

Subsector Study: Deciduous Fruit

The National Agricultural Marketing Council



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The National Agricultural Marketing Council

and

Commark Trust



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Foreword

In his February 2006 State of the Nation Address, President Thabo Mbeki identified agriculture as a key contributor to South Africa's 6% economic growth target. The sector's importance lies in its potential to provide significant contribution to economic development through job creation, assisting with poverty alleviation and earning foreign exchange.

Certain agricultural subsectors are currently delivering growth and are therefore well positioned for further growth through carefully-designed government collaboration and support. Others, although important in terms of achievement of broader national objectives, are not yet competitive and will require government to play a more leading role in unlocking their potential. A recent study by the Monitor Group identified subsectors that could be considered both nationally attractive in terms of broader development goals and international competitiveness. Using the Monitor Group study as a reference, the National Department of Agriculture commissioned the National Agricultural Marketing Council (NAMC), who later partnered with ComMark Trust, to undertake diagnostic studies whose purpose would be to identify growth and development constraints and challenges in each of the following key subsectors, as well as to recommend interventions to be made towards unlocking their potential for contribution towards ASGI-SA:

Beef cattle; Poultry meat; Citrus; Viticulture; Wool; Deciduous fruits; Potatoes; Goats; Rooibos; and Honeybush tea

Six of the subsector reports were outsourced to NAMC partners in academia and industry, while the rest were prepared within NAMC and Commark Trust.

The Deciduous Fruit Report is the second in a series to be published over the next few months.

TR RAMABULANA
CEO: NAMC

January 2007

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List of abbreviations, acronyms and terms

AgriBEE	Agricultural Black Economic Empowerment
AgriSETA	Agriculture Sector Education and Training Authority
ARC	Agricultural Research Council
BEE	Black Economic Empowerment
CASP	Comprehensive Agriculture Support Programme
CFPA	Canned Fruit Producers Association
CPA	Cape Pomological Association
DFPT	Deciduous Fruit Producers Trust
DFI Dev.	Deciduous Industry Development Trust
DTD	Dried Fruit Technical Services
EU	European Union countries
EurepGAP	European Retail Group Good Agricultural Practices
FAWU	Food & Allied Worker's Association
FIP	Fruit Industry Plan
FPEF	Fresh Produce Exporters Forum
HAACP	Hazard Analysis Critical Control Point
IPM	Integrated Pest Management
IT	Information Technology
JMF	Joint Marketing Forum
LRAD	Land Redistribution for Agricultural Development
MAFISA	Micro-Agricultural Finance Schemes of South Africa
NAMC	National Agricultural Marketing Council
NAFU	National African Farmers Union
NGO's	Non Governmental Organisation
OABS	Optimal Agricultural Business Systems
PDI	Previously Disadvantaged Individual
Pome fruit	Apples and Pears
POS	Point of Sale
QC	Quality Control
RSA	Republic of South Africa
R & D	Research and Development
SAAPA	SA Apple & Pear Producer Association
SAPO	SA Plant Improvement Organisation
SASPA	SA Stone Fruit Producer Association
SAT	SA Table grapes
SATI	South African Table Grape Industry
SETA	Sector Education and Training Authority
Stone fruit	Apricots, Peaches, Plums and Nectarines
UK	United Kingdom
US	United States of America

1 Executive summary

The deciduous fruit industry consists mainly of pome fruit (apples and pears), stone fruit (apricots, peaches & nectarines and plums) as well as table grapes. The total area planted to deciduous fruit in South Africa amounts to 74 246 hectares. The total number of deciduous fruit producers is 2 225. The Western Cape has the largest concentration growers which represent 74% of the total area planted to deciduous fruit. The Northern Cape is the second largest area representing 15% of the total area followed by the Eastern Cape (8%).

Industry data within this report reflects that intensive orchard replacement has taken place since 1995. Increased volumes and new cultivars can also be ascribed to good horticultural management. The productive life expectancy of pome fruit orchards and table grape vineyards are 25 years, while stone fruit has a life expectancy of 18 years. The majority of fruit production units are smaller than 30 hectares, and units larger than 30 ha is found mainly in the apple growing regions. Economies of scale and consistency in yield and quality are key characteristics of these larger operations. Large farming units have strategised forward integration growth by specifically exporting their own products. These units are identified as grower, packer and exporter.

The South African deciduous fruit industry is an export orientated industry with large volumes being exported annually. The exporters are represented in the industry by the Fresh Produce Exporters Forum (FPEF). The current members of the FPEF include 88 of 172 registered exporters, representing more than 80% of exported volumes. During the 2005 season a 108 exporters were responsible for exporting more than 50% of the total exported volume.

The deciduous industry creates employment for almost 100 000 employees (converted to permanent equivalents) throughout the whole of South Africa. Permanent labour is mainly employed to perform task such as harvesting, supervision, operational duties in pack houses, irrigation management, insect and disease management and on a seasonal basis tractor and forklift driving. Seasonal labour is mainly employed on a contract basis with the main purpose of harvesting the crop and or fruit packing. Common problems experienced in terms of labour are low levels of education and literacy, social problems such as absenteeism, alcohol abuse and family strife and poor health.

The transformational process is slow and the poor financial performance of new entrants in the industry is a cause for concern. The reasons cited for this is that new entrants tend to formulate poorly structured business plans, based on a limited knowledge and regard for the overall market. Capital grants are often utilised for the purchase of land without taking into account the amount of operational funds needed to sustain the business during the gestation period of five to seven years. This is responsible for more or less than 45%

of the constraints experienced by emerging farmers. Government capacity to deliver funds, extension and other services, in line with project schedules, has been lacking and there is a general lack of professional extension services in farm management and mentorship programmes.

Among these land reform initiatives, where support is forthcoming is in the form of LRAD grants, CASP and MAFISA funding. Education and skills funding also receive government support through tax incentives on AgriSETA accredited programmes. The Department of Trade and Industries also offered export initiative support programmes, but are of limited duration.

1. Introduction

The deciduous fruit industry in South Africa is well established and primarily aimed at supplying fresh grapes, apples, pears, peaches, nectarines, plums and apricots to the export market. Peaches, pears, apricots and grapes are also processed and supplied as either canned or dried products to the international and local markets. At this time, fresh South African fruit is available in many northern hemisphere countries during their winter and spring seasons. The bulk of these sales to the consumer are by means of contractual agreements via preferred category suppliers to the large supermarket chains. Furthermore, various export companies or agents conduct this business on the basis of consignment sales on behalf of the grower or packer.

This subsector study on deciduous fruit is an overview of various aspects of the industry as stipulated in the terms of reference provided by the National Agricultural Marketing Council (NAMC). It is based on information compiled from industry data, publications such as the annual “Key Deciduous Fruit Statistics” and the “Fruit Industry Plan” (FIP). Linkages between the strategic plan for South African agriculture and the industry are set out in the FIP and the three key objectives provide the basis for discussion in Sections 5 and 6 of this report. These three key objectives are as follows:

1. **Enhancing equitable access and participation.** It is envisaged that this will be achieved through land reform, restitution and redistribution and agricultural black economic empowerment (AgriBEE). Land reform will involve the establishment of new farmers, in line with the target of 30% of land in black ownership by 2014. Land restitution will ensure the return of land to dispossessed communities, while land redistribution will involve the provision of state land for agricultural use by emergent farmers. The AgriBEE transformational process at both industry and enterprise levels will be promoted by bringing existing stakeholders from previously disadvantaged groups into mainstream structures and business operations in terms of ownership, management and recognised participation at various links in the supply chain
2. **Improvement of global competitiveness and profitability.** This will require the capacity to create superior value for customers and improved profits for stakeholders in the value chain, in comparison to competitor suppliers. The improvement of profitability and global competitiveness is determined by the level of productivity in the utilisation of human, capital and natural resources at each link of the chain. Productivity, in turn, sets wealth in terms of wages, returns to capital and natural resource endowments. Improved competitiveness and profitability will create an “engine” for ongoing development in the technical, social and professional spheres of the industry.

3. **Ensuring sustainable management of resources in the farming system.**

This concerns the integrated outcome of economic, ecological and social dimensions of the industry, which are measurable and monitored over time and are as follows:

- Ongoing financial viability
- Risk management to alleviate potential adverse effects of climate, and economic and market factors
- Reduction in outputs which put the environment at risk
- Production practices and processes that are socially and morally acceptable
- Improved quality of life and biodiversity

In the FIP, 47 sub-strategies are identified to align the industry with the strategic plan for South African agriculture (see Annexure 1). A number of issues raised and discussed in this document are closely linked to the terms of reference of this subsector report. Leadership organisations in the deciduous fruit industry have instituted a number of actions based on the recommendations contained in the plan. The main focus areas are integral components of the recommendations contained in the latter section of this subsector report. These focus areas are as follows:

- BEE and land reform
- Rural development
- Human resource development
- Relationship with government
- Research and development, information and technology transfer
- Logistics and infrastructure
- Information and market intelligence
- Marketing and promotion of fruit

The supply chain is a complex linkage of various production and operational role-players (see Figure 1.1). Other key stakeholders are producer organisations, organised labour, NGOs, financial institutions and government.

Traceability measures to ensure food safety by means of various accreditation compliance schemes (e.g. EurepGAP and HACCP) have been imposed by various foreign supermarkets. Tracking, (monitoring the path and progress of consignments in the chain) is of the utmost importance for the producer or packer as the business of exports is based largely on consignment sales.

Growers, packers and exporters need ready access to point of sale (POS) information in order to monitor progress, recognise opportunities and take corrective action on threatening problems. O'Rourke (2006) stresses the matter of "reading market signals correctly".

High farm-gate returns resulting from currency exchange rates at times when market values are static (e.g. late 1990s to 2002) are often interpreted incorrectly as the time to plant. Consequently, recent large-scale plantings in developing Middle East countries will result in Turkey, Iran, Pakistan and India becoming new players as significant suppliers of low-cost apples during the new decade. Similarly, production is set to increase in southern hemisphere countries. The key point is that orchards and vineyards come into full production five to seven years after planting.

The deciduous fruit industry is capital, technology and labour intensive. Furthermore, it is very site specific in terms of climatic characteristics, namely:

- Mediterranean type climate – cold winters and hot dry summers
- Temperature
 - Winter chill factor for completion of dormancy prior to bud break in spring
 - Moderate average maximum temperature range in summer
 - Moderate diurnal temperature variation during the growth period
 - Cooling of night temperature levels in autumn (for good fruit colour)
- Precipitation
 - Water requirement in excess of 600 mm (effective rainfall or supplementary irrigation), spread over the growing season; winter rain run-off channelled into dams and storage reservoirs
 - Absence of early frost in March and April
 - Absence of late frost during the bloom period and the first month of fruit growth
 - Absence of hail during the growing season
 - Absence of long wet and cool weather conditions during harvest periods
- Wind – very low incidence of strong winds during the growing season
 - Relative humidity – low levels of humidity which do not favour the development of plant diseases on young foliage or fruit

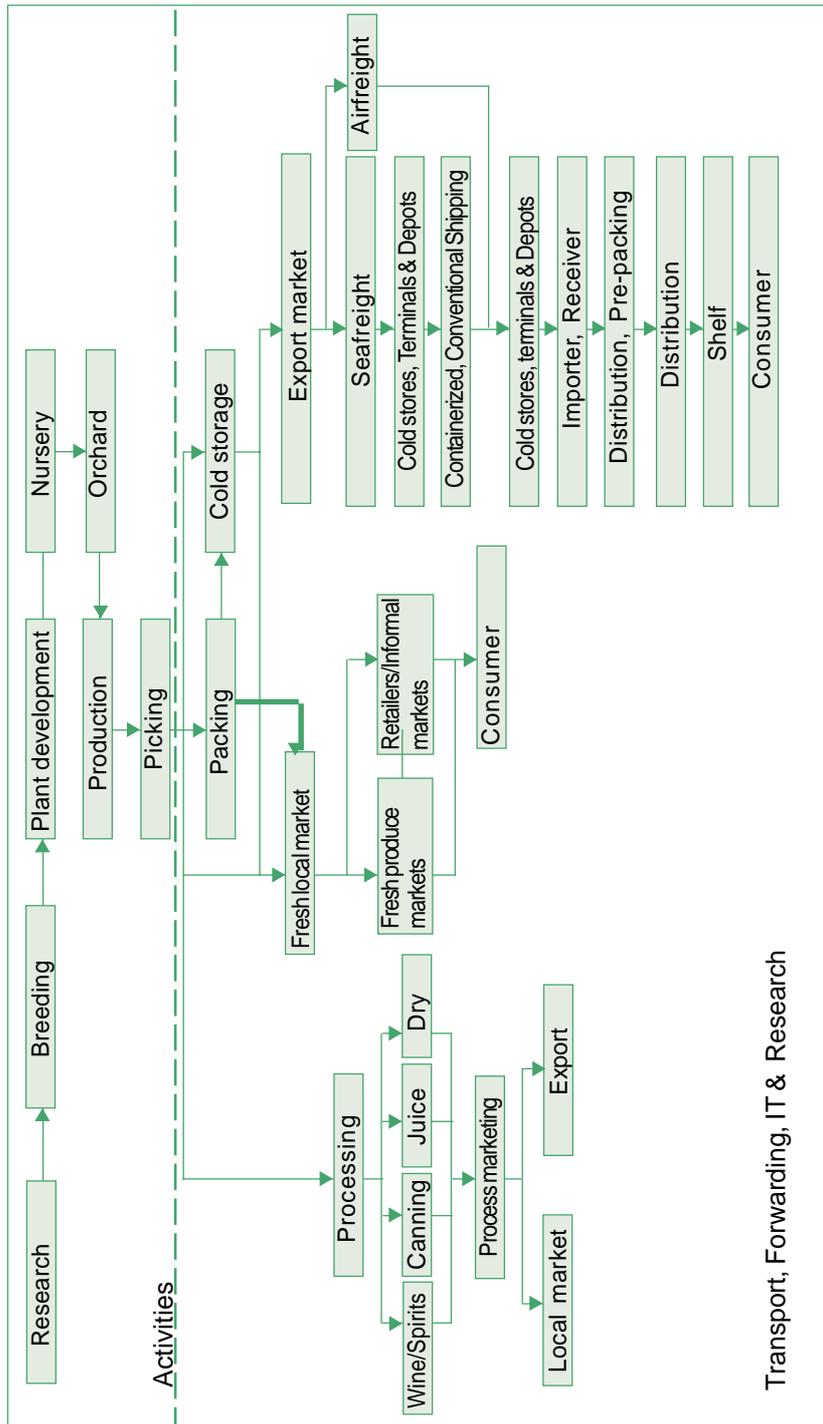
Orchard and vineyard soils are an integral link in the *terroir* (plant/climate/soil) concept of sustainable farming systems. Soils which have the capacity to sustain high yields and good crop quality are deep, well drained and well aerated with structural stability derived from the following:

- In situ weathering of the profile, giving rise to apedal or moderate blocky structured B horizons
- Biologically transformed alluvial and colluvial deposits
- In-site, long-term weathering of ancient tilted shales, giving rise to stable loamy B horizons
- Sandy landscapes in river valleys (especially for grapes)

The utilisation of marginal soils or climatic regions for intensive fruit and grape farming is only feasible during periods of exceptionally good prices and increased demand, as was the case during the late 1980s. These production units introduce a high incidence of financial stress at farm level and increased risk of quality failure in the supply chain.

The purpose of this document is to provide an overview of the industry in accordance with the terms of reference provided, with specific commentary on the potential for increasing pro-poor growth, employment creation and poverty alleviation. The report concludes with recommendations on possible strategic market interventions in support of the issues addressed.

Figure 1.1: The deciduous fruit and table grape supply chain



Source: OABS, 2004

2. Sector analysis

This section gives attention to the types of firms and the organised associations in the subsector. Employment, skills and labour absorption are discussed, with particular emphasis on low-skilled jobs and poverty reduction. The section ends with an overview of inputs.

2.1 Production units

Information on the extent of the industry in terms of the major fruit types, established hectares and age distribution of orchards and vineyards, and number of production units, is presented in Tables 2.1, 2.2 and Figure 2.1 respectively.

2.1.1 Major fruit types

From the information given in Table 2.1 it may be seen that 32 567 hectares are established under pome fruit, 22 653 under grapes and 19 279 under stone fruit.

As the traditional production region, the Western Cape is the main province in the industry, with the largest concentration of growers and 74% of the total area (ha) planted. The Northern Cape accounts for 15% and the Eastern Cape for 8% of the total area planted. The Northern Cape is important for table grape production, with 48% of all vineyards established in that province. The Eastern Cape, mainly the Langkloof Valley accounts for 19% of apple and 12% of pear hectares in South Africa.

Fruit production in other provinces offers specific niche marketing opportunities, such as apples from the Free State and peaches from Northern Province (which supply the first new season fruit into the local market) and grapes from the Northern Cape (which supplies the first southern hemisphere fruit into the United Kingdom (UK) and European Union (EU) in the late autumn).

2.1.2 Age distribution of orchards and vineyards

The age distribution of orchards and vineyards is shown in Table 2.2. Non-bearing bearing units are in the age group of 0 - 3 years, and coming into full production is the area specified as the 4 - 10 year group. Plantings older than 25 years (see columns marked 16 - 25 year and 25+) are deemed old and generally show declining yields and quality. New plantings are in line with changing consumer and market “wants”.

Industry data reflects that intensive orchard replacement (younger than 10 years) in major fruit types has taken place since 1995. In apples, new plantings (28%) indicate mere replacement of older orchards (40%) and increased volumes of new cultivars will be the result of good horticultural management. In pears, orchards under good management are productive beyond 25 years and the relatively high ratio of new plantings (34%) indicates increased market volumes during the next five years.

The life expectancy of stone fruit orchards is 18 years. Nectarines and plums reflect a high percentage of new plantings, which will result in increased market volumes between 2007 and 2012. The high percentage of full bearing orchards in the case of plums (40%) indicates that the production volumes will remain strong during the next five years, while with grapes, 60% of vineyards are of prime age, with a good ratio of new plantings as replacement for the older hectares.

2.1.3 Number of production units

Information presented in Table 2.3 is based on the number of farms under fruit production and not the number or size of business units. The “fruit basket mix”, or number of fruit types per farm, is presented in Figure 2.1.

The information based on hectares reflects that the majority of fruit production units are smaller than 30 ha, thus indicating membership of cooperative or company pack house facilities (e.g. the large pack house and fruit storage facilities in most Boland towns). Grapes are packed on the farm close to the site of production. Harvesting and packing are labour intensive operations and economies of scale are critical, hence the predominance of small units.

Production units larger than 30 hectares are found mainly in apple-growing. A number of apple growers (units larger than 60 hectares) also operate their own packing and cold storage operations. Economies of scale and consistency in yield and quality are three key characteristics of these operations.

Table 2.1: Number of fruit and grape growers and hectares per province in South Africa

Province	Hectares planted to deciduous fruit and table grapes							Total hectares	Total no. producers
	Apples	Pears	Apricots	Peaches (dessert & cling)	Nectarines	Plums & prunes	Table grapes		
Gauteng	7			37	19	23	41	127	13
Gauteng vs. industry (%)	0			0.4%	1.3%	0.5%	0.2%	0.2%	
KwaZulu-Natal			1	12	16	1		30	1
KwaZulu-Natal vs. industry (%)			0	0.1%	1.1%	0		0.04%	
Limpopo	2		14	206	188	83	888	1 381	120
Limpopo vs. industry (%)	0		0.3%	2.3%	12.9%	1.8%	3.9%	1.6%	
Mpumalanga	154			103	24	1	9	291	23
Mpumalanga vs. industry (%)	0.7%			1.1%	1.6%	0	0	0.4%	
Northern Cape			53	6	6	43	10 795	10 903	265
Northern Cape vs. industry (%)			1.2%	0	0.4%	1.0%	47.7%	14.6%	
North West			1	45	21	22	106	195	31
North West vs. industry (%)			0	0.5%	1.4%	0.5%	0.5%	0.3%	
Eastern Cape	4 007	1 405	277	179	82	216	4	6 170	90
Eastern Cape vs. Industry (%)	19.3%	12.0%	6.5%	2.0%	5.6%	4.8%	0.0%	8.3%	
Free State	285		4	209	9	6	8	521	23
Free State vs. Industry (%)	1.4%		0.1%	2.3%	0.6%	0.1%	0	0.7%	
Western Cape	16 330	10 377	3 925	8 201	1 094	4 151	10 801	54 879	1 660
Western Cape vs. industry (%)	78.6%	88.1%	91.8%	91.1%	74.9%	91.3%	47.7%	73.7%	
TOTAL HECTARES	20 785	11 782	4 274	8 999	1 461	4 545	22 653	74 499	2 226

Source: DFPT, 2006 Table 2.2: Age grouping of deciduous fruit and table grape plantings in South Africa

Table 2.2: Age grouping of deciduous fruit and table grape plantings in South Africa

Fruit	Percentage of total ha				
	25+ years	16–25 years	11–15 years	4–10 years	0–3 years
Apples	40.3%	16.1%	15.9%	20.6%	7.1%
Pears	23.5%	23.3%	18.3%	25.0%	9.9%
Apricots	8.3%	28.1%	19.4%	29.4%	14.8%
Peaches	5.0%	19.2%	26.7%	30.9%	18.2%
Nectarines	0.2%	16.4%	25.6%	31.7%	26.1%
Plums	1.2%	7.4%	27.1%	39.5%	24.8%
Grapes	7.1%	16.1%	17.9%	43.3%	15.6%

Source: DFPT, 2006

Table 2.3: Size of the production units per fruit type

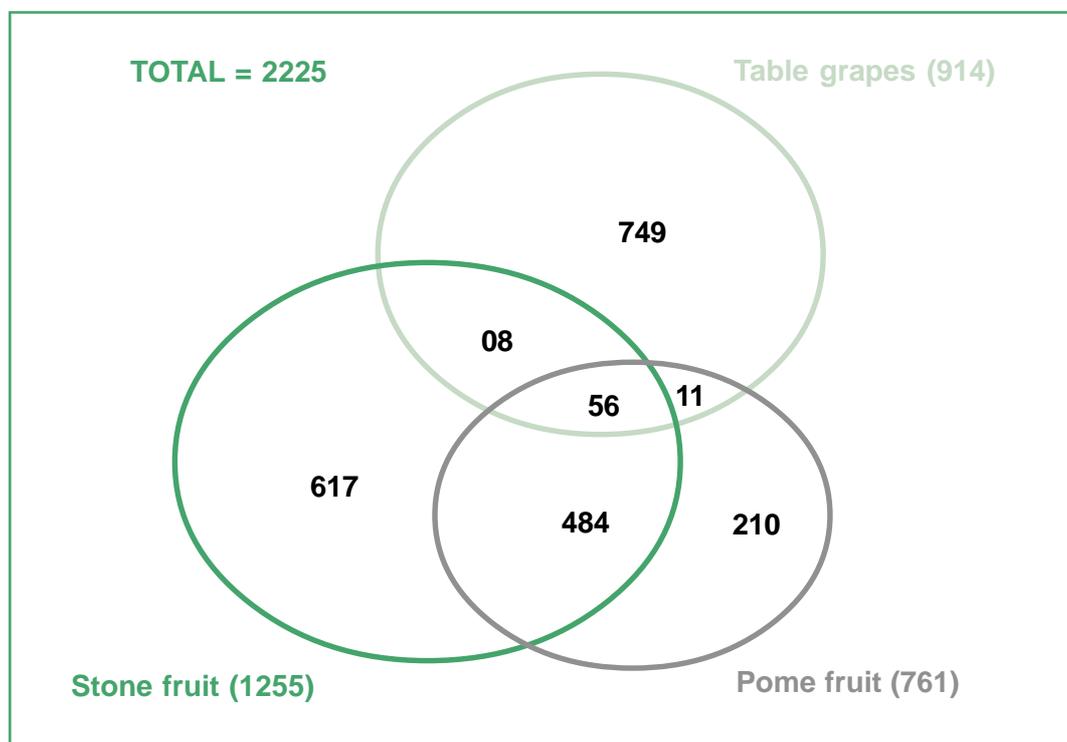
Size of production unit (Ha)	Fruit type							Total no of units
	Apples	Pears	Plums	Peaches	Nectarines	Apricots	Grapes	
0 – 2	74	150	151	335	162	230	417	1 519
2 – 5	85	188	195	354	127	258	444	1 644
5 – 10	101	191	138	246	50	203	332	1 314
10 – 30	246	265	122	258	30	120	581	1 765
30 – 60	145	82	15	45	4	5	169	532
60 – 80	34	18	18	2	1	0	20	93
80 – 120	32	7	1	1	0	0	8	55
120 – 180	15	4	0	0	0	0	2	25
18 – 240	8	0	0	0	0	0	0	8
240 – 300	2	0	0	0	0	0	1	3
300 – 500	3	0	0	0	0	0	0	3
> 500	0	0	0	0	0	0	0	0

Source: DFPT, 2006

The fruit basket mix depicted in Figure 2.1 indicates that grape producers are the largest specialised group. Grape production is the most labour intensive fruit farming system of all the fruit types. Labour is needed from the commencement of vine growth in the spring till the picking and packing of the grapes – a period of six to seven months.

Stone fruit growers have mixed baskets, with apples and/or pears as the main complementary crops. This mix allows for utilisation of labour over a longer period in the season due to differing bloom periods, thinning operations, harvest dates and timing of pruning practices. Seasonal labour is contracted in for the hand operations of thinning and picking. Many growers recommend a mixed basket in order to counter risks due to variation in climate and markets.

Figure 2.1: Fruit farm “basket” mix

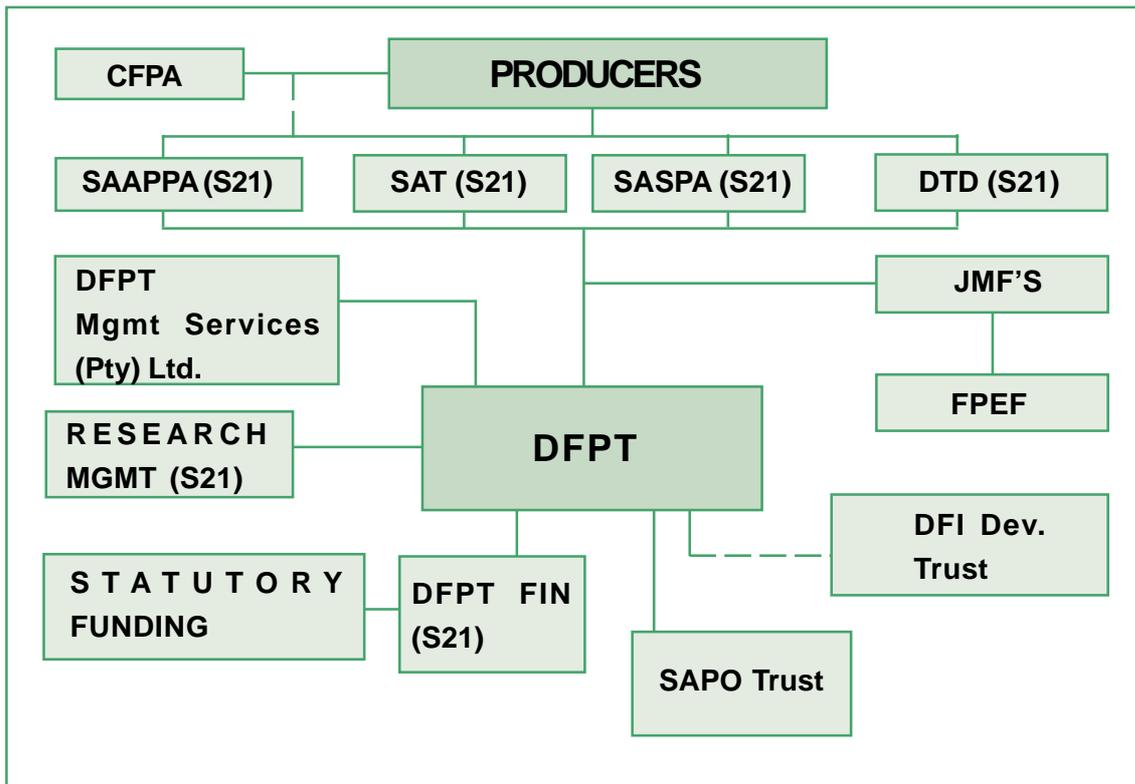


Source: DFPT, 2006

2.2 Producer and associated organisations

Grower participation and control of their interests in the industry are structured by means of fruit type producer associations (Section 21), as illustrated in Figure 2.2.

Figure 2.2: Structure of the producer interest in the deciduous fruit industry



The main associations and institutional stakeholders in the industry are listed below. Their objectives are stated or, where this is not possible, a brief description of the organisation is provided.

Deciduous Fruit Producers' Trust (DFPT)

Website: <http://www.dfpt.co.za>

The objectives of the DFPT are as follows:-

- To protect and expand market share based on effective communication To build long-term relationships
- To lobby with relevant authorities
- To position deciduous fruit among relevant target audiences
- To lower input costs and enhance efficiencies in the export value chain To enhance the long-term economic viability and sustainability of the industry thereby increasing the bargaining position of the producers

South African Apple and Pear Producers' Association (SAAPPA)

Website: <http://www.dfpt.co.za>

The objectives of the SAAPPA are as follows:-

- To rationalise and promote the production and marketing of apples and pears, and apple and pear products
- To encourage and pursue constructive dialogue and mutual cooperation with government and other parties 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 a reciprocal information system and promote the maintenance of responsible and sustainable production and marketing practices
- To support and assist the development of the Association's decision-making systems and structures

South African Stone Fruit Producers' Association (SASPA)

Website: <http://www.dfpt.co.za>

The objectives of the SASPA are as follows:-

- To promote the common interest and specific needs of stone fruit producers in South Africa and to act as their official representative
- To rationalise and promote the production and marketing of stone fruit and stone fruit products
- To encourage and pursue constructive dialogue and mutual cooperation with government and other parties
- To foster mutual trust and long-term relationships among role-players and stakeholders
- To establish and promote a reciprocal information system to enable stakeholders to make informed market decisions

South African Table Grape Industry (SATI)

Website: <http://www.satgi.co.za>

The objectives of the SATI are as follows:-

- To maintain South Africa's position as the preferred country of origin for retailers around the world, as well as to ensure that the industry remains progressive, equitable and sustainable as it moves to the future
- To gain increased international market access for South African grapes, as well as to ensure effective information systems that will allow growers and exporters to make sound decisions.

DFPT Research

Website: <http://www.dfptresearch.co.za>

The objectives of the DFPT Research are as follows:-

- To direct and guide research to address short and long-term needs of the industry
- To institute effective and efficient management systems
- To access and develop new funding sources
- To facilitate the development of people to create the required capacity to meet the needs of the industry now and in the future
- To institute an effective system of transferring information and results of research back to the growers and other funders of research
- To develop new facts that will improve growers' ability to compete in world markets
- To discover and develop new technologies that will make South African growers world leaders in specific fields

Fresh Produce Exporters' Forum (FPEF)

Website: <http://www.fpef.co.za>

The objectives of the SATI are as follows:-

- The FPEF is a unique consortium of 70 South African companies. These companies collectively export nearly 90% of all fresh fruit volumes from South Africa.
- The forum sees itself as the international community's gateway to providing South Africa's finest quality produce from highly reputable South African exporters.
- Membership of the FPEF is open to all exporters, export agents, grower-exporters and service providers as well as to the major producer associations.

Perishable Products Export Control Board (PPECB)

Website: <http://www.ppecb.com>

The objectives of the PPECB are as follows:-

- To advise producers with regard to harvest readiness/ripeness, pre-harvest grading and orchard residue samples
- To carry out product inspection (at Inland Pack house or Intake Depot)
- To provide export notification by means of capturing data and handling enquiries for information and advice on optimum post-harvest procedures and carrying conditions
- To handle cold store registration

Food and Allied Workers' Union (FAWU)

Website: <http://www.cosatu.org.za>

The objectives of the FAWU are as follows:-

- To improve the material conditions of its members and of the working people as a whole
- To organise the unorganised
- To ensure worker participation in the struggle for peace and democracy principles

National African Farmers' Union (NAFU)

Website:

The objectives of NAFU are as follows:-

- To lobby for policy reforms aimed at levelling the field in all agricultural matters with particular reference to land acquisition, agricultural funding, market access and public policy
- To lobby for the provision of appropriate services, such as extension, marketing and credit to members
- To identify, quantify and address the needs of members
- To facilitate the provision of training
- To empower women and young people so as to enable them to participate fully in farming activities

Agricultural Research Council (ARC)

Website: <http://www.arc.agric.za>

The objectives of the ARC are as follows:-

- To commercialise resource poor agriculture
- To improve natural resource use and management
- To provide information service support
- To improve competitiveness
- To enhance quality of life

National Agricultural Marketing Council (NAMC)

Website: <http://www.namc.co.za>

The objectives of the NAMC are as follows:-

- To engage in the minimum market intervention
- To increase market access for all market participants
- To promote efficient marketing of agricultural products
- To optimise export earnings of agricultural products
- To enhance the viability of the agricultural sector

South African Plant Improvement Organisation (SAPO)

Website: <http://www.saplant.co.za>

- SAPO is a specialist plant improvement organisation owned by deciduous fruit growers, DFPT, CPA, and DTD.
- It is responsible for the production of certifiable, propagation plant material.
- It is also responsible for phytosanitary and genetic upgrading (improvement) of deciduous fruit plant material. This includes virus elimination and testing, establishment and maintenance of nucleus, foundation and mother blocks, as well as the selection of propagation plant material and trueness to variety controls
- SAPO is the main supplier of such propagation plant material to deciduous fruit nurseries. In the order of 14 million propagation units are distributed to nurseries annually.
- It is the distribution agent of more than 200 scion varieties to deciduous tree and vine nurseries.
- It is a specialist in the importation of new varieties worldwide and a leader in variety development and commercialisation.

2.3 Fruit exporters

The Fresh Produce Exporters' Forum (FPEF) is made up of voluntary members drawn from agents and companies engaged in the business of export within the industry. Current members include 88 of 172 registered exporters, representing more than 80% of exported volumes

As may be seen from Table 2.4, there is an imbalance in this secondary activity of the supply chain in that in 2005 the top 20 exporters accounted for 86% of total grape exports, 84% of stone fruit and 79% of pome fruit exports. The italic number represents the number of exporters responsible for export of the remaining volumes. Thus in 2005, 108 exporters were responsible for exporting 14% of total grape exports, 16% of stone fruit and 21% of pome fruit exports. A decreasing trend is evident from 2002 to 2005 in the number of smaller exporting companies.

Table 2.4: Volume of export crop handled by exporters, 2000 – 2005

	Top 10 exporters			Top 20 exporters		
	Grapes	Stone	Pome	Grapes	Stone	Pome
2005	72%	74%	65%	86%	84%	79%
				108	78	149
2004	73%	72%	64%	85%	85%	77%
				154	107	182
2003	72%	73%	76%	85%	85%	77%
				158	109	198
2002	69%	69%	64%	82%	82%	77%
				165	115	183
2001	77%	74%	68%	87%	86%	81%
				144	90	179
2000	79%	81%	65%	88%	91%	79%
				131	83	153

Source: DFPT, 2005

The business acumen of the exporter was shown to be a significant factor in the profitability of fruit growers in an ongoing cost analysis study of Ceres and Overberg growers. Analyses of this nature are conducted by various accountancy and auditing firms which prepare annual financial reports for fruit and grape growers.

During the 2005/06 season, the top 25% of growers (based on farm profitability) primarily exported via two companies, while fruit from the lower group was handled by numerous other exporters (CPA, 2006). This situation gives rise to a number of serious problems, such as fragmentation of packed volumes and market information and lack of market coordination. It has a negative impact on the maintenance of discipline, especially with regard to quality, and undermines bargaining power with category managers and supermarkets. It causes fragmentation on the supply side when growers split consignments destined for the same market between various agents or exporters, resulting in a weakened competitive position. There have also been instances where “small” exporters have failed to reimburse growers for fruit received. Another impact is that of trading fruit consignments between agents (a common practice where smaller agents are used as mere procurement mechanisms by larger organisations).

Exporters do, however, offer a range of important services to their clients, in return for “commission plus costs”. These include the following:

- Advance payments in terms of various structures and dates after dispatch
- Ordering of packing materials, packing guidelines and quality control assistance
- Consolidation of accounts once all monies have been received from the buyers
- Tracking of consignments
- “Export” paper work
- Transport and logistics

2.4 Employment, skills and labour absorption

Full-time labourers employed on fruit farms are primarily employed for a number of specialist tasks such as pruning and training of trees or vines. Labour is also required to carry out thinning practices during blooming or during the first four weeks of fruit growth. Other tasks include harvesting supervision, operational duties in the pack house, irrigation management, scouting for insects and diseases on a seasonal basis, tractor or forklift driving and grafting.

Seasonal labour is employed on a contract basis for a fixed period of time with the main purpose of harvesting the crop and/or fruit packing. The prescribed minimum wage is used as a baseline for determining basic wages in accordance with the legislation governing conditions of service. Much of this labour is drawn from the ranks of unemployed persons in neighbouring towns. In some cases a system similar to the previous recruitment of migrant labour continues to be used.

The absorption of all labour, expressed in terms of full-time equivalents, is presented in Table 2.5. Common problems experienced in terms of labour are low levels of education and literacy; social problems such as absenteeism, alcohol abuse and family strife; and poor health.

Table 2.5: On-farm employment

Fruit	Labourers*	Dependants
Apples	28 540	114 158
Grapes	33 435	133 741
Pears	14 921	59 684
Peaches	10 872	43 489
Plums	5 443	21 770
Apricots	4 745	18 981
Nectarines	1 822	7 287
TOTAL	99 778	399 110

* Casual labour converted to permanent equivalents

Source: OABS, 2005.

In terms of the proposed AgriBEE process, it is imperative that the farmer be actively engaged in the educational and social upliftment of the workforce. In cases where the literacy levels of the workforce are low, only half of the potential score value can be carried forward to the scorecard. Once 80% of the labour has qualified at the basic literacy levels stated in the draft Charter, the grower will be able to score full points for skills development. Socially conscious consumers in developed world markets may provide a measure of return on the capital investment in human resource development that this demands.

Another important factor in terms of human resource development within the AgriBEE process is the employment of black matriculants via Agricultural Sector Education and Training Authority (AgriSETA) learnerships. Technically skilled and academically qualified black persons need to be appointed to positions of middle and senior management, while black women need to be appointed in senior management positions. Black persons who lack schooling or skill certificates should be given accreditation for prior learning. Internships would allow college and university students to gain valuable hands-on experience.

Finally, the industry and enterprises within the industry should invest in the social sphere of the farm labour community by, for example, providing care for preschool children, supporting rural schools and sport activities, facilitating access to health services and making provision for the welfare of senior citizens.

2.5 Inputs and farming requisites

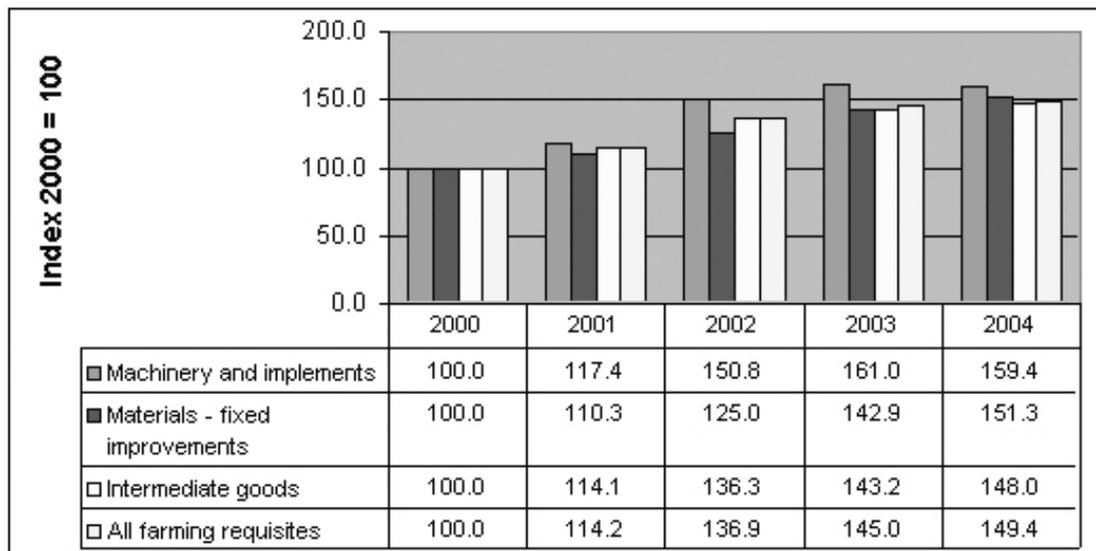
Fruit farming is a large user of specialised inputs and sophisticated agricultural chemicals. Changes in selected costs for the 2000 to 2004 seasons are shown in Figures 2.3 and 2.4. These show that the index of intermediate goods increased by 48 points due to

increases in the cost of crop protection chemicals, fertilisers, and repairs and maintenance of equipment and machinery. Inflation in costs, coupled with declining income after 2002, have put fruit and grape growers in a tight cost squeeze situation.

Figure 2.3: Inflation on direct cost items, 2000 to 2004

Source: Louw, 2006

Figure 2.4: Inflation on selected cost items, 2000 to 2004



Source: Louw, 2006

2.6 Strategic pointers

The industry has put a number of actions and measures in place to address the key strategies identified in the FIP (DFPT, 2005; Brodie, 2006). Strategic pointers within the industry as a whole are summarised as follows:

Strengths

- Full spectrum of deciduous fruit and table grape cultivars
- Established supplier in UK (£) and EU (•) supermarkets
- Industry has all traceability systems in place, as required by accreditation protocols
- Extended supply season
- High level of investment in current technology within packhouses and cold chain facilities
- Orchard and vineyard production efficiency and knowledge base
- Relatively high level of new plantings (<10years), which incorporate current technologies relating to cultivars, irrigation, IPM and mechanisation
- Financial management of research and development strategies
- Communication mechanisms to all participants in the industry

Weaknesses

- Reliance on UK and EU as main export market
- Fragmentation within industry
- Lengthy supply chain beyond pack house
- Lack of industry control on efficiency and productivity in supply chain beyond farm gate and pack house door
- Delays due to degradation of supporting infrastructure within supply chain – handling facilities at ports, roads, energy supply, cold chain breakage
- Poor skills and knowledge level of new entrants
- Relatively high cost of production

Opportunities

- Market access initiatives to Middle East, Asia (India, Indonesia) and China
- Increasing demand for fresh fruit in Africa
- Potential for increased local market consumption

Threats

- Lack of government support in terms of market access, border protection and trade initiatives
- Lack of government support for redevelopment of infrastructure following losses due to natural disasters
- Currency variability
- Inflation rate with regard to cost of labour and farming and packing requisites
- Impact of climate change on the Western Cape
- Availability and cost of irrigation water
- Availability of skilled labour

3. Markets and trends

This section provides an overview of trends in turnover, investment, imports and exports. It summarises the markets in which the industry is operational and gives attention to market and demand trends and competitiveness. Market opportunities and growth potential are outlined and the impact on other agricultural subsectors is examined.

3.1 Turnover of South African fruit and grapes in the export market

South African fruit and grapes are mainly destined for the traditional markets in the UK and EU countries. Thus 70% of apples and 88% of grapes exported are absorbed by these markets. However, with access to the global market, South African produce is now sold in significant volumes in other developing northern hemisphere countries, such as the Far and Middle East, Asia and Russia. Markets have also opened in Africa. The best farm-gate prices are still obtained for products sold in UK£ and EU• currency, despite the various accreditations required to participate in these markets.

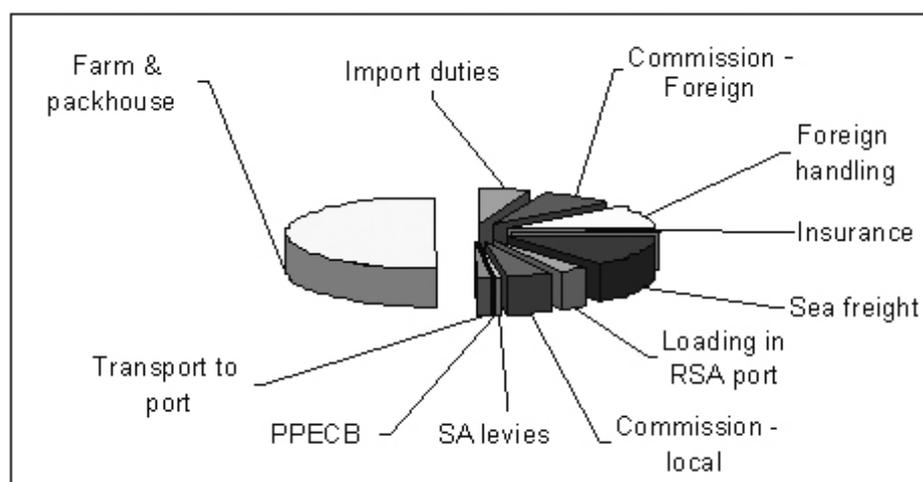
The fruit supply chain (see Figure 1.1) is a complex combination and integration of stakeholders and role-players. Exports generate substantial off-farm value in terms of monies paid for services and logistics, as shown in Table 3.1 and Figure 3.1 respectively. In the current system of selling fruit on a consignment basis as it moves along the chain, returns at the farm gate amount to only 10% to 20% of the gross product value. Consequently, once the fruit leaves the farm or pack house, growers are exposed to business risks which are not directly incurred by them.

Table 3.1: Turnover and costs for export fruit and grapes, 2005 season (R millions)

ITEM	Grapes	Apples	Pears	Plums	Peaches	Apricots	TOTAL
Gross value	2 765	1 559	1 064	442	130	50	6 010
Import duties	138	86	59	22	14	5	324
Commission (foreign)	221	122	83	29	9	3	466
Foreign handling	227	186	127	35	8	4	586
Insurance	14	12	8	4	1	0.3	38
Sea freight	359	249	170	53	16	6	853
Loading in SA port	55	70	48	12	7	1	193
Commission (local)	124	86	59	18	5	2	294
SA levies	11	7	5	3	1	0.3	26
PPECB	9	5	3	2	1	0.1	20
Transport to port	38	21	14	6	1	1	81
Farm & pack house	1 554.	622	409	246	55	21	2 906
Net farm income (R millions)	13	94	81	14	14	7	222
Net farm income % Gross value	1%	6%	8%	3%	11%	13%	4%

Source: OABS, 2005

Figure 3.1: Distribution of costs incurred in export of all South African fruit and grapes, 2005 season



Source: OABS, 2005

Fruit and grapes sold in the export markets generate a greater unit price than that achieved on the local market (see Table 3.2). Management orientation and understanding of “the rules of the export game” are critical factors in the pathway to success in fruit production. Since the 2002 season, the trend in net farm income (NFI%) has been downward (see Table 3.3). The decline in grape profitability is due to the increased volumes in the traditional markets, particularly during the early northern hemisphere market window, and the simultaneous strengthening of the Rand. Stone fruits, despite the need for intensive and critical timing of management inputs, have withstood the onslaught of rising costs, price variation and currency fluctuations better than pome fruit and grapes.

Table 3.2: Summarised prices (R/ton) and % crop distribution for export, local and processed fruit and grapes and total crop value, 2004/05

Table 3.2: Summarised prices (R/ton) and % crop distribution for export, local and processed fruit and grapes and total crop value, 2004/05

FRUIT TYPE	Prices (R/ton) & % of crop distribution						Total production (tons)	TOTAL VALUE (R x '000)
	Export		Local		Processed			
	Rand/ton	%	Rand/ton	%	Rand/ton	%		
Apples	3 625	34%	2 720	36%	341	30%	658 940	1 437 598
Pears	3 802	47%	2 458	18%	490	34%	328 631	765 078
Apricots	7 185	8%	3 662	4%	1 017	74%	43 261	82 198
Peaches	8 236	4%	4 249	22%	1 033	71%	184 783	360 452
Plums	5 541	72%	2 651	24%	137	4%	55 278	250 229
Grapes	5 369	60%	4 143	8%	727	32%	351 483	1 298 870

Source: OABS, 2005

Table 3.3: Variation in net farm income (%) 2002 – 2005

YEAR	APPLES	PEARS	PLUMS	PEACHES	APRICOTS	GRAPES
2002	20	23	18	7	24	20
2003	5	9	16	23	19	9
2004	8	11	14	16	13	2
2005	6	8	3	11	13	1

Source: OABS, 2002; 2003; 2004; 2005

3.2 South Africa's position in the global export market

South Africa is a relatively small fruit and grape grower in terms of global hectares. However, the country is a major volume exporter in global terms, as illustrated in Figures 3.2, 3.3, 3.4 and 3.5. The major competitor suppliers are listed below.

Apples

- Southern hemisphere: Chile, Brazil, New Zealand
- Northern hemisphere: China, France, Italy, US, Poland, Netherlands, Belgium

Pears

- Southern hemisphere: Argentina, Chile
- Northern hemisphere: China, Netherlands, Belgium, US, Italy

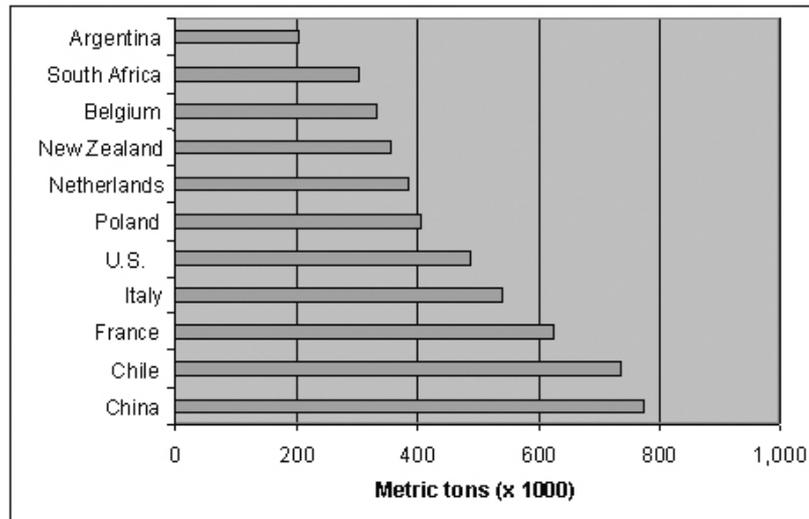
Plums

- Southern hemisphere: Chile
- Northern hemisphere: Spain, US

Grapes

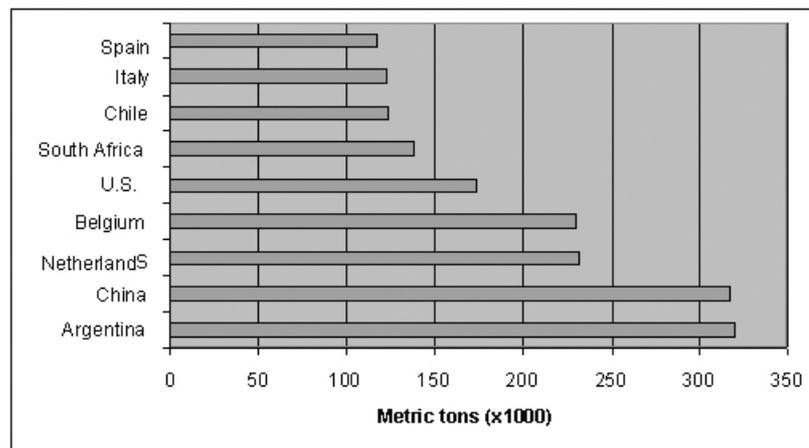
- Southern hemisphere: Chile
- Northern hemisphere Italy, Turkey, Mexico, Spain

Figure 3.2: South Africa's comparative position (tonnage) in global apple exports, 2004



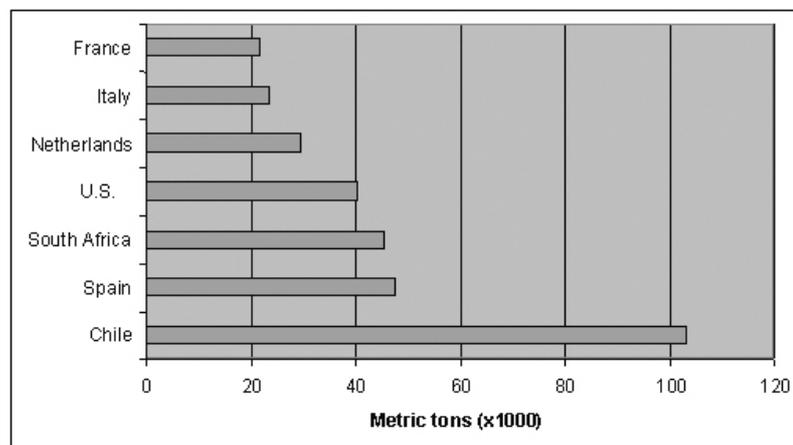
Source: FAO, 2005

Figure 3.3: South Africa's comparative position (tonnage) in global pear exports, 2004



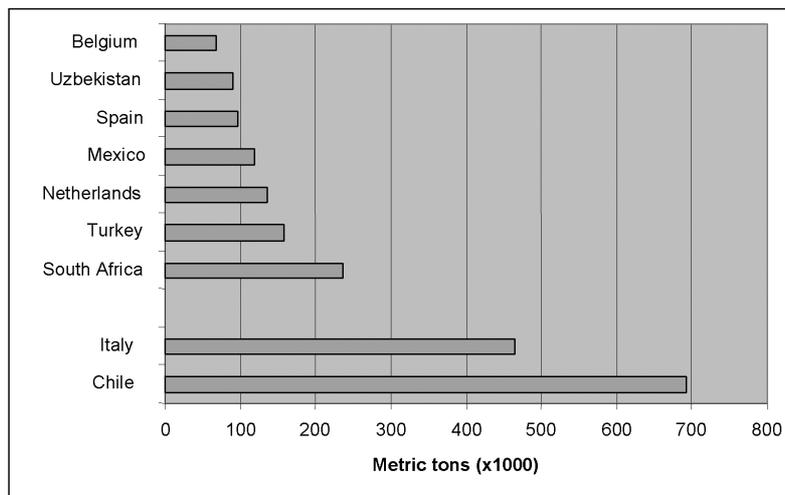
Source: FAO, 2005

Figure 3.4: South Africa's comparative position (tonnage) in global plum exports, 2004



Source: FAO, 2005

Figure 3.5: South Africa's comparative position (tonnage) in global grape exports, 2004



Source: FAO, 2005

3.3 Imports of fruit and grapes into South Africa

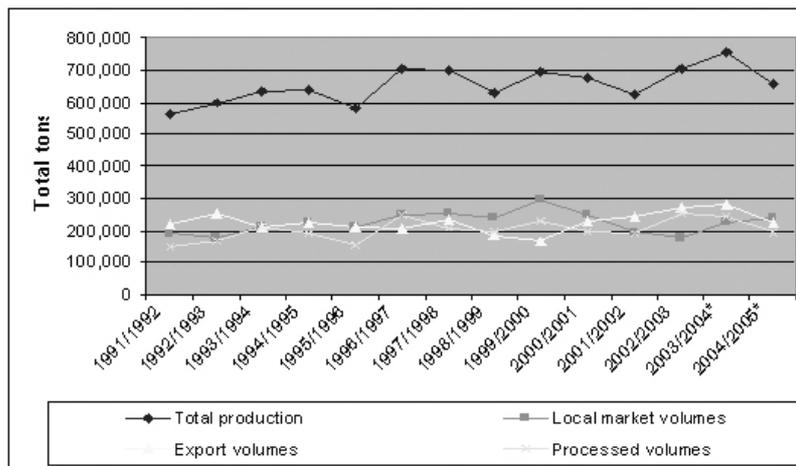
The large supermarkets (e.g. Woolworths, Pick n' Pay and Fruit & Veg City) have declared their intention to provide fresh fruit and grapes to the South African consumer throughout the year. Although apples and pears can be stored for as long as ten months of the year by means of controlled atmosphere technology, consumers are weary of purchasing poor quality fruit. Consequently, limited volumes of highly priced imported stone fruit and grapes can be found in these stores out of the South African season. The industry is wary of the potential entry of large supplies of Chinese apples on the local market in the spring of 2006.

3.4 Trends in fruit and grape markets

Historical market information for selected crops is presented in Figures 3.6 to 3.14. These graphs demonstrate the significant role of the export market as an income generator. They also show that prices on the local markets are volume sensitive and that crop volumes are adversely affected by high risk weather events, such as frost (1995/96), hail and delayed foliation due to warm winters.

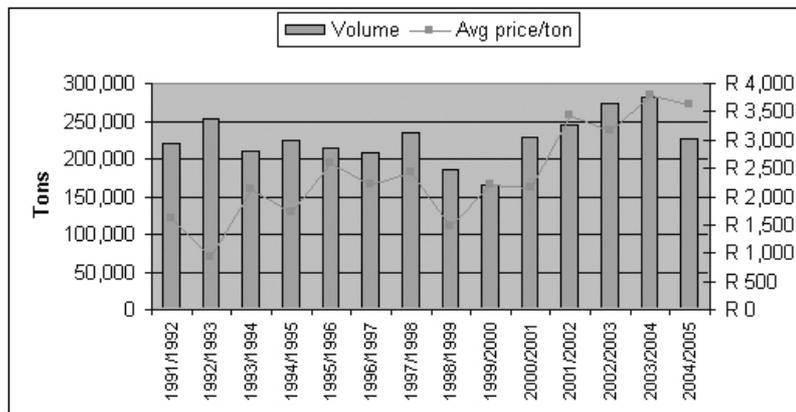
It is clear, from these graphs, that growth in local market volumes is horizontal and indicates no growth in per capita consumption for the main fresh fruit products. Growth in stone fruit volumes has been absorbed by increased exports to the traditional markets, but the current levels of returns at the farm gate indicate that these markets are at risk of severe oversupply.

Figure 3.6: Distribution of South African apple crop, 1992 – 2005



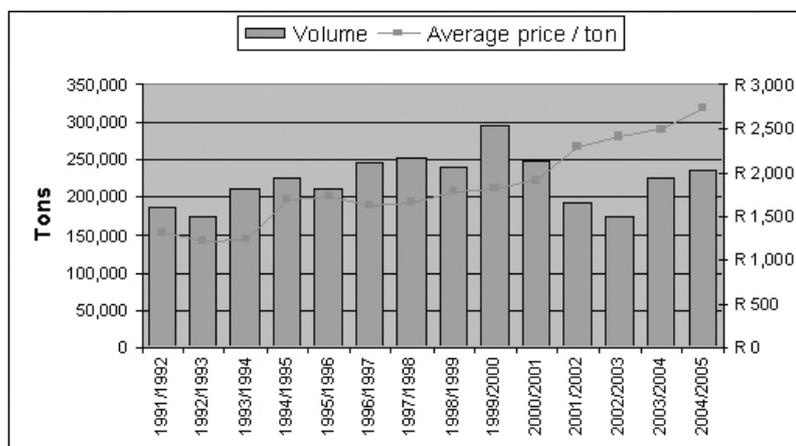
Source: OABS, 2005

Figure 3.7: Historical apple export market volumes vs. price



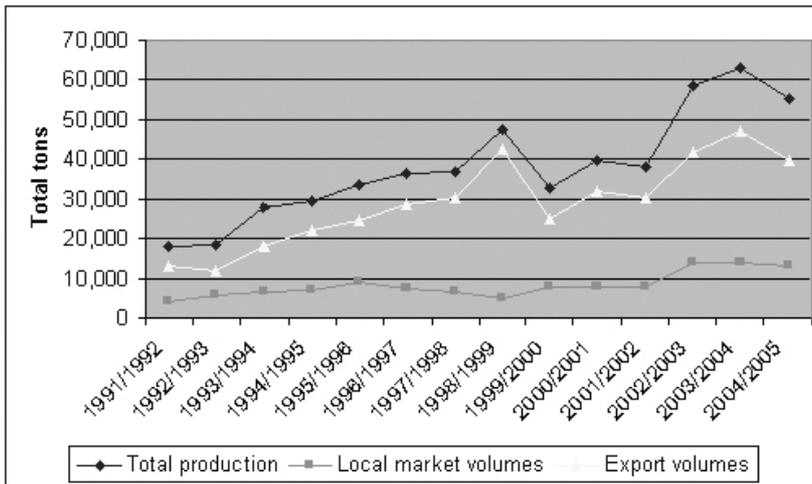
Source: NDA, 2005; OABS, 2005; PPECB, 2005

Figure 3.8: Apple local market historical volumes vs. price trends



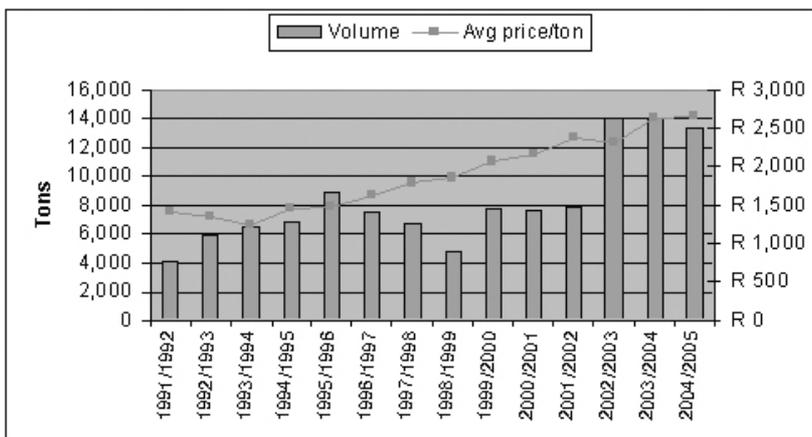
Source: NDA, 2005

Figure 3.9: Distribution of South African plum crop



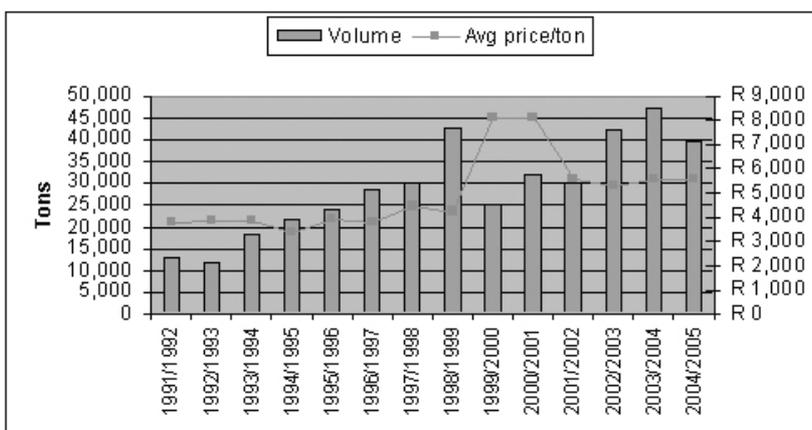
Source: OABS, 2005

Figure 3.10: Plum historical local market volume vs. price trends



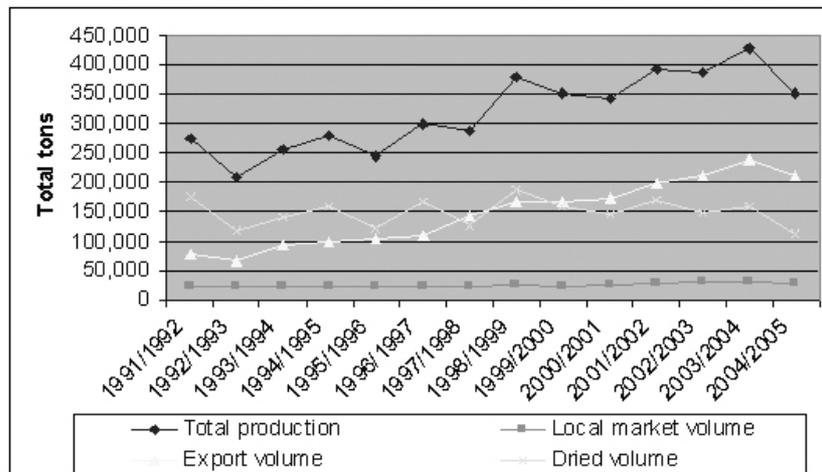
Source: NDA, 2005

Figure 3.11: Plum historical export volume vs. price trends



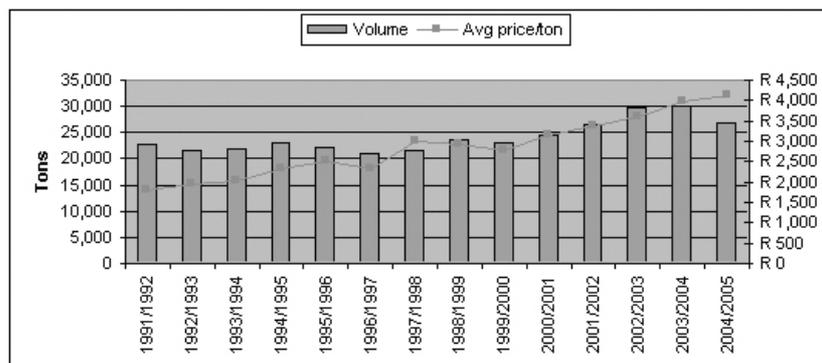
Source: NDA, 2005; OABS, 2005; PPECB, 2005

Figure 3.12: Distribution of South African table grape crop



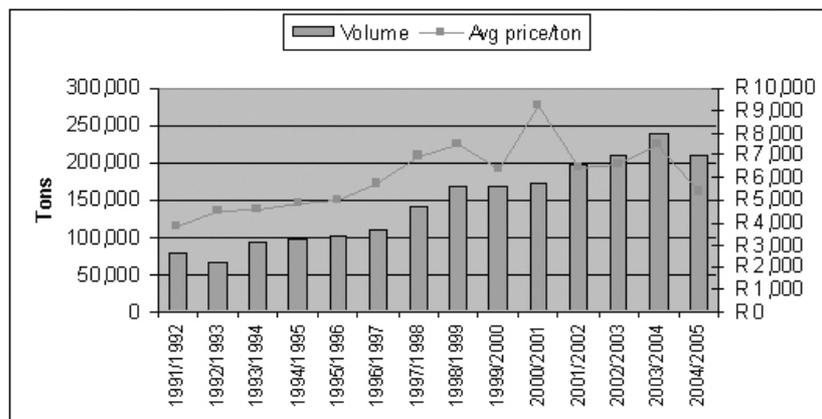
Source: OABS, 2005

Figure 3.13: Table grape local market historical volume vs. price



Source: NDA, 2005

Figure 3.14: Table grape historical export volume vs. price trends



Source: NDA, 2005; OABS, 2005 PPECB 2005

3.5 South African trade in apple juice concentrate

The extent of the importation of concentrated apple juice by local processors since 2002 is reason for concern, given the size of the local industry. The large increase in foreign juice coming into the country may indicate a lack of processing capacity at critical times during the year. China supplied 82% and Brazil 12% of these imports in 2004. The main destination for South African exports is the US.

Table 3.4: RSA trade in apple juice concentrate, 2002 – 2004

YEAR	EXPORT	IMPORTS
2002 (tonnes)	8 644	2 054
2003 (tonnes)	14 867	5 577
2004 (tonnes)	14 369	4 161
2004 (value)	US\$13 877 000	US\$2 944 000

Source: FAO, 2006

3.6 Investment in orchards and cold storage

The gross value of capital investment (land, fixed improvements, machinery and equipment) at current values is estimated at R18 000 million. The cost of production for selected fruit crops (see Table 3.5) reflects the intensive nature of the infrastructure needed in grape cultivation (e.g. trellis support systems and micro irrigation).

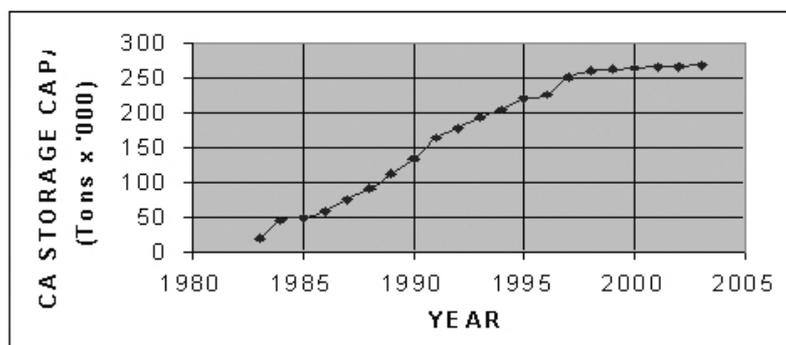
Table 3.5: Full production costs for selected fruit crops, 2004

FRUIT TYPE	ESTABLISHMENT (R/ha)	MAINTENANCE Non-bearing (R/ha)	MAINTENANCE Full-bearing (R/ha)
Apples	116 221	30 431	111 387
Pears	108 666	26 953	95 524
Table grapes	137 813	47 446	125 528
Plums	93 243	22 760	101 043

Source: OABS, 2004

Intensive fruit production systems require adequate cold storage capacity at site. The growth in controlled atmosphere (CA) cold rooms, which are a function of both short and long-term storage, has flattened off since the late 1990s (see Figure 3.15). Projects to increase capacity since 2004 are based on BEE projects and related funds.

Figure 3.15: South African CA cold storage capacity



Source: Hurndall, 2006

3.7 Marketing mix

Supermarkets and consumer health awareness programmes (e.g. “5-a-day”) distinguish between fresh fruit products on the basis of colour and eating characteristics, giving rise to new concepts such as “bicolour”. Tables 3.6 to 3.8 present crop market mixes, which serve as guidelines in market orientated planting of apples, pears or plums.

Table 3.6: Apple cultivar market mix

APPLE MARKET CHARACTERISTIC	CULTIVAR – HARVEST TIME				
	EARLY		MID-SEASON		LATE
	JAN	FEB	MAR	APR	MAY
BICOLOUR		Royal Gala	Fuji	Pink Lady®	
			Braeburn		Sundowner®
RED		Topred	Early Red One		
		Red Delicious	Starking		
YELLOW			Golden Delicious		
GREEN				Granny Smith	

Table 3.7: Pear cultivar market mix

PEAR MARKET CHARACTERISTIC	PEAR CULTIVAR – HARVEST TIME			
	EARLY		MID-SEASON	LATE
	DEC	JAN	FEB	MAR
BICOLOUR	Bon Rouge	Rosemarie	Doyenne du Comice	
			Forelle	
GREEN		Clapp's Favourite	Packham's Triumph	
		Abate Fetel	Beurre Hardy	
YELLOW		William's Bon Chretien (Bartlett)		
BROWN			Beurre Bosc	Winter Nelis
			Golden Russet Bosc	

Table 3.8: Plum cultivar market mix

PLUM MARKET CHARACTERISTIC	PLUM CULTIVAR – HARVEST TIME					
	EARLY		MID-SEASON		LATE	
	NOV	DEC(15)	DEC	JAN	FEB	MAR
YELLOW			Sun Kiss	Sun Dew	Songold	
				Sun Breeze		
				Sun Supreme		
				Golden Kiss		
RED	Red Beaut	Santa Rosa	Lady Red	Laetitia		
	Pioneer	Souvenir	Reubennel Ruby Red			
BLACK /PURPLE		Sapphire			Angeleno	

3.8 Competitiveness rankings of the South African apple industry

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. The competitiveness of apple and pear producing countries is determined on an annual basis by Dr Desmond O'Rourke, Bellrose Inc., in Washington State. His rankings for apples (see Tables 3.9 and 3.10) are used as a guideline for the evaluation of the South African fruit industry. Although no such analyses are available for stone fruit types and grapes, ranking in terms of off-farm issues would be similar for these crops.

Table 3.9: Ranking of major apple producing country competitiveness, 2006

RANK	OVERALL	PRODUCTION EFFICIENCY	INFRASTRUCTURE & INPUTS	FINANCIAL & MARKETS
1	Chile	Netherlands	Chile	France
2	New Zealand	New Zealand	USA	Belgium
3	France	South Africa	New Zealand	Italy
4	Italy	Chile	Argentina	Japan
5	Netherlands	Italy	Canada	New Zealand
6	USA	France	France	Chile
7	Japan	Austria	Brazil	Austria
8	Austria	Brazil	Italy	UK
9	Belgium	Belgium	South Africa	Netherlands
10	Canada	Japan	Japan	Canada
11	South Africa	Germany	Turkey	Australia
12	Australia	Poland	Australia	Germany
13	Germany	Australia	Austria	Spain
14	Spain	Spain	Belgium	USA
15	UK	USA	Germany	Portugal
16	Brazil	Canada	Netherlands	Greece
17	Argentina	Portugal	UK	South Africa

Source: O'Rourke, 2006

Key factors in determining the production efficiency index are as follows:

- Relative change in tonnage produced based on a moving three-year average over a period of five seasons, that is, 1998–2000 to 2003–2005 (SA = +18.6%)
- Relative variability in production during past five seasons, that is, high vs. low (SA = 1.36)
- Percentage of non-bearing orchards in previous season (SA = 17.3%)
- Percentage of production represented by new cultivars in previous season (SA = 31.5%)
- Average orchard density in previous season (SA = 929 trees/ha)
- Average orchard yield 2003–2005 (SA = 38.75 ton/ha).

Grower confidence in the industry can be measured in terms of changes in the rate of new plantings, the adoption of high density orchard technology and the rate of introduction of new bicolour cultivars.

Key factors in determining the index value for industry infrastructure and inputs are based on a comparative evaluation of the listed factors for each country, as follows:

- Adequacy of cold storage
- Modern packing facilities
- Marketing system
- Land availability
- Water availability
- Labour availability
- Input cost

Key factors in determining the index for financial and market factors are based on a comparative evaluation of the listed factors for each country, as follows:

- Interest rates, previous season
- Inflation rates, previous season
- Capital availability
- Security of property rights
- Product quality control
- Percentage of crop exported, three-year moving average
- Average export price, two seasons back (US\$/ton)
- Average distance to market (km)

The overall competitiveness of South African apples has weakened since 1998 (see Table 3.10). Although the adoption of new technologies improved production efficiency, overall competitiveness declined due to problems beyond the “farm gate” or “pack shed door”.

Table 3.10: Slide in South African apple competitiveness rankings

YEAR	OVERALL	PRODUCTION EFFICIENCY	INFRASTRUCTURE & INPUTS	FINANCIAL & MARKETS
1998	9	7	5	14
1999	10	7	6	15
2000	8	5	6	14
2001	9	5	6	16
2002	11	5	7	17
2003	13	3	8	18
2004	13	5	8	18
2005	11	4	10	17
2006	11	3	9	17

(Source: O'Rourke, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006)

With regard to pears, South Africa is ranked first in terms of production efficiency in the world. Once again, however, overall competitiveness of the industry slides due to the same issues identified in the apple ranking list.

3.9 Market opportunities and future growth potential

Two important recent developments are significant in creating stability in fruit farm profitability. The first of these is that large farming units have strategised forward integration growth by specifically exporting their own products. These units are thus identified as grower/packer/exporter. Control and management of costs in the supply chain beyond the pack house is the main reason for this change. In these companies, new employment opportunities for academically qualified persons have been created in line with the proposed AgriBEE charter. The second development is the establishment of "Grower Cultivar Market Clubs" whereby plantings and marketing are restricted to club shareholders, e.g. Pink Lady®. Present returns are above the average payments for other cultivars. These clubs are multinational and growers in various countries are linked by a common interest.

Marketing strategies based on price-cutting and/or low prices to gain market access or maintain market share are not to the benefit of the grower. Returns obtained by these means do not attract investment capital in infrastructure (roads, ports, cold storage, pack sheds) nor in new orchards (O'Rourke, 2006).

Since deregulation of the industry, South Africa has lost ground in a number of key functional areas which contribute to the sustainability of any fruit industry. These include research capacity, technology transfer, market discipline, promotion and productivity at the ports.

Market penetration by South Africa export fruit into the most populated region of the globe, namely Asia and the Far East, is very low (e.g. apples 14% and grapes 5%). With the steady increase in the supply of goods and foodstuffs from those countries to South Africa, reciprocal trade may prove to be the answer to accommodate increased South African fruit and grape volumes. Government support and leadership to gain entry to these markets is imperative. In Asian markets, prices of apples are three times that of bananas (O'Rourke, 2006), while in Europe, the prices of apples, citrus and bananas are closely linked.

3.10 Impact on other agricultural subsectors

Growth and competitiveness will be enhanced by the development of economic clusters in the main rural areas, whereby the needs and performance of the fruit industry and all its input suppliers, service providers and associated institutions are present and actively interlinked (e.g. packaging materials, electricity supply network, cold storage, water, skilled labour and transport). The Boland/Overberg/Breede River region (Ceres, Worcester, Grabouw/Villiersdorp, Roberston/Ashton) is an appropriate example of such a cluster.

3.11 Conclusion

Growth potential in the fruit industry can be stimulated and sustained by creating a focused, coordinated approach to entrenching productivity, effectiveness and efficiency at each link in the value chain. These issues have been addressed in the FIP document and a number of appointments have been made and operational divisions realigned. Actions regarding key areas for market growth and development of the industry are the following:

- Increased per capita consumption of all fruit in South Africa
- Sustaining supply of high quality produce in all markets
- Elimination of poor productivity in the supply chain
- Cost management in the supply chain
- Market access into the rising economies of Asia and the Far East
- Accreditation of exporters
- Promotion of mechanisms to bring new farmers on board in the mainstream of the industry
- Preparation of the industry to move with the AgriBEE transformational charter, once the final document is published

4. Current policies

This section provides a summary of government policy and support, and of support from other sources. It describes the status of the empowerment process and its impact, and evaluates the extent to which these issues are being addressed.

4.1 Summary of current government policy and support

The alignment of current agricultural policy and its impact in the fruit industry has been addressed in the FIP document (Annexure 1). Government support is primarily aligned to activities in the field of BEE. Foremost among these are land reform initiatives, where support is forthcoming in the form of LRAD grants, CASP funding and MAFISA funding. Education and skills development also receive government support through tax incentives on AgriSETA accredited programmes.

A number of valuable export initiative support programmes are currently offered by the Department of Trade and Industry. These programmes are, however, of limited duration.

4.2 Other support

The financial sector is very active in providing funds for new projects based on BEE principles. In each case specific conditions apply. Key players are the Industrial Development Corporation, commercial banks and the Land bank. The Industrial Development Corporation has helped fund orchard establishment and packhouses development, as well as BEE projects in the field of intensive horticulture which will lead to the creation of jobs. The commercial banks have made available development funds (at lower interest rates, e.g. via Khula), while the Land Bank provides specialised loans and grants to new farmers.

4.3 Status of empowerment process and impact

Overall progress in the transformational process is slow. The industry has published a review of the existing farming projects in the book *New leaves* (Brodie, 2006). These projects have been based on and financed by mechanisms supporting equity transfer, transfer of state land for farming and social responsibility. The AgriBEE process has been under discussion for a number of years, and industry leaders are awaiting final policy documentation and guidelines in order to mobilise stakeholders and actions.

The overall poor financial performance of new entrants in the industry is a cause for concern. One of the reasons cited for this is that new entrants tend to formulate poorly structured business plans, based on a limited knowledge and regard for the overall market. In addition, capital grants are often utilised for the purchase of the land without taking into account the amount of operational funds needed to sustain the business during the gestation period of five to seven years. This is thought to be responsible for more or less 45% of the constraints experienced by emerging farmers.

Land grant funding, on the other hand, is often used to expand the business, disregarding the business plan on the basis of which the monies were supplied to the beneficiary group. Poor financial returns for export fruit in the industry as a whole have affected new entrants, and profit margins have been further affected by cost inflation and interest payments.

Lack of human capacity in terms of technical, managerial and administrative skills has also contributed to poor financial performance. Related to this are problems regarding cooperation within groups and difficulties with commercial farmer partners.

New entrants also have to contend with limited physical and financial resources. Many units are, for example, established on a poor or degraded resource base, while farmer/labour share equity buy-in schemes have not been successful. Government capacity to deliver funds, extension and other services, in line with project schedules, has been lacking and there is a general lack of professional extension services in farm management and mentorship programmes.

4.4 Evaluation of whether subsector issues are being adequately addressed

The industry is in the process of evaluating a number of the issues raised in the FIP document and the BEE process, such as the following:

- Database of land reform projects based on fruit farming
- Status of success in these projects
- Formulation of the key role of industry leadership in linkage of new entrants to the mainstream in order to access markets and secure suitable funding
- Training and educational programmes which are supported by a number of industry bursaries
- Bringing key farm personnel from previously disadvantaged groups on board at field days and symposia by means of central funding to subsidise registration costs.

5. Constraints and challenges

This section identifies constraints and market failures that are currently hindering growth and employment, with particular emphasis on regulations, labour markets and infrastructure.

5.1 Regulatory issues

While labour regulations are often cited as a hindrance to growth, it should be noted that similar regulatory factors exist in competitor countries, such as Chile and New Zealand. Furthermore, one of the hallmarks of a competitive industry is its capacity to pay reasonable wages and social investment, which provides for human resource growth and development.

Current labour legislation in South Africa allows for employers to apply for exemptions regarding work hours during critical farm activities. In a number of cases, these exemptions have proven valuable during periods of peak workloads. The following Acts are relevant here:

- Basic Conditions of Employment Act, 1997 (sectoral determination of minimum wage)
- Labour Relations Act, 1995
- Equity Employment Act, 1998
- Unemployment Insurance Act, 2001
- Skills Development Act, 1998 (Skills Development Levy)
- Workman's Compensation Act 1977
- Security of Tenure Act 1997

5.2 Labour markets

The critical need for labour at harvest time offers seasonal work to unemployed persons in the immediate vicinity of orchards and vineyards. This is a global reality. 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 the skills to find work outside of crop harvesting.

A major constraint 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. Squatter communities have developed within the urban sprawl of the main fruit industry towns, such as De Doorns and Grabouw, and have given rise to widespread local social and economic problems that have further eroded the quality of the available labour. The incidence and prevalence of HIV/Aids is undoubtedly the most serious of these problems. The industry has launched an awareness programme (DFPT, 2005), "Let's Talk Status HIV/Aids", at farm level.

5.3 Infrastructure

In the development of the fruit plan, participants at the various workshops identified similar constraints in all the different provinces. During the past two seasons(2003/2004 and 2004/2005), a number of other serious problems have been raised, which not only have an impact on costs (direct and indirect) but also on the competitiveness of the industry. Solutions to these problems need a focused and purposeful approach and cooperation among all the relevant role-players. These problems are summarised as follows:

- Imbalance of packed fruit deliveries to the cold storage facilities and the ports, resulting from large-scale planting of selected cultivars such as Laetitia and Songold plums which peak in week 8 to 10
- Lack of cold storage capacity at certain times of the year, when grapes, stone fruit and pome fruit is being harvested (i.e. mid-January till end of February)
- Hygiene and micro-bacterial quality of water available for use in packhouses and domestic purposes on farms (e.g. *E.coli* in the Berg River)
- Electricity outages in the Western Cape during the fruit season
- 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, road/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

5.4 Other

Competition for scarce natural resources (i.e. water and land) is putting continued pressure on good farmland that can be used for agricultural purposes. Furthermore, the opening up of Elgin/Grabouw as a niche wine growing area has resulted in grubbing of orchards in favour of vineyards and also an opportunity for exit from deciduous fruit.

Fruit production in the Western Cape is under threat from the impact of climate change. Production of the Forelle pear (high chilling), in particular, could be adversely affected by 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 in “bicolour” fruits. The risk of sunburn is also increased.

Government financial support for land reform initiatives as well as public sector housing support in a number of key fruit areas is not keeping pace, with the rate at which growers are geared to implement change (Calvert, 2006).

6. Opportunities

In this section possible key interventions and their implications are considered. Market development interventions are suggested and possible marketing incentive schemes are examined.

The first and major opportunity for the industry is to **re-assess its role in international trade**. All the stakeholders in the industry, and in particular state departments, are needed to contribute to this process. Besides the state protocols, implementation of phytosanitary standards and border protection mechanisms need to be understood and agreed upon. Citrus and sub-tropical fruits are in the same boat and all three fruit groups stand to benefit from a combined and integrated approach.

The presence of agricultural **imports from China** in South Africa and the subsequent impact of these on local market prices in all major agricultural subsectors is reason for grave concern. Given the need to maintain free trade rules in the greater picture of prosperity in South African agriculture, the NAMC can offer leadership by facilitating the process to formulate strategies and measures which will safeguard the affected industries.

Secondly, the **poor level of economic performance on the part of empowerment farming projects** should in no way blunt the current momentum. With the advent of the AgriBEE transformational charter and scorecard (within the immediate future), the industry will be in need of financial support to fast-track its contribution to the process of change. Agricultural industries have not been partners in the decisions regarding the establishment of state or privately funded empowerment projects. Yet, in terms of the AgriBEE process, industries are accountable for the overall success of bringing these new entrants into the mainstream. Market intervention in support of the newly established projects is recommended, but the manner and size thereof should be undertaken under the auspices of the NAMC, based on current initiatives with the large supermarket chains.

Thirdly, **support for promotion of the consumption of all fresh fruit** on the local market is recommended. Per capita consumption of apples at 4 kg, in comparison to Asia's 13.25 kg and the EU's 17.6 kg, highlights the scope for increased sales on the local market. Industries are, however, in need of financial support to drive promotions in the local market. It is recommended that state-sourced grants be established for this purpose. In financial terms, grants based on 1:1 (Rand for Rand) would be a valuable contribution to industry initiatives. Innovative labelling or branding at the point of sale, such as "*Genuine South African*", would give discerning, patriotic consumers a measure of assurance that the fruit or product on promotion is not of foreign origin.

Fourthly, the industry is dependent on the **level of efficiency and productivity of a number of state and parastatal institutions** who provide services at a cost, within the supply chain. Examples are National Ports, Fresh Fruit Terminals, PPECB, Spoornet and the National Department of Agriculture. Invention by the NAMC in terms of an efficiency audit on the role and contribution of these institutions is recommended.

A comprehensive strategy and guidelines for decisions regarding investment in South African agricultural industries are sorely lacking. Policy makers need to understand the industry and consult with stakeholders. These guidelines should be based on market forces and should contain analyses of pertinent short and medium-term prospects and pointers regarding matters such as markets, cultivar choice, labour productivity indices and sustainability criteria. This initiative should be a joint venture between the NAMC and the particular industry.

7. Conclusion

The nature of the complex relationships within the supply chain in the deciduous fruit subsector calls for strong, decisive industry leadership and a close relationship with government and state institutions at the macroeconomic level. The main focus areas with regard to the fruit industry are the following:

- Attention to gaining market access in the Asian and Far Eastern economies
- Investment in upgrading existing road and harbour infrastructure
- Attention to policies which support sustainable growth in export orientated industries
- Socio-economic service delivery

The enterprises within the supply chain need to focus on capacity development in terms of innovativeness and productivity. Growers need to do the following:

- Introduce technology which will result in a reduction in unit costs
- Improve quality control
- Align with proven high performance exporters

Understanding the correctness of signals emanating from the market by all is lacking at this time and needs to be addressed by industry and the relevant state bodies, such as the NAMC and National Department of Agriculture, DTI, ARC, AgriSETA. The large increase in young orchards and vineyards during the past ten years may cause oversupply in the market driven supply chain and see a number of production units being absorbed by larger concerns. There is an urgent need to address the impact of decision making which will influence future outcomes.

Investment in human resources is essential for the development of a professional industry, which is in line with the social transformational processes in South Africa. Education and training initiatives therefore need to be fast-tracked and funding mechanisms need to be instituted to meet the demand that will arise from the implementation of the AgriBEE mentorship and incentive processes.

Issues contained in the Fruit Industry Plan are under consideration by the industry and its stakeholders. Relevant matters for the attention of the NAMC will be raised directly by the industry representatives in due course.

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APPENDIX 1:

SYNOPSIS OF THE STRATEGIC OBJECTIVES IDENTIFIED IN THE FRUIT INDUSTRY PLAN

Forty-seven sub-strategies are identified to align the industry with the strategic plan for South African agriculture. A number of issues raised and discussed in this document are closely linked to the terms of reference of this subsector report. The main focus areas and related considerations of the plan are the following:

BEE and land reform

- Develop a new farmer programme that is specific to the industry and incorporates and builds on current initiatives in a properly sequenced and efficient manner.
- Establish mechanisms to attract, and where necessary build capacity in black persons at management level throughout the value chain.
- Develop methods and procedures to support land reform in a coordinated and efficient manner.
- Appraise existing empowerment schemes to determine how to build on successes and rectify problems.
- Establish a representative, legitimate structure to address BEE and land reform matters.
- Develop mechanisms to unlock funding of empowerment projects.

Rural development

- Develop an overall industry policy on supporting development initiatives in relevant rural communities.
- Create national, provincial and local networks to disseminate the policy and to indicate the industry's willingness to become an active, supportive player in rural and community development initiatives.
- Stimulate, at local level, the creation of rural and community development initiatives where these do not currently exist or function effectively.

Human resource development

- Improve training and development within the industry to ensure that the industry is staffed by well-trained, competent and productive employees.
- Ensure legal compliance by assisting all parties in the industry to comply fully with the letter and spirit of legislation affecting employment by ensuring full awareness of the relevant legislation.
- Highlight workplace relations to improve the participation of farm employees through greater transparency and more effective communication.

Relationships with government

- Create an industry-wide body for representing the industry in communication with government.

R&D, information and technology transfer

- Determine resources needed to provide an environment conducive to research and to ultimately ensure industry growth.
- Establish, maintain and promote sustainable programmes and practices to ensure improved quality and safety and to comply with market and regulatory forces, in terms of plant improvement, primary production, harvest, orchard to pack house/cold store, pack house operations, post-harvest treatments, cold storage and cold chain management.
- Improve and develop new approaches to ensure optimal market access procedures.

Logistics and infrastructure

- Establish and identify mechanisms to coordinate fruit logistics and infrastructure planning on regional, national and international levels.
- Revisit and critically evaluate current regimes with regard to packaging and palletising, and tracking and monitoring.
- Establish mechanisms to improve efficiency at packhouses and cold storage facilities.
- Establish mechanisms to increase logistical efficiency at ports and of shipping.
- Establish logistical information and communication protocols at each level of the value chain.
- Establish service level protocols and accreditation.
- Foster good labour relations in the logistical chain.
- Develop and institute appropriate capacity delivery mechanisms to address training and development in the logistics chain.

- Develop proper, efficient regimes to document all aspects of logistics and disseminate these timeously to relevant role-players.
- Establish, promote and/or adapt internationally recognised fruit handling protocols at ports where South African fruit enters overseas markets.

Information

- Stabilise the current information environment.
- Understand what is needed of information and systems in the industry.
- Plan for the future.
- Determine accountabilities for industry level information and systems.
- Coordinate fruit market and marketing information.
- Create and maintain a strategic information database and capacity to analyse strategic information.

Marketing and promotion of fruit

- Establish and maintain a crop mix that will lower risks associated with changing consumer tastes and preferences in order to maintain and increase real returns on investments and profits for all role-players in the value chain.
- Establish, maintain and promote sustainable production, harvesting and packing strategies that adhere to and comply with market and regulatory forces.
- Identify critical points in the value chain where transaction cost can be reduced, taking due cognisance of
 - demand and supply patterns
 - available logistical infrastructure
 - transport modes
 - level of training
 - relationships between role-players

Identify and capitalise on emerging niche markets in an orchestrated manner

- Establish mechanisms to streamline current export initiatives.
- Improve and develop new approaches to ensure optimal access procedures.
- Determine the optimal market structure and conduct for the domestic fruit market.
- Improve the local market's product quality and safety.
- Determine the optimal promotional strategy.