Module 1
The South African Citrus Industry

Presenter: Justin Chadwick

References
The information and figures used in this module are derived from the 2008 Key Industry Statistics, published by the Citrus Growers’ Association. Please consult the latest edition of this publication or the members’ section of the CGA website for current information.

Introduction

For more than 100 years, citrus has been exported from South Africa to all over the world. The industry has a long and successful history of growth, innovation and forward thinking.

Since 2006, South Africa has been the second largest exporter of fresh citrus in the world, although we are only the twelfth largest producer. We export oranges, grapefruit, lemons and soft citrus to more than sixty foreign countries.

Of the about 2 million tons of citrus produced in Southern Africa every year, around 69% is exported, 7% is processed, and the remaining 24% is sold on the local market.

There are eighteen citrus growing regions in South Africa, allowing us to produce a wide variety of export citrus for a large portion of the year.

Citrus Sectors

The citrus industry has four sectors, as per the main citrus types, namely:

- Oranges
- Soft citrus
- Grapefruit
- Lemons
Oranges

About two thirds of our citrus is orange production. Of the 60,000 hectares under citrus, around 24,000ha are under Valencia oranges and about 14,000ha under Navel oranges.

Most of the Valencias are produced in the Limpopo and Mpumalanga provinces, whereas Navels prefer the colder areas in the Western and Eastern Cape and are also produced in areas around Marble Hall and Groblersdal.

We do process oranges, mostly into oranges juices, about 300,000 tons per annum. We also sell on the local market, about 120,000 tons, with about 750,000 tons exported annually.

In terms of our major export markets, continental Europe takes 42% and the United Kingdom 8%. About 18% of our production goes to the Middle East, Northern America takes about 6% and then the Far East takes 9% of our orange exports. In total, the orange industry earns about 3 billion Rand in foreign exchange annually.
**Soft Citrus**

In total, 5,000ha of soft citrus are grown in South Africa. This is mostly grown in the Western Cape, with 58% coming out of that area. The second biggest area is the Eastern Cape, with 25%, and then there are small pockets of soft citrus up in the Limpopo and Mpumalanga provinces.

In terms of how the soft citrus is utilised, 20,000 tons are processed annually, about 25,000 tons are sold on the local market, and the balance of about 100,000 tons is exported every year.

The United Kingdom is by far our biggest market for soft citrus. They absorb in excess of 50% of soft citrus exported annually and continental Europe takes 20%, and then we just about distribute to most other markets around the world. In terms of gross earnings, soft citrus earns about 500 million Rand per annum.

Soft citrus is the most competitive product in all our citrus ranges in the southern hemisphere, with large quantities also coming out of Peru, Uruguay, Argentina and Chile.

In terms of the global soft citrus markets, Spain is by far the largest soft citrus exporter, with China second, Morocco third and South Africa the fifth largest exporter in the world.
Grapefruit

The next sector that we will look at is grapefruit. This is largely grown in the Limpopo province with about 32% to 34% from there. In Mpumalanga have about 30%, and in KwaZulu-Natal about 20%.

In terms of the usage of grapefruit, approximately 175,000 tons are processed annually. There is a very small local market of just over 3,000 tons annually. The bulk of the fruit is exported, about 200,000 tons.

Japan is a very important market for us, absorbing about 40% of our exports every year and the balance goes into Europe, with about 43% going into continental Europe. The United Kingdom takes about 8% and Eastern Europe, which is a growing market for all types of citrus, takes about 6%.

In terms of global exports, South Africa is the second biggest exporter of grapefruit in the world, behind the USA. In total, grapefruit earns about 600 million Rand in foreign exchange every year.
Lemons

The final sector we look at is lemons, grown on about 4,500 hectares. The majority of lemons are grown in the Eastern Cape, particularly in the Sunday's River area, where about 45% of lemon production is. Then we have in the Western Cape about 21%. Lemons prefer the cooler areas of South Africa.

In terms of usage, about 70,000 tons are processed every year that goes into both lemon juices and lemon oils. About 10,000 tons is marketed on the local market and then the balance of about 110,000 tons is exported every year.

The lemon crop in the Southern Hemisphere is dominated by Argentina, exporting about 360,000 tons and juicing about 1,000,000 tons a year. In terms of the southern hemisphere lemon industry, Argentina dwarfs the South African lemon industry. The other big players are Spain, Mexico and Turkey.

In terms of our lemon exports, 45% goes to the Middle East, about 16% to continental Europe, 12% to the United Kingdom, and about 15% into South-East Asia. In total, the lemon industry earns about 400 million Rand in foreign exchange.
### Sector Comparisons

#### Production by Sector

<table>
<thead>
<tr>
<th>Type</th>
<th>Annual production (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oranges</td>
<td>1,170,000</td>
</tr>
<tr>
<td>Soft citrus</td>
<td>145,000</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>378,000</td>
</tr>
<tr>
<td>Lemons</td>
<td>190,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,883,000</td>
</tr>
</tbody>
</table>

#### Export by Sector

<table>
<thead>
<tr>
<th>Type</th>
<th>Annual exports (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oranges</td>
<td>750,000</td>
</tr>
<tr>
<td>Soft citrus</td>
<td>100,000</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>200,000</td>
</tr>
<tr>
<td>Lemons</td>
<td>110,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,160,000</td>
</tr>
</tbody>
</table>

#### Foreign Exchange Earnings by Sector

<table>
<thead>
<tr>
<th>Type</th>
<th>Annual forex earnings (R million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oranges</td>
<td>3,000</td>
</tr>
<tr>
<td>Soft citrus</td>
<td>500</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>600</td>
</tr>
<tr>
<td>Lemons</td>
<td>400</td>
</tr>
<tr>
<td>Total</td>
<td>R4,500</td>
</tr>
</tbody>
</table>
## Total Usage

<table>
<thead>
<tr>
<th>Usage</th>
<th>All Varieties (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing</td>
<td>560,000</td>
</tr>
<tr>
<td>Local Market</td>
<td>158,000</td>
</tr>
<tr>
<td>Export</td>
<td>1,160,000</td>
</tr>
<tr>
<td>Total</td>
<td><strong>R4,500</strong></td>
</tr>
</tbody>
</table>

## The Citrus Industry

Until 1997, the citrus industry was regulated, in other words everything was done through the Citrus Board. Since deregulation the industry has broken up into a number of different bodies.

The growers formed the Citrus Growers Association in 1998, largely responsible for research in the industry, but also playing a role in transformation, information and market access.

Export agents formed the Fresh Produce Exporters Forum and particular in terms of citrus, the Citrus Exporters Forum. They look at the export side and what is going on in the market.

The Citrus Growers Association also formed the Citrus Academy in 2005, which looks after training and skills development in the citrus sector. Then they also have Citrus Research International, which does research work and looks at the technical side of market access.

### Websites of Industry Bodies

- Citrus Growers’ Association (CGA)  
  [www.cga.co.za](http://www.cga.co.za)
- Citrus Research International (CRI)  
  [www.cri.co.za](http://www.cri.co.za)
- Citrus Academy  
  [www.citrusacademy.org.za](http://www.citrusacademy.org.za) / [www.sitrusakademie.co.za](http://www.sitrusakademie.co.za)
- Fresh Produce Exporters’ Forum  
  [www.fpef.co.za](http://www.fpef.co.za)
Postharvest Innovation

Over the past couple of years the industry has also looked at more research and more innovation in the packaging and the cold chain arena. The industry has formed the Citrus Cold Chain Forum, with players from all different aspects of the citrus industry, looking at these issues and trying to ensure that South Africa stays ahead in terms of technology and requirements in packaging and in the cold chain.

The Post Harvest Innovation Fund is funded by the Department of Science and Technology and has been put together by the Fresh Produce Exporters Forum. The Post Harvest Innovation Fund funds various projects in the cold chain arena, specifically looking at packaging and cold chain infrastructure.

In terms of the packhouses in the industry, in the past most packhouses were cooperative type packhouses, but since deregulation many farmers have their own packhouses. We now have packhouses packing 50,000 or less cartons right up to huge communal or company owned packhouses that pack up to 5 million cartons.

In terms of packing material, most citrus is exported in cardboard cartons. There hasn't been a lot of development in terms of changing the technology of these cartons over time, but ‘super-vent cartons’ are now being developed, which allow for more cooling.

There is also work being done on containers, in terms of the airflow in containers, so that the air comes into the container and is distributed evenly throughout the container. This is particularly important in our cold sterilisation markets where the fruit has to be at a certain core temperature in order for the pests that are of issue to be destroyed.

In terms of pallets, obviously they are a vital part of the whole transport infrastructure. It is a requirement that all pallets are treated, either hot water treated or chemically treated to ensure that there are no borers in the pallets. It is also important that pallets are constructed correctly and the industry has over the years developed protocols and standards for proper packaging and pallet manufacturing.
Industry Challenges

In terms of challenges and opportunities that face our industry: because most of our fruit goes into continental Europe and the United Kingdom, we have consumers that are very concerned about issues such as food safety, issues around the environment and issues around ethical trading.

In terms of the food safety aspects what they are most concerned about is chemical residues and bacterial contamination. In terms of ethical trading we are engaged with the UK retailers to ensure that our working conditions are acceptable to them. In terms of the environment we got work that is underway in terms of the carbon emissions and carbon calculator, so that growers can actually determine their own carbon footprint.

Transformation of the citrus sector and land reform in general in South Africa is obviously a very important issue. Within the citrus industry we have a number of black growers that are now involved in the industry. The Citrus Growers Association has a mentorship programme which is funded by the Department of Agriculture, where successful commercial farmers are put in touch with these new growers in order to help transfer skills.

We also joined operations with the Department of Agriculture in terms of extension, we have our own extension offices in the north and in the south and we engage with the extension offices of the Department of Agriculture in order to get certain of their personnel to become citrus experts and able to transfer skills and technology to new black growers in the industry.

Extension Officers

Extension officers provide technical advice on farming practices. The Department of Agriculture, Forestry and Fisheries employee extension officers that assist all types of farmers. In some provinces there are government extension officers that specialise in citrus production, while citrus farmers in other provinces receive extension services from generalists.

Citrus Research International (the CRI) also employee extension officers. They focus on technical advice and technology transfer – they make sure that the latest information and findings from the researchers are communicated to growers so that it can be implemented in the industry.
Labour utilisation in the sector, there is roughly 60,000 labourers that are employed in the production part of the industry, and probably another 40,000 employed in packhouses and downstream activities. This labour is employed in some of the poorest rural areas of South Africa, such as the Eastern Cape and the Limpopo regions.

The other challenges obviously revolve around the cost of production with escalating prices of fertiliser and fuel prices. Obviously we are down here in the bottom end of Africa and we have to transport our fruit a long way to the markets. Any increase in oil prices has an adverse effect on transport costs.

active learning

Watch the DVD clips, read through the learning material and do workplace research to gather the knowledge and information to complete the assignments below.

Activity 1.1 – Mind Map

Do research on the internet about the industry organisations that play a role in the Southern African citrus industry. Hold a group discussion around the history, roles and responsibilities of these bodies. Record the details of your discussions on a mind map in your workbook.

(Additional resource reference: Citrus Academy learning material – Industry Overview)

Activity 1.2 – Research Report

Consult industry media sources and have a discussion with your supervisor / mentor on the latest developments on the challenges that face the citrus industry. Write a 2-page report based on the information that you gather.

(Additional resource reference: Weekly CGA newsletters – From the Desk of the CEO; SA Fruit Journal; general media)
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