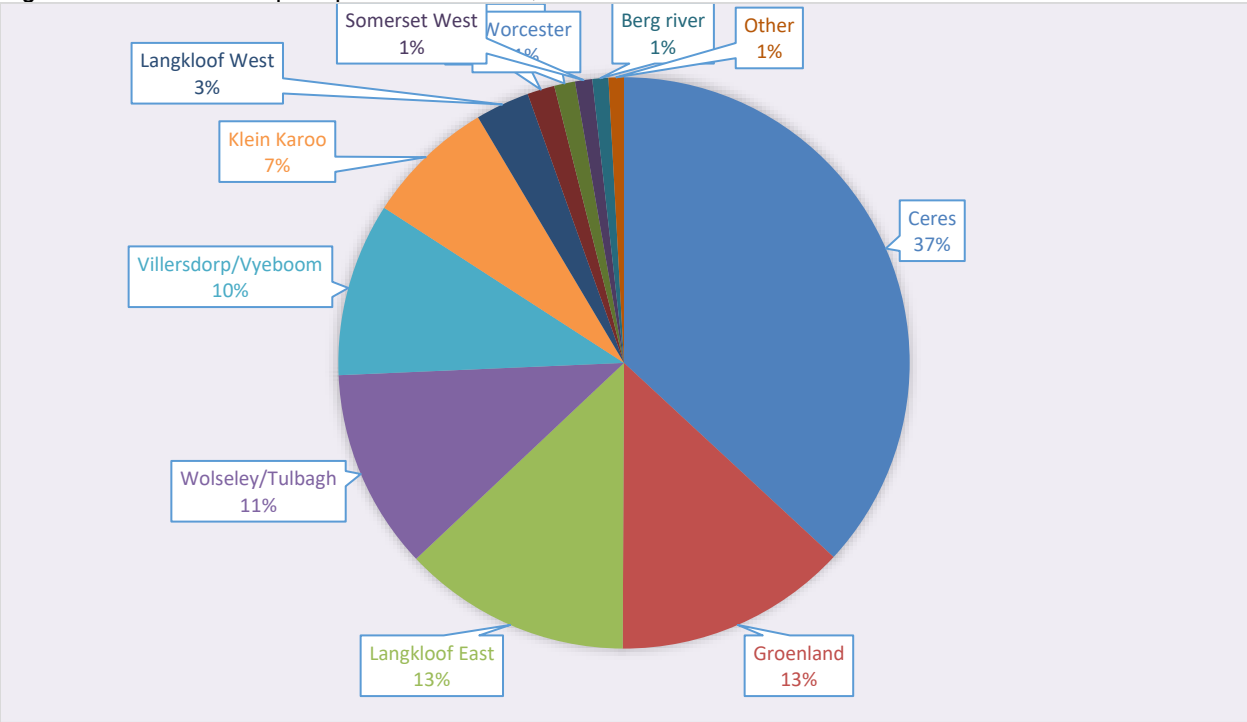
Source: Statistics and Economic Analysis, DAFF

The total value of production for the industry has been on a steady increase since 2009/10 production season. This is happening at the same time when production of pears for large part of the period has been relatively stable (see figure 3). Given this, an increase in the total value of production can only be explained by amongst other things significant increases in the demand for pears in the international markets. Total value of production of pears increased by 3.1% between 2017/18 and 2018/19. It is interesting to note that the total value of production increased at the same time when the volume of production increased. The increase in the total value of production is attributed to increased production in major production regions. During the ten years under review, the total value of production increased from R1.4 billion in 2009/10 to R2.8 billion in 2018/19. This represents an increase of 108% in ten years.

1.1 Pear production areas

South Africa's main pear producing areas are Ceres, Groenland, Wolseley/Tulbagh (all in the Western Cape) and Langkloof East in the Eastern Cape. The Western Cape Province account for more than half of all the pears produced in South Africa. The major pear production areas in 2019 are shown in Figure 2.

Figure 2: South African pear production areas, 2019



Source: Hortgro Tree Census, 2019

Figure 2 above shows that in terms of the area planted to pears in hectares, Ceres accounted for 37% with 4 676 ha. Ceres was followed by Groenland and Langkloof East at 13% each with 1 676 ha and 1 635 ha respectively. Wolseley/Tulbagh accounted for 11% at 1 438 ha while Villiersdorp/Vyeboom followed at 10% with 1 245 ha. Total production area for pears in 2019 was 12 676 hectares. This represents a 2.9% increase in production area from the 2019 production year. The most increase in production area happened in the Langkloof West where the area under pear cultivation in Langkloof West increased from 238 ha to 388 ha while the most decreases in production area happened in the Wolseley/Tulbagh at 4.7% between in 2018 and 2019.

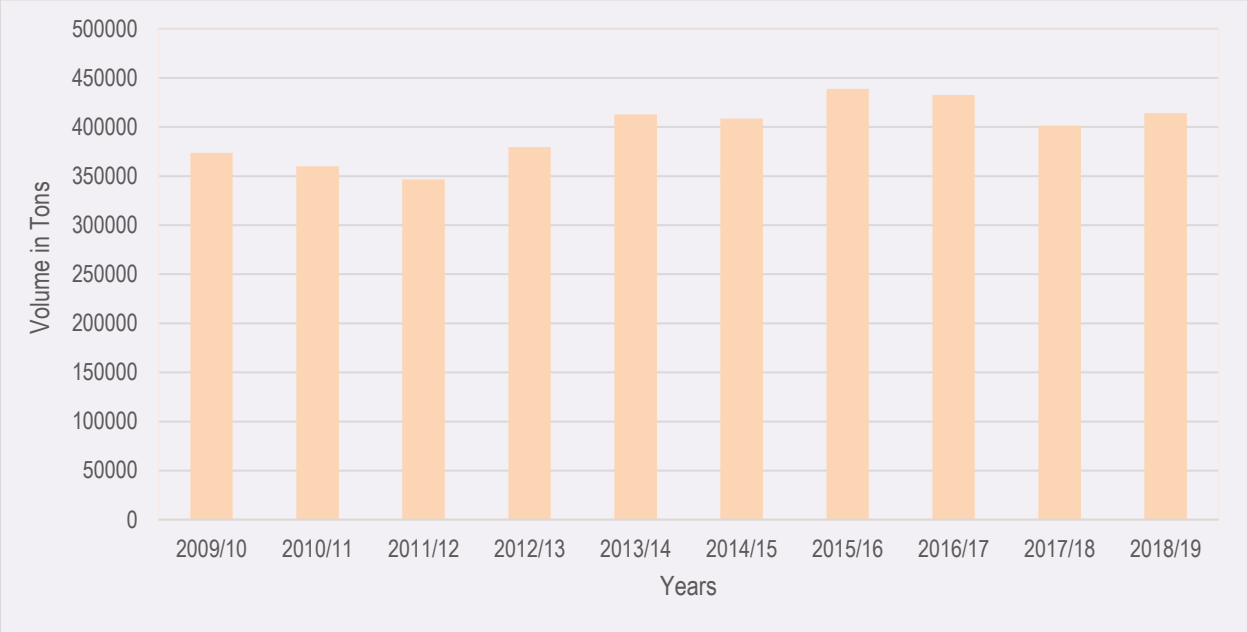
1.2 Pear production

In 2019 the pear orchard age distribution was as follows:

- 1 122 ha (9%) was in the category of 0 – 3 years;
- 3 079 ha (24%) was in the 4 – 10 years category;
- 1 401 ha (11%) was in the 11 – 15 years category;
- 3 140 ha (25%) was in the 16 – 25 years category; and
- 3 932 ha (31%) were older than 25 years.

It is important to note the over half (56%) of South Africa's pear orchards are over 15 years old. The non – bearing group are those between 0 -3 years, only coming into production in the category of 4 – 10 years. Therefore that demonstrate that active production of pears occurs in the 91% of the total area (11 552 ha), with a total population of over 17 million trees. Figure 3 illustrates total South African production of pears for the years 2009/10 to 2018/19. Generally, the production of pears in South Africa has been fairly stable in the first half of the review period. A total of 414 000 tons of pears were produced in South African during the 2018/19 production season. The 2018/19 figure was 3% more than 2017/18 figure. During the ten years under review, production reached its peak at 438 925 tons in 2015/16 and was at its lowest at 346 642 tons in 2011/12 season.

Figure 3: Total production of pears, 2009/10 – 2018/19

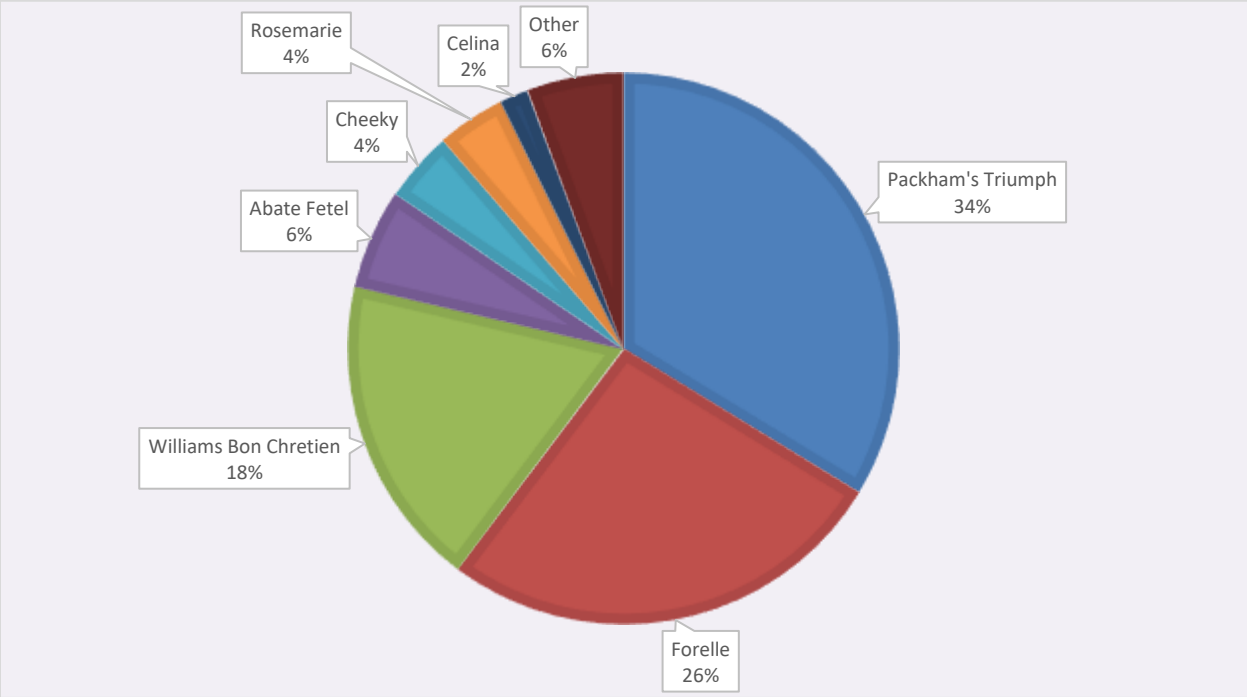


Source: Statistics and Economic Analysis, DAFF

1.3 Pear cultivars

South Africa's main pear cultivars are Packham's Triumph, Forelle, Williams Bon Chretien and Abate Fetel. Figure 4 shows that in 2019, Packham's Triumph accounted for 32% (4 275 ha) of the total area planted (12 676 ha). It was followed by Forelle at 26% (3 361 ha), Williams Bon Chretien at 18% (2 330 ha) and Abate Fetel at 6% (744 ha).

Figure 4: Leading major pears cultivars planted in 2019



Source: Hortgro Tree Census, 2019

1.4 Employment

The industry makes an important contribution to direct employment in the pear production and processing. It provides indirect employment for numerous support industries in the areas where pears are grown. In 2017, direct employment within the industry was estimated at 14 068 people with 56 273 dependents. This represents a 6.7 percent increase in the number of people employed in the pear industry between 2018 and 2019.

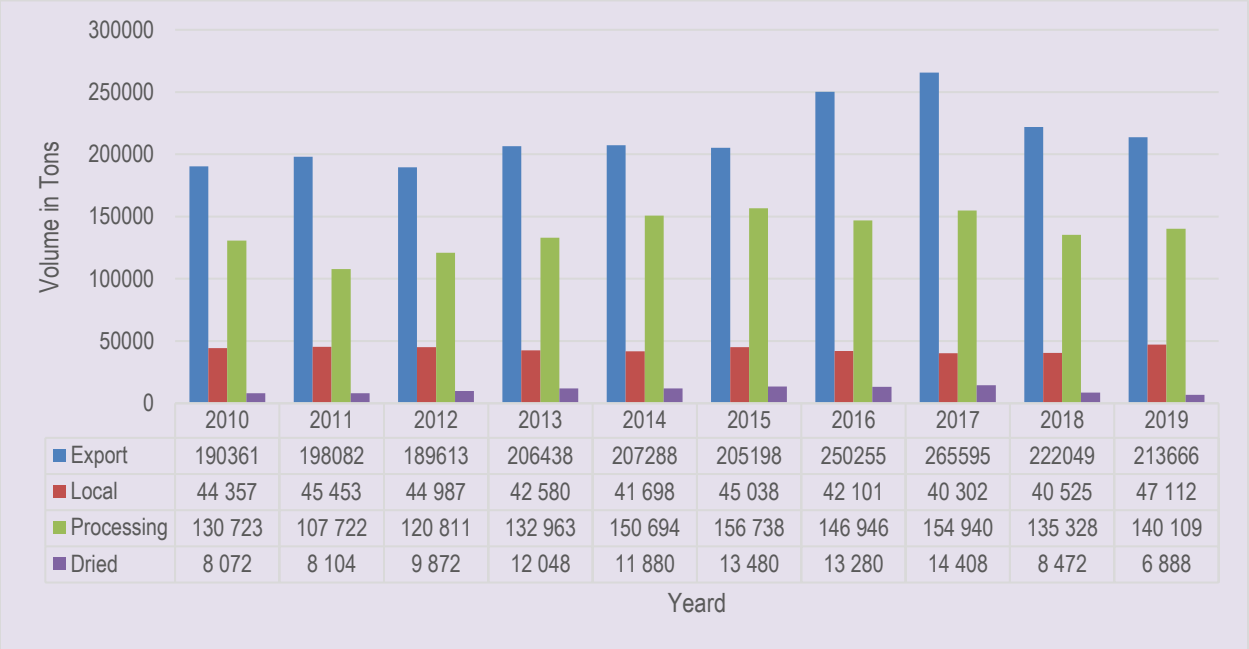
The Minimum Wage Act 9 of 2019 came into effect in January 2019. The Act applies to all workers and their employers, except members of the South African National Defence Force, the National Intelligence Agency, the South African Secret Service, and volunteers who perform work for another person without remuneration. Under this Act, farm workers are entitled to a minimum wage of R18.69 per hour. The Act establishes the National Minimum Wage Commission, which is tasked to review the national minimum wage and make recommendations to the Minister on any adjustment of the national minimum wage.

2. MARKET STRUCTURE

The distribution of pears across the various markets for the period 2009/10 to 2018/19 is presented in Figure 5. As illustrated in the figure, pear production in South Africa is primarily aimed at mainly exports and processing markets and to a lesser extent local markets. Dried fruit production is relatively insignificant. A total of 213 666 tons of pears were exported in 2019 while a total of 140 109 tons of pears were absorbed by the processing industry during the same year. Between 2010 and 2017, the processing and export categories have been on an upward trends trajectory. Volumes of pears processed increased by 19% while those exported increased by 40% during that period. During 2018/19 season, processed pears went up by 4% after

a slight decline of 12% in 2018 season. Exports of pears decreased by 3.8% during the 2019 season. Pears volumes destined for local markets have constant remaining below 50 thousand tons for major part of the past decade.

Figure 5: Pear crop distribution, 2009/10 – 2018/19



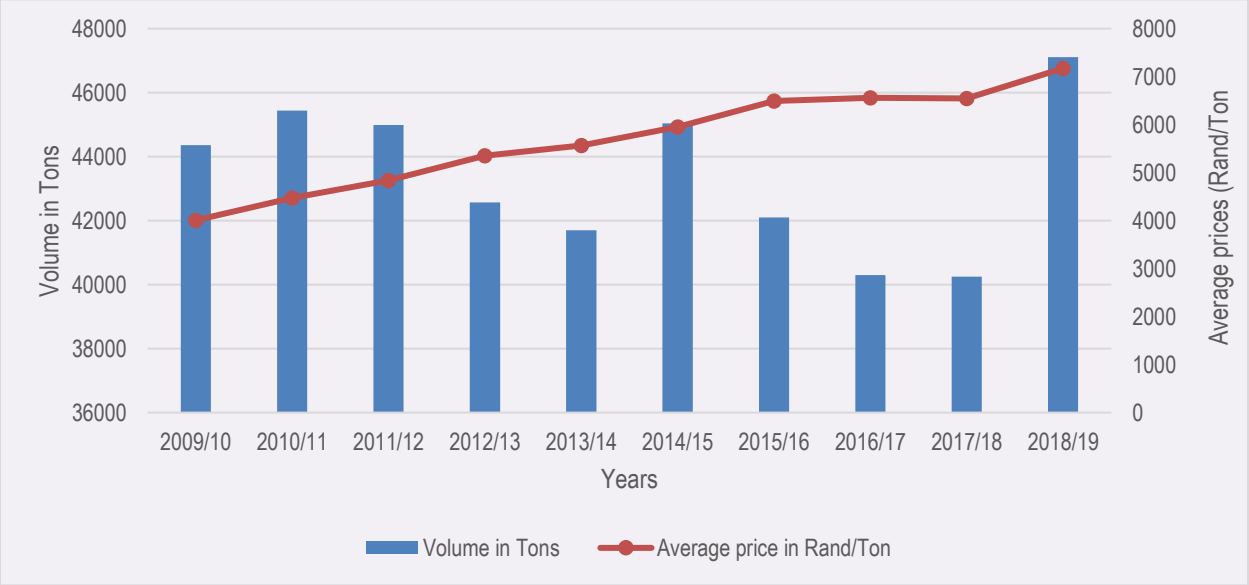
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Export	190361	198082	189613	206438	207288	205198	250255	265595	222049	213666
Local	44 357	45 453	44 987	42 580	41 698	45 038	42 101	40 302	40 525	47 112
Processing	130 723	107 722	120 811	132 963	150 694	156 738	146 946	154 940	135 328	140 109
Dried	8 072	8 104	9 872	12 048	11 880	13 480	13 280	14 408	8 472	6 888

Source: Statistics and Economic Analysis, DAFF

2.1 Domestic markets and prices of pears

Local pear market volumes and general price trends from 2009/10 to 2018/19 are presented in Figures 6.

Figure 6: Local pear sales, 2009/10 – 2018/19



Source: Statistics and Economic Analysis, DAFF

As illustrated in Figure 6, volumes of pears at local market during the past ten years have been relatively stable, remaining above 40 thousand tons for most part of the review period. A total of 47 112 tons of pears were sold through the local markets in the 2018/19 marketing season. This was 17% higher than the volume sold through the same channel during the previous year. Prices realised in the local markets increased from R4 008/ton in 2009/10 to R7 175/ton in 2018/19. The lack of serious growth in the local market in terms of volume during the past decade may be due to a lack of coordinated marketing. Growth in the sector has been absorbed by the increased exports to the traditional markets, resulting in significant increases in the average prices at the local markets during the period between 2009/10 and 2018/19.

2.2 Pear exports

South African exports of pears for the period 2010 to 2019 are presented in Figure 7. South Africa is a relatively small pear grower in terms of global hectares. However, the country is a major volume exporter in global terms. Pears sold in the export markets generate a greater unit price than that achieved on the local market. (see Table 1) Therefore, a thorough understanding of the rules of the export markets is necessary for success in international pear marketing.

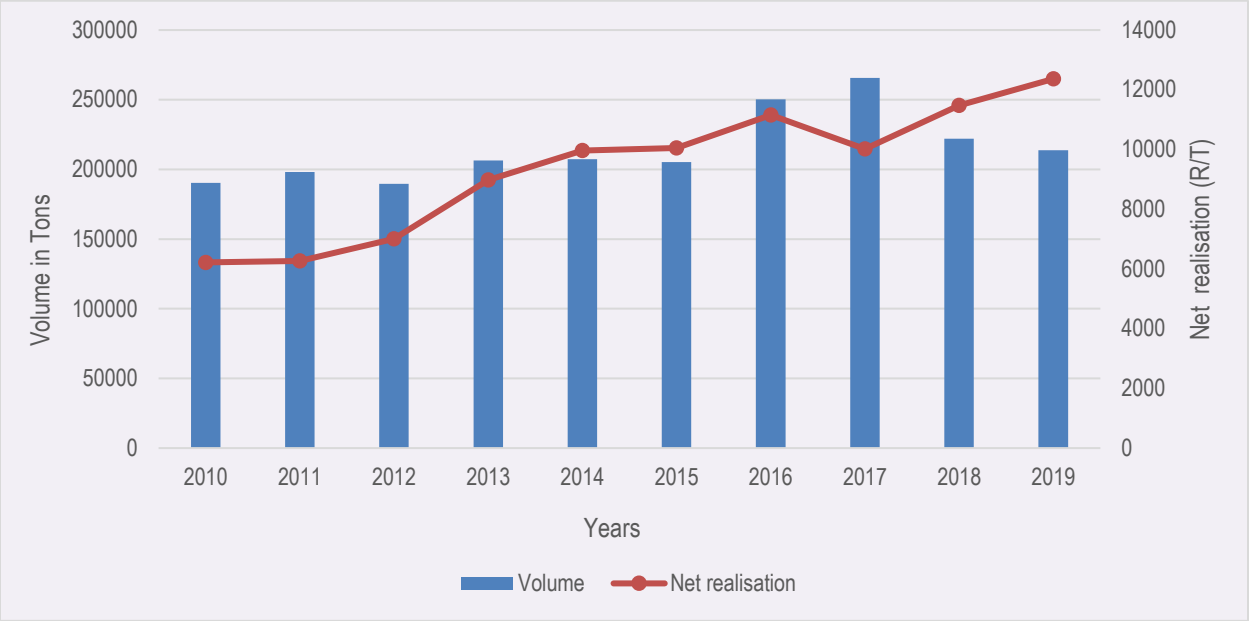
Table 1: Pears exports perspective

	Rand	**%**
Sales Price	**271.39**	**100**
Receiver cost	42.59	15.7
Receiver commission	15.88	5.9
Delivery Price Receiver	212.93	78.5
Delivery Cost	14.47	5.3
CIF	**198.46**	**73.1**
Shipping cost	30.74	11.3
FOB	167.71	61.8
Export commission (R)	13.95	5.1
Local Cost	6.87	2.5
DIP	**146.90**	**54.1**
PPECB	0.75	0.3
Hortgro levies	1.00	0.4
Carton size	**12.5**	
Carton/Ton	**80**	

Source: Hortgro: 2019

Export pear market volumes and net realisation trends from 2009/10 to 2018/19 are presented in Figures 7.

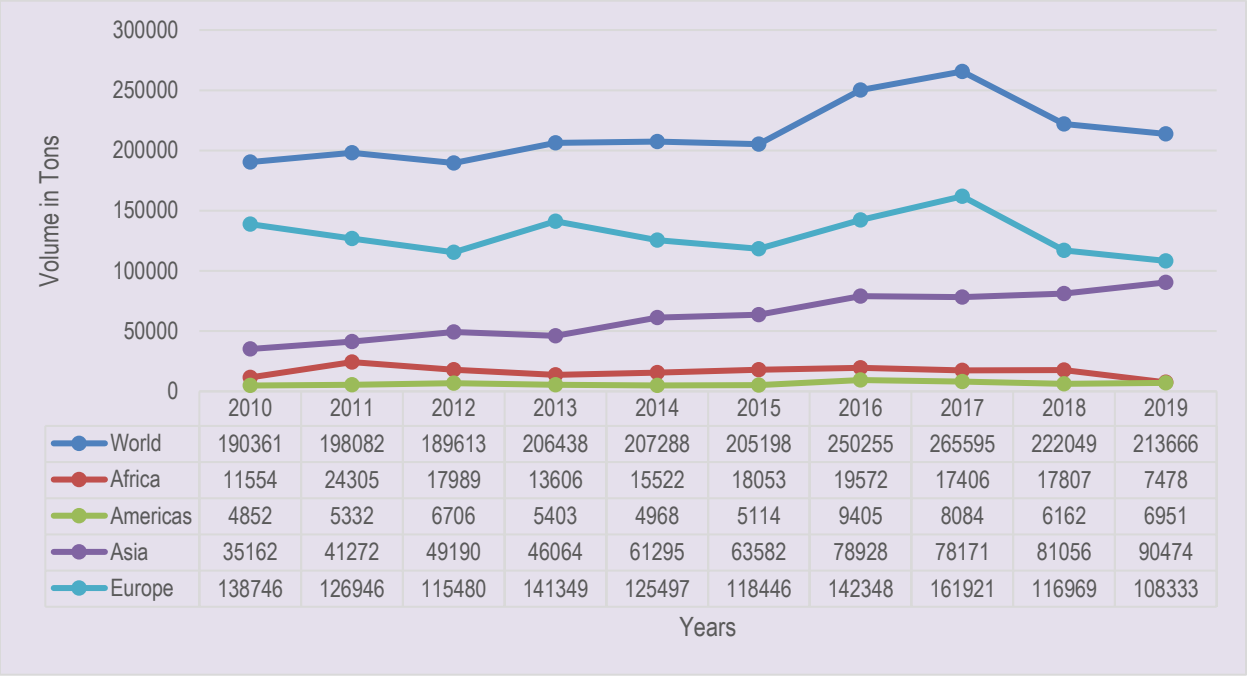
Figure 7: South African pear exports, 2010 - 2019



Source: Quantec Easydata

As illustrated in Figure 7 pear exports have experienced significant growth during the last decade, increasing from 190 361 tons in 2010 to 213 666 tons in 2019. The volume exported decreased by 3.8% in 2019 compared to 2018 season. The net realisation on the other side has been increasing indicating that the growth in volumes exported has also been accompanied by growth in export earnings, however in 2017, net realisation declined by 10%. The net export realisation increased from R6 219/ton in 2010 to R12 363/ton in 2019 Figure 8 below illustrates the South African exports of pears to the various regions of the world over the past decade.

Figure 8: South Africa pears exported to various regions of the world, 2010 - 2019



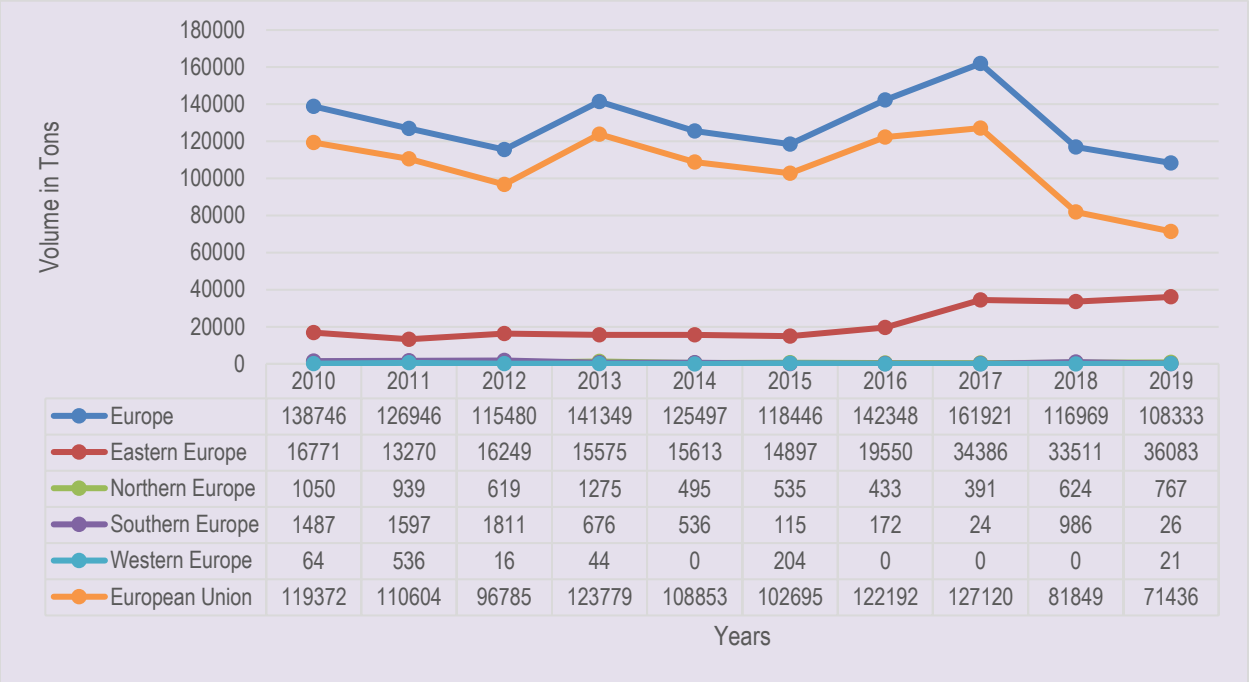
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
World	190361	198082	189613	206438	207288	205198	250255	265595	222049	213666
Africa	11554	24305	17989	13606	15522	18053	19572	17406	17807	7478
Americas	4852	5332	6706	5403	4968	5114	9405	8084	6162	6951
Asia	35162	41272	49190	46064	61295	63582	78928	78171	81056	90474
Europe	138746	126946	115480	141349	125497	118446	142348	161921	116969	108333

Source: Quantec Easydata/Hortgro 2019/ own calculation

It is evident from Figure 8 that during the past decade, at 108 333 tons, most of South Africa's exports of pears were destined to the Europe. Asia is the second most important market for South African pears. In 2019 exports to Europe accounted for 51% of total South African pear exports. This is a clear indication that Europe is a major market for South African pears. Following Europe is Asia. The continent contributed 42% to total South African pear exports in 2019. Cumulatively the two continents absorbed 93% of all South African exports of pears during 2019. Between 2018 and 2019 exports to Europe down by 7%. The volumes to Asia increased by 12% during the same period. Africa absorbed 7 478 tons (3.5%) of South Africa's pear exports in 2019 while the Americas absorbed 6 951 tons (3%) during the same period. Given the fact that Europe constitutes a significant share of South Africa's market for pear exports, Figure 9 below shows how the exports are distributed within the different regions of the European continent.

Within Europe, the European Union is the major destination of South African pears (see Figure 9). The economic bloc accounted for almost all (66%) of pears exported to Europe in 2019. The European Union is followed by Eastern Europe which accounted for 33% of the total South African exports of pears to the European continent in 2019. South African exports of pears to the European Union have been unstable during the past 10 years. The pears exports to the bloc decreased by 17% between 2013 and 2015, and by 4% between 2016 and 2016. In 2019, exports to Eastern Europe also increased by 8% while those to the European Union decreased by 13% in 2019.

Figure 9: Volume of pears exported to regions of Europe, 2010 - 2019



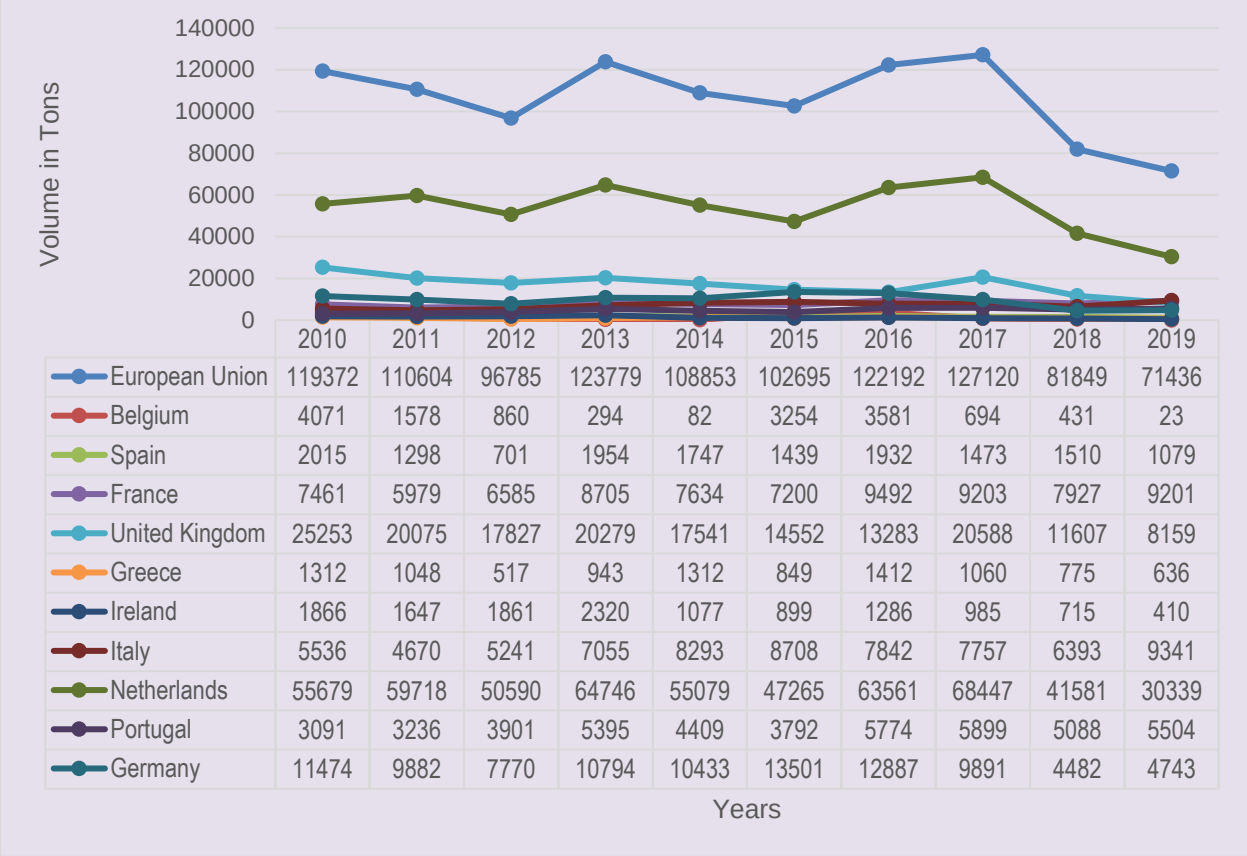
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Europe	138746	126946	115480	141349	125497	118446	142348	161921	116969	108333
Eastern Europe	16771	13270	16249	15575	15613	14897	19550	34386	33511	36083
Northern Europe	1050	939	619	1275	495	535	433	391	624	767
Southern Europe	1487	1597	1811	676	536	115	172	24	986	26
Western Europe	64	536	16	44	0	204	0	0	0	21
European Union	119372	110604	96785	123779	108853	102695	122192	127120	81849	71436

Source: Quantec Easydata

Given the importance of the European Union to the South African exports of pears (see Figure 9 above), the economic bloc is further broken down into its member states in Figure 10 in order that the contribution of the different member states can be isolated. Only those member states whose imports of pears from South Africa exceeded 1 000 tons in a particular year during the last decade are shown in Figure 10. This criteria produces 10 member states for the period under review (see Figure 10).

It can be seen from Figure 10 that within the European Union the Netherlands, the United Kingdom and Germany are the major destinations of South African pears. In 2019, Netherlands accounted for 42%, while the Italy and France accounted for 13% each of the total South African exports of pears to the European Union. Other important destinations include United Kingdom, Portugal and Germany. Pear exports to the Netherlands have been increasing during the past three years, following a disappointing period between 2013 and 2015. During the 2019 season, pear exports to Netherlands and United Kingdom went down by 27% and 30% respectively during the same period.

Figure 10: Volume of pear exported to various EU member countries, 2010 - 2019



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
European Union	119372	110604	96785	123779	108853	102695	122192	127120	81849	71436
Belgium	4071	1578	860	294	82	3254	3581	694	431	23
Spain	2015	1298	701	1954	1747	1439	1932	1473	1510	1079
France	7461	5979	6585	8705	7634	7200	9492	9203	7927	9201
United Kingdom	25253	20075	17827	20279	17541	14552	13283	20588	11607	8159
Greece	1312	1048	517	943	1312	849	1412	1060	775	636
Ireland	1866	1647	1861	2320	1077	899	1286	985	715	410
Italy	5536	4670	5241	7055	8293	8708	7842	7757	6393	9341
Netherlands	55679	59718	50590	64746	55079	47265	63561	68447	41581	30339
Portugal	3091	3236	3901	5395	4409	3792	5774	5899	5088	5504
Germany	11474	9882	7770	10794	10433	13501	12887	9891	4482	4743

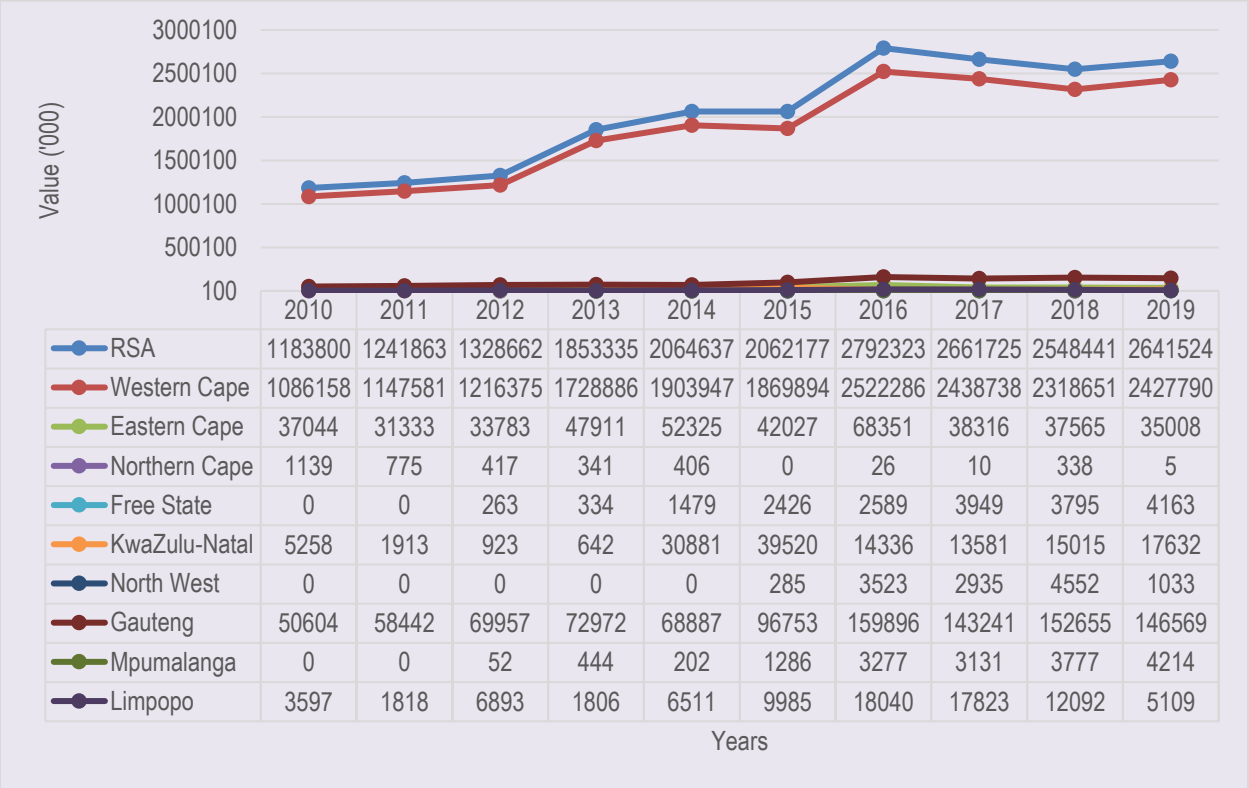
Source: Quantec Easydata

The contributions of the different provinces and districts to the total South African pear exports are explored in the following subsection.

2.3 Provincial and district export values of South African pears

Figure 11 depicts the value of pear exports from each province of the Republic of South Africa for the period 2010 to 2019. Pears worth over R 2.6 billion were exported during 2019. This value was 4% higher than the value of pear exports in 2018.

Figure 11: Value of pear exports by provinces, 2010 - 2019



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
RSA	1183800	1241863	1328662	1853335	2064637	2062177	2792323	2661725	2548441	2641524
Western Cape	1086158	1147581	1216375	1728886	1903947	1869894	2522286	2438738	2318651	2427790
Eastern Cape	37044	31333	33783	47911	52325	42027	68351	38316	37565	35008
Northern Cape	1139	775	417	341	406	0	26	10	338	5
Free State	0	0	263	334	1479	2426	2589	3949	3795	4163
KwaZulu-Natal	5258	1913	923	642	30881	39520	14336	13581	15015	17632
North West	0	0	0	0	0	285	3523	2935	4552	1033
Gauteng	50604	58442	69957	72972	68887	96753	159896	143241	152655	146569
Mpumalanga	0	0	52	444	202	1286	3277	3131	3777	4214
Limpopo	3597	1818	6893	1806	6511	9985	18040	17823	12092	5109

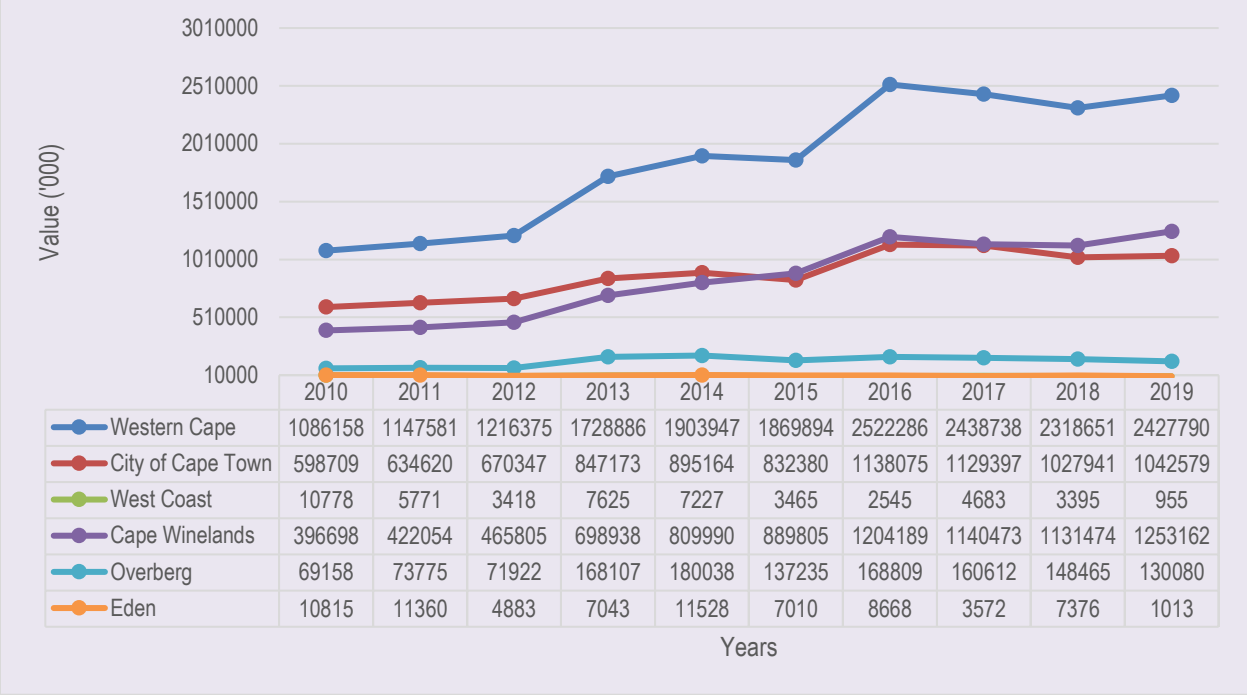
Source: Quantec Easydata

It is evident from Figure 11 that the Western Cape has consistently been the dominant pear exporting province of South Africa over the last ten years, exporting R2.4 billion worth of pears in 2019. It is followed by Gauteng at around R146 million and Eastern Cape at R35 million during the same year. Another province of significance is Kwazulu Natal, which exported pears worth R17 million. Other provinces featured intermittently but usually registered minimal trade.

The following figures (Figures 12 - 20) show the value of pear exports from the various districts in the nine provinces of South Africa, starting with the Western Cape in Figure 13.

It is clear from Figure 12 that exports of pears from the Western Cape are mainly from the City of Cape Town, Cape Winelands and Overberg municipalities. High export values for all the leading municipalities were recorded in 2016 in the City of Cape Town, 2019 in the Cape Winelands. Overberg district recorded its highest values in 2013. The use of the Cape Town harbour as an exit point may have played a major role in the City of Cape Town being a leader in the export of pears from the Western Cape (see Figure 12). Pear exports from all the major districts in the Western Cape increased in 2019 when compared with 2018 with the exception of Overberg and West Coast district.

Figure 12: Value of pear exports by Western Cape province, 2010 - 2019

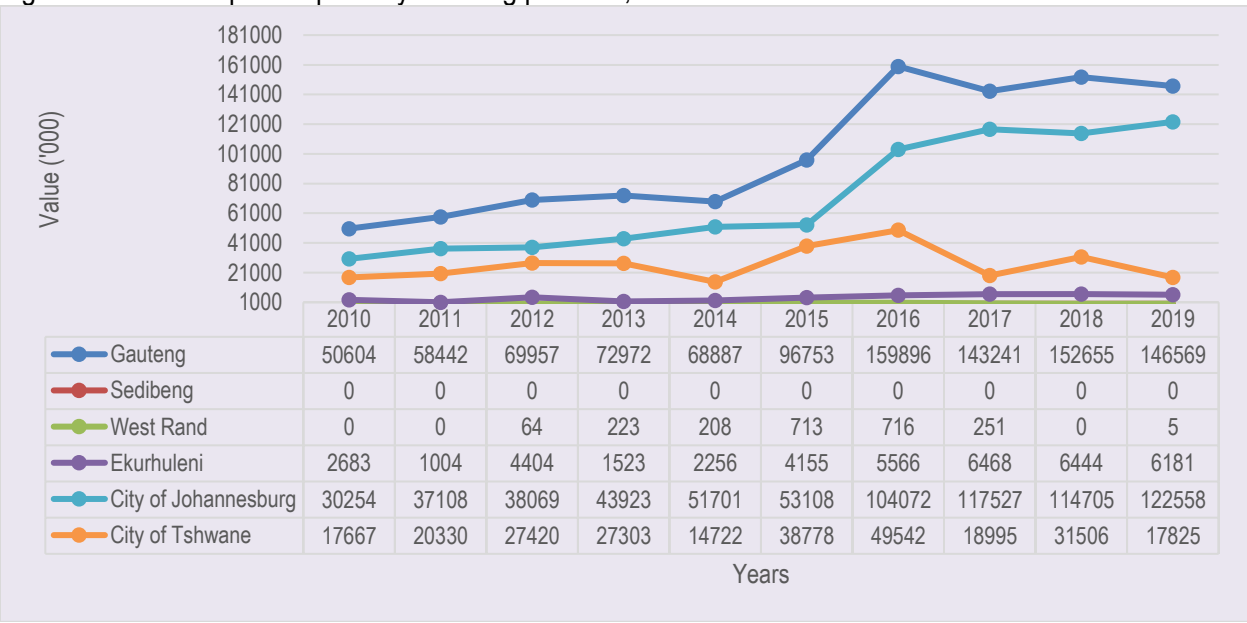


	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Cape	1086158	1147581	1216375	1728886	1903947	1869894	2522286	2438738	2318651	2427790
City of Cape Town	598709	634620	670347	847173	895164	832380	1138075	1129397	1027941	1042579
West Coast	10778	5771	3418	7625	7227	3465	2545	4683	3395	955
Cape Winelands	396698	422054	465805	698938	809990	889805	1204189	1140473	1131474	1253162
Overberg	69158	73775	71922	168107	180038	137235	168809	160612	148465	130080
Eden	10815	11360	4883	7043	11528	7010	8668	3572	7376	1013

Source: Quantec Easydata

Values of pear exports from the Gauteng province are shown in Figure 13. The leading role players during the last three years have been the City of Tshwane, City of Johannesburg and Ekurhuleni municipalities. High export values of the leading municipalities were recorded in 2019 for the City of Johannesburg, 2017 for Ekurhuleni and 2016 for the City of Tshwane. The City of Johannesburg has been the major exporter in Gauteng during the period under review. Exports from the city have been increasing, only declining slightly in 2018 before rising again in 2019.

Figure 13: Value of pear exports by Gauteng province, 2010 - 2019

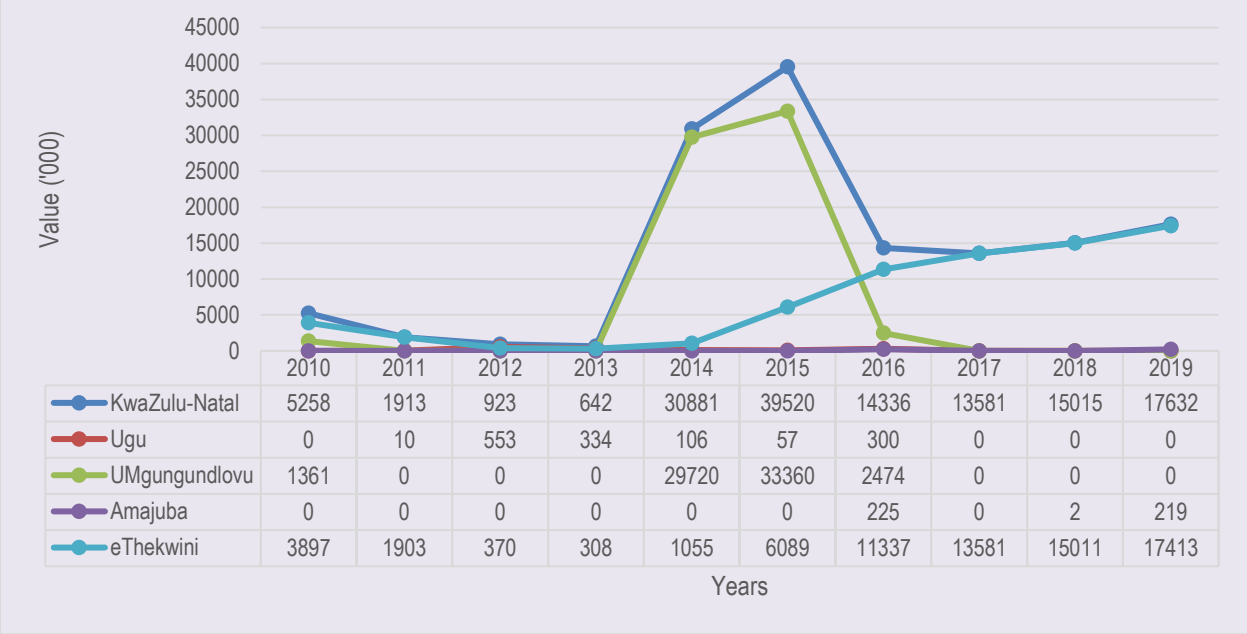


	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gauteng	50604	58442	69957	72972	68887	96753	159896	143241	152655	146569
Sedibeng	0	0	0	0	0	0	0	0	0	0
West Rand	0	0	64	223	208	713	716	251	0	5
Ekurhuleni	2683	1004	4404	1523	2256	4155	5566	6468	6444	6181
City of Johannesburg	30254	37108	38069	43923	51701	53108	104072	117527	114705	122558
City of Tshwane	17667	20330	27420	27303	14722	38778	49542	18995	31506	17825

Source: Quantec Easydata

Values of pear exports from the Kwazulu Natal province are presented in Figure 14. It is clear from Figure 14 that pear exports from KwaZulu Natal are mainly from the Umgungundlovu and EThekwini municipalities. High export values for the leading municipalities were recorded in 2015 for UMgungundlovu and 2019 for EThekwini. Exports from both EThekwini and UMgungundlovu have been fairly unstable during the past ten years. The Umgungundlovu overtook Ethekwini as the leading exporter of pears in 2014 in value terms before retreating in 2016. Export from UMgungundlovu fell drastically during 2016, surpassed by Ethekwini as the leading exporting region. The use of the Durban harbour as an exit point may have played a major role in EThekwini being a leader in the export of pears from Kwazulu Natal in the past ten years (excluding 2014 and 2015).

Figure 14: Value of pear exports by Kwazulu Natal, 2010 - 2019

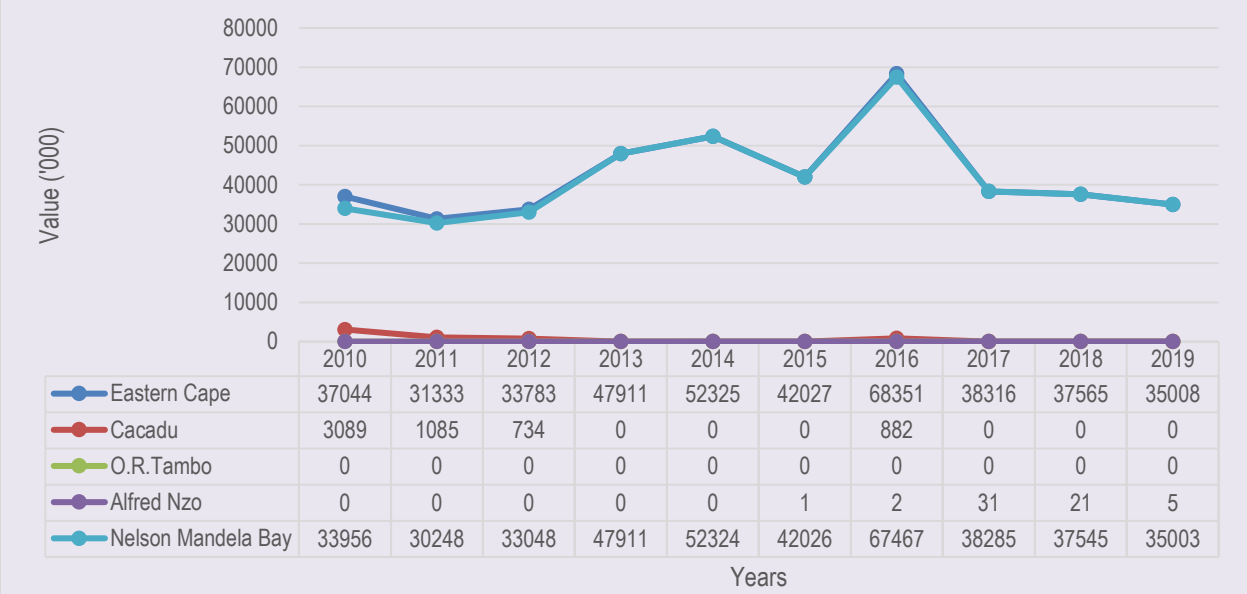


	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
KwaZulu-Natal	5258	1913	923	642	30881	39520	14336	13581	15015	17632
Ugu	0	10	553	334	106	57	300	0	0	0
UMgungundlovu	1361	0	0	0	29720	33360	2474	0	0	0
Amajuba	0	0	0	0	0	0	225	0	2	219
eThekwini	3897	1903	370	308	1055	6089	11337	13581	15011	17413

Source: Quantec Easydata

Figure 15 shows values of pear exports from the Eastern Cape province. The Nelson Mandela metro municipality is the leading exporter of pears in the Eastern Cape; exporting over R35 million worth of pears in 2019 (see Figure 15). Pear exports recorded in the Eastern Cape during 2019 were mostly from the Nelson Mandela bay Metro. Other district that recorded exports over the past decade are Cacadu district and to lesser extend Alfred Nzo district. Pear exports from Eastern Cape province has been unstable over the period under review. As can be seen from Figure 15 exports from the Nelson Mandela district took a dip between 2010 and 2011 before increasing substantially again between 2013 and 2014 and then taking another dip in 2015. Over the past three years pear exports from Nelson Mandela has been relatively stable. During 2019, pear exports from Nelson Mandela decreased to record R35 million from R37 million recorded in 2018. The use of the Nelson Mandela Bay harbour as an exit point may have played a major role in Nelson Mandela metropolitan municipality being the leader in pear exports from the Eastern Cape.

Figure 15: Value of pear exports by Eastern Cape province, 2010 - 2019



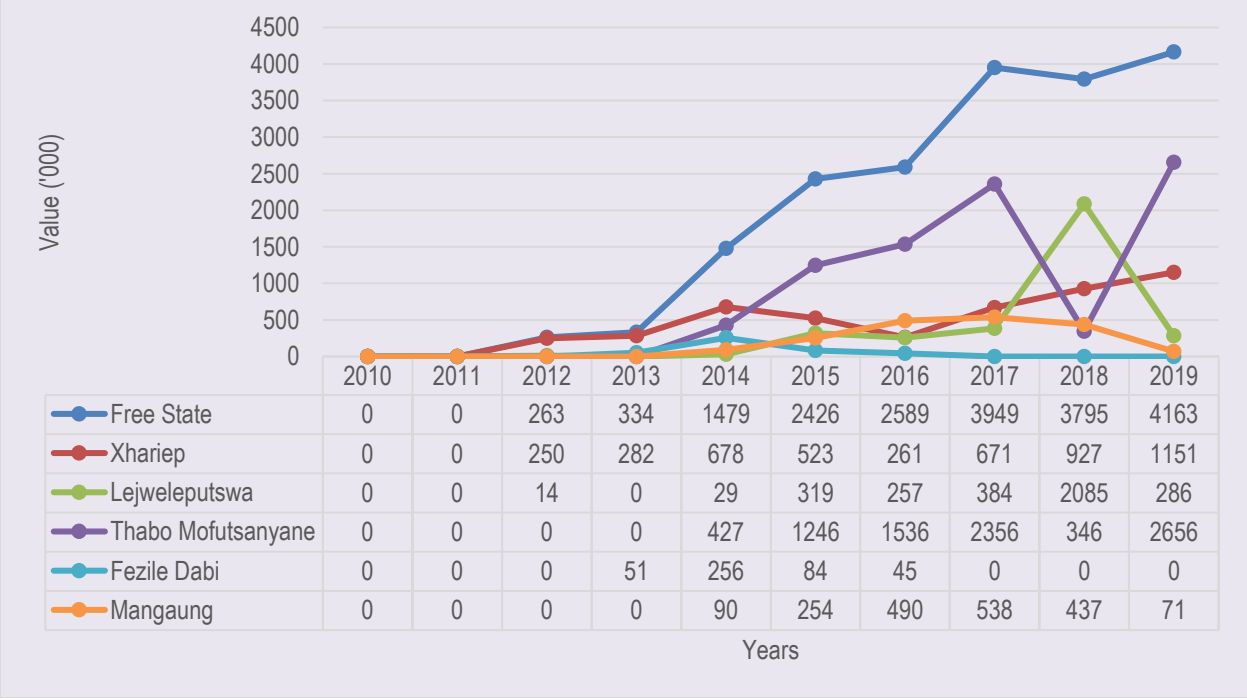
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Eastern Cape	37044	31333	33783	47911	52325	42027	68351	38316	37565	35008
Cacadu	3089	1085	734	0	0	0	882	0	0	0
O.R.Tambo	0	0	0	0	0	0	0	0	0	0
Alfred Nzo	0	0	0	0	0	1	2	31	21	5
Nelson Mandela Bay	33956	30248	33048	47911	52324	42026	67467	38285	37545	35003

Years

Source: Quantec Easydata

Values of pear exports from the Free State province are shown in Figure 16.

Figure 16: Value of pear exports Free State province, 2010 - 2019



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Free State	0	0	263	334	1479	2426	2589	3949	3795	4163
Xhariep	0	0	250	282	678	523	261	671	927	1151
Lejweleputswa	0	0	14	0	29	319	257	384	2085	286
Thabo Mofutsanyane	0	0	0	0	427	1246	1536	2356	346	2656
Fezile Dabi	0	0	0	51	256	84	45	0	0	0
Mangaung	0	0	0	0	90	254	490	538	437	71

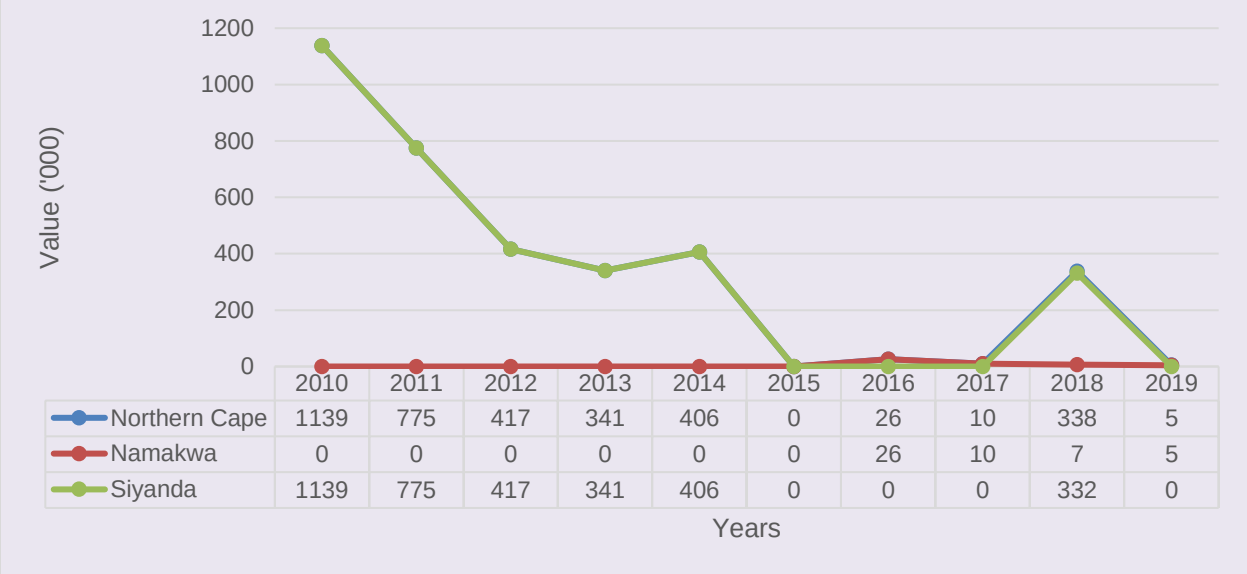
Years

Source: Quantec Easydata

It is clear from Figure 16 that all pear exports from Free State are mainly from Thabo Mofutsanyane, Mangaung and Xhariep municipalities. High export value for the leading municipality was recorded in 2017

for Mangaung, 2018 for Lejweleputswa and 2019 for both Xhariep Thabo Mofutsanyane municipalities. Figure 17 depicts values of pear exports from the Northern Cape province.

Figure 17: Value pear exports by Northern Cape province, 2010 - 2019



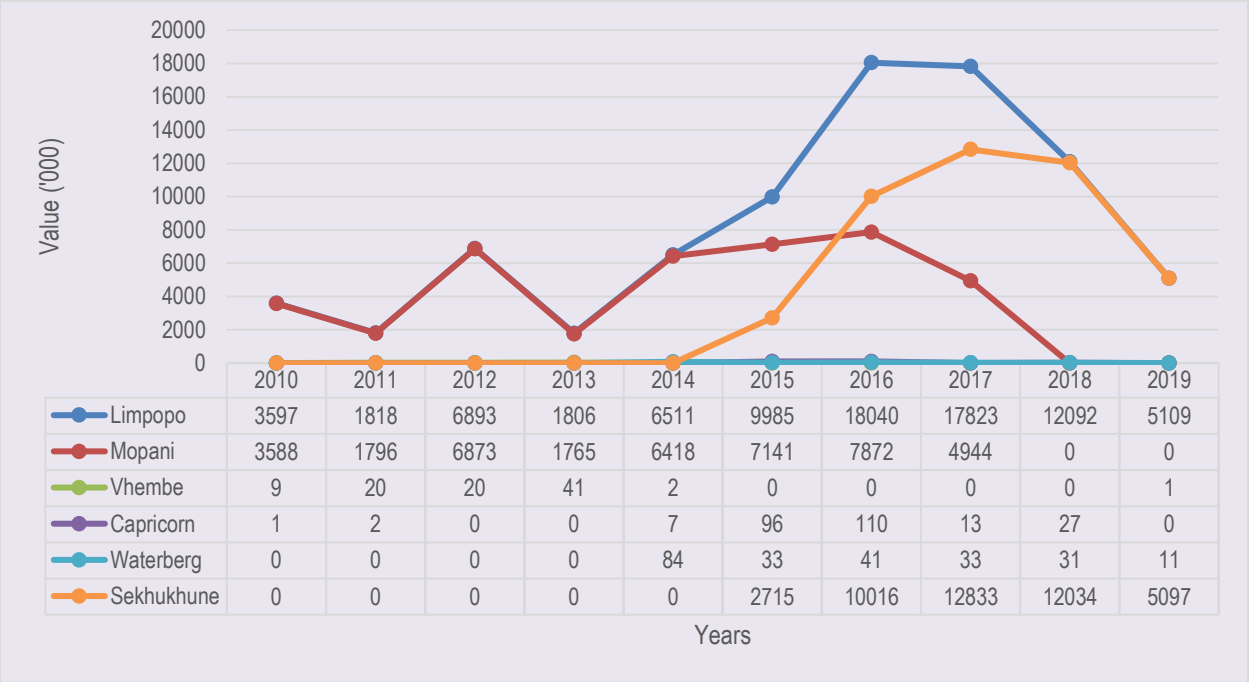
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Northern Cape	1139	775	417	341	406	0	26	10	338	5
Namakwa	0	0	0	0	0	0	26	10	7	5
Siyanda	1139	775	417	341	406	0	0	0	332	0

Source: Quantec Easydata

Pear exports from the Northern Cape are mainly from Namakwa and Siyanda municipality. High export value for the leading municipality was recorded in 2010. The municipalities recorded no pear exports in 2015. In 2019, Namakwa district remained the only region to record pear exports.

Values of pear exports from the Limpopo province are shown in Figure 18. Majority of recorded pear exports by Limpopo province were from the Mopani and Sekhukhune district. 2015 marked the first year in which the Sekhukhune district recorded pear exports after five years and in 2016, it surpasses Mopani as the major pear exporter (see Figure 18). The Waterberg district and Capricorn are also recorded some pear exports for the during the period under review.

Figure 18: Value of pear exports from Limpopo, 2010 - 2019

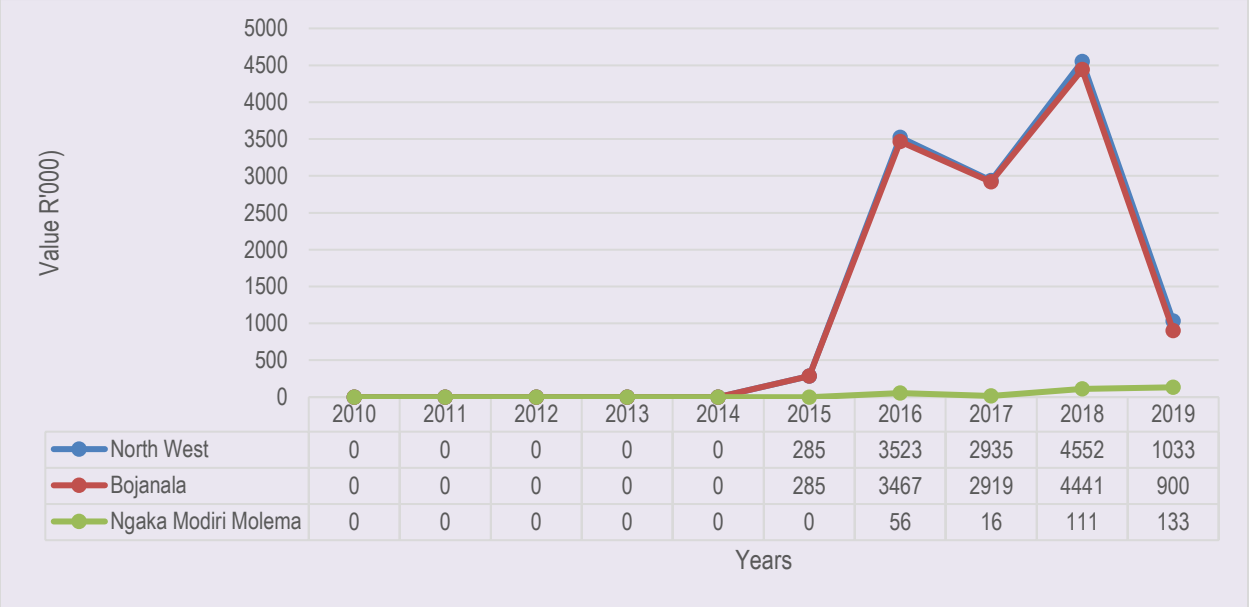


	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Limpopo	3597	1818	6893	1806	6511	9985	18040	17823	12092	5109
Mopani	3588	1796	6873	1765	6418	7141	7872	4944	0	0
Vhembe	9	20	20	41	2	0	0	0	0	1
Capricorn	1	2	0	0	7	96	110	13	27	0
Waterberg	0	0	0	0	84	33	41	33	31	11
Sekhukhune	0	0	0	0	0	2715	10016	12833	12034	5097

Source: Quantec Easydata

Figure 19 shows the value of pear exports from the North West province.

Figure 19: Value of pear exports by North West province, 2010 - 2019

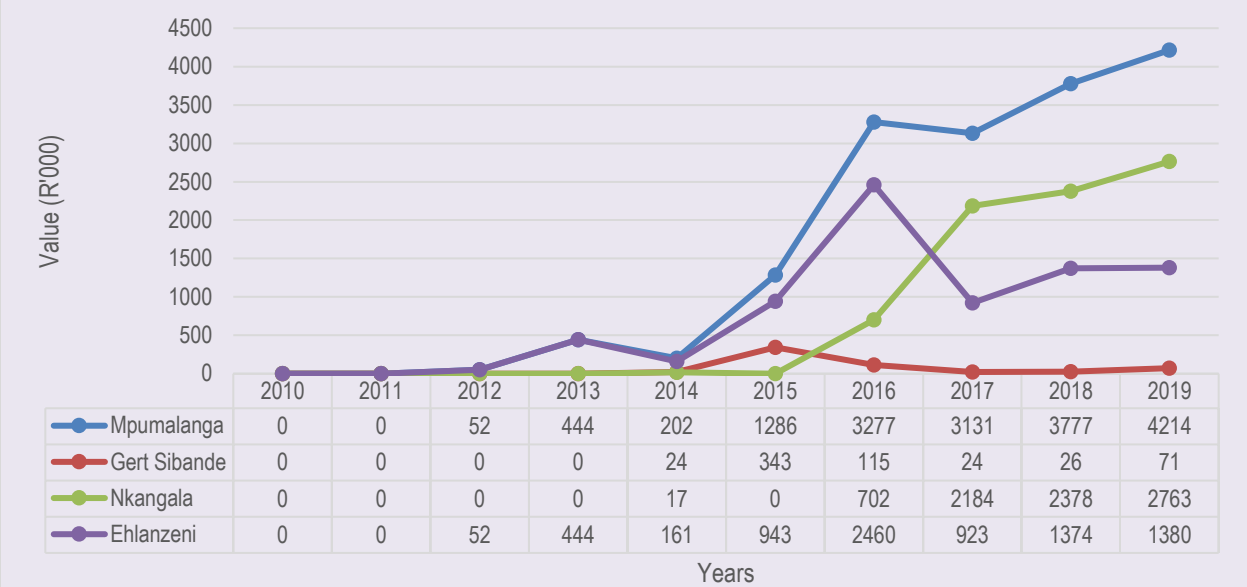


	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
North West	0	0	0	0	0	285	3523	2935	4552	1033
Bojanala	0	0	0	0	0	285	3467	2919	4441	900
Ngaka Modiri Molema	0	0	0	0	0	0	56	16	111	133

Source: Quantec Easydata

Pear exports recorded in the North West during 2019 were almost all from the Bojanala district. (see Figure 19). Values of pear exports from the Mpumalanga province are presented in Figure 20.

Figure 20: Value of pear exports by Mpumalanga province, 2010 - 2019



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Mpumalanga	0	0	52	444	202	1286	3277	3131	3777	4214
Gert Sibande	0	0	0	0	24	343	115	24	26	71
Nkangala	0	0	0	0	17	0	702	2184	2378	2763
Ehlanzeni	0	0	52	444	161	943	2460	923	1374	1380

Source: Quantec Easydata

It is clear from Figure 20 that the exports recorded by Mpumalanga province have been unstable during the ten year period. Majority (63%) recorded pear exports by Mpumalanga in 2019 were from the Nkangala district. In 2019, Ehlanzeni was the second most exporter in Mpumalanga followed by Gert Sibande.

2.4 Share Analysis

Table 2 is an illustration of provincial shares towards national pear exports. The table shows that the Western Cape is the leading exporter of pears in South Africa, accounting for 91.9% of the total South African pear exports in 2019. It was followed by the Gauteng at 5.5%, Eastern Cape at 1.3%. As explained earlier, this means that the leading export provinces derive their advantage from the fact that the registered exporters are based in their provinces and they also have exit points for pear exports.

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

Years Province	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
RSA	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Western Cape	91.8	92.4	91.6	93.3	92.5	90.7	90.3	91.6	91.0	91.9
Eastern Cape	3.1	2.5	2.5	2.6	2.5	2.0	2.4	1.4	1.5	1.3
Northern Cape	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Free State	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2
Kwazulu-Natal	0.4	0.2	0.1	0.0	1.5	1.9	0.5	0.5	0.6	0.7
North West	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0
Gauteng	4.3	4.7	5.3	3.9	3.0	4.7	5.7	5.4	6.0	5.5
Mpumalanga	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2
Limpopo	0.3	0.1	0.5	0.1	0.3	0.5	0.6	0.7	0.5	0.2

Source: Calculated from Quantec Easydata

The accompanying tables (Tables 3 to 11) show shares of the various districts' pear exports to the various provincial pear exports.

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

Years District	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Western Cape	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
City of Cape Town	55.1	55.3	55.1	49.0	47.2	44.5	45.1	46.3	44.3	42.9
West Coast	1.0	0.5	0.3	0.4	0.4	0.2	0.1	0.2	0.1	0.0
Cape Winelands	32.5	36.8	38.3	40.4	42.4	47.6	47.7	46.8	48.8	51.6
Overberg	6.4	6.4	5.9	9.7	9.4	7.3	6.7	6.6	6.4	5.4
Eden	1.0	1.0	0.4	0.4	0.6	0.4	0.3	0.1	0.3	0.0

Source: Calculated from Quantec Easydata

Table 3 presents the shares of district pear exports to the total Western Cape provincial pear exports for the years 2010 to 2019. The leading pear export districts in the Western Cape in 2019 are the Cape Winelands (51.6%) and the City of Cape Town (42.9%). Together, the two districts accounted for 94.6% of total Western Cape provincial pear exports in 2019.

Table 4: Share of district pear exports to the total Eastern Cape provincial pear exports (%)

Years District	2010	2011	2012	2013	3014	2015	2016	2017	2018	2019
Eastern Cape	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cacadu	8.3	3.5	2.2	0.0	0.0	0.0	1.3	0.0	0.0	0.0
O.R.Tambo	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

Years District	2010	2011	2012	2013	3014	2015	2016	2017	2018	2019
Alfred Nzo	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Nelson Mandela	91.7	96.5	97.8	100.0	100.0	100.0	98.7	99.9	99.9	100.0

Source: Calculated from Quantec Easydata

In the Eastern Cape, the leading district in pear exports is the Nelson Mandela district (see Table 4). The district accounted for all (100%) pear exports from the Eastern Cape province in 2019.

Table 5: Share of district pear exports to the total Mpumalanga provincial pear exports (%)

Years District	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Mpumalanga	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gert Sibande	0.0	0.0	0.0	0.0	28.3	26.7	3.5	0.8	0.8	0.7
Nkangala	0.0	0.0	0.0	0.0	18.6	0.0	21.4	69.8	69.8	63.0
Ehlanzeni	0.0	0.0	100.0	100.0	53.1	73.3	75.1	29.5	29.5	36.4

Source: Calculated from Quantec Easydata

The shares of district pear exports to the total Mpumalanga provincial pear exports are presented in Table 5. The Ehlanzeni district was the leading exporter of pear in 2019. The remaining exports came from the Nkangala and Gert Sibande district.

Table 6: Share of district pear exports to the total Free State provincial pear exports (%)

Years District	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Free State	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Xhariep	0.0	0.0	94.9	84.6	23.9	21.5	10.1	17.0	24.4	27.6
Lejweleputswa	0.0	0.0	5.1	0.0	3.6	13.2	9.9	9.7	54.9	6.9
Thabo Mofutsanyane	0.0	0.0	0.0	0.0	52.5	51.4	59.1	59.7	9.1	63.8
Fezile Dabi	0.0	0.0	0.0	0.0	8.9	3.4	1.7	0.0	0.0	0.0
Mangaung	0.0	0.0	0.0	0.0	11.2	10.5	18.9	13.6	11.5	1.7

Source: Calculated from Quantec Easydata

The Free State province never recorded any exports of pears before 2012 (see Table 6). Thabo Mofutsanyane was the leading exporter of pears in 2019 accounting for 63.8%. Xhariep recorded second most pear export (27.6%) followed by Lejweleputswa (6.9%) and Mangaung (1.7%).

Table 7: Share of district pear exports to the total Gauteng provincial pear exports (%)

Years District	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gauteng	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sedibeng	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
West Rand	0.0	0.0	0.1	0.3	2.2	0.7	0.4	0.0	0.0	0.0
Ekurhuleni	5.3	1.7	6.2	2.1	5.4	4.3	3.5	4.5	4.2	4.2
City of Johannesburg	59.8	63.5	54.4	60.2	61.9	54.9	65.1	82.0	75.1	83.6
City of Tshwane	34.9	34.8	39.2	37.4	30.6	40.1	31.0	13.3	20.6	12.2

Source: Calculated from Quantec Easydata

In 2019 the biggest contributor to total Gauteng provincial pear exports was the City of Johannesburg, which contributed over two-third (84%) (see Table 7). Another consistent contributor is the City of Tshwane district (12.2% in 2019). The remainder went to Ekurhuleni (4.2%).

Table 8: Share of district pear exports to the total North West provincial pear exports (%)

Years District	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
North West	100.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0
Bojanala	100.0	0.0	0.0	0.0	0.0	100.0	98.4	99.4	97.6	87.1
Ngaka Modiri Molema	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.6	2.4	12.9

Source: Calculated from Quantec Easydata

The North West province never reported any exports of pears between 2011 and 2014 (see Table 8). Recorded exports in 2010 were mostly from Bojanala. In 2019, recorded pear exports were almost all (87.1%) from Bojanala district. The remaining 12.9% came from Ngaka Modiri Molema district.

Table 9: Share of district pear exports to total Limpopo provincial pear exports (%)

Years District	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Limpopo	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mopani	0.0	99.7	98.8	99.7	97.8	98.3	71.5	43.6	27.7	0.0	0.0
Vhembe	0.0	0.2	1.1	0.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0
Capricorn	100.0	0.0	0.1	0.0	0.0	0.4	1.0	0.6	0.1	0.2	0.0
Waterberg	0.0	0.0	0.0	0.0	0.0	1.3	0.3	0.2	0.2	0.3	0.2
Sekhukhune	0.0	0.0	0.0	0.0	0.0	0.0	27.2	55.5	72.0	99.5	99.8

Source: Calculated from Quantec Easydata

Table 9 presents the shares of district pear exports to the total Limpopo provincial pear exports for the years 2010 to 2019. The most notable contributor is Mopani district and to lesser extent Waterberg and Vhembe districts. The Sekhukhune district never recorded any pear exports until 2015 and surpassed Mopani as the major exporter in 2016. The district contributed almost all (99.8%) of the total Limpopo pear exports.

Table 10: Share of district pear exports to the total Northern Cape provincial pear exports (%)

Years District	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Northern Cape	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0
Siyanda	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	2.0	100.0
Namakwa	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	98.0	0.0

Source: Calculated from Quantec Easydata

All recorded exports of pears in the Northern Cape province between 2009 and 2014 were from the Siyanda district (see Table 10). All pear exports in 2019 were from Namakwa district.

Table 11: Share of district pear exports to the total Kwazulu Natal provincial pear exports (%)

Years District	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kwazulu-Natal	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ugu	0.0	0.5	59.7	51.5	0.3	0.1	2.1	0.0	0.0	0.0
Umgungundlovu	25.9	0.0	0.0	0.0	96.0	84.4	17.3	0.0	0.0	0.0
eThekwini	74.1	99.5	40.3	48.5	3.6	15.4	79.0	100.0	100.0	98.8
Amajuba	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.2

Source: Calculated from Quantec Easydata

The shares of district pear exports to the total Kwazulu Natal provincial pear exports are presented in Table 11. In 2019, almost all (98.8%) pear exports from the Kwazulu Natal province were from the Ethekwini municipality. Another consistent contributor in Kwazulu Natal is Umgungundlovu district.

2.5 Imports

Volumes of pears imported by South Africa from different regions of the world during the last ten years are depicted in Figure 21. South Africa is a net exporter of pears. It is critical to note that imports of pears by South Africa have been stable between 2010 and 2012, averaging 214 tons during that period. Before that period (2010 to 2012), South Africa imported very minimal volumes of pears. Between 2013 and 2014, import fell by 82%. The fall in imports of pears may be attributed to increased production during that period (see figure 3). It has to be noted that after that slump period, import rose exponentially by more than 600% in 2015. In 2019, imports from the rest of the world increased by 51% compared to 2018. A total of 295 ton of pears were imported by South Africa in 2019. Europe accounted for 36% of the total pears imports into South Africa. Europe was followed by Asia and Africa at 33% and 32% of the pear imports in 2019. All 96 tons of pears imported by South Africa from the Asian continent in 2019 came from India and China. In 2019 South Africa's imports of pears represented 0.00% of world imports and its ranking in the world was 127.

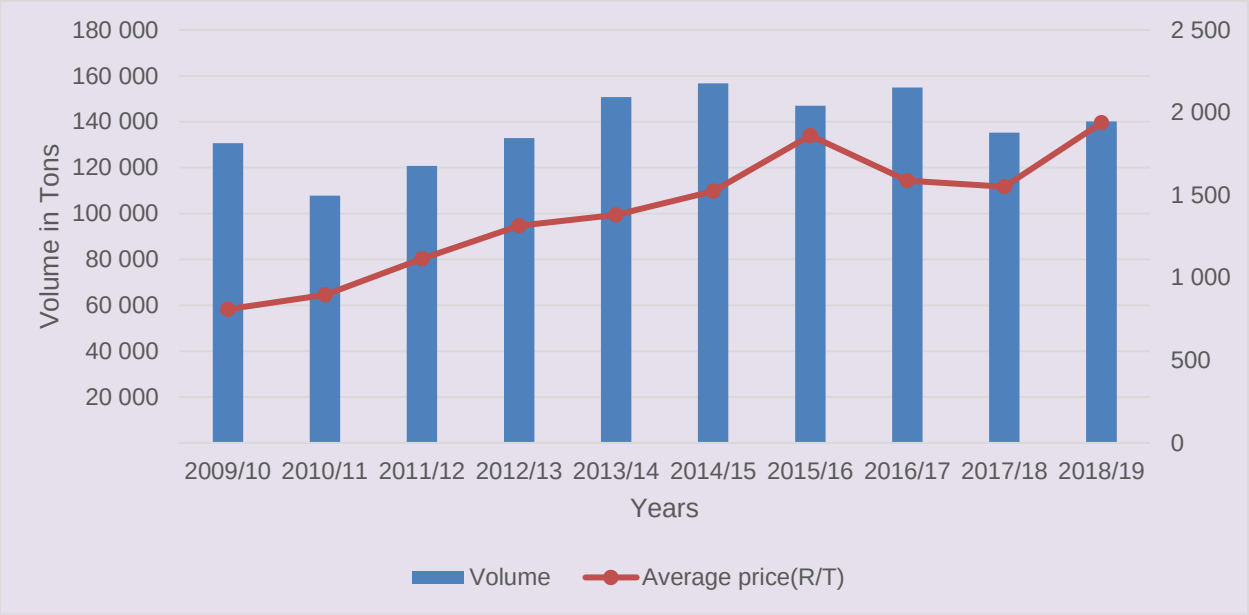
Figure 21: Volume pear exports by South Africa from all regions of the world, 2010 - 2019

Source: Quantec Easydata

2.6 Processing

The volumes of pears available for processing in South Africa fluctuate yearly, depending on the crop size and the percentages of exportable fruit. In 2018/19, the processing industry absorbed approximately 34% (140 109 tons) of all pear production (414 000 tons). This figure represents direct purchases from growers and quantities of pears purchased from the National Fresh Produce Markets (NFPMs). The volumes processed and prices received during the last ten years are shown in Figure 22. As can be seen from Figure 22, the volumes of pears processed have been inclining since 2011/12 while prices have also been increasing. Volumes processed went up by 3.5% between 2017/18 and 2018/19 while prices dropped by 24% during the same period.

Figure 22: Pear purchased for processing, 2009/10 – 2018/19



Source: Statistics and Economic Analysis, DAFF

Pears are consumed fresh, canned, as juice or dried. The juice can also be used in jellies and jams, usually in combination with other fruits or berries. Fermented pear juice is called perry. Pears will ripen faster if placed next to bananas in a fruit bowl. They stay fresh for longer if kept in a fridge. Pears are the least allergic of all fruits. Pear wood is one of the preferred materials in the manufacture of high quality woodwind instruments and furniture. It is also used for wood carving, and as firewood to produce aromatic smoke for smoking meat or tobacco.

3. GROWTH, VOLATILITY AND STABILITY ANALYSIS

Table 12 presents the results of growth and coefficient of variation estimations. They were calculated using yearly statistics and covered the same ten-year period under review beginning in 2010 and ending in 2019. The coefficient of variation is a measure of volatility or stability. When the coefficient of variation is less than one, the variable in question is said to be relatively stable, meaning that there were minimal changes. When the coefficient of variation is more than one, it is said to be volatile, meaning there were major changes during the period under review.

Table 9: Pear industry growth rates & variation coefficients (2010 – 2019)

Category	Subcategory	Growth Rate (%)	Coefficient of Variation
Production	Gross Value (GV)	7.76	0.27
	Volume	1.03	0.07
Sales at NFPMs	GV/Price	5.09	0.18
	Volume	0.32	0.05
Export	Gross Value	5.95	0.23
	Volume	2.09	0.11
Import	Gross Value	0.57	0.43
	Volume	0.04	0.14

Source: Calculated from data from Statistics and Economic Analysis, DAFF and Quantec

As shown in Table 9 above, the pear industry experienced a positive growth rate from 2010 to 2019 in terms of both gross values of and volumes.

Table 9 also shows various levels of volatility at different levels of the pineapple industry's yearly figures over the same period (2010 to 2019). Low volatility was indicated by the coefficients of variation that were less than one (<1). All variables have values less than 1, which means that on a weighted variance scale, they displayed minimal changes for pear during the ten years under review.

4. MARKET INTELIGENCE

4.1 Competitiveness of South African pear 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 2019, South African pear exports represented 7.3% of world exports and its ranking on the world exports was number 5.

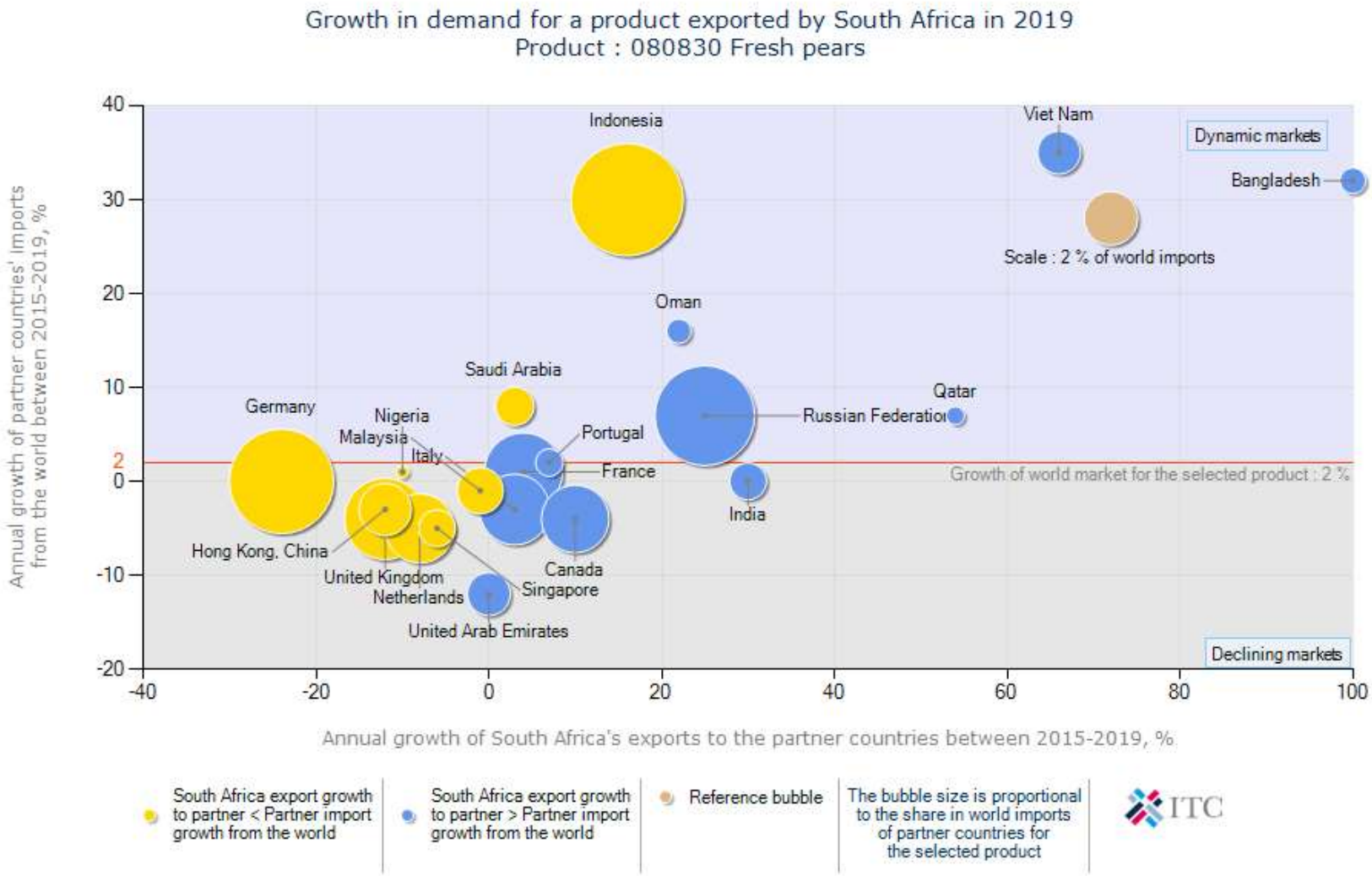
As depicted on Figure 23 below, South African pear exports are growing faster than the world imports in Vietnam, Bangladesh, Qatar, France, Portugal and Oman. South Africa's performance in those markets can be regarded as gains in dynamic markets.

South African pear exports are growing while the world imports are declining in the United Arab Emirates, Canada and Italian markets. South Africa's performance in those markets can be regarded as gains in declining markets and should be viewed as achievement in adversity.

South African pear exports have declined faster than world imports in the United Kingdom, Singapore, Netherlands and Malaysian markets. South Africa's performance in this market can be regarded as loss in a declining market.

At the same time, South Africa's pear exports are declining while the world imports are growing in Indonesian and Saudi Arabian markets. These markets are dynamic and South Africa's performance in these markets should be regarded as an underachievement.

Figure 23: Growth in demand for the South African pears in 2019



Source: TradeMap, ITC

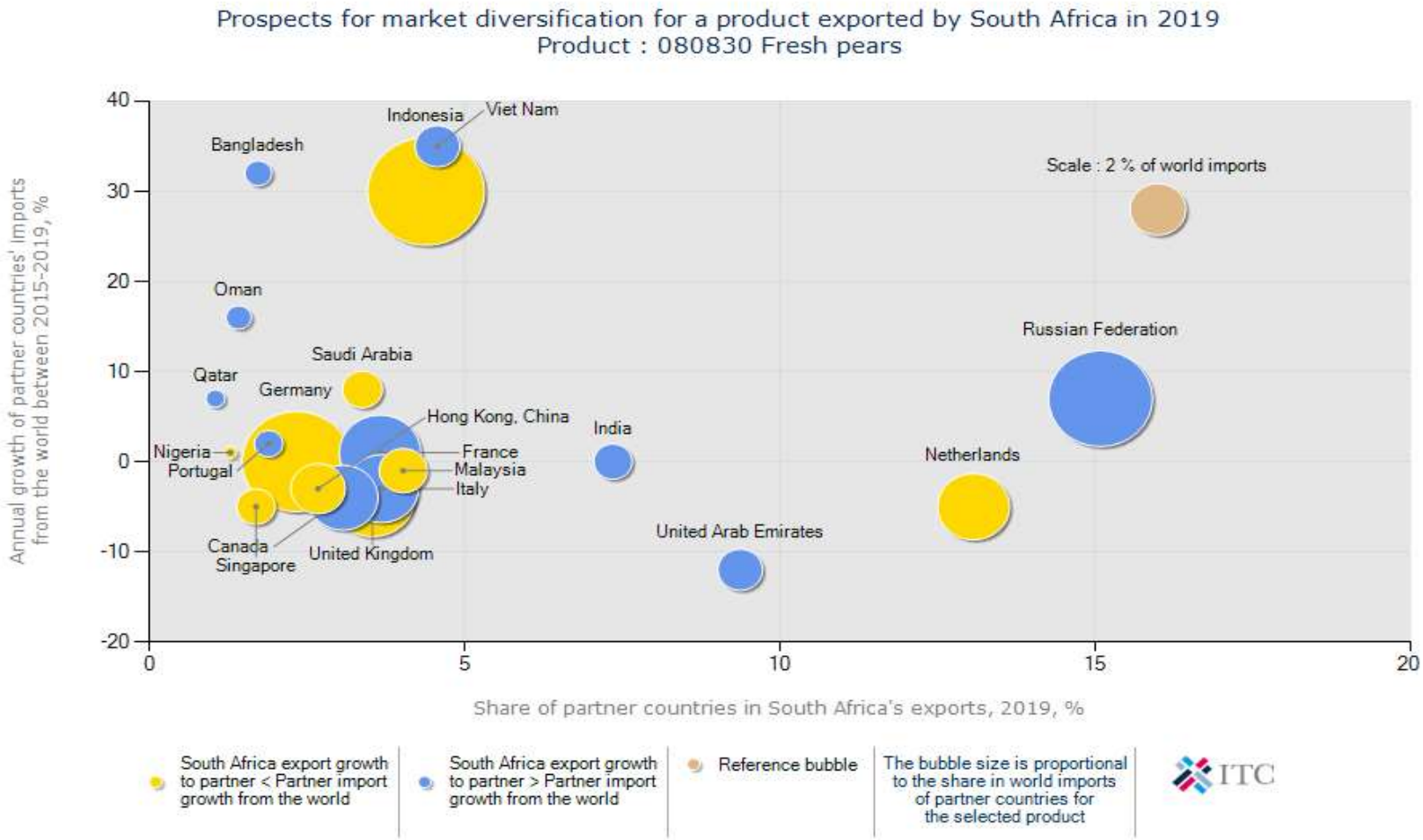
Figure 24 below illustrates prospects for market diversification by South African exporters of pears. The Netherlands, United Kingdom, Russia and United Arab Emirates hold a bigger market share of South African pear exports.

In terms of market size, Indonesia was the largest pear market in 2019 with just over $236 million (167 685 tons) worth of pear imports, or roughly 9.3% of the world pear market. Second was Germany with just over $203 million (160 372 tons) worth of pear imports, or roughly 8% market share followed by Russia with just over $186 million (223 147 tons) worth of pear imports, or roughly 7.3% market share and USA with just over $131 million (74 389 tons) worth of pear imports, or roughly 5.1% market share.

Whilst four countries dominate world pear imports, it is interesting to note that countries like Nigeria, together with Botswana and India have experienced higher annual growth rates in terms of imports from 2015 - 2019 (See Figure 24). Belarus experienced an annual growth rate of 42%. Second was Morocco with 38% annual growth rate followed Philippines at 30%. It is important to note that growth by all these mentioned countries has been from a low base. These countries represent possible lucrative markets for South African pear producers.

It is also important to note that pear imports from the world to countries such as Russia, Belgium, UAE and Italy have declined from 2015 - 2019 and as a result these countries recorded negative growth rates in pear imports.

Figure 24: South Africa's prospects for market diversification, 2019

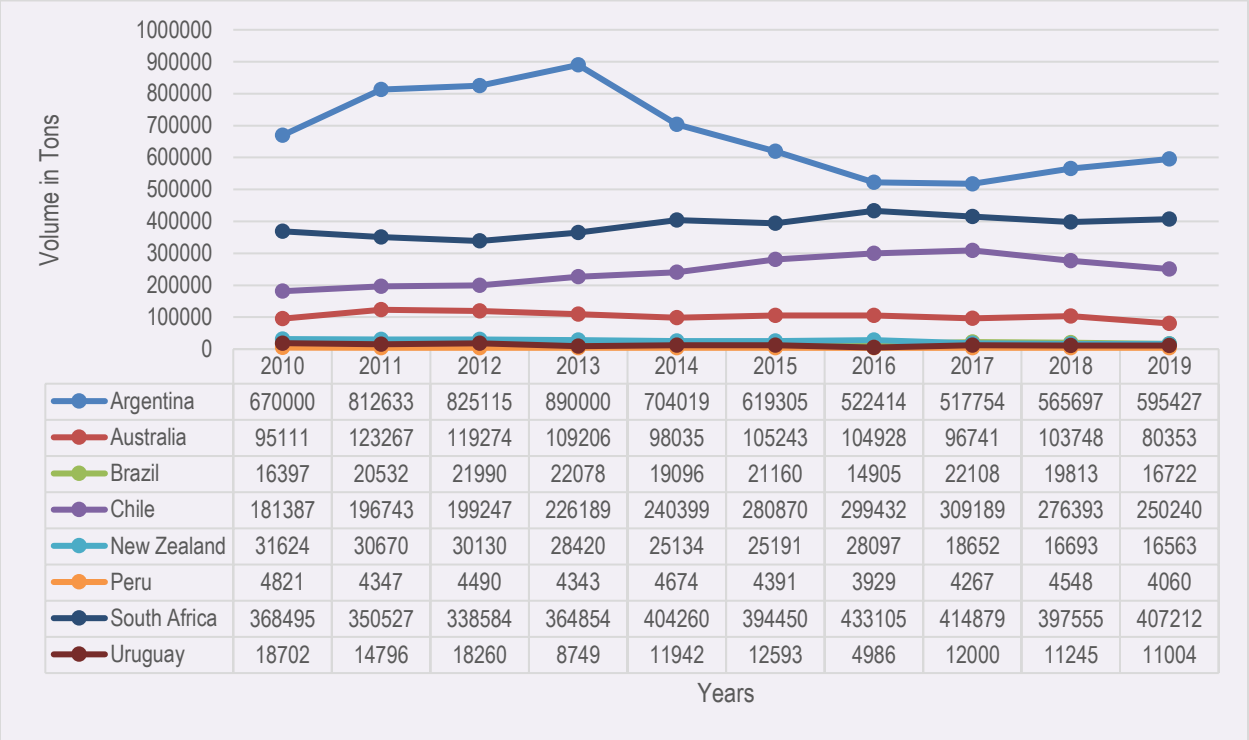


Source: TradeMap, ITC

4.2 South Africa vs. Southern hemisphere production

Figure 25 presents southern hemisphere production of pears for the period 2010 to 2019.

Figure 25: Southern hemisphere pears production, 2010 - 2019



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Argentina	670000	812633	825115	890000	704019	619305	522414	517754	565697	595427
Australia	95111	123267	119274	109206	98035	105243	104928	96741	103748	80353
Brazil	16397	20532	21990	22078	19096	21160	14905	22108	19813	16722
Chile	181387	196743	199247	226189	240399	280870	299432	309189	276393	250240
New Zealand	31624	30670	30130	28420	25134	25191	28097	18652	16693	16563
Peru	4821	4347	4490	4343	4674	4391	3929	4267	4548	4060
South Africa	368495	350527	338584	364854	404260	394450	433105	414879	397555	407212
Uruguay	18702	14796	18260	8749	11942	12593	4986	12000	11245	11004

Source: FAOSTAT

It is clear that South Africa was the second largest (407 212 tons in 2019) producer of pears in the southern hemisphere after Argentina with total production of 595 427 tons of pears during the same year. South Africa was followed by Chile with 250 240 tons. The major markets for these countries are the lucrative European and North American markets.

South Africa' main competitors from the southern hemisphere in the EU and the rest of European markets for pear exports are Chile and Argentina. The main impact of the southern hemisphere pears into the European market is that it drives prices down. Market coordination by the southern hemisphere can reduce the pressure on price by controlling the supplies into the European markets. New Zealand, Brazil and Australia produce primarily for local markets and exports very little. Both these countries pose no serious threat in the European markets.

5. 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 fruit (including pear) 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 onto foreign shelves.

5.1 Tariffs, 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. This phenomenon is referred to as tariff-rate quotas (TRQs).

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 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 labelling and packaging, organic produce certification, quality assurance and other standards and grades. Table 13 presents tariffs applied by the top-ten export markets (countries) to pears originating from South Africa. It is important to note that in 2019 five of the top ten export markets for South African pears were members of the European Union. Because members of the EU have the same tariff structure, only the EU will appear in Table 13 as opposed to the different member states. They include the Netherlands, United Kingdom, Germany, France, and Italy.

Table 13: Tariffs applied by various markets to pears originating from South Africa

COUNTRY	HS CODE	PRODUCT DESCRIPTION	TRADE REGIME	APPLIED TARIFFS	TOTAL AD VALOREM EQUIVALENT TARIFF
European Union	0808301000	Fresh perry pears, in bulk, from 1 August to 31 December	MFN duties (Applied)	0.00%	0.00%

COUNTRY	HS CODE	PRODUCT DESCRIPTION	TRADE REGIME	APPLIED TARIFFS	TOTAL AD VALOREM EQUIVALENT TARIFF
	080830901001	Fresh pears (excl. perry pears in bulk from 1 August to 31 December) : Of the variety Nashi (Pyrus pyrifolia), Ya (Pyrus bretscheideri). If the declared price is higher than or equal to 51 EUR/100 kg	MFN duties (Applied)	0.00%	0.00%
	0808309090	Fresh pears (excl. perry pears in bulk from 1 August to 31 December) : Other	MFN duties (Applied)	0.00%	0.00%
Russia	0808301000	Apples, pears and quinces, fresh: Pears: No description at level 10	Preferential tariff for GSP countries	3.75%	3.75%
	0808309000	Apples, pears and quinces, fresh: Pears: No description at level 10	Preferential tariff for GSP countries	3.75%	3.75%
United Arab Emirates	08083000	Apples, pears and quinces, fresh: Pears and quinces: Pears	MFN duties (Applied)	0.00%	0.00%
Malaysia	08082000	Fresh pears and quinces	MFN duties (Applied)	5.00%	5.00%
Hong Kong	08082000	Apples, pears and quinces, fresh: Pears and quinces	MFN duties (Applied)	0.00%	0.00%
Indonesia	0808200000	Apples, pears and quinces, fresh: Pears and quinces	MFN duties (Applied)	5.00%	5.00%
Singapore	08083000	Pears fresh (tne)	MFN duties (Applied)	0.00%	0.00%
Canada	08083091	Fresh pears and quinces : Pears: other	MFN duties (Applied)	10:50% or 22.29$/T on whichever is the greater	10.50%

COUNTRY	HS CODE	PRODUCT DESCRIPTION	TRADE REGIME	APPLIED TARIFFS	TOTAL AD VALOREM EQUIVALENT TARIFF
	08083091	Fresh pears and quinces : Other pears : Imported during such period specified by order of the Minister of Public Safety and Emergency Preparedness or the President of the Canada Border Services Agency, not exceeding 24 weeks in any 12 month period ending 31st March	MFN duties (Applied)	10.50% or 23.24 $/Ton whichever is the greater	10.50%
	08083099	Fresh pears and quinces : Other pears : Other	MFN duties (Applied)	0.00%	0.00%
India	08082000	Apples, pears and quinces, fresh: pears and quinces	MFN duties (Applied)	30.00%	30.00%
Angola	08082000	Pêras e marmelos, frescos	MFN duties (Applied)	50.00%	50.00%

Source: Market Access Map, ITC

Tariffs imposed by the European Union on pears originating from South Africa vary depending on the month during which pears are imported, ensuring that tariffs are higher during the European pear season and lower when European pear stocks are low. Asian countries such as the United Arab Emirates, Singapore as well as Hong Kong do not impose any tariff on pears originating from South Africa. These countries present great potential for South African exporters given their ever-increasing disposable incomes, populations, as well as their changing consumption and lifestyle patterns. Russia imposes a 3.75% tariff on pears originating from South Africa while Malaysia and Indonesia impose a 5% tariff on South African pears. In the Canadian market, South African pears face tariffs of up to 10.5% while India and Angola impose tariffs of 30% and 50% respectively.

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 designated to protect domestic industries, and as such are likely to discriminate against those attempting to compete with the domestic producers of that country.

5.2 European Union (EU)

As can be observed from Table 13 above the EU has a seasonal tariff structure with tariffs at their peak during the European peak harvesting seasons (the price entry system). The Union also has quotas and specific tariffs and various policies that allow, amongst other things, government organizations to purchase produce should supply rise too quickly (and thereby maintain prices), and then release this excess back onto the market as and when supply drops again. The immediate implication of these policies for South Africa is that an opportunity exists to supply pears to the European market in the off season periods, as the produce

will not compete directly with the European producers and thus would not be liable to a whole array of higher tariffs and other protective mechanisms.

There are other non-tariff barriers, including the phytosanitary and food health regulations laid down by the EU legislation, marketing standards and certificates of conformity, and the ever changing demand patterns of the EU consumers.

5.2.1 Tariff barriers

The EU applies a system known as entry price system. With this system, the EU establishes an 'entry price' at which produce may enter the EU market, which is not only based on the market price for the current year (demand and supply) and for previous years, but also on the prices of the domestic producers (prices they need to maintain profitability). It is calculated by the regulatory authorities so that it can be used in combination with tariffs and quotas to aid EU's attempts at protecting its agricultural system. The entry price is the minimum price at which produce may enter the market. If the price of the produce is lower than its calculated price, it is liable to have duties imposed upon it over and above any duties/quotas it might originally attract. Agricultural duties are applied as follows:

- When the value of the imported party is between 92% and 94% of the entry price, 8% of the entry price will be added to the normal customs duty.
- When the value of the imported party is between 94% and 96% of the entry price, 6% of the entry price will be added to the normal customs duty.
- When the value of the imported party is between 96% and 98% of the entry price, 4% of the entry price will be added to the normal customs duty.
- When the value of the imported party is between 98% and 100% of the entry price, 2% of the entry price will be added to the normal customs duty.

There are tariffs applicable over and above the entry price tariffs, depending on the produce, where it originates from and whether that country has any preferential trading agreements with the EU.

5.2.2 Non-tariff barriers

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

5.2.2.1 Legal requirements

i) Product legislation: quality and marketing

There are a number of pieces of EU legislation that govern the quality of produce that may be imported, marketed and sold within the EU. They are as follows:

General Food Law which covers matters in procedures of food safety and hygiene (micro-biological and chemical), including provisions on the traceability of food (for example, Hazard Analysis and Critical Points, or HACCP), and it is laid out under regulation EC 178/2002.

EU Marketing Standards which govern the quality and labelling of fruit are laid out in the Common Agricultural Policy (CAP) framework under regulation EC 2200/96. These regulations include diameter, weight and class specifications, and any produce that does not comply with these standards will not be sold on the EU markets.

Certificate of Conformity must be obtained by anyone wishing to export and sell fruits in the EU, if that fruit falls under the jurisdiction of the EU marketing standards.

Certificate of Industrial Use must be obtained if the fruit is to be used in further processing.

Maximum Residue Limits (MRL) of various pesticides allowed.

ii) Product legislation: phytosanitary regulations

The international standard for phytosanitary measures was set up by the International Plant Protection Committee (IPPC) to protect against spreading of diseases or insects through the importation of certain agricultural goods. The EU has its own particular rules formalized under EC 2002/89, which attempts to prevent contact of EU of crops with harmful organisms from elsewhere in the world.

The crux of the directive is that it authorizes the Plant Protection Services to inspect large number of fruit products upon arrival in the EU This inspection consist of physical examination of a consignment deemed to have a level of phytosanitary risk, identification of any harmful organisms and certification of the validity of any phytosanitary certificate covering the consignment. If the consignment does not comply with the requirements, it may not enter the EU although certain organisms can be fumigated at the expense of the exporter.

iii) Product legislation: packaging

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

5.2.2.2 Non-legal requirements

To access the market, importers must not only comply with legal requirements set out above, but must also with market requirements and demands. For the most part, these revolve around quality and the perception of European consumers about environmental, social, health and safety aspects of both the products and the production techniques. Whilst supplying fruit that complies with these issues may not be mandatory in the legal sense, they are becoming increasingly important in Europe and cannot be ignored by existing or potential exporters.

i) **Social accountability** is becoming important in the industry, not only amongst consumers, but also for retail outlets and wholesalers. The Social Accountability 8000 (SA 8000) certification is a management

system based on International Labour Organization (ILO) conventions, and deals with issues such as child labour, health and safety, and freedom of association, and requires an on-site audit to be performed annually. The certificate is seen as necessary tool for accessing any European market successfully.

ii) **Environmental issues** are becoming increasingly important with European consumers. Consumer movements are lobbying against purchasing non-environmentally friendly or non-sustainable produce. To this end, both governments and private partners have created standards (such as ISO 14001 and EUREGAP) and labels to ensure that produce adhere to particular specifications.

Although eco-labels (for example, the EU Eco-label, the Netherlands Milieukeur, the German Blue Angel and the Scandinavian White Swan) are voluntary, they can afford an exporter a marketing edge, as consumers wishing to purchase environmentally sound produce demand products that are easily recognizable.

Another important emerging label is Fairtrade, and includes those labels offered by Max Haavelaar Foundation, TransFair International and the FLO (Fairtrade Labelling Organization). Recently a 'universal' logo was adopted based on international fair trade standards developed by FLO, which covers amongst other things, minimum quality and price, various processing requirements, compensation of small farmers that covers sustainable production and living standards, and contracts that allow for long term planning and development.

5.2.2.3 Consumer health and safety requirements

Increasing consumer conscience about health and safety issues has prompted a number of safety initiatives in Europe, such as EUREPGAP on good agricultural practices (GAP) by the main European retailers, the international management system of HACCP, which is independently certified and required by legislation for European producers as well as food imported into Europe (EC 852/2004), and the ISO 9000 management standards system (for producers and working methods) which is certified by the International Standards Organization (ISO).

5.3 United States of America (USA)

5.3.1 Tariff barriers

South African exporters have completely free access to the USA markets under the Generalized System of Preference (GSP), the GSP for LCDs (Least Developed Countries) or the African Growth and Opportunity Act (AGOA). South African exporters must always compare with what Chile (the main supplier of fruit to the USA and South Africa's potential rival) must pay in terms of tariff duties when exporting fruit to the USA. Chile's access to the USA fruit market is considered to be highly preferential under its own Preferential Trade Agreement (PTA).

5.3.2 Non-tariff barriers

The USA's phytosanitary regulation is conducted by Animal and Plant Health Inspection Service (APHIS), which is divided into nine sub-sections. Plant Protection and Quarantine (PPQ) and Veterinary Services (VS) are responsible for issuing permits for commodities and determining whether a commodity can be imported. The Policy and Program Development (PPD) division works with both these divisions in determining long term plans and procedures.

Some products can get pre-clearance from international Services (IS) personnel stationed in the country of origin, either at exporting terminals of site inspections. The PPQ's main focus is to prevent the spread of diseases and pests into the USA's agriculture resources, and it has personnel stationed at all airports, seaports and border stations that check imported cargo and oversee the quarantine process. Exporters or importers must make a request to export/import a commodity, provide as much information as possible on the product, its region of origin and its status that is whether there are restrictions or regulations governing that particular product from that particular region before a permit is issued, along with the conditions of importation (disinfestations treatment) or mitigation measures. Denials can be challenged and governments and companies can request a change in the status of a prohibited commodity (an investigation must be performed by the PPQ scientific team), as long as sufficient conditions have changed or a risk assessment has not been conducted within the last 10 years.

Most approved commodities can enter with inspection alone, but some may have to undergo mitigating measures including post-harvest treatments (hot/cold temperature treatments, irradiation or fumigation, depending on the requirements and which particular treatment is least harmful). The establishment of specifically and maintained pest-free areas in a country (which obviously requires extensive co-operation between the country's plant health services and APHIS IS division) or systems approaches (field surveys, random inspections or various onsite treatments.

In addition to phytosanitary regulations, the USDA Food Safety Inspection Services (FSIS) regulates sanitary practices in the packing of food products, while the Food and Drug Administration (FDA), which is part of the US Department of Health, regulates packaging and labelling. The HACCP protocol is used extensively. The USDA quality standards for fruits and vegetables provide basis for domestic and international trade and promote efficiency in marketing and procurement.

6. DISTRIBUTION CHANNELS

There are roughly three distinct sales channels for exporting fruits. One can sell directly to an importer with or without the assistance of an agent (usually larger, well established commercial operations). One can supply fruits 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 fruits 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 fruits, 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 labelling, bar-coding, etc. Most of the time, export organizations will enter into 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 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 (GlobalGap, etc.) and the year round availability of fruit, the planning of long term contractual relationship is expected to increase.

7. LOGISTICS

7.1 Mode of transport

The transport of fruits 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 produce (for example Durban's new fruit terminal).

7.2 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.

7.3 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. The business panel of any carton (including printed carton labels) should comply with the requirements as established by the EU or any other regulations that are specified by a target market. Producers are advised to present their designs to the Perishable Products Export Control Board (PPECB) before they can order any cartons from a manufacturer. The following is normally required:

- Class I or II
- Fruit type
- Carton depth
- Country of Origin: "Produce of South Africa"
- Complete address of exporter or producer
- Name of variety

- Content of carton: “14 x punnets or bags”
- PUC or PHC code: Registered producer – or Pack House Code with DAFF
- Date code
- Food safety accreditation number: Global Gap, Nature’s Choice registration number, etc.

8. ORGANIZATIONAL ANALYSIS

8.1 Producer and associated organizations

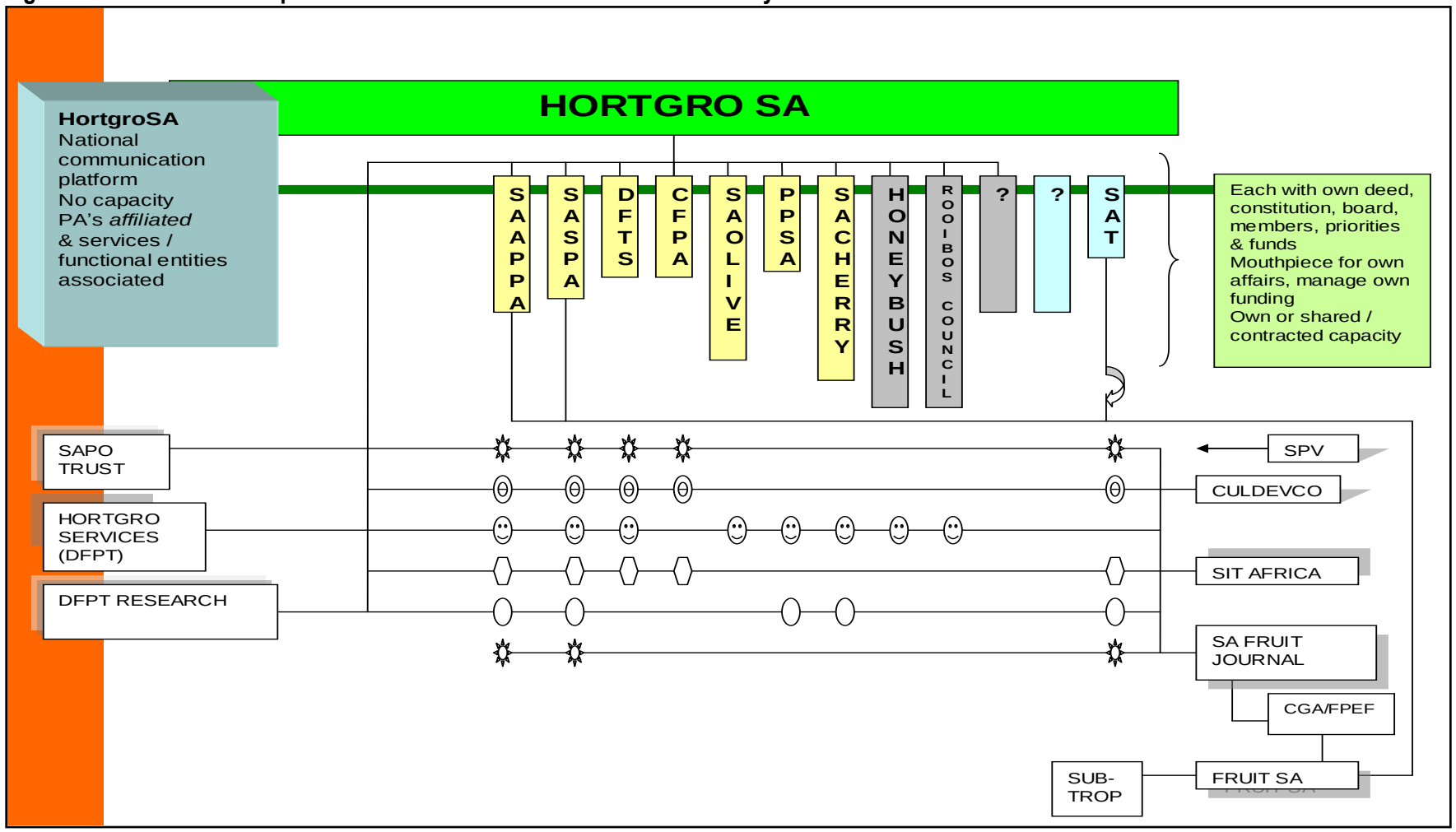
Grower participation and control of their interests in the industry are structured by means of fruit type producer associations (Section 21 companies), as illustrated on Figure 27. The industry consists of Hortgro Services as its mouthpiece. Hortgro Services is responsible for administrative services and financial administration, as well as operational industry services such as transformation and training, information, communication and social programmes.

Hortgro Services comprises of its members, affiliated members and service entities. The members are the South African Apple and Pears Producers Association (SAAPPA), South African Stone Fruit Producers Association (SASPA), Dried Fruit Technical Services (DFTS), Protea Producers of South Africa (PPSA), South African Cherry Growers’ Association (SACGA), and the South African Olive Industry Association.

The affiliated members are Rooibos Tea Producers Association, Pomegranate Producers Association, Cape Flora, South African Honeybush Tea Association (SAHTA), South African Bee Industry Organisation, South African Berry Producers Association.

The service entities are Fruitgro Science (DFPT Research), South African Plant Improvement Organisation (SAPO) Trust, Cultivar development Company (CULDEVCO), Sterile Insect Technique (SIT) Africa, Entomon Technologies and the SA Fruit Journal.

Figure 27: Structure of the producer interest in the deciduous fruit industry



Source: Hortgro

The main association responsible for the pear industry is the South African Apple and Pear Producers Association (SAAPPA). It is a Section 21 company and its objectives are as follows:

- To rationalize and promote the production and marketing of apples and pears, apple and pear products.
- To support and assist the development of the Association's decision-making systems and structures.
- To encourage and pursue constructive dialogue and mutual cooperation with government and other role players in order to promote the interest of the Association and its members.
- To foster mutual trust and long term relationships among role players and stakeholders.
- To establish and promote a reciprocal information system and promote the maintenance of responsible and sustainable production and marketing practices.

8.2 Strengths, Weaknesses, Opportunities and Threat analysis

Some of the strengths, weaknesses, threats and opportunities of the pear production sector in South Africa are the following:

Strengths	Weaknesses
• The industry's export operations and leading players who account for approximately 80% of the overall exports are well established. • An efficient export infrastructure exists and market access has been improved. • The South African pear industry is known for excellent overall quality for fruit (strong reputation in major international markets). • Sound communication mechanisms to majority of industrial participants. • High level of investment in current technology within pack houses and cold chain facilities. • Industry has all traceability systems in place, as required by accreditation protocols.	• Production is largely dependent on climatic conditions which can only be partially manipulated by man through irrigation. • Deteriorating research infrastructure and capacity may limit new technology development in the future. • Saturation of traditional export markets. • Reliance on the UK and EU as main export market. • Relatively high input and capital costs. • An element of fragmentation in the industry. • Lengthy supply chain beyond the pack house. • Lack of industry control on efficiency and productivity in supply chain beyond farm gate and pack house door. • Poor skills and knowledge of the new entrants. • Delays due to degradation of the supporting infrastructure within the supply chain (handling facilities at ports, roads and energy supply).
Threats	Opportunities

• Increased competition from the Southern Hemisphere counterparts like Chile, Brazil, Argentina and Australia. • Oversupply of fruit into established export markets. • Availability and cost of irrigation water. • Impact of climate change especially in the Western Cape. • Inflation rate with regard to cost of labour and farming and also packing prerequisites. • Currency variability.	• Market access initiatives to the Middle East, Asia (India, Indonesia) and China. • Increasing demand for fresh apples in Africa. • Potential for increased local market consumption.

8.3 Strategic challenges

8.3.1 Labour markets

The critical need for labour at harvest time offers seasonal work to unemployed persons in the immediate vicinity of plantations. In most countries, workers migrate from one region to another as the harvest season progresses from early to late. However, in the local scenario, labourers lack mobility as well as skills to find work outside crop harvesting.

A major challenge in terms of labour is the lack of skilled labour. At the same time, farm wage levels do not attract skilled or qualified people to undertake menial and hard work. Smaller producers, who pay comparatively lower wages, are more exposed than the larger producers to the threat of labour shortages.

8.3.2 Infrastructure

Some of the infrastructural challenges are as follows:

- Lack of storage capacity at certain times of the year, when pears and other fruits are being harvested (mid-January until end of February).
- Hygiene and micro-bacterial quality of water available for use in pack houses and domestic purposes on farms.
- Poor or no communication between the agricultural sector and service providers in terms of planning and future expansion on issues such as energy and transport.
- Transport from the pack house to the market – road, ship or rail.
- Logistical systems which are not applied at full efficiency.
- Inefficient handling operations at South African ports, giving rise to costly delays and breaks in the cold chain.

8.3.3 Other challenges

Producers are being confronted with more regulations to control the production from farm to fork. These include regulating soil, air, water, chemical, labelling and safety. On the retailing side pressure mounts to introduce measures for increased traceability of products. The consumer wants a safe product produced with

socially acceptable and environmentally friendly production methods. Combined with this many consumers are up in arms about GMO's.

Competition for scarce natural resources (land and water) is putting continued pressure on good farmland that can otherwise be used for agricultural purposes.

There is a threat of climate change particularly in the Western Cape Province. Production of pears and other fruits could be adversely affected by the warming of the winter season due to rising average temperatures and subsequent loss in chilling hours. Lack of winter chilling gives rise to delayed foliation and the problem of small fruit of poor quality. Increased average maximum temperatures in January and February may result in poor colour development. The risk of sunburn is also increased.

8.4 Empowerment issues and transformation in the sector

According to Hortgro Services, transformation in the deciduous fruit industry has four focus areas. These are economic development, the Deciduous Fruit Development Chamber (DFDC), networking and agri-villages.

With regards to economic development, Hortgro Services serves as an implementation agent of CASP grants for the Western Cape Department of Agriculture. This provides an opportunity for Hortgro to provide matching funds for the implementation of targeted transformation projects in the province. The main focal point of economic development is the tree project. The tree project aims to increase production or footprint for Black Economic Empowerment (BEE) farmers.

To overcome transformation challenges and encourage it, the Deciduous Fruit Development Chamber (DFDC) was established as a national support structure for emerging deciduous fruit farmers. The DFDC provides space for incubator interactions that guide the business and technical assistance to emerging fruit farmers. The DFDC aims to fulfil a dynamic capacity building and advocacy role and to exert pressure in order to mobilise resources from various quarters, including government and the donor community.

Networking entails the building of relationships and networks in order to enhance the procurement of funds and other resources to help with the transformation process. This includes building working relations with all commercial banks and other DFIs and parastatals such as the Land Bank, Industrial Development Corporation (IDC), the Agricultural Research Council (ARC), and other industry stakeholders.

Agri-villages focus specifically on the provision of housing for farm workers and their families. Hortgro Services has committed itself to participating in organised agricultural initiatives to explore the following options as possible solutions to farm worker housing:

- On-farm housing without ownership rights.
- Off-farm housing without ownership, e.g. renting.
- Off-farm housing with ownership.

9. PEAR SUPPLY VALUE CHAIN

The supply value chain is a complex linkage of various production and operational role-players (see Figure 28). Key stakeholders include producer organisations, organised labour, NOGs, financial institutions,

government, exporters and other traders. The following discussion focuses on the main segments of the pear value chain.

9.1 Suppliers of inputs and farming requisites

Fruit farming is a large user of specialised inputs and sophisticated agricultural chemicals. Input suppliers ensure that all inputs needed by farmers for successful production, including farm equipment, pesticides, insecticides and others, are always available at reasonable prices so as to ensure a competitive fruit industry in South Africa.

9.2 Producers

The core business of producers is to produce a high quality crop within "Good Agricultural Practice" protocols. Consistency, reliability of supply and producing varieties as demanded by the markets at affordable prices are also important facets of the producer's responsibility and business activities.

9.3 Fresh produce markets

FPMs are the dominant player and form of wholesaling in the South African pear and fresh fruit and vegetable (FFV) sector. However other wholesale forms do exist including independent wholesalers, contract buyers, supermarkets, 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.

9.4 Retailers

South African pear 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 pears sales are at predetermined prices and are typically individually or in small packages.

9.5 Processors

As explained earlier, the processing of pears consists of canning, drying and juice manufacturing There is also a set of further processors not captured in the group above. These entities use pears (and pear products) in food preparations. This includes caterers, hospitality and other institutions such as corporates, government institutions like hospitals, prisons, etc.

9.6 Cold storage operators and transporters

Cold storage operators are responsible for receiving, handling, cooling the pears to the required temperature and for ensuring that the correct fruit is loaded out according to the exporter's specifications into a truck or

container that has been approved or registered by Perishable Produce Export Control Board (PPECB). A flatbed truck or other non-approved vehicle may be used in journeys shorter than two hours in total.

Transporters perform a key link in the fresh fruit supply chain by facilitating the physical transfer of the products between parties such as the producer, cold store and terminal operator. Transporters are responsible for maintaining the cold chain during transit.

9.7 Exporters

The core business of exporters is to market and sell the fruit of primary producers at the best market price that they are able to negotiate. In order to realize this, the exporter needs to communicate with many of the role players in the logistics chain (cold stores, transporters, shipping lines, port terminals, clearing and forwarding agents, PPECB, regional producers associations and special market inspectors, etc.). It is the exporters' responsibility to manage the cold chain, handle the fruit in an acceptable manner and, they are accountable for the quality of fruit that reaches the destination market.

The main organisation that handles the export of fruits in South Africa is the Fresh Produce Exporters' Forum (FPEF). The FPEF was registered in 1998 as a non-profit organisation and its membership is voluntary and open to all companies that export fresh fruit from South Africa. The FPEF's mission is to create, within free market principles and a deregulated environment, a prosperous but disciplined fruit export sector. It was established mainly to provide leadership and services to its members and the international buying community. The forum sees itself as the international community's gateway to providing South Africa's finest quality produce from highly reputable South African exporters.

9.8 PPECB

In terms of the PPECB Act (Act 9 of 1983) the PPECB is responsible for the "control of perishable products intended for export from the Republic of South Africa". This mainly involves the control of the cold chain (including the shipping process). PPECB also acts as a government "assignee" in terms of the APS (Agricultural Products Standards) Act (Act 119 of 1990) and is responsible for the "control over sale and export of agricultural and related products". PPECB controls (and certifies) that the quality standards of these products are met. The National Department of Agriculture, Forestry and Fisheries (DAFF) issues the phytosanitary certificates.

All PPECB and other inspection regulations, protocols or requirements must be met and adhered to. The Information and Communication Procedure (ICP) must therefore be seen in conjunction with the PPECB Act and its regulations, the APS Act, as well as those temperature and other specialized handling protocols and procedures as established by PPECB in conjunction with the industry. As more emphasis is placed on food safety and customers are demanding higher standards of quality, PPECB and other inspection bodies play an increasingly important role in the export of fresh produce from South Africa. PPECB may make the following information available to exporters and producers on request:

- Packed volumes
    - ✓ Inspected and approved for export
    - ✓ Inspected and rejected for export
- Product quality

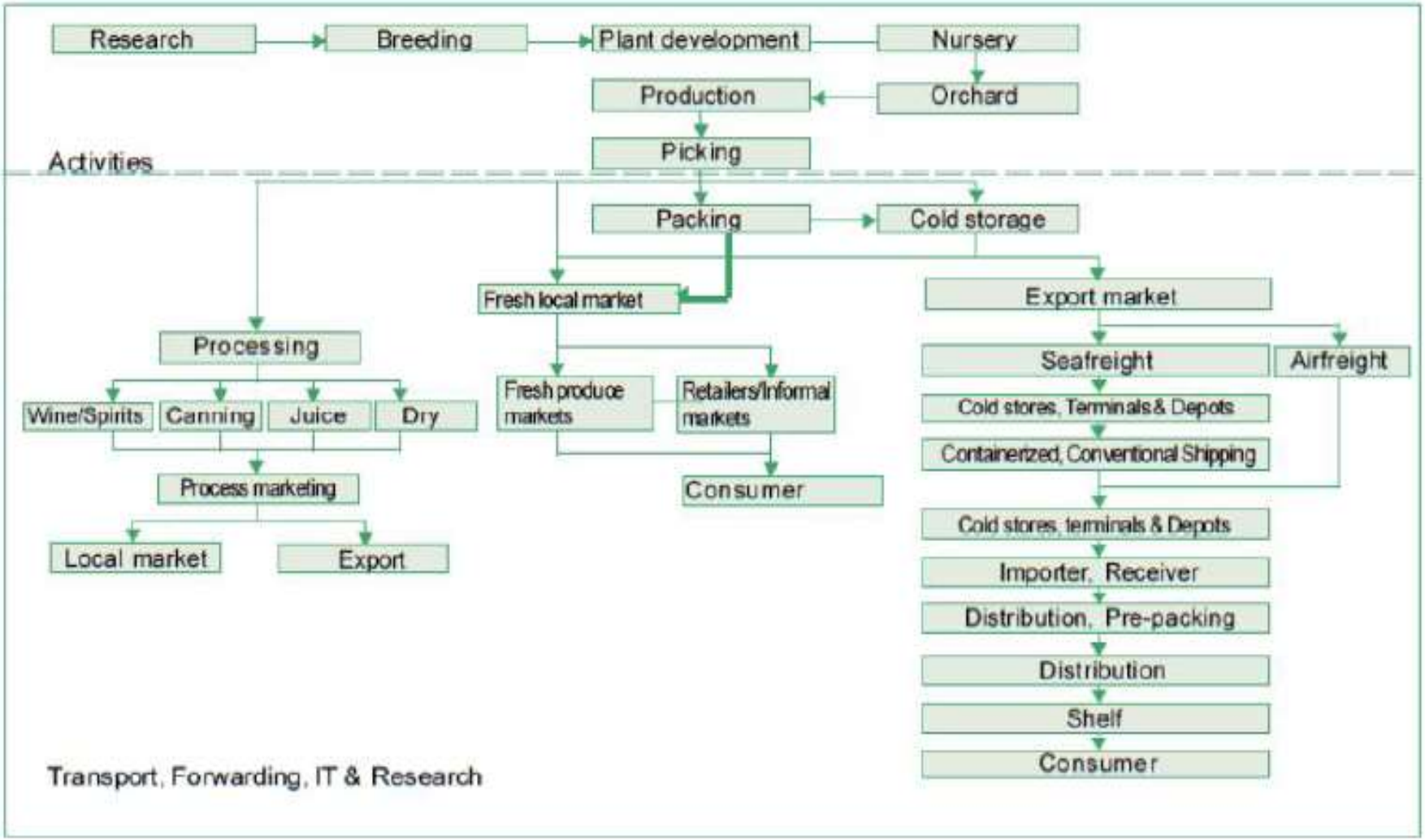
- ✓ Reasons for rejection
- Shipped volumes
  - ✓ This information is available on a product and destination region level
- Cold chain information
  - ✓ Vessel carrying instructions (temperature letter, vessel temperature log, statements of facts, deviations, etc.

The information outlined above is available in varying degrees of detail.

9.9 Terminal and port operators

Terminal operators must inform exporters, PPECB and other relevant parties in the supply chain such as transporters, producer associations, producers and cold stores about port related delays such as labour strikes, wind delays, plug-in congestion and other traffic congestion in the port that will impact on the flow of fresh produce into and out of the harbour. The South African Port Operations (SAPO) container terminal reports to shipping lines.

Figure 28: The deciduous fruit and table grape supply value chain



Source: OABS

10. ACKNOWLEDGEMENTS

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