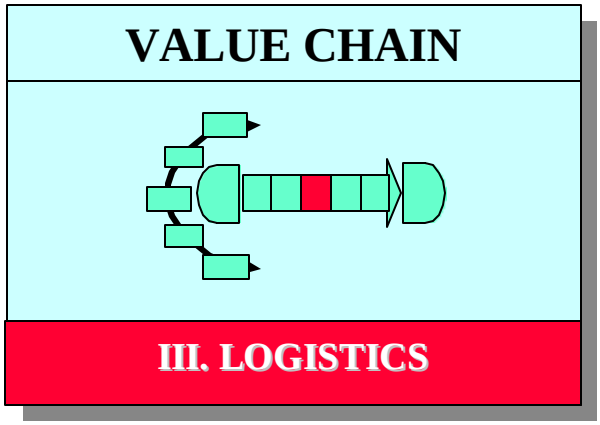


III.1 Objectives

To ensure that all floriculture products are exported in a timely and cost effective manner whilst maximising quality throughout the cold chain.

III.2 Background

Currently, export logistics across the South African floriculture industry are characterised as follows:

- There is insufficient airfreight capacity, particularly to Europe, in peak season (October to February)
- Other perishables receive preferential treatment, particularly fish
- SAA is aggravating the situation by
  - Blocking airlines from entering with more space
  - Giving preferential treatment to products from Harare
- The airfreight rates are too high for some products to be cost competitive
- There is no industry-wide cold chain strategy (particularly for international transfers)

Floriculture exports by air are currently conducted on an ad-hoc basis. As a result, the industry does not attract any benefits from economies of scale and the airlines have minimal motivation in reducing rates and guaranteeing space.

Worse still, there have been numerous occasions where customers' orders cannot be met due to insufficient space. In one case, flowers had to be destroyed as the airline could not accommodate the products. Not only does the situation need to be improved for current volumes, but also to accommodate the significant growth in volumes from the industry ***– logistics is the single greatest infrastructural constraint to the expansion of South African floricultural exports.***

In terms of cold chain management, although this is accepted in the worldwide floricultural industry as being the single most important quality detracting element of the export process, South African exporters have also only addressed it on an ad hoc rather than an industry-wide basis. Generally, exporters and handlers have little communication about the conditions for treatment and no one at the airports wants to assume full responsibility for the quality.

III.3 Areas for strategic focus

III.3.1 Specific initiatives

1. POOL PRODUCTS ACROSS FLORICULTURE, THEN AGRICULTURE	**2. DEVELOP COLD CHAIN MANAGEMENT PROTOCOL**

Initiative 1: Pooling strategy (across floriculture and across complementary perishables)

Context

All agricultural products, particularly floriculture, are grown and exported seasonally. The predominant volumes of traditional greenhouse products (roses, carnations etc.) are exported in October to March, whereas Protea and Cape Greens are exported April to December. Therefore, when individual exporters approach the airlines (the vast majority of floriculture products are flown), it is impossible to guarantee year-round minimum volumes for export. The result is that neither competitive freight rates, nor guaranteed space, is achieved.

The way to negotiate the freight rate is by signing year long contracts guaranteeing a minimum volume of monthly exports, but this requires a certain critical mass.

Kaiser Associates analysed the various options and came up with two distinct but intertwined solutions for gaining the needed critical mass:

1) Pool all floricultural products together
2) Pool all floricultural products with other 'complementary' perishable products

Kaiser Associates therefore analysed all the monthly volumes of floriculture products and then selected the 'complementary' perishable products based on those whose air freight exports focus on South Africa's winter months, the off peak months for floricultural products. By focusing on complementary perishable products exported during floriculture's low months, Kaiser Associates was able to even out the dip in volume and guarantee an attractive minimum per month.

The products selected were melons, avocados, pineapples and asparagus, which follow the export timings as shown below:

PRODUCT	VOLUME (kg)*	DESTINATIONS	TIMINGS
TOTAL FLORICULTURE	3,195,835	• Holland • Germany	• Overall peak in October to March
PINEAPPLES	3,369,780	• UK (over 70% of total volume)	• Year round
MELONS	844,717	• UK • Germany • Holland	• Jan-March
AVOCADOS	1,215,274	• Holland • Germany	• April-September
ASPARAGUS	541,781	• Germany (over 70% of total volume)	• September-November
OUTCOME	TOTAL VOLUME: 9,167,387	• Equal emphasis on floriculture's main 3 destinations (particularly UK)	• Continuous supply all year round with rounded peak from October to March)

*Only to main 3 destinations, Holland, UK and Germany – Source PPECB

Figure 14: 'Complementary' perishables export profile
Source: PPECB

Figure 15 shows which products command the majority airfreight volumes, by month, by floriculture's top 3 European destinations:

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
HOLLAND	CF	CF	CF	CF PR	PR	PR	PR	PR	PR	CF PR	PR	PR
GERMANY	MEL	MEL	PIN	AVO	PIN	AVO	AVO	AVO PR	PR ASP	CF ASP	ASP	PIN PR
UK	MEL PIN	MEL PIN	PIN	PIN	PIN	AVO PIN	AVO PIN	PIN	PIN	PIN	PIN	PIN

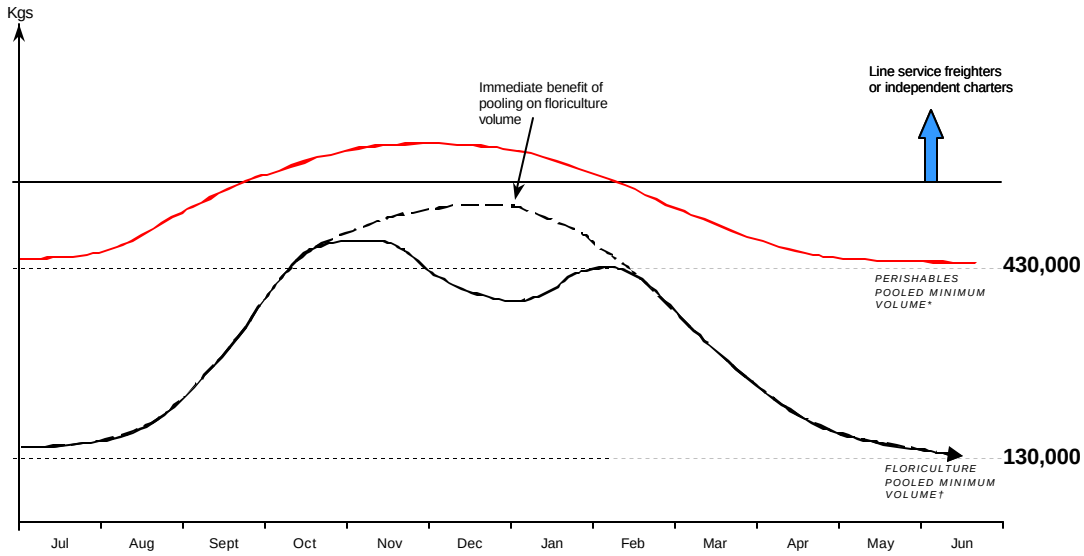
CF = Traditional cut flowers
PR = Protea and Cape Greens
MEL = Melons
AVO = Avocados
PIN = Pineapples
ASP = Asparagus

Figure 15: Monthly majority product, by volume, to top 3 destinations
Source: PPECB

Clearly, floriculture has the controlling volume to the Netherlands, and to this destination it is clear that traditional cut flowers, and Protea and Cape Greens can potentially complement one other thereby boosting minimum monthly volumes even before bringing in any other perishable products. ***In fact, by pooling all floricultural products, the minimum monthly volume to these three destinations moves from 0 to 130,000kgs.***

The opportunity becomes even stronger when looking at the other perishables and other markets. To take an example, pineapples cannot get space to Amsterdam because of flowers, and flowers cannot get space to the UK because of pineapples. They are effectively competing with one another (and both paying over the odds per kg) and they do not end up with adequate volume to their target markets. Furthermore, the reason that pineapples are all going to the UK is because they cannot get space direct to Holland, so they must use the UK as a redistribution market. In fact, they are competing for space to the "wrong" destinations as greater volumes of the pineapples actually want to go to Holland and greater volumes of flowers actually want to go to the UK. With communication and appropriate planning, there should be sufficient space to get all products directly to their desired end market. ***By pooling all of the above products to the 3 markets, a minimum volume of 430,000kgs per month can be achieved.***

The resulting position can be shown graphically as follows:



** Pooling all floriculture products with pineapples, melons, avocados, asparagus*
† Pooling all floriculture products

Figure 16: Monthly minimum volumes for two pooling scenarios (floriculture alone and floriculture + complementary perishables)
Source: Kaiser Associates

Note: The dip in floriculture exports between November and February is a direct result of pressure on space. As soon as minimum volumes are guaranteed, this pressure disappears.

This puts this group of agricultural products in a highly favourable negotiating position with the airlines for both freight rates and guaranteeing space. Not only will airlines guarantee existing space and reduce freight rates, they will also provide a 'line freighter' service. In the months where supply exceeds natural capacity, the airlines will provide freighter planes to cover specific peaks. Again, they will only do this once minimum all-round volumes are guaranteed through year-long contracts with the airlines.

The reaction from the other perishables associations (eg Vegetable Exporters Association, Avocado Growers Association, etc) and exporters of complementary perishables (eg Westphalian Marketing, CapeSpan, Rolex Perishables Exporters) has been very encouraging. All parties interviewed expressed a strong willingness to take discussions further. The only condition that was consistently raised was that the floriculture industry has to first prove that success is achievable across floriculture before the group can be widened. See DFD for further details.

Key action steps

Pooling floriculture

The first step in building a fully integrated pooling strategy, is to pool all floricultural products.

In order to do this, it is necessary to understand all export requirements across the industry. SAFIC, through the support services group (see industry organisation section), must capture in detail the forecasted export volumes, by month, of all growers/exporters, establishing the minimum monthly volume, using more sophisticated production planning and forecasting mechanisms. Pooling across all floricultural products must take place prior to the involvement of the other perishable exporters***. Communication and transparency across the chain will be essential for success.***

Pooling roundtable

The next step is to set up a workshop between the growers, exporters, freight forwarders and airlines to discuss the impact that these volumes will have on rates and guaranteed space. Floriculture producers, via SAFIC, will have to sign 12-month contracts (which will have built-in terms for cancellation and reselling of space).

Freight negotiations

There are two fundamental options with the airlines:
1) Single airline solution (SAA)
2) Destination contracts

The former option is to fly all exports to Germany, the UK and Holland using SAA. This will require SAA to guarantee that they can accommodate all monthly volumes to the required destinations (either using their own fleet or by arranging alternative transport) as well as being highly competitive on rates. The second option is to consider contracts by destination (failing full agreement on the first option), i.e.

- Exports to UK fly BA or Virgin or SAA
- Exports to Holland fly KLM or SAA
- Exports to Germany fly Lufthansa or SAA

Market specific recommendations

Although pooling is a fairly standardised approach, there are a few market specific considerations when exporting to Germany, the UK, and Japan that if included, will make distribution of product from entry point more effective.

Germany – When exporting to Germany use as much direct flight space as possible in order, for example, to minimise transport costs and auction mark-ups going through Holland.

Currently, SAA and Lufthansa both fly to Frankfurt so South Africa will need a distribution strategy for Munich, and Dusseldorf as well, and can even explore agricultural charters to these additional destinations.

UK – Use direct flight space to Heathrow as easiest distribution point for target customers and multiple channels throughout UK.

Consider special preference agreements with BA or Virgin for freight rate negotiation.

Japan – Create a distribution strategy that takes into account various transfers necessary as there are currently no direct flights to Tokyo. Explore connections through Amsterdam or other destination where specialised cold storage is available during transfer time.

Explore option of agricultural charter flights directly to Tokyo.

Initiative 2: Cold chain management strategy

Context

The marketplace currently views South African floricultural products as being lower in quality than those from other developing nations such as Kenya and Colombia. This is particularly the case for the traditional greenhouse products, although the condition of the indigenous products at market entry points could also be improved. Although the quality issues are largely perception based overall, there are some changes in the way in which the product is handled (non-perception based factors) that will improve the quality.

Key action steps

In order to improve the physical handling of the product, industry needs to pull together all the relevant players and engage in a constructive dialogue that sets out guidelines for the effective handling of floricultural products. This discussion should address specific concerns such as the fact that floricultural products are often left to stand in the sun between flights, and the fact that the responsibility between the airport handlers and the airline handlers are at present unclear.

In short, the South African floricultural industry needs to write a "post-harvest handling protocol" for the handling of the product in South Africa, en route to the end market, and at the point of entry. It is essential that the code also include better education of customers who may inadvertently mistreat the products due to lack of knowledge about the best conditions for a particular product.

The partners to be included in the dialogue should be the growers, ARC, PPECB, exporters, airline representatives, and the airports company. The success of the protocol will depend on the strength of information going in, and on expanding the degree of viable solutions which growers have experienced on a small scale to the industry as a whole.

III.3.2 Key responsibilities

Lead	SAFIC	Pooling - The support services group must oversee the whole pooling initiative Cold chain – Provide a forum for discussion and drafting of the "Post-handling Protocol" between growers and handlers, etc.
Support	Growers/ exporters	Pooling - Open communication across growers and exporters is critical. The development of more sophisticated forecasting and production planning must also take place. Cold chain - Discuss failures and successes in dealing with the airport and airline handlers as well as end customers in order to shape best protocol possible.
	Government	Pooling - Department of Transport must facilitate similar work to be conducted across all airfreight export products. Cold chain – ARC to provide technical expertise about improvements in treatment/spraying of products along the cold chain. The Perishable Products Export Control Board (PPECB) can play a role in advising on quality control issues from a physical handling point and should therefore also help to shape the protocol.
	Related industries	Freight forwarders and airlines - If both the freight forwarders and the airlines want to compete for this business, they will have to play a key role in offering support to the industry. The main freight forwarders in South Africa must be proactive in assisting the support services group to get this initiative off the ground. Handlers must also assume a greater responsibility for the quality of the product en route and should receive special training and instructions on how to keep the products in optimal conditions during transport.

III.4 Implications for other agricultural sectors

Of all the categories across the value chain and enabling environment, logistics has the greatest implications for other sectors, as the greater the involvement of other sectors, the greater the efficiency of the total airfreight process. The ultimate impact on improving freight rates and guaranteeing space will be immense.

The Department of Transport is currently investigating ways in which to improve the airfreight efficiency across exports, and there is no doubt that solving this issue is critical to the success of all export industries and allowing them to attract foreign exchange and create more jobs.

The following logistics issues should be explored from a pan-agricultural perspective:

- **Pooling**

  Perishables export cargo centre

  Currently there is no specialised facility for the pooling and storage of perishables in South Africa and only one major freight forwarder who specialises in perishables transport. Training perishables exporters and investing in a dedicated perishables export centre for pooling, packaging and shipping is therefore another initiative that may best be addressed on a pan-agricultural level.

  Export manager

  In order to facilitate a fully integrated pooling strategy, the industry will need an efficient system of organisation and a qualified export manager to co-ordinate the dropping off of cargo and the negotiations with the airlines on the air freight.

  Designing a pooling system and employing an export manager is therefore something else that should be explored from a cross-sectoral perspective, perhaps even wider than just perishables, or agriculture.

- **Cold chain management**

  Designing a protocol

  The problems in respect of the handling of floricultural products within South Africa, particularly at the airports during transfer times, are directly applicable to at least all other perishable exports if not to all types of export product.

  As the floriculture industry begins a dialogue with the relevant players in the cold chain, (primarily the freight forwarders and airport handlers) to design a "Post-harvest handling/cold chain protocol", specifically for floricultural products, it would provide a great opportunity to find out what the core elements of the problem are for all perishable products.

Furthermore, as there will certainly be overlap, it may be most sensible to write a "Perishables Handling Protocol" addressing the core common problems that would then also have product specific sections attached with differences in temperature, etc for each product.