Module 35
Export Shipping Overview

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Introduction

In 1906, the first ever consignment of 3,000 cases export oranges arrived in London from the then Transvaal. Over the last 100 years, citrus exports from South Africa have grown to almost 90 million cartons in 2008, amounting to about 1.4 million tonnes.

Exporting this volume of citrus requires considerable infrastructure, both inland and in terms of port and shipping capacity. All citrus fruit is refrigerated while being shipped with some of the fruit pre-cooled at the packhouse and other pre-cooled only once it reaches the harbour.

On the ship fruit is kept at optimum temperatures to preserve the quality and vigour of the fruit, and to suppress the development of postharvest diseases.

There are mainly two types of vessels that are used for exporting citrus, being reefer ships and container ships. On reefer, or refrigeration, ships loose pallets are loaded in the decks, where the fruit is kept cold during the voyage. Container ships transport containers that have already been loaded with pallets of citrus, either at the packhouse, or at the port.

Growth in citrus export volume in the late 1990s resulted in fruit terminals becoming congested. From that time on, there were a number of cold store facilities built around the ports. The facilities stored or pre-cooled citrus, which was then trucked to the citrus terminals for loading on a specialised reefer ships.

Containerisation growth was marginal and only since the turn of the century began to escalate annually.
**Production Regions and Harbours**

This map illustrates the main production regions relative to the port of export being Cape Town, Port Elizabeth, Durban and Maputo. It can be seen that the Western and Eastern Cape regions, which are in close proximity to ports, have the advantage to load containers at either packhouse facilities or inland cold stores, which are then transported directly to container terminals.

This trend in shipping has grown phenomenally in these regions and in recent years offers a more competitive price structure as opposed to trucking the fruit to fruit terminals to be exported on board reefer ships.

**Container Shipping Growth**

From the illustrated chart, high growth in container shipping can be seen during the last five years, with a severe decline in exports on reefer ships. Also illustrated is the growth towards loading containers at inland production points.

The next chart illustrates the percentage growth towards container shipping. Where in 2004 only 30% of citrus was exported using containers, in the more recent 2008 citrus season, growth in container shipping has escalated to over 60%. It is estimated that growth in the next five years will reach possibly above 70% of citrus exports.

**Western Cape Growth**

The next chart shows the high growth in container exports from the Western Cape hinterland, from 45% in 2004 to an estimated 80% in the next five years.

**Eastern Cape Growth**

Similarly, in the Eastern Cape container growth can be seen from 30% in 2004 to an estimated 80% during the next five years.
Northern Regions Growth

Growth in container volume can be seen in the northern regions hinterland, which is exported from Durban and Maputo ports. Growth has escalated from under 30% in the 2004 citrus season to an estimated 70% in the next five years.

The reason for the high growth in container volume is that container ships can load far more cargo under deck as well as on deck and in most cases it is more economical than reefer ships and therefore reduces the cost of the supply chain.

Container Shipping Savings

Another important factor that contributes to the increase in containerised exports is that harbour handling fees can be reduced by loading containers at inland production facilities.

Container Export

Northern Europe and UK

The following chart illustrates that the growth in container exports can be seen predominately to Northern Europe and the UK from a mere 30% in 2004 to 70% of exports to that region using containers in the 2008 citrus season.

Southern Europe

Southern Europe, which is predominately shipped on reefer ships, has grown from 10% to over 50% towards container shipping.
Middle East

Middle East, which is one of the bigger markets, second to Europe, has seen similar growth in container volume from around 20% to around 80% during the last season.

These markets specifically have seen higher growth towards container shipping during the current 2009 season than what was originally anticipated. The main markets where specialised reefer ships still dominate are Russia, Japan and the United States.

Conclusion

There are advantages to be had both from shipping fruit in reefer ships and from using containers. The infrastructure that is available for handling and transporting containers is the main factor that will determine developments in future.

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 35.1 – Mind Map

Have a group discussion about the growth towards container exports and the impact it will have on the South African citrus industry. Draw a mind map in your workbook detailing the outcomes of your discussions.

Activity 35.2 – Research

Use information from earlier modules and conduct internet research to gather information about the following:

✓ What is a ‘cold sterilisation protocol’?
✓ Why do certain countries require fruit to be exported using a cold sterilisation protocol?
✓ Which countries require this protocol at the moment?
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