

The objective is to ensure that fruit can be moved from the tree to the consumer with:

- velocity by air freight and in such a way that fruit is of unrelenting and unquestioned quality
- maximum efficiency
- the consumers' needs in mind
- 3.1 transport and logistics systems
- 3.2 innovative packaging
- 3.3 innovative packing systems
- 3.4 in market logistics systems



### **3.1** Transport and logistics systems

• will analyse current industry practices and develop an understanding of the future options for best use of air and sea freight;

- to handle projected increases in crop volume
- to the highest quality and
- to a range of countries.
- industry trials will be carried out to optimise new systems.

| Activ | vities                              | Milestones  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|-------|-------------------------------------|---|--------|--------|--------|--------|--------|--------|--------|
| 3.1   | 3.1 Transport and logistics systems |   |        |        |        |        |        |        |        |
|       | 3.1.1                               | Current industry practices and gap analysis         | ~      | ~      |        |        |        |        |        |
|       | 3.1.2                               | Option analysis for logistics to range of countries |        | ~      | ~      |        |        |        |        |
|       | 3.1.3                               | Trials for optimising new systems                   |        |        | ~      | ~      | ~      | ~      | ~      |



### 3.2 Innovative packaging

- will carry out design and trial studies on:
  - innovative packaging for direct to consumer marketing
  - reduction of wasted space to maximise available freight options
  - sustainable packaging

• will design new packaging, large scale industry trials will be carried out in cooperation with programme partners.

**Closely aligns with:** 1.5 Packaging requirements

3.3 Innovative packing systems

| Activities |                          | Milestones                     | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|------------|--------------------------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
| 3.2        | 3.2 Innovative packaging |                                |        |        |        |        |        |        |        |
|            | 3.2.1                    | Study of consumer requirements | ~      | ~      |        |        |        |        |        |
|            | 3.2.2                    | New systems design             |        | ~      | ~      |        |        |        |        |
|            | 3.2.3                    | Industry trials                |        |        | ~      | ~      | ~      | ~      | ~      |



#### **3.3** Innovative packing systems

- will focus on analysing the requirements and the development of innovative handling and packaging technologies
- The following will need to be considered:
  - new high performance orchards have trees that are smaller and in configurations that are more amenable to robotics, thus speeding up orchard activities
  - robotic systems in packhouses
  - new systems will be designed, and industry trials carried out.
  - investigate the viability of one-touch packing systems designed specifically to minimise handling of the fruit in the market and promote quality.

| Activ | vities                         | Milestones                                  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|-------|--------------------------------|---|--------|--------|--------|--------|--------|--------|--------|
| 3.3   | 3.3 Innovative packing systems |   |        |        |        |        |        |        |        |
|       | 3.3.1                          | Current industry practices and gap analysis | ~      | ~      |        |        |        |        |        |
|       | 3.3.2                          | New systems design                          |        | ~      | ~      |        |        |        |        |
|       | 3.3.3                          | Industry trials                             |        |        | ~      | ~      | ~      | ~      | ~      |



### 3.4 In market logistics systems

- will develop an understanding of internal systems and limitations within markets for prioritised markets and fruits
- will conduct in market analysis of priority markets
- will design new systems and industry trials carried out
- the investment in activity 3.3 will need a corresponding investment into the logistics in our key markets.
- exporters, packhouses and freight forwarders will be involved in the trials and analysis
- Closely aligns with: 3.3 Innovative packing systems

| Activ | vities                          | Milestones  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|-------|---------------------------------|---|--------|--------|--------|--------|--------|--------|--------|
| 3.4   | 3.4 In market logistics systems |   |        |        |        |        |        |        |        |
|       | 3.4.1                           | Study of in market systems for prioritised markets and fruits | ~      | ~      | ~      |        |        |        |        |
|       | 3.4.2                           | New systems design  |        | ~      | ~      |        |        |        |        |
|       | 3.4.3                           | Industry trials   |        |        | ~      | ~      | ~      | ~      | ~      |



#### **Outputs**

- Leading innovations in transport, packaging and packing.
- Investment into development of sustainable packaging that maximises freight space.
- Industry adoption trials and practices.
- Smart consumer ready packaging developed.
- Key information on changes in supply chain logistics shared.
- Direct delivery of high volumes of high quality fruit delivered to new markets and consumers with velocity.
  Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7

| Budget(000) | \$255 | \$322 | \$473                      | \$649 | \$585 | \$598 | \$617   |
|-------------|-------|-------|----------------------------|-------|-------|-------|---------|
|             |       | То    | Total overall budget (000) |       |       |       | \$3,500 |