



Horticulture Australia



Custard Apples
Australia^{INC.}

Custard Apple Industry Strategic Investment Plan 2011-2016

Custard Apple

Industry Strategic Investment Plan

2011-2016

Introduction

This strategic plan was developed by the Custard Apples Australia (CAA) Management Committee (which provides the functions of the Horticulture Australia Limited Industry Advisory Committee) in consultation with Horticulture Australia Limited (HAL).

The planning process commenced in March 2010, with the development and dissemination of a grower survey. This survey was used as the basis to determine the industry needs in terms of research and development and marketing from a grower perspective for the next five years. The results of this survey were then used as a base from which to build the 2011-2016 Australian Custard Apple Industry Strategic Investment Plan.

The plan will provide a clear direction and define the key outcomes required to advance the industry and guide the investment of industry and government funding over the next five years.

It was developed by CAA based on the input provided from industry. At a meeting in July 2010 with the CAA Management Committee, the plan was reviewed through a workshop process and the development guidelines for the 2011-2016 Strategic Investment Plan agreed. It continues on from the previous strategic plan for 2006 – 2011.

Executive Summary

It has been developed to provide strategic direction for the Australian custard apple industry over the next five years. In particular, the plan will be used to provide direction for the Custard Apple R&D and Marketing levy investments.

It has been developed as a fairly simple but high level plan which addresses the priority issues and strategies for the industry. It is intended that this plan will be reviewed regularly and specific actions will be considered and implemented on an annual basis.

Strategic Intent

The Australian Custard Apple industry aspires - *to provide consumers with a unique product, utilising innovative production systems thereby maximising grower profitability and sustainable industry expansion.*

Objectives

1. Achieve measurable growth in viable domestic and export markets
2. Develop production and marketing systems that deliver improved production efficiency, product consistency and consumer satisfaction
3. To provide strong industry leadership through a motivated industry body

Why a five year Industry Strategic Investment Plan

The Australian Custard Apple Industry Strategic Investment Plan for 2011 – 2016 has been developed to provide a clear direction and define the key outcomes required to advance the industry and guide the investment of industry and government funding over the next five years.

It is expected that approximately \$500,000 will be invested into industry research and development and marketing activities during this period. A key role of this document is to demonstrate to levy payers that their money has been invested thoughtfully and in a way to achieve growth and develop the industry. The Australian Government can be confident that the public monies, the matched dollar with the research and development, are being allocated sensibly and addressing the Government research and development priorities.

The Australian Government's Rural and Research and Development Priorities are –

1. Boosting productivity and adding value to rural production
2. Effective operation of supply chains and markets for existing and new products
3. Supporting effective natural resource management
4. Building resilience to climate variability and climate change, and
5. Protecting Australian from biosecurity threats.

These priorities are underpinned by the supporting priorities which are –

1. Innovation skills and
2. Technology.

The three key priority areas for Custard Apples are –

1. Demand – custard apple marketing – domestic and export
2. Supply – production, quality and productivity
3. Industry – leadership and a motivated industry body.

The plan will also provide a management framework for Custard Apples Australia and will guide industry leadership and decision making. It will assist in ensuring the industry investment is targeted and delivering priority outcomes for the industry.

Developing the Australian Custard Apple Industry Strategic Investment Plan

It is based on the Custard Apple Industry Strategic Plan 2006 – 2011. In 2011 the industry experienced a significant downturn in production as a result of the extreme weather conditions and rain events in Queensland and Northern New South Wales. The changes in production have been incorporated into the development of this strategic investment plan.

The following process was adopted to develop the 2011 – 2016 Custard Apple Industry Strategic Investment Plan.

Step 1 – Review of 2006 – 2011 plan

- An evaluation of the previous plan was undertaken to determine the degree to which the objectives of the plan were met and to identify where gaps existed.

Step 2 – Situation analysis

- The industry situational analysis was updated and is presented in the following section

Step 3 – Grower survey/identification of key issues

- Included in the plan development process was a grower survey. It was considered important to examine industry needs in terms of research and development and marketing from a grower perspective for the next five years. The results from this survey have been incorporated into the plan

Step 4 – Plan development

- A planning meeting was held with members of the Custard Apple industry and Industry Advisory Committee in early February 2011
- The results of the broader grower group survey to identify key industry issues were collated in mid 2011.
- A draft plan was developed by the Custard Apple industry President and Management Committee for consideration with the broader group at the conference held end of July 2011.

Step 5 – Analytical business case

- A cause and effect analysis of the key topics was undertaken

Step 6 – Revision and industry endorsement of plan

- After consideration a final draft plan was released to the industry management committee for review and comment, before the final Industry Strategic Investment Plan was endorsed by the Custard Apple Industry Advisory Committee (IAC).

Profile of the Australian Custard Apple Industry - 2012

A detailed situation analysis has been prepared by Custard Apple Australia which was used to inform the following summary.

Customers, Markets and Products

Products Marketed

The main varieties of custard apples are Pinks Mammoth, Hilary White (a sport of Pinks) and African Pride. Since the release of new varieties by DEEDI in 2000, there have been small plantings of Maroochy Gold. There have been significant plantings of KJ Pinks, a self pollinating sport of Pinks Mammoth controlled by ANFIC. Of the total custard apple production, about two thirds is made up of African Pride with about one third Pinks Mammoth.

Increased plantings of KJ Pinks has resulted in increased volumes of Pinks Mammoth on the market. While appropriate growing strategies are still being developed and implemented (restricting fruit numbers per tree), it is anticipated that there will be increased volumes of smaller Pinks Mammoth on the domestic market.

It is hoped that the breeding program will produce better varieties with self pollinating characteristics, smooth skin, sweet, large and longer self life that doesn't blemish easily and is disease resistant. We can then take the market by storm!

Products marketed are whole fresh fruit only. Currently there is no large scale commercial processing of custard apples, although there are small volumes of processed custard apple marketed locally in Central Queensland and Northern New South Wales.

Two major marketing groups exist: The National Jedefruit Custard Apple Marketing Association Inc (J-CAM) and The Avocado Marketing Co-op (AMCL) (more commonly known as Sunfresh). These are discussed in detail later in this plan.

Consumers and Consumer Research

In the first half of the 20th century, custard apples in Australia were almost unknown outside of Queensland. In the 1970's with the influx of Asian migrants and the "sea change" of city dwellers heading to the country, the production of custard apples increased and fruit appeared on southern markets. Asians were the main consumers, with the average Aussie preferring more well known fruits like apples and pears.

The following statement is based on consumer research conducted in – or is it anecdotal from key industry stakeholders – "Awareness and knowledge of custard apple is low in many parts of Australia. A quarter of people outside Queensland do not recognise the fruit and 37.5% having never tasted it" This measurement of consumer awareness will be further clarified with another consumer research survey to be conducted in Year 3 or 4 of the strategic investment plan.

Additional commentary from the original consumer survey with the key points identified is outlined below.

- Consumers have poor knowledge of how to buy, ripen and prepare custard apples, except the Asians, who "ripen them in the rice".
- Consumers cannot identify different varieties, but there is a general preference for Pinks Mammoth.
- There is significantly higher consumption among the Asian population and older population

- The majority of users see the fruit as an occasional purchase with 62% eating no more than once a month.
- It is consumed as a fresh fruit on its own and in recipes across a broad range of time and occasions.
- It is considered a high risk, impulse purchase.

Domestic markets

As custard apples were first planted in Queensland, the fruit mainly was sold on the Brisbane market or locally where it was grown. A generalisation from the research is that people in their 60s and older recall how they ate custard apples often as a child and even had a tree growing in their back yard.

With the increase in Asian immigration in the 1970's and since, the demand in other cities has increased. A smaller variety of custard apple, sugar apple (*annona squamosa*), is grown in different parts of Asia. It is sweet but small and very seedy. The new migrants knew the fruit and were astounded at the size, flavour and few seeds in the ones available in Australia. The industry had an instant market.

The Sydney wholesale market has received about 50% of the product, Brisbane and Melbourne about 22% each. A small quantity is marketed in Adelaide and very small quantities in Perth. Significant quantities are forwarded between markets.

Production has decreased from 1998 to 2008. The following table shows the change in production and market distribution based on LRS levy collection figures and industry data. Figures for Melbourne, Perth and Adelaide are questionable – figures from market sources show higher throughput.

Production over the past four years, except 2011, has been relatively stable as has levy income.

Market	Trays			
	1998	2008	2010	2011
Sydney	179,300	150,115	126,341	71,202
Melbourne	67,600	49,907	42,003	23,672
Brisbane	59,000	61,264	51,562	29,058
Adelaide	8,900	4,230	3,560	2,006
Perth	4,900	4,427	3,726	2,100
TOTAL Trays	319,700	203,374	227,192	128,038
TOTAL Tonnes	2,237	1,423	1,590	896

Source – Extrapolated from Levies Revenue Service levy collection figures and industry data

In the Melbourne market, demand has strengthened and prices slowly increased over the last 4 years. Pinks Mammoth are preferred if available but Prides return good prices when the Pinks supply has gone.

In the Sydney market, Pinks are definitely preferred and Prides only return good prices at the end of the season when supply is very low. It seems more poor quality fruit is sent to the Sydney market – it has become the “dumping ground” for poor fruit.

In the Brisbane market, demand and supply have slowly increased over the last 4 years. Pinks Mammoth are the preferred variety and prices for African Prides are quite low when Pinks are available. However, as soon as Pinks are not available, the demand for Prides pick up and prices increase substantially. Once dubbed the “dumping ground”, Brisbane now has a reputation for good quality fruit being available. During the Queensland season the majority of fruit is sent to Sydney, followed by Brisbane and Melbourne.

Some fruit is sold on road side stalls and in local flea markets, although a lot of this fruit is 3rd grade fruit which would return very little at the wholesale market. Some fruit would be sold directly to local fruit shops but the vast majority is sold through the main wholesale markets. Little if any is sold directly to the chain stores.

While the volume of fruit sold to chain stores is still minimal in comparison to wholesale markets, this has increased over the last two years as marketing groups with direct access to chain stores sell the fruit on behalf of growers. Chain stores find it difficult to tell the difference between Pinks Mammoth and African Prides, and because of the lower price that they are prepared to pay fruit that is available in chain stores is typically African Pride.

Wholesaler/retailer market research conducted a few years ago revealed only about 20% of the product was sold through supermarkets. 80% was sold through fruit barns and small fruit shops.

- The fruit has a low profile at retail level.
- Storage and handling problems are prevalent in domestic supply chains resulting in poor quality fruit available at retail.
- Prices fluctuate throughout the season and from market to market.

Export markets

Figures on how much fruit is exported as an entire industry are still not available. Quantities exported by J-Cam are down compared to 5 years ago but prices are higher. Over the last two years there has been an increase in the gap between export and domestic prices. This can be attributed to the expansion of direct export customers, as well as third party exporters. Marketing activities by SC JCAM have also been increased with the contracting of marketing services to Natures Fruit Company and their dedicated marketing team. Market visits to Asia and Vancouver have also taken place to develop business relationships with customers.

African Prides are no longer exported by J-Cam although they were in the past. This is because orders were too small and irregular and prices paid were only marginally above domestic market prices. Both varieties are bought off the market floor in small quantities and exported by third parties.

Although the Australian \$ has remained strong over the last two years this has not had an effect on the volumes or prices of fruit exported, except in the latter part of the year (August) when customers are ready to move on to the new season fruits such as mangoes.

The main export market is Singapore, which is considered fairly saturated. Newly developed export markets include Malaysia with Hong Kong starting to take regular small consignments of fruit. Small volumes have also started in the United Arab Emirates.

Other potential countries for exports have quarantine restrictions due to Qld Fruit Fly. Market Access into USA, New Zealand and Taiwan using irradiation has been instigated. Trials have been conducted using irradiation through a nuclear facility with little success. It is possible that quarantine restrictions could be overcome through the use of microwave irradiation, however at this stage there is no such facility available in South East Queensland. Until such a facility is available and trials can be conducted, irradiation is not considered a viable method, therefore market access applications are at a standstill until further research can be conducted.

Competitors and the nature of competition

Custard Apple Producers

Taiwan is the largest producer of custard apples, producing about 5,000 tonnes per year. About half of these are sugar apples, and half atemoyas, similar to African Pride. Almost 100% of their crop is sold in Taiwan and is counter seasonal to Australia. If their crop increases, they will be looking to export to China and perhaps South East Asia. Their production is believed to be stable at present.

- Spain, Brazil and Chile all produce cherimoyas, with Spain exporting to Europe. A small quantity of atemoyas is produced in Chile and Brazil with the Brazil industry expanding.
- Chile exports to USA and Japan, but the industry is believed to be contracting.
- The Cherimoya industry in New Zealand is all but extinct. An atemoya industry exists in southern China. It is unknown if there is any commercial production of custard apples in Southern Africa.

Consumer benefits

Custard apple is predominantly a 'cold season' fruit available from March to October, peaking from April to August. It is a unique product to Australia.

- They provide variety from the more common fruits on offer during the colder months.
- They are a soft fruit with an intensely sweet flavour
- They are easy to digest, have low GI, contain plenty of Vitamin C and have low acidity.

Alternative products

Competitors include other winter tropicals and exotics, as well as sweets/desserts – early/late season mango, early season summerfruit, papaya, mangosteen, persimmons and durian, ice-cream, yoghurts, etc.

Barriers to consumption

Custard apples are a high risk purchase that takes a degree of commitment to purchase and prepare.

- Being an exotic, they make a change from the 'boring' fruit on offer during the colder months.
- When not handled correctly at retail level the fruit is troubled by issues of skin blackening and short shelf life.
- It is often not available in chain stores and 'run of the mill' fruit and vegetable shops.

Ease of entry

Entry into the industry is relatively easy. However, planting material is in limited supply due to lack of rootstock seed. Capital infrastructure required is low compared with other industries.

Operating Systems

Marketing systems and structures

Custard Apple producers are price takers. The industry is dominated by smaller growers who pack their own fruit and market them through wholesalers. Two major marketing groups exist and are outlined below briefly.

1. The National Jadefruit Custard Apple Marketing Association Inc (J-CAM).

This group formed in 1999. It is an umbrella group for the Sunshine Coast (SSC) J-CAM Association Inc and NSW J-CAM Association Inc.

The SSC J-CAM has members from Tolga, Central Qld, Maryborough and the Sunshine Coast. This group deals mainly in Pinks Mammoth. Each grower packs their own fruit in J-Cam branded cartons under specific Quality Assurance requirements. The domestic brand is "Sweet Nature" and the export brand is "Jadefruit". Both these brands are trademarked.

In 2008 SC JCAM contracted Natures Fruit Company to undertake both export and domestic marketing activities on members' behalf. This has been successful with an increase in prices returned to grower, as well as further development of the export market. Export opportunities are now available for 'domestic grade' fruit which has relieved the pressure on the domestic market, therefore increasing the returns for domestic grade fruit to growers and expanding export markets and customers.

The services of an independent Auditor have been maintained to ensure that strict quality assurance standards are maintained.

The NSW J-Cam has members all from the Alstonville/Lismore region of northern NSW. They have their own marketing co-ordinator who concentrates on the domestic market. This group deals mainly in African Prides.

2. The Avocado Marketing Co-op (AMCL)

This group based on the Sunshine Coast have a custard apple marketing section that markets under the brand of "Sunfresh". They pack their own fruit to a set standard and have a marketing co-ordinator that directs where their fruit is sent. They export Pinks Mammoth.

Promotion and market development

Prior to the implementation of the marketing levy in 2002, the only custard apple promotion activity was through the NSW custard apple group of the Exotic Fruit Growers Association. A voluntary levy from NSW growers funded supermarket taste test and merchandising programs for about 6 years from 1988 to 1994.

Once Horticulture Australia Limited (HAL) was formed, it made it economically viable for small industries to run a marketing program. A marketing levy of 20cents a carton was implemented in 2002 and a marketing program commenced in 2002 with consumer leaflets being developed, a PR program implemented and a Retail Development program commenced.

HAL runs all marketing programs funded by the national marketing levy. The levy was adjusted in 2004 so that more funds went to R&D and less to marketing to fund the Retail Development program. A Public Relations program has had excellent results. An Influencer Program has had positive feedback but some question its long term benefits.

Levy funds collected for marketing are very small which limits the scope of promotion activity.

If there is a decrease in production in the next few years, this could impact considerably on the R&D and marketing programs as there would be reduced levies collected. Liaison with similar sized industries may be an important consideration in the future.

Production Systems and processes

Custard apple production is highly labour intensive. Minimal mechanisation is possible due to the delicate nature of the product. Consequently, production units are relatively small and intensive.

The recent development of the KJ Pinks variety is expected to result in a significant improvement in production efficiency.

A project involving comparing various tree training methods funded through R&D levies and matched Government funding took place between 2005-2010. This project was very successful resulting in both new and existing growers moving to high density plantings using both hedgerow and trellis systems.

Industry organisation and performance

People

The majority of custard apple growers are in the 46-55 age range, followed by the 56 and over age range. Some new younger growers have entered the industry and some have taken over family farms.

Location and extent of production

Custard apples are produced predominantly on the Queensland and the northern NSW coast. Market throughput data indicates production is static or in decline. However, new plantings of KJ Pinks are occurring.

Pinks Mammoth Custard apples were first grown in the Redland Bay area of Queensland in the late 1880's. African Pride custard apples were introduced into the Bundaberg region from East Africa in the 1950's. The industry was seen as a cottage type industry until in the late 1970's/early 1980's when there were large plantings of African Pride in Northern NSW and Central Queensland. The industry grew steadily and tree numbers peaked in the mid 1990's. There were about 450 growers at this time. Many of these were very small growers with only up to 100 trees. Many were also growing other crops and custard apples were a very secondary crop.

In the 1980's, a small group of growers in NSW attempted developing a Cherimoya industry. Fino de Jete and El Bumpo were the main varieties planted. Unfortunately, at about 10 years of age, the trees developed an uncontrollable anthracnose and died.

An Overview of the Strategic Investment Plan

Strategic intent	To provide consumers with a unique product, utilising innovative production systems thereby maximising grower profitability and sustainable industry expansion.	
Key Aspirations	The Australian Custard Apple Industry aspires to <i>Australian Custard Apples are recognised as a unique, healthy fresh product sought for when they're in season.</i>	
Objective 1	Achieve measurable growth in viable domestic and export markets	
Strategies	1.1 Develop promotion and consumer education programs in target markets (domestic and export) to increase awareness and demand for Australian custard apples	1.2 Ensure effective communication and education through all sectors of the supply chain to deliver products that meet consumer requirements
	1.3 Develop new rootstocks and varieties that produce consistent crops of high quality fruit	1.4 Encourage increased plantings from existing (and new) growers to support market growth
Objective 2	Develop production and marketing systems that deliver improved production efficiency, product consistency and consumer satisfaction	
Strategies	2.1 Develop new rootstocks and varieties that produce consistent crops of high quality fruit	2.2 Develop production, harvesting and marketing systems for new varieties
	2.3 Establish base line data on current IPDM, irrigation and nutrition management practices	2.4 Continue to develop effective and sustainable Integrated Pest and Disease Management strategies
	2.5 Improve irrigation, nutritional and environmental management and efficiencies for consistent, higher yields updated by manuals every 3 years	2.6 Educate retailers how to best handle the product for optimum presentation to consumers
	2.7 Identify inefficiencies in major custard apple supply chains (paddock to plate) and develop and communicate best practice guidelines for supply chain management to ensure clear responsibilities and accountabilities along the supply chain	
Objective 3	To provide strong industry leadership through a motivated industry body	
	3.1 Form a liaison with similar sized industries and representative organisations to address across-industry issues	3.2 Gather and maintain reliable statistics on grower numbers, tree plantings, varieties, production, returns and cost of production for sound industry planning
	3.3 Maintain communications to growers to encourage industry involvement and keep up with new developments	

Details of the Custard Apple Industry Strategic Investment Plan objectives, rationale and key performance indicators are in the following pages.

Objective 1

Objective 1	Achieve measurable growth in viable domestic and export markets	
Strategies	1.1 Develop promotion and consumer education programs in target markets (domestic and export) to increase awareness and demand for Australian custard apples	1.2 Ensure effective communication and education through all sectors of the supply chain to deliver products that meet consumer requirements
	1.3 Develop new rootstocks and varieties that produce consistent crops of high quality fruit	1.4 Encourage increased plantings from existing (and new) growers to support market growth
Key performance indicators	<ul style="list-style-type: none"> ✓ Increased awareness of custard apple in Australia by 2014 as measured by consumer survey ✓ Increased export sales (by value) through marketing groups by 5% by 2016 using JCAM group as an indicative measurement. 	<ul style="list-style-type: none"> ✓ Increased domestic sales (at stable prices) by at least CPI year on year ✓ One new improved variety or rootstock that has passed field tests by 2015.

Objective 2

Objective 2	Develop production and marketing systems that deliver improved production efficiency, product consistency and consumer satisfaction	
Strategies	2.1 Develop new rootstocks and varieties that produce consistent crops of high quality fruit	2.2 Develop production, harvesting and marketing systems for new varieties
	2.3 Establish base line data on current IPDM, irrigation and nutrition management practices	2.4 Continue to develop effective and sustainable Integrated Pest and Disease Management strategies
	2.5 Improve irrigation, nutritional and environmental management and efficiencies for consistent, higher yields updated by manuals every 3 years	2.6 Educate retailers how to best handle the product for optimum presentation to consumers

	2.7 Identify inefficiencies in major custard apple supply chains (paddock to plate) and develop and communicate best practice guidelines for supply chain management to ensure clear responsibilities and accountabilities along the supply chain	
Key performance indicators	<ul style="list-style-type: none"> ✓ Increased adoption of IPDM as measured by field day survey in 2010 ✓ Improved irrigation and nutrition management as measured by field day survey in 2010 by updating the manuals every 3 years 	<ul style="list-style-type: none"> ✓ Improved product quality at retail level measured by retail surveys

Objective 3

Objective 3	To provide strong industry leadership through a motivated industry body	
Strategies	3.1 Form a liaison with similar sized industries and representative organisations to address across-industry issues	3.2 Gather and maintain reliable statistics on grower numbers, tree plantings, varieties, production, returns and cost of production for sound industry planning
	3.3 Maintain communications to growers to encourage industry involvement and keep up with new developments	
Key performance indicators	<ul style="list-style-type: none"> ✓ Similar sized industry liaison established by 2014 ✓ Member satisfaction of 80% determined by survey issued ✓ CAA membership at 75% of production by 2012 	<ul style="list-style-type: none"> ✓ Reliable industry statistics database in place by Dec 2013 and then reviewed biennially

Budget Allocation

The following is a broad budget allocation for the implementation of this plan over the next five years. It is based on a detailed budget for specific outputs under each strategy. These allocations are a guide only and may vary as the plan progresses and new information is collected.

The total levy income determines the budget available to implement the SIP as well as the allocation of funds between Marketing and Research and Development (R&D). The total budget available depends on levy revenue and matching funds for R&D from the Australian Government, less HAL's corporate cost rate and across industry contributions.

The following tables provide a summary of the proposed investment across all of the main strategies. The data has been aggregated from a more detailed budget spreadsheet which estimates costs for delivering specific outputs under each of the strategies. There is some cross over between strategies which is not immediately apparent in the summary data provided. This plan will guide the investment of industry and government monies over the next five years. It is expected that \$500,000 will be invested into research and development and marketing campaigns. It will assist in ensuring targeted investment and delivery of the prioritised outcomes for the Custard Apple industry.

The table below estimates how the planned program expenditure will be allocated across the strategies over the life of the plan.

		2011/12	2012/13	2013/14	2014/15	2015/16	TOTAL
Production estimate Fresh (t)		1600	1600	1800	1800	1800	8600
R&D program funds available*		106000	106000	120000	120000	120000	572000
MK program funds available*		27300	26000	29250	29250	29250	141050
Objective	Strategies						
1. Achieve measurable growth in viable domestic and export markets	1.1 Develop promotion and consumer education programs in target markets (domestic and export) to increase awareness and demand for Australian custard apples	5000	6000	10000	12000	12000	45000

	1.2 Ensure effective communication and education through all sectors of the supply chain to deliver products that meet consumer requirements	5000	6000	10000	12000	12000	45000
	1.3 Develop new rootstocks and varieties that produce consistent crops of high quality fruit	31794	19501	29059			80354
	1.4 Encourage increased plantings from existing (and new) growers to support market growth						0
TOTAL - OBJECTIVE 1	Strategies	41794	31501	49059	24000	24000	170354
2. Develop production and marketing systems that deliver improved production efficiency, product consistency and consumer satisfaction	2.1 Develop new rootstocks and varieties that produce consistent crops of high quality fruit	31794	19501	29059			80354
	2.2 Develop production, harvesting and marketing systems for new varieties	20158	12364	18424			50946
	2.3 Establish base line data on current IPDM, irrigation and nutrition management practices		2000	2000	2000		6000
	2.4 Continue to develop effective and sustainable Integrated Pest and Disease Management strategies	20119	29273	28818	10000	10000	98210
	2.5 Improve irrigation, nutritional and environmental management and efficiencies for consistent, higher yields updated by manuals every 3 years	1926	1181	1760			4867
	2.6 Educate retailers how to best handle the product for optimum presentation to consumers						0
	2.7 Identify inefficiencies in major custard apple supply chains (paddock to plate) and develop and communicate best practice guidelines for supply chain management to ensure clear responsibilities and accountabilities along the supply chain	10616	14616	15000	15000	15000	70232
TOTAL - OBJECTIVE 2	Strategies	84613	78935	95061	27000	25000	310609

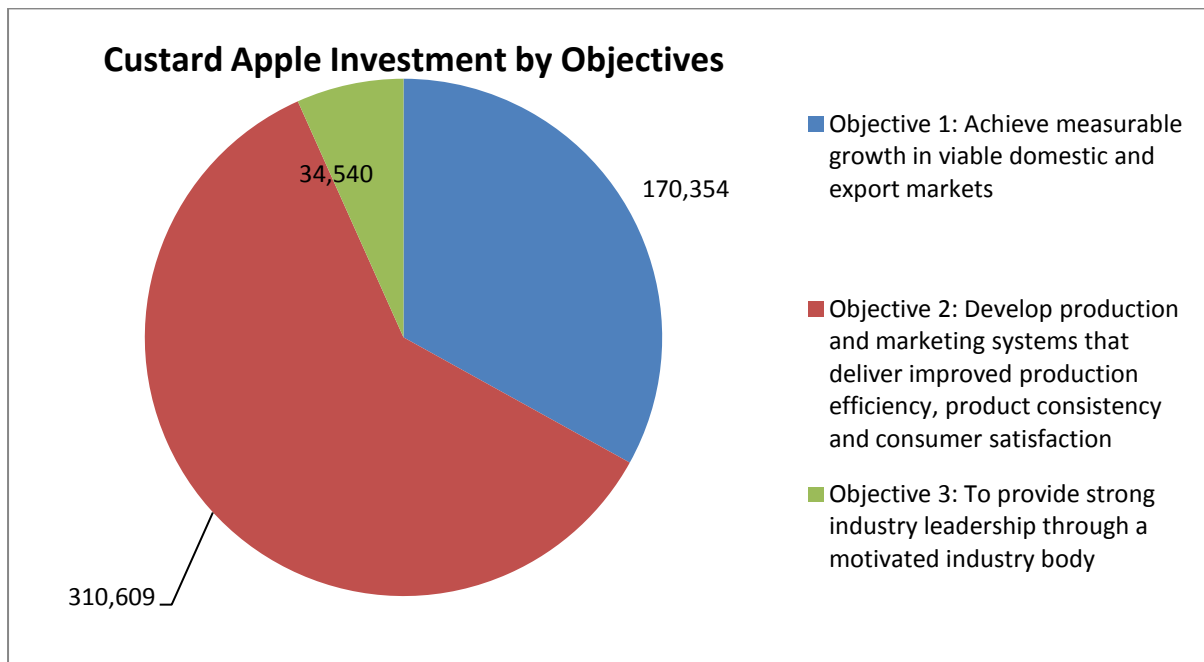
To provide strong industry leadership through a motivated industry body	3.1 Form a liaison with similar sized industries and representative organisations to address cross-industry issues	1272					1272
	3.2 Gather and maintain reliable statistics on grower numbers, tree plantings, varieties, production, returns and cost of production for sound industry planning						0
	3.3 Maintain communications to growers to encourage industry involvement and keep up with new developments	6584	6584	6700	6700	6700	33268
TOTAL - OBJECTIVE 3		7856	6584	6700	6700	6700	34540
TOTAL INVESTMENT		134263	117020	150820	57700	55700	515503
TOTAL R&D#		124263	105020	130820	33700	31700	425503
TOTAL MK		10000	12000	20000	24000	24000	90000

* levy income minus CCR, LRS and AIC costs plus matched funding from Commonwealth

R&D costs including market research

Over 50% of the expenditure is allocated to objective 2 aimed at improving productivity and marketing systems this aligns with the importance of this objective as outlined in the rationale. The investment is essential given the importance in developing new varieties with high yields for the development of the industry.

Objective 3 addressed the enabling environment and is a critical area of investment to ensure the benefits of the levy program are delivered to growers and the broader industry through the industry communication channels.

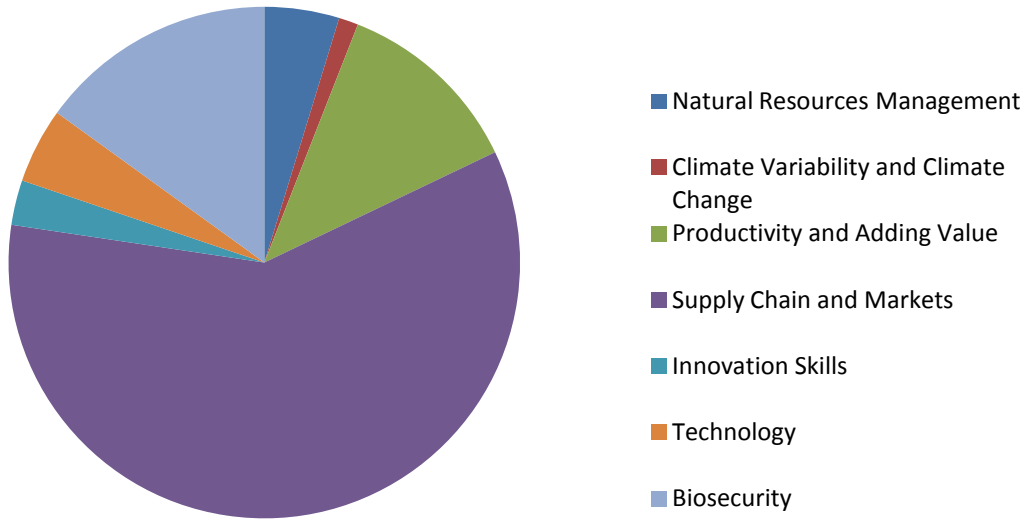


Proposed Investment against Rural R&D Priorities

The proposed investment over the life of the plan has been assessed against the Rural R&D Priorities. The pie chart below shows the expected allocation of funds and the data has been aggregated using a detailed budget spreadsheet which aligns the estimated costs for delivering proposed outputs with each of the Rural R&D Priorities.

The program addressed all of the Rural R&D Priorities with the majority of the program addressing the two priorities – supply chain and markets and biosecurity.

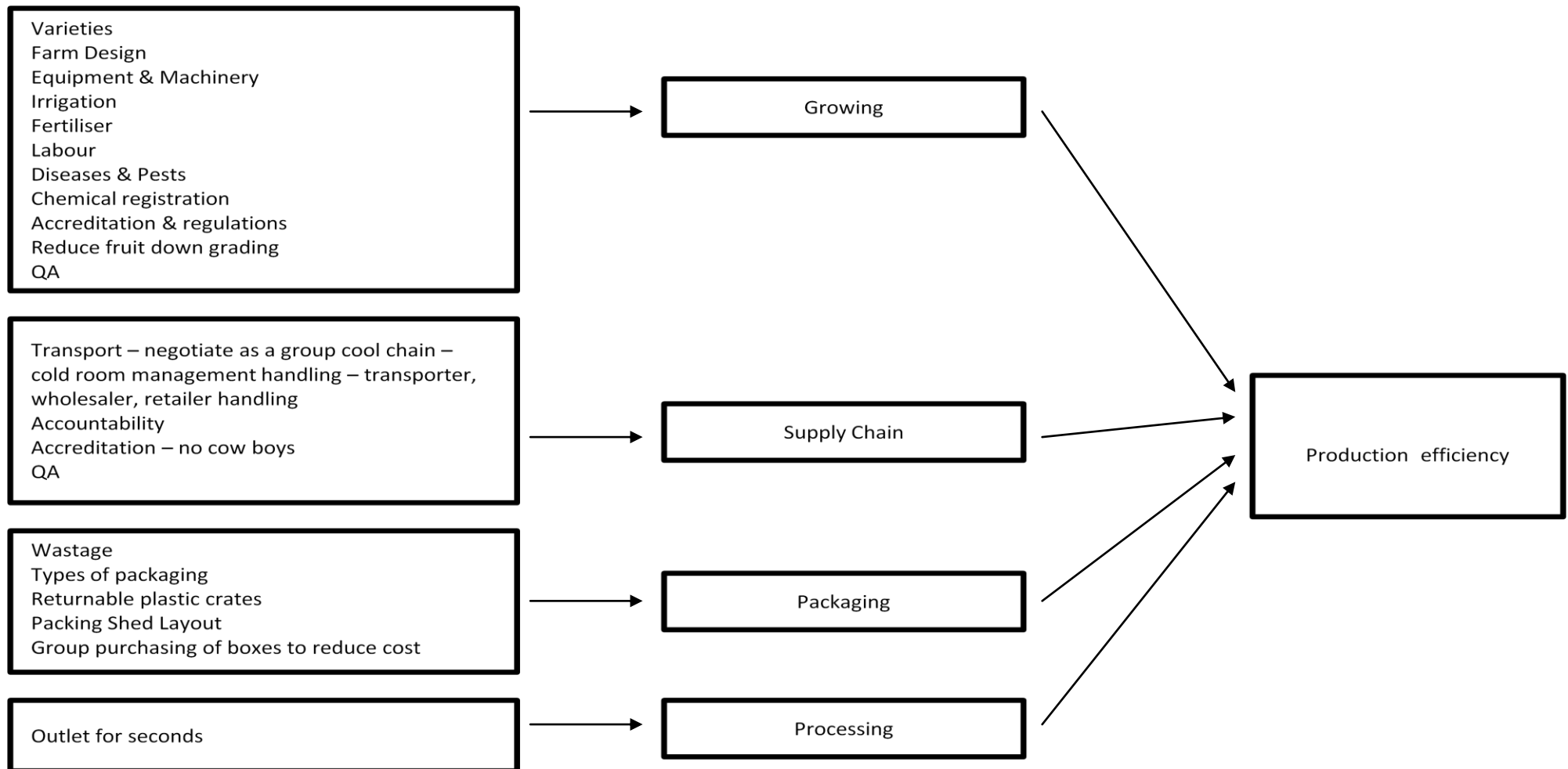
Proportion of planned investment against Australian Government Priorities



Analytical Business Case

CAA will need to continually monitor the investment priorities to ensure a strong return on investment. Over time the investment priorities may change as the situation of the industry changes.

Cause and effect – To improve production efficiency, product consistency and consumer satisfaction.



Appendix 1: CONTRIBUTORS

The following people are acknowledged for their contribution to the Australian Custard Apple Industry Strategic Investment Plan process.

Name	Role	Growing Region
Ros Smerdon	CAA President, IAC Chair, grower	Glasshouse Mountains
Patti Stacey	CAA Secretariat, IAC Member, grower	Northern NSW
Ali Randall	Northern NSW CAA representative, grower	Northern NSW
Paul Thorne	CAA, Vice President, grower	Brisbane
Wayne Stewart	North Queensland CAA representative, grower	North Queensland
John Fitzpatrick	North Queensland grower	North Queensland
Peter Trebbin	Wide Bay grower	Wide Bay
Astrid Hughes	HAL, Industry Services Manager	NA
Grant Bignell	DEEDI/DAFFQ	Sunshine Coast

Appendix 2: SWOT ANALYSIS

STRENGTHS

Sweet, unique, tasty product
Niche product
Limited competition in the cooler months
Unusual appearance
Healthy product - High Vitamin C/low GI
Low acid
Soft fruit – suit babies and elderly
Small unified industry
Good cohesive industry organisation
Sharing, supporting industry
New high yielding, precocious variety (KJ Pinks)

WEAKNESSES

Price takers
Lack of value adding/processing
Impulse purchase
Low shelf life
Difficulty handling/sensitive product
Lack of consumer knowledge handling/using
Limited access to export markets
Lack of volume to service export markets

Lack of adherence to QA standards
Lack of awareness of product
African Pride – Market acceptance problems
Low production per hectare
High production costs
Lack of mechanical grading
Poor disinfestations treatments
Lack of funds to address industry issues

OPPORTUNITIES

New varieties – seedless/colour
Market access – domestic and export
Value adding/processing
New packaging/products
Room to increase market share/consumption
Expand production
Better rootstocks
Removal of second grade product through value adding
New varieties and training systems

- to improve efficiency
- to encourage new growers

Increasing older demographic with time and dollars
Capitalise on market window in the cooler months

THREATS

South African KJ Pink production
Consumer/market turn-off from poor quality fruit
Flooded domestic market if export not developed
Cost of regulation/red tape
Exotic pests and diseases
Ageing growers leaving the industry
Overproduction due to downturns in other industries
Ageing trees
Increasing costs/lower profit margins
Decreased production leading to decreased levies and R&D
Loss of chemicals
Lack of access to new chemicals
Increased public resistance to new chemicals
Traditional markets eroded by more organised industries
Pest & disease resistance
Bad publicity
Water restrictions
Climate change
Industry disunity