

Horticulture Innovation Australia

Final Report

Australian Apple and Pear Industry Development Initiative

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Apple & Pear Australia Limited (APAL)

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AP12037

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Summary

The key focus of this project is industry development. Defined by Horticulture Australia Limited (now Horticulture Innovation Australia)... as “the process of informing and empowering those in horticulture to make better business decisions”, industry development is essentially a process of knowledge transfer. In this particular case the industry development initiative was designed and executed to ensure:

- 🌱 Adoption of RD&E at a practical level by apple and pear growers;
- 🌱 Growers and the apple and pear supply chain have an informed understanding of their operating environment;
- 🌱 There is an improved capacity by growers and packers to adapt to changing operating environments through skills and leadership development;
- 🌱 Relationship building across horticulture and agriculture as well as along the supply chain to improve the effectiveness of RD&E investments and utilisation of the outcomes.

The causal link between agricultural industry development services and industry performance is difficult to define due to lag effects, changing market circumstances and the interplay of many interconnected economic and physical forces. Though often intangible, industry development initiatives can provide the difference between industry growth, optimism and confidence compared with industry contraction and negativity.

Notwithstanding these complicating factors, the project sought to and has influenced industry confidence and innovation capacity has improved across the sector through the acquisition of knowledge, skills and networks.

This industry development initiative has focused on the delivery of six broad outcomes including:

- 🌱 Improved biosecurity preparedness;
- 🌱 Better investment of R&D and targeted extension efforts to improve the chances of uptake by growers;
- 🌱 An enhanced capacity for the industry to seize opportunities and face challenges by building leadership capability and identifying the required skills base;
- 🌱 An improved business operating environment focusing on cost containment and greater awareness of the regulatory and legislative obligations of growers;
- 🌱 Enriched access to and better analyses of data to aid business decision-making
- 🌱 Greater quarantine access to markets and strengthened knowledge of export market opportunities and more well developed relationships with key buyers and influencers

In turn each of these outcomes goes some way toward achieving the strategic direction of the industry as articulated within the apple and pear Strategic Investment Plan. This Plan has 3 key objectives:

Objective 1: Improve Sales Volume by 5% for apples and maintain pear volume by:

A. Stimulating Domestic Demand by 5% through product quality and innovation

B. Expanding apple and pear exports to 10% of marketable product exported by 2015

Objective 2: Produce High Quality Apples and Pears at Internationally Competitive Prices

Objective 3: Provide a supportive operating environment

The activities associated with this industry development initiative and the outcomes achieved have focused in different ways and at different intensity levels on all three objectives.

This project funded John Dollisson (CEO) and Annie Farrow (Industry Services Manager) to provide the leadership, support and some of the resources to drive the strategies and initiatives targeted to meeting industry challenges and seizing opportunities.

The target audience for this project is Australian apple and pear growers, packers and exporters. But other players across the supply chain are important:

- 🍏 Information wholesalers (private agronomists and advisors, state agency industry development officers) are crucial to the reinforcement of opportunities and learning lessons;
- 🍏 Research agencies;
- 🍏 The pre and post farm gate supply chain: input suppliers and service providers as well as wholesalers and traders;
- 🍏 The advisory mechanisms: the apple and pear Industry Advisory Committee and sub committees of the former Horticulture Australia Limited and current advisory mechanisms under Horticulture Innovation Australia (HIA);
- 🍏 State and Commonwealth governments;
- 🍏 International buyers and Government officials (market access decision-makers).

Engagement with the many and varied stakeholders to this project has been achieved through a number of formats:

- 🍏 on-farm visits;
- 🍏 regional grower meetings and APAL State workshops;
- 🍏 industry and agricultural conferences;
- 🍏 grower representative body forums;
- 🍏 meetings with key decision makers and government officials;
- 🍏 the leadership of delegations and Roundtables;
- 🍏 participating in key industry committees;
- 🍏 desktop research;
- 🍏 provision of information and facilitation services.

Keywords

Industry development, Industry capacity building, Market access, Market development, Industry consultation, apple and pear exports.

Introduction

The Australian apple and pear industry continues to face significant challenges. In an increasingly globalised market there is a constant threat of expanded competition from southern and northern hemisphere suppliers requiring increased productivity to world-class levels. On the domestic market the industry needs to raise consumption against competition (from other fruits, foreign imports, and snack foods). However international market development provides the best option for easing domestic market pressures and ensuring that the industry is actively involved in international research and marketing networks.

The low Australian dollar has provided impetus to export growth which will further benefit from the recent removal of tariff barriers with some trading partners. But the export orientation of apple and pear growers has traditionally been low compared to other large horticulture sectors. A significant effort has been made by APAL through this project to develop an export focus from a low base and to work toward achieving quarantine access in desired markets.

These domestic and export challenges require sustained and significant effort as well as leadership across the supply chain. They also require a heightened level of knowledge, skills and networks so that new technologies and techniques can be adopted and that fresh approaches to finding solutions and seizing opportunities are taken.

Whilst the key target audience for this project has been Australian apple and pear growers and their key advisors, other stakeholders from across the supply chain have featured in the development and delivery of industry development services leading to:

1. New ideas and concepts are which are generated for industry development initiatives.
2. An improved understanding of the policy and regulatory operating environment by growers and the supply chain.
3. An improved understanding by government of industry dynamics and drivers.

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The role of industry development in underscoring business sustainability is frequently underestimated. An informed and trusted industry development program ensures the ongoing transfer of knowledge, skills and networks in appropriate settings, provides invaluable industry consultation and the identification of opportunities and barriers to growth.

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- 🌱 Better investment of R&D and targeted extension efforts to improve the chances of uptake by growers;

¹ Prior to December 2013 it funded Jon Durham, Managing Director of APAL

- 🌱 An enhanced capacity for the industry to seize opportunities and face challenges by building leadership capability and identifying the required skills base;
- 🌱 An improved business operating environment focusing on cost containment and greater awareness of the regulatory and legislative obligations of growers;
- 🌱 Enriched access to and better analyses of data to aid business decision-making;
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Progress toward achieving these objectives has been met through the engagement of the industry development resources on researching issues, providing industry feedback, pre-scoping solutions to address impediments to growth, liaising with stakeholders, managing programs, undertaking trade missions, participating in or leading workshops and forums, and making on farm visits. The key focus has been on: farm and packhouse input costs, market access and trade, biosecurity, industry leadership, industry capability and skills, and intra-industry relationship building.

This Industry Development Initiative has been complementary to the delivery (and secretariat services) of:

- 🌱 Industry leadership and capability initiatives such as the Nuffield Scholarship (AP14701), the Emerging Leaders Course and the Agribusiness Scholarship at Marcus Oldham (AP12034);
- 🌱 Export initiatives such as Asian Market Access (AP14701) and Asian Market Development (AP11023);
- 🌱 Strategic initiatives such as Key Stakeholders Roundtable (AP13036) and leadership of some aspects of Apple and Pear Communications (AP12013) - the State pome fruit industry grower association meetings and the grower roadshows.

As with all effective programs the Industry Development Initiative Project has utilised a range of communication channels to ensure that key knowledge and skills outcomes can be transferred. They included: the monthly Australian Fruitgrower (circulation 1000) magazine, the weekly electronic newsletter Industry Juice (circulation 1100) and the APAL website.

Methodology

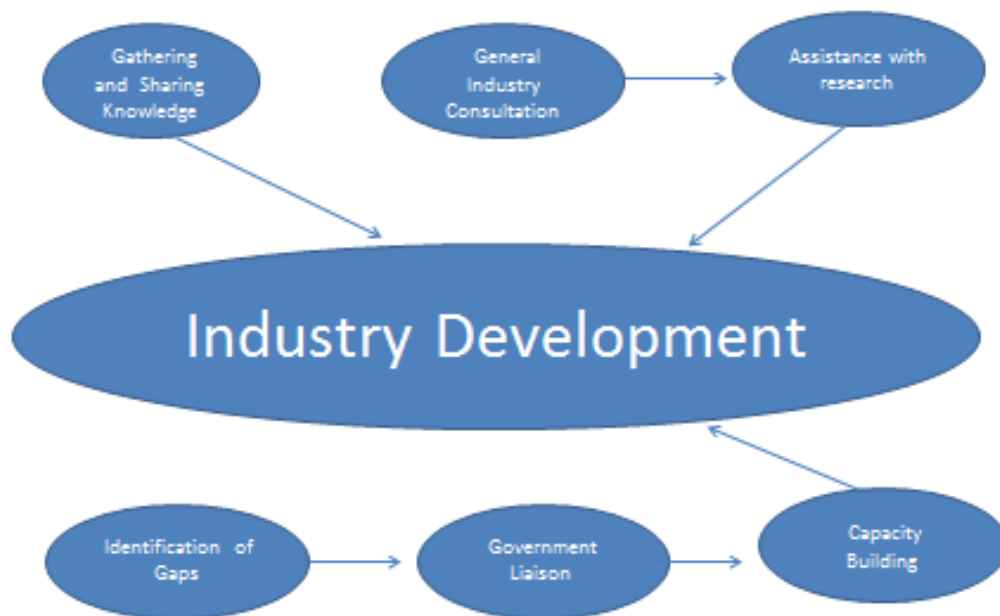
There are several projects that were complementary to and supported in varying degrees by this Industry Development Initiative. This includes: Apple and Pear Technical Manager (AP11014); Future Orchards™ (AP11017); Market Development Manager (AP11016); Asian Market Development (AP11023); Asian Market Access (AP14701); Nuffield (AP13036); Key Stakeholders Roundtable (AP13036); and, Emerging Leaders (AP12034).

Industry development occurred under this Project through the highlighting of sensible and practical opportunities to improve business profitability through the removal of barriers that impede the uptake of R&D outputs and/or knowledge of industry best practices and innovation. It researched and disseminated opportunities to lower input costs, drove the development of better data and decision-making tools and provided the basis for an effective biosecurity system that advantages the apple and pear industry. Overall this Project provided support to growers and packers and the supply chain by contextualising the R&D, aggregating industry responses to issues and identified gaps, and providing a trusted conduit for advice, information and feedback.

APAL has multi-faceted touchpoints with growers, packers, exporters and the supply chain that aids both consultation to give direction to specific industry development activities but also to dissemination of knowledge. APAL's ability to provide linkages with other research and extension programs, both levy and non-levy funded, have also been exploited to add value to this Project. As the "go to guys" APAL has the opportunity to:

- 🌱 Provide industry knowledge and information about opportunities to reduce costs, improve access to newer technologies and adapt to changed operating and regulatory environments;
- 🌱 Provide input to the R&D program and technology transfer initiatives;
- 🌱 Maintain a high level of government liaison and information sharing;
- 🌱 Deliver on the industry's strategic and operational plans;
- 🌱 Coordinate inter-related projects to ensure industry development and industry capability / capacity building initiatives maximise the uptake of R&D outputs that provide opportunities for the industry to achieve improved profitability;
- 🌱 Draw lessons learned from other industries relevant to the Australian apple and pear industry for communication to the supply chain.

The methodology used to effect industry development under this project included:



Gathering and Sharing Knowledge and Identification of Gaps was achieved through:

- 🍏 Discussions with the supply chain;
- 🍏 Consultations with the development officers and management from other industries;
- 🍏 Discussions with other agricultural industries
- 🍏 Government and commercial workshops and conferences;
- 🍏 Literature searches.

General Industry Consultation was achieved through:

- 🍏 Liaison with growers and the supply chain to assist them to articulate and prioritise their needs {through telephone conversations, on-farm visits, informal grower group meetings, participation in regional grower group meetings, participation at Future Orchard Walks and other industry workshops, attendance at industry meetings};
- 🍏 Discussions with APAL Board, Key Stakeholders Roundtable, and State fruit grower representative organisations, the R&D Sub Committee and the apple and pear Industry Advisory Committee;
- 🍏 Consultations with industry agronomists and information wholesalers, research agencies and service providers.

Assisting Research was achieved through:

- 🍏 Explaining the industry Strategic Investment Plan and R&D Priorities to potential service providers as well as to the supply chain during discussions about competing priorities (to

better understand areas of commonality, areas of difference);

- 🕒 Assisting third party service providers to refine their funding proposals (both for HAL and non-HAL funding) when requested by the service provider;
- 🕒 Promoting greater R&D effort in apples and pears where non levy funding opportunities presented.

Liaising with Government involved:

- 🕒 Participation in meetings, teleconferences, roundtable events and working groups;
- 🕒 Responding to requests for feedback and the preparation of background briefs on the views of industry on the impact of policy options on their profitability and business environment. The preparation of responses to such requests required ringing around industry (specific growers or packers, state grower representatives or others in the supply chain) to seek feedback and input, research, and liaison with / debriefing other horticultural industry representatives. Activities include liaison with:
 - Commonwealth Department of Agriculture and Water Resources (DAWR);
 - Department of Industry, Innovation, Climate Change, and Science;
 - Department of Infrastructure and Transport;
 - Department of Regional Australia;
 - Department of Immigration;
 - Plant Health Australia (PHA);
 - Agencies such as Australian Pesticide and Veterinary Medicines Authority (APVMA), and Australian Consumer and Competition Commission (ACCC);
 - State Departments of Agriculture.

Capacity Building happens as a consequence of:

- 🕒 Resourcing the secretariat of the apple and pear industry Key Stakeholders Roundtable;
- 🕒 Managing a Nuffield Scholar and the scholarship process;
- 🕒 Intra-industry relationship building;
- 🕒 Developing industry collaboration which is critical to:
 - maximise the value of research dollars;
 - gain efficiencies in knowledge transfer and uptake;
 - achieve economies in people and capacity development; and,
 - in disseminating information about adapting to changes in operating environments.

Outputs

The specific outputs from the project fall into major subject areas: biosecurity preparedness, facilitation of adoption of R&D and innovation, industry capacity building, understanding the business environment, improving industry data, and market development - market access. These are described more fully below:

i. **Biosecurity preparedness;**

A fully functional and efficient biosecurity system is a vital part of the future profitability, productivity and sustainability of the Australian apple and pear industry. There has been an ongoing need to contribute to the systems that keep the Australian apple and pear industry free from exotic pests and diseases. Equally there has been a need to provide input into the nationally coordinated decision making and cost sharing approach that enables the industry to respond to incursions. Improving the capacity of the industry to be better prepared for endemic pest and disease incursion was also required.

Outputs:

- 🕒 Plant Health Australia meetings and discussions attended to ensure the Emergency Plant Pest Response Deed remains current and meets the needs of the apple and pear industry; Reference group participation provided on specific aspects of the Deed; representation (A Farrow) on the Plant Industry Forum executive to act as a conduit between the horticulture sector and the Department of Agriculture on Deed matters;
- 🕒 Participation in the National Management Group (NMG) and Consultative Committee for Emergency Plant Pests (CCEPP) in relation to Torres Strait Fruit Fly and other pests in which apples or pears are deemed to be an affected party;
- 🕒 Preparation of technical materials for and participation in the Categorisation Group for European Canker;
- 🕒 Development of the Owner Re-imburement cost framework commenced;
- 🕒 Participation in the National Fruit Fly Governing Body and HAL Fruit Fly Working Group; Participation in Goulburn Valley Fruit Fly consultative committee;
- 🕒 Review of HIA funding proposals in relation to fruit flies to assist grower panel decision-making and liaison with research agencies to ensure fruit fly research proposals are aligned to meet the specific needs of the apple and pear industry;
- 🕒 Participation in Department of Agriculture Horticulture and Agriculture Industry Biosecurity Roundtables;
- 🕒 Initial discussions held with PipFruit New Zealand to address biosecurity preparedness around Brown Marmorated Stink Bug (BMSB);
- 🕒 Discussions held with Department of Agriculture and PHA in regard to pathways to move emergency plant pest response levy from zero to positive.

ii) Facilitation of adoption of R&D and innovation;

This project provided a supporting role (to AP11014 Technical Manager and AP11017 Future Orchards™) to understand and develop systems to improve the transfer of know-how and R&D to growers and the industry development network as well as the wider supply chain. This serves to increase the uptake of knowledge which in turn improves business productivity and management; enables the industry to adapt services to match a changed operating environment; and, improves the flows and quality of information to improve business decision-making.

Outputs:

- 🌱 Liaison with growers about their R&D needs through on-farm visits;
- 🌱 Consultations with State fruit grower organisations about regional R&D needs and priorities through the attendance to regional grower meetings and APAL State workshops (AP12013);
- 🌱 Liaison with R&D and industry development service suppliers to provide industry feedback on proposals and ensure research proposals were aligned with apple and pear Strategic Investment Plan priorities;
- 🌱 Assistance given to R&D and industry development service suppliers to ensure HAL/HIA R&D funding mechanisms understood;
- 🌱 Participation in the apple and pear R&D Committee (HAL) and apple and pear Industry Advisory Committee (HAL) and feedback provided in to regard to investment proposals. Feedback on proposals provided to apple and pear Grower Advisory Panel (HIA) where sought;
- 🌱 Participation on PIPS National Apple and Pear Advisory Committee (NAPAC);
- 🌱 Annual apple and pear industry conference planning assisted with topics of interest selected and suitable key note presenters identified;
- 🌱 Assistance provided to HIA to develop the Terms of Reference for projects to be commissioned;
- 🌱 Liaison with other horticulture commodity groups to identify potential R&D outputs to encourage greater cross-fertilisation of ideas and knowledge uptake;
- 🌱 Desktop research to improve APAL capability to ensure best practice transference paths are used in extension programs;
- 🌱 Assistance provided to HAL and HIA by developing Terms of Reference for industry development and research projects to improve clarity around desired outputs and outcomes;
- 🌱 Liaison with State and regional apple and pear grower groups to seek alignment of their extension programs with APAL initiatives;
- 🌱 Relationship building with the apple and pear information wholesalers such as private advisors and agronomists, chemical resellers, State Industry Development Officers and others within the industry extension network to encourage greater uptake and rollout of R&D outputs;
- 🌱 Desktop research of RD&E outcomes generated by / within other horticulture and agriculture industries; assessment of their validity for apple and pear growers and communicating appropriate materials messages through Juice Magazine and websites;
- 🌱 Attendance at conferences (ABARES, The Victorian Agribusiness Summit and the Victorian and New South Wales Farmers Federations): to identify lessons learned from agricultural innovation initiatives and extension practices.

iii) Industry Capacity Building;

The future of the apple and pear industry relies heavily on the development of leadership capabilities of current and future decision makers and on equipping growers and the supply chain with skills to make more informed business decisions. This project provided: a supporting role to the Nuffield Scholarship (AP13036) to enable a student to undertake the prestigious Nuffield Scholarship; the provision of secretariat services and strategic input into the Key Stakeholders Roundtable (AP13036); and, enabled APAL to better understand skills gaps within the industry and to pre-scope options to address specific areas where skills could be enhanced.

Outputs:

- 🌱 Nuffield scholarship promoted; candidates assessed (by then Chair of APAL, John Lawrenson); Memorandum of Understanding between APAL and the successful candidate Fiona Hall secured; Area of study developed and feedback provided by APAL;
- 🌱 Review of Skills Needs Analyses prepared by Growcom (Workplace Development Plan) and AgriFood Skills (Tasmanian Fruit Industry) and similar materials to better understand apple and pear skills gaps; discussions with industry leaders across all eight major growing regions about key skill development priorities; discussions with government about opportunities to fund programs aimed at overcoming skill gaps within the industry; pre-scoping and road-testing of a program aimed at improving financial literacy of apple and pear growers;
- 🌱 An initial review of business tools developed by other agricultural industries and assessment for application to the apple and pear industry;
- 🌱 Secretariat services provided to the Apple and Pear Key Stakeholders Roundtable with agendas developed, minutes provided to participants, actions pursued through APAL Board or HIA as appropriate;
- 🌱 Attendance to 3 events in the Leadership Horticulture Master Classes operated by the Horticulture Centre of Excellence.

iv) Understanding the Business Environment

Identifying opportunities to improve cost savings within the orchard and packing shed was a key focus of this project. This included desktop research and business liaison on matters such as netting, fuel, energy, irrigation and labour costs. This project also enabled APAL to keep growers and the supply chain abreast of the changing regulatory and legislative environment in which they operate. It also afforded APAL the opportunity to liaise with government officials and representatives to improve their understanding of the Australian apple and pear industry and how policy and regulatory matters affect the industry. Similarly APAL is frequently asked by government to address specific issues and respond formally through written submissions and attendance to inquiries to assist their deliberations to develop better agricultural policies.

Outputs:

- 🌱 Discussions with growers about their key operating drivers and impediments to a desired operating environment through onsite visits, regional grower meetings, attendance at Future Orchard Walks;
- 🌱 Investigation of opportunities for growers and packing sheds to reduce orchard and packing shed costs through research into refrigerants, netting, fuel, energy, irrigation and labour;

- 🕒 Identification of opportunities and assistance for growers and packing sheds to seek funding to support the adoption of new or existing technologies to achieve cost reductions;
- 🕒 Desktop reviews of emerging and new regulations and legislation. Growers alerted (via Industry Juice weekly e-newsletter) to matters of significance to their operating environments;
- 🕒 Meetings with government officials and attendance to consultation workshops to clarify policy settings and/or grower compliance requirements;
- 🕒 Responses provided to Government requests for advice on the impact of proposed policy options and industry preferred policy settings. This includes input into free trade agreements, import risk assessments, seasonal worker programs, the levy system, horticulture code of conduct, irradiation, and agricultural competitiveness;
- 🕒 Links to articles published in Australian Fruitgrower and as blogs as well as Responses to Government submissions are provided in Table 1.

Table 1: Articles published in Australian Fruitgrower and web

1. R22 phase out: Knowing your options <http://apal.org.au/wp-content/uploads/2013/08/AFG-Aug13-LR-v3.pdf>
2. Selecting the "best" refrigerant for cool rooms p26-27 <http://apal.org.au/wp-content/uploads/2014/12/AFG-Dec14-final.pdf>
3. Energy grant helps grower sow the seeds for a new generation: <http://apal.org.au/wp-content/uploads/2013/08/AFG-Aug13-LR-v3.pdf>
4. Give your business an energy boost: <http://apal.org.au/wp-content/uploads/2013/10/AFG-Oct13-LR.pdf>
5. Irrigation grants for NSW growers p8 <http://apal.org.au/wp-content/uploads/2015/01/AFG-Feb15-final-LR.pdf>
6. NSW netting grants still available p9 <http://apal.org.au/wp-content/uploads/2015/01/AFG-Feb15-final-LR.pdf>
7. Fair Work Ombudsman targets pome fruit growers p8 <http://apal.org.au/wp-content/uploads/2014/04/AFG-May14-web.pdf>
8. Facilitated article Fruit growers access seasonal worker program p28-29 <http://apal.org.au/wp-content/uploads/2014/08/AFG-Aug14-final-LR.pdf>
9. Growers must pay staff properly or risk legal sanctions p31-32 <http://apal.org.au/wp-content/uploads/2014/08/AFG-Aug14-final-LR.pdf>
10. New country-of-origin-labelling p6 <http://apal.org.au/wp-content/uploads/2015/07/AFG-Aug15-final-LR.pdf>
11. Convert packing shed waste to profit p23-24 <http://apal.org.au/wp-content/uploads/2015/07/AFG-Aug15-final-LR.pdf>
12. Solar Panels packing shed costs p26 <http://apal.org.au/wp-content/uploads/2015/07/AFG-Aug15-final-LR.pdf>
13. [Employers obliged to provide payslips](http://apal.org.au/category/blog/page/3/#sthash.7FEBAbUM.dpuf) <http://apal.org.au/category/blog/page/3/#sthash.7FEBAbUM.dpuf>
14. Reduce energy costs and save <http://apal.org.au/reduce-energy-costs-save/>
15. [Are you investment ready?](http://apal.org.au/are-you-investment-ready/) <http://apal.org.au/are-you-investment-ready/>
16. Flying-fox funding for NSW <http://apal.org.au/flying-fox-funding-nsw/#sthash.57eIvdTn.dpuf>
17. Horticulture Code of Conduct Review <http://apal.org.au/wp-content/uploads/2015/09/Horticulture-Code-Review-Submission-2.pdf>
18. Seasonal Worker Inquiry <http://apal.org.au/wp-content/uploads/2015/08/Final-Submission-to-Seasonal-Worker->

[Inquiry-6-August-2015.pdf](#)

19. Joint Selection Committee Trade and Investment Growth <http://apal.org.au/resources-media/government-submissions/#sthash.dGNAJG8h.dpuf>
20. Agricultural Competitiveness Green Paper <http://apal.org.au/resources-media/government-submissions/#sthash.dGNAJG8h.dpuf>
21. Senate RRAT references committee inquiry into R,D and marketing levies <http://apal.org.au/resources-media/government-submissions/#sthash.dGNAJG8h.dpuf>
22. FSANZ on apple irradiation <http://apal.org.au/wp-content/uploads/2014/09/20140909-APLA-submission-to-FSANZ-on-irradiation-of-apples.pdf>
23. Examination of the import risk analysis process <http://apal.org.au/wp-content/uploads/2014/09/APAL-Submission-IRA-Process-September-2014.pdf>
24. Japan FTA – Joint Standing Committee <http://apal.org.au/resources-media/government-submissions/#sthash.Ldt1eKht.dpuf>
25. China Free Trade Agreement <http://apal.org.au/wp-content/uploads/2014/08/Free-Trade-Agreements-China-Submission-July-2014.pdf>
26. Korea FTA – Joint Standing Committee - <http://apal.org.au/resources-media/government-submissions/#sthash.6ZXcJ8VU.dpuf>
27. Korea FTA – Senate Committee <http://apal.org.au/wp-content/uploads/2014/07/APAL-Response-to-Korea-FTA-June-2014-Final-Senate-Committee1.pdf>

v) Improving Industry Data

Timely, accurate and relevant data is a crucial enabler for better business decision making. Collecting, interpreting and using detailed industry data enables the industry to manage itself, rather than being managed by the buyers. Following a recommendation made by the Key Stakeholder Roundtable (AP13036) APAL sought to improve industry capability by establishing systems to secure data both on the growing side of the business, and on the packing/marketing part of the supply chain. Better data is crucial so we can better manage industry profitability, enable growers to benchmark their orchard against the industry, assist in advising what varieties to plant, where we may have oversupply in the future, and to better market our fruit. A basic understanding of what data is available and the assessment of what this means about the size and trends within the industry was also a key focus.

Outputs:

- 🍏 A comprehensive review of ABS data on production compared with levy data. This work enabled APAL to provide a more informed industry situational assessment which was provided to Key Stakeholder Roundtable participants and the APAL Board. The confidential industry situational assessment is available to the Australian growers and the supply chain direct from APAL.
- 🍏 Discussions with ABS on the methodologies employed in collecting industry statistics;
- 🍏 An evaluation of consumer habit and purchasing data from Nielsen Homescan data and Woolworths to assess veracity and gain insights;

- 🌱 Pre-scoping, concept development and establishment of terms of reference (mostly by CEO, John Dollisson) for the Data Collection Project (AP13025). Work to develop the concepts for funding a tree registry and crop estimation project;
- 🌱 Pre-scoping to assess the viability of pulling together data on packing shed and marketing costs for large, medium and small facilities to determine if businesses are willing to share data and how such data might be used to benefit business decision-making. This work is not yet complete;
- 🌱 Links to articles published in Australian Fruitgrower and as blogs are provided in Table 3.

Table 3: Articles published in Australian Fruitgrower and as web blogs

- | | | |
|----|---|---|
| 1. | Need for current and accurate data p5 | http://apal.org.au/wp-content/uploads/2013/11/AFG-Nov13-LR.pdf |
| 2. | Understanding apple production costs p5 | http://apal.org.au/wp-content/uploads/2014/01/AFG-Feb14-FINAL-lores-for-web.pdf |
| 3. | Data to help with business decisions p5 | http://apal.org.au/wp-content/uploads/2014/08/AFG-Aug14-final-LR.pdf |

vi) Market Development and Market Access

Exporting is no longer an option for Australian apple and pear growers, but a necessity, so as to secure the long-term growth of the Australian apple and pear industry. Transitioning from a domestic supply model to one that also includes an export component requires: information and tools to enable growers to understand potential export opportunities and identify pathways to participate; assistance to build relationships with key buyers and influencers; advice to government to prioritise access to target markets; and assistance to develop and implement collaborative market initiatives.

This project enabled APAL to undertake international market development and market access work to augment activities funded through AP11016 (Market Development) and AP14701 (Asian Market Access).

Outputs:

- 🌱 Export strategy drafted and road-tested with key grower exporters. This work is on-going;
- 🌱 Consumer market in-sights (for new and emerging markets) corralled from multiple sources and opportunities for Australian exporters identified;
- 🌱 Desktop research undertaken on competitor activity in targeted markets and gathered through collaboration and discussions with other industry representative bodies, exporters and state agencies; significant intelligence circulated to industry through Daily Clippings service and Industry Juice (AP12013);
- 🌱 Liaison undertaken with DoA and HIA to pursue apple and pear industry trade access and protocol improvements;
- 🌱 Stock-take on China R&D needs for market access for mainland apples commenced;
- 🌱 Review of Fruit Growers Tasmania draft submission improved access for Tasmanian apples into Japan undertaken;
- 🌱 Relationship building with State and Commonwealth in-market resources (posts) commenced to encourage greater market intelligence gathering and analyses and understanding of market access and market improvement needs of the apple and pear industry. This included organisation

of two roadshows for new Commonwealth overseas resources to meet grower exporters and understand their businesses (December 2014 and November 2015);

- 🍏 Review of cherry and citrus export documentation to determine learning lessons for the apple and pear industry. This identified the need for the development of a) a Standard Operating Practices document that describes the Australian apple and pear industry from rootstocks and nursery through to port to assist foreign officials in preliminary deliberations of an import risk assessment to advance market access requests, and b) a Hierarchy of preferred post-harvest disinfestation treatments to be used as a negotiation platform for DoA and articulation of industry position;
- 🍏 A scan of the Integrated Pest Management (IPM) manual to determine currency. This led to agreement by the R&D grower advisory panel to recommend that HIA commission a service provider to comprehensively review the IPM manual to determine whether a best practice or current practice manual is required and a subsequent redevelopment of the manual;
- 🍏 Participation in ad hoc market access updates from the DoA;
- 🍏 Trade related workshops (DoA, State Agency, HIA, Austrade, AHEA) attended;
- 🍏 Assistance provided to Commonwealth and State agencies with inbound visits by overseas government officials eg Taiwan, China;
- 🍏 Attendance on Victorian Government China Super Trade Missions 2013 and 2014. Meetings held with Chinese officials CIQA/AQSIQ/MoA/CAAS to advance access request for mainland apples. Attendance with Minister Robb 2014 Trade Mission to China;
- 🍏 Collaborative initiatives with China progressed and drafting of an MoU with CIQA commenced;
- 🍏 Participation in Asia Market Insights Conference May 2014;
- 🍏 Presentation made to Inbound Asian buyer missions hosted by AUSVEG tied-in to annual APAL AUSVEG Conference;
- 🍏 Presentation made to Inbound China investor mission hosted by State Growth Tasmania;
- 🍏 Pre-scoping of options to identify supply chain efficiencies such as consolidation of packing facilities;
- 🍏 Market insights provided to grower exporters through articles published in Australian Fruitgrower and as blogs (provided in Table 4).

Table 4: Articles published in Australian Fruitgrower and as web blogs

Market Development	
1.	Imports –an integral part of the industry’s future http://apal.org.au/wp-content/uploads/2013/12/Dec13-Jan14-Final-AFG-LR.pdf p4
2.	China Trade Mission Report p30-31 http://apal.org.au/wp-content/uploads/2013/12/Dec13-Jan14-Final-AFG-LR.pdf
3.	Making An Entry (China) p34 http://apal.org.au/wp-content/uploads/2013/12/Dec13-Jan14-Final-AFG-LR.pdf
4.	Every day is fruit day: An Asian internet success story p18-19 http://apal.org.au/wp-content/uploads/2014/01/AFG-Feb14-FINAL-lores-for-web.pdf
5.	Deconstructing China as an export destination p8 http://apal.org.au/wp-content/uploads/2014/06/AFG-Jul14-final-MR.pdf

6. Top Chinese greengrocer seeks Tassie apples p14-15 <http://apal.org.au/wp-content/uploads/2015/01/AFG-Feb15-final-LR.pdf>
7. Fruit sales via mobile booming in China p26-27 <http://apal.org.au/wp-content/uploads/2015/07/AFG-Aug15-final-LR.pdf>
8. Breeding a market winner (ghost written) <http://apal.org.au/breeding-market-winner/#sthash.mt4U5ZPO.dpuf>
9. Growers support seasonal workers <http://apal.org.au/growers-support-seasonal-workers/>

Market Access:

1. Keeping the supply chain informed of alternate disinfestation options eg Irradiation presentation
2. <http://apal.org.au/wp-content/uploads/2013/10/AFG-Oct13-LR.pdf> page 7
3. Taiwanese delegation visits Australia, Tasmania inks MOU with China, and China Australia FTA p8 <http://apal.org.au/wp-content/uploads/2014/12/AFG-Dec14-final.pdf>
4. Apples next on trade priority list for China p32-33 <http://apal.org.au/wp-content/uploads/2014/12/AFG-Dec14-final.pdf>
5. Building industry initiatives with China <http://apal.org.au/category/blog/page/8/#sthash.w64sONA1.dpuf>

Outcomes

This industry development initiative has focused on the delivery of six broad outcomes including:

- 🌱 Improved biosecurity preparedness;
- 🌱 Better investment of R&D and targeted extension efforts to improve the chances of uptake by growers;
- 🌱 An enhanced capacity for the industry to seize opportunities and face challenges by building leadership capability and identifying the required skills base;
- 🌱 An improved business operating environment focusing on cost containment and greater awareness of the regulatory and legislative obligations of growers;
- 🌱 Enriched access to and better analyses of data to aid business decision-making;
- 🌱 Greater quarantine access to markets and strengthened knowledge of export market opportunities and more well developed relationships with key buyers and influencers.

In turn each of these outcomes goes some way toward achieving the strategic direction of the industry as articulated within the apple and pear Strategic Investment Plan. This Plan has 3 key objectives:

Objective 1: Improve Sales Volume by 5% for apples and maintain pear volume by:

- A. Stimulating Domestic Demand by 5% through product quality and innovation;
- B. Expanding apple and pear exports to 10% of marketable product exported by 2015;

Objective 2: Produce High Quality Apples and Pears at Internationally Competitive Prices;

Objective 3: Provide a supportive operating environment;

The activities associated with this industry development initiative and the outcomes achieved have focused in different ways and at different intensity levels on all three objectives.

The specific outcomes achieved by the project and how they relate to the strategic objectives are described in detail below:

i) Biosecurity Preparedness

Overarching Outcome: Improved biosecurity preparedness *supports the operating environment* of growers and the supply chain with systems in place to respond to and fund incursions of exotic pests and diseases, greater effort being directed at managing fruit fly initiatives at a national level, and the biosecurity regulatory environment meeting industry needs. Likewise, improved biosecurity preparedness *supports an expansion of apple and pear exports* by enhancing access to markets with phytosanitary concerns.

Specific Outcomes:

- 🌱 Industry capacity to respond to exotic incursions of pests and disease has been enhanced:
 - European Canker has been categorised. Categorisation 3 was achieved which means that a cost sharing arrangement of 50% each between Government (Commonwealth and States) and industry has been established should an incursion occur;
 - Torres Strait Fruit Fly (*Z. cucurbitae*, *B. dorsalis* and *B. trivialis*) has been categorised. Categorisation 2 was achieved which means that a cost sharing arrangement of 80% for Government (Commonwealth and States) and 20% for industry has been established to take effect for the immediate season (summer 2015).
- 🌱 Improved industry understanding of the trade access implications of and requirements for establishing Pest Free Areas of Production, Pest Free Places of Production and Areas of Low Pest Prevalence;
- 🌱 Emergency Plant Pest Response Deed currently operates effectively for industry, with areas for improvement identified through the review of PlantPlan and incorporated into discussions at PHA Plant Industry Forums;
- 🌱 A new transition to management element introduced into the Deed (to clarify roles and responsibilities when eradication is deemed neither technically or economically feasible);
- 🌱 Industry Biosecurity Plan reviewed, agreement to fund an update secured from the apple and pear grower R&D advisory panel and lodged for development through the HIA system (2016);
- 🌱 Pathway to move emergency plant pest response levy from zero to positive streamlined by Department of Agriculture benefitting industry and reducing cost burden;
- 🌱 Industry understanding of government biosecurity vision and reforms improved through participation in Department of Agriculture Horticulture and Agriculture Industry Biosecurity Roundtables. Likewise, government understanding of impact of biosecurity policy developments on apple and pear industry enhanced through same.

ii) Facilitation of adoption of R&D and Innovation

Overarching Outcome: Better investment of R&D and targeted extension efforts to improve the chances of uptake assists growers to *produce high quality fruit at internationally competitive prices* by matching research effort to address grower needs and knowledge gaps. It also ensures that research matches the requirements of government to underpin phytosanitary access requests so that *fruit exports can be expanded*.

Specific Outcomes:

- 🍏 R&D and industry development service providers better informed about the HAL/HIA R&D levy investment process;
- 🍏 R&D and industry development suppliers provided feedback on their project proposals and an opportunity to better align proposals with the industry strategic investment plan;
- 🍏 Apple and pear R&D Committee, Industry Advisory Committee and Grower Advisory Panel better able to assess investment proposals: priorities against Strategic Investment Plan and linkages with other R&D effort evaluated;
- 🍏 Strategic direction provided to the PIPS leadership team through participation on the National Apple and Pear Advisory Committee (NAPAC);
- 🍏 Innovation applicable to and/or lessons learned from other industries relevant to the Australian apple and pear industry identified and targeted for presentation to the apple and pear Conference and Summit;
- 🍏 HAL / HIA in a better position to commission or tender projects with improved clarity around desired outputs and outcomes for Crop Estimate and Tree Registry Projects, Industry Biosecurity Plan review, Future Orchards Agronomy Services;
- 🍏 Activities and messages provided by state and regional based industry development initiatives - Fruit Growers Tasmania, Fruit Growers Victoria, FruitWest and Apple and Pear Growers Association South Australia - are better aligned and coordinated with the national program operated by APAL;
- 🍏 Relationships with apple and pear information wholesalers (private advisors and agronomists, chemical resellers, State Industry Development Officers and others within the industry extension network) strengthened;
- 🍏 Awareness of RD&E outcomes generated within other horticulture and agriculture industries improved through research and attendance at workshops/conferences; validity for apple and pear growers assessed and if relevant communicated to growers and the supply chain.

iii) Industry Capacity Building

Overarching Outcome: An enhanced capacity for the industry to seize opportunities and face challenges by building leadership capability and identifying the required skills base enables growers and the supply chain to focus on *innovating their product offerings and improving fruit quality* as well as developing *exports*.

Specific Outcomes:

- 🍏 An apple and pear industry Nuffield Scholar Fiona Hall that is highly engaged with the industry secured. Learning lessons from scholar experiences to date imparted to growers:

- Nuffield Scholar shares her learnings <http://apal.org.au/nuffield-scholar-shares-learnings;>
- Leadership and communication; lessons from a Nuffield Scholar <http://apal.org.au/category/blog/page/11/#sthash.1GwCvzdo.dpuf;>
- 🍏 Key Stakeholders Roundtable works effectively to provide avenues for the largest growers and packing sheds to take leadership and give strategic direction for the industry by brainstorming ways the industry can seize opportunities or find solutions to issues faced;
- 🍏 Improved industry understanding of apple and pear skills gaps in different growing regions;
- 🍏 Road testing of a possible solution to weak financial literacy with a view to develop tailored and efficient training programs.

iv) Understanding the Business Environment

Overarching Outcome: A *supportive operating environment* improves profitability through improved knowledge of cost containment and regulatory obligations.

Specific Outcomes

- 🍏 Industry intelligence on pack house economics and opportunities for growers and packing sheds to reduce orchard and packing shed costs through desktop research including refrigerants, netting, fuel, energy, irrigation and labour;
- 🍏 Assistance provided to pack-houses to seek funding from Governments and finance corporations to help support the adoption of new or existing technologies to achieve cost reductions or business improvement;
- 🍏 Improved industry knowledge of emerging or new regulations and legislation, and matters of significance to grower's operating environments communicated to growers through Industry Juice and other APAL communication channels;
- 🍏 An enhanced network of government contacts;
- 🍏 Improved knowledge for government of the impact on growers of policy and regulatory options. This includes input into free trade agreements, import risk assessments, seasonal worker programs, the levy system, horticulture code of conduct, irradiation, and agricultural competitiveness.

v) Improving Industry Data

Overarching Outcome: Enriched access to and better analyses of data aids business decision-making which assists growers to *produce and supply fruit at internationally competitive prices.*

Specific Outcomes

- 🍏 Through a thorough data assessment, APAL was able to provide a more informed industry situational assessment which debunked some myths and clarified the trends the industry was facing. The analysis was:
 - 🍏 provided to Key Stakeholder Roundtable participants and the APAL Board to improve the industry's understanding of the challenges it faces and the opportunities it could seize;

- 🍏 made available to growers through discussions during Grower Roadshows and through APAL website;
- 🍏 presented to the Marketing Committee to assist in more informed decision-making about marketing levy investment;
- 🍏 Better industry data leads to greater precision in orchard block and variety replacement. For example the pre-scoping of a project to understand the number of trees planted by variety and their age profile (to reflect maturity) enabled HIAL to commission a Tree Registry database which has provide industry with a good base data to make block renewal decisions;
- 🍏 Likewise better industry data leads to improved decision – making about grading and packing facility renewal. For example a pre-scoping exercise is underway to identify options to encourage growers to optimise (rationalise) pack-house facilities to build or use export (technology) capable facilities to improve quality control and increase scale and supply lines.

vi) Market Development and Market Access

Overarching Outcome: Greater quarantine access to markets, strengthened knowledge of export market opportunities and better developed relationships with key buyers and influencers enables growers to *enter export markets and expand export volumes* with greater confidence.

Specific Outcomes:

- 🍏 A greater export focus identified through the development of a draft Export Strategy;
- 🍏 Both In-bound and out-bound trade missions to new and important existing markets has helped to open the doors for trade between Australian supply chains, importers and retailers in the destination country, develop relationships with key decision makers and engender an understanding of and loyalty to the Australian apple and pear industry;
- 🍏 Better export business decisions and industry capability improved through access to timely, accurate and market relevant data;
 - 🍏 Insights on mechanics of the China market gained and relationships with buyers established, providing Tasmanian grower/exporters expanded trade opportunities and mainland growers increased knowledge of potential trade opportunities;
 - 🍏 Initial market assessment of Middle East and Indian market opportunities undertaken;
 - 🍏 Better understanding of competitor activity in key target export markets gained;
 - 🍏 Sources of export market intelligence identified and monitored;
- 🍏 Tools to improve grower and industry confidence and understanding of exporting identified including the need for: online registration systems for protocol markets, regionally delivered pre-harvest training, the formation of grower exporter alliances to increase scale and longer lines of supply, sharing of lesson learnings from the successful experience of New Zealand and Australian export focused horticultural commodities;
- 🍏 Trade access and protocol improvement priorities communicated to DoA and HIA;
 - 🍏 e.g. Industry access to Vietnam (following market closure in January 2015) raised as a priority with DoA. Placement in queue for resolution achieved in line with harvest seasons (citrus and table grape protocols established in 2015, to be followed by cherries and stonefruit, followed by apples and pears in early 2016);

- 🍏 e.g. Investigation of Canadian review of Light Brown Apple Moth protocols undertaken and communicated with DoA;
- 🍏 R&D on protocol improvement, seeking contemporary cold treatment schedules, airfreight protocols and mixed fruit containers progressed with DoA and Victorian Government;
- 🍏 Concerns about access to Indonesia and Global Gap requirements lodged;
- 🍏 Maintenance of Australian apple access to China as “next in queue” after nectarines;
- 🍏 Relationships with key Chinese government and related decision-makers strengthened to improve access and trade opportunities:
 - 🍏 Chapter in HIA-CIQA MoU with CIQA secured;
 - 🍏 Discussions with CIQA about MoU for apple and pear collaborative industry initiatives commenced;
 - 🍏 Australian grower collaborative efforts assisting Chinese growers communicated with Chinese officials;
- 🍏 Better R&D proposals to match gaps for market access provided to HIA R&D grower advisory panel;
- 🍏 Relationships with State agency and Commonwealth in-market resources (posts) strengthened;
- 🍏 Priority for the development of export / trade access documentation - a Standard Operating Practices and a Hierarchy of preferred post-harvest disinfestation treatments – identified to HIA with grower advisory panel recommendation for HIA to progress;
- 🍏 Grower advisory panel recommendation for HIA to progress Integrated Pest Management (IPM) manual review and revision.

Evaluation and Discussion

Evaluation of the activities and achievements of this Project was essentially undertaken by the APAL Board. Six monthly work programs for activities under this Project were developed and submitted to HAL/HIA by using the APAL Annual Operating Plan (Commercial In Confidence) which in turn had full Board approval. Reporting against the Plan (and hence of activities under this Project) was also provided and approved by the Board at the six month and full year mark. This evaluation afforded the Project team with feedback from seven growers which include a grower representative from each State and a pear representative, as well as the professional input from a specialist independent Chair with extensive knowledge from across other agricultural sectors.

The project finish date was brought forward as a result of the transition from HAL to HIA. Consequently the opportunity to undertake an Industry Confidence Survey was not able to take place. A stakeholder confidence survey could capture some metrics and attempt to ascribe them to the activities (outputs and outcomes) generated from this project. Metrics might include whether apple and pear growers, packers, and exporters, feel more knowledgeable; more informed; and confident about opportunities to produce better quality fruit at more competitive prices; have access to more markets and market platforms to channel production to domestic and export customers; and, have a more supportive operating environment. Likewise, metrics might measure whether researchers and R&D levy investment committees are better able to target levy research or an improved proposal. Similarly, metrics might determine whether government officials are better informed about the apple and pear industry.

However any future survey would need to be well designed to capture meaningful information. This is because:

- 🍏 Much of the activity in this industry development initiative was aimed at providing a supportive operating environment or providing a platform to enhance industry capability which are indirect and difficult to measure;
- 🍏 There is a general lag effect of industry responses to industry development initiatives;
- 🍏 The vagaries and interplay of climate, commodity markets and economic parameters make direct attribution difficult.

Recommendations

The following is a brief summary of some of the recommendations stemming from this project:

i) Biosecurity Preparedness:

- 🍏 Pathways to secure funding to contribute to the eradication efforts of Torres Strait Fruit Fly are pursued with grower and Ministerial approval to trigger the Emergency Plant Pest Response levy from zero to positive;
- 🍏 Categorisation of Apple Leaf Curling Midge be pursued;
- 🍏 The Owner Reimbursement Cost Framework be populated and finalised;
- 🍏 Apple and Pear industry continue to contribute to the evolving and continuous improvement of the operation of the Emergency Plant Pest Response Deed;
- 🍏 Joint initiatives with PipFruit New Zealand to address biosecurity preparedness around Brown Marmorated Stink Bug (BMSB) and other pests of mutual concern be investigated;
- 🍏 Apple and Pear industry continue to contribute to the development of extension of tools for growers to manage fruit fly incursions and the development of R&D initiatives to assist with the establishment of Pest Free Areas of Production, Pest Free Places of Production and Areas of Low Pest Prevalence;
- 🍏 Continued involvement by APAL to improve industry capability in managing fruit flies by assisting grower panel decision-making and liaison with research agencies to ensure fruit fly research proposals are aligned to meet the specific needs of the apple and pear industry;
- 🍏 Tools be provided to growers to improve awareness of on-farm biosecurity; State agencies awareness of the impact of abandoned orchards on biosecurity be advanced and options to address issues be developed and prosecuted.

ii) Facilitation of adoption of R&D and innovation

- 🍏 Activities and industry development initiatives provided by state and regional based grower groups - Fruit Growers Tasmania, Fruit Growers Victoria, FruitWest and Apple and Pear Growers Association South Australia - be coordinated by APAL to ensure that it is aligned with the national program. This is complex because the national apple and pear program goes well beyond funding from Hort. Innovation. Activities undertaken by regional grower groups may have some funding from State government agencies and/or by Hort. Innovation;

- 🌱 APAL continue to provide assistance to research agencies and industry development officers in the pre-scoping and design of research and marketing projects;
- 🌱 APAL continue to provide assistance to the apple and pear Industry Advisory Committee R&D Committee, and marketing committee to assist panel members to assess investment proposals;
- 🌱 Relationships with apple and pear information wholesalers continue to be strengthened;
- 🌱 Greater awareness of industry development methodologies, targeted outcomes, successes and learning lessons within other horticulture and agriculture industries be achieved by initiating better and more opportunities for the cross-fertilisation of ideas.

iii) Industry Capacity Building

- 🌱 The apple and pear industry continue to invest in capacity and capability improvement;
- 🌱 APAL continue to prosecute the importance of leadership and business skills capability improvement to the supply chain and seek novel ways to make learning opportunities attractive to them;
- 🌱 APAL continue to provide the secretariat services of the Key Stakeholders Roundtable to ensure interconnectedness with APAL's suite of industry engagement and industry development delivery programs (both HIA and non-HIA funded);
- 🌱 APAL continues to identify skills gaps across the supply chain and pre-scopes solutions with road-testing against growers (or relevant audience).

iv) Understanding the Business Environment

- 🌱 APAL should continue to:
 - investigate opportunities for growers and packers to improve cost savings within the orchard and packing shed;
 - keep growers abreast of the changing regulatory and legislative environment in which they operate;
 - liaise with government to improve their understanding of the Australian apple and pear industry;

v) Improving Industry Data

- 🌱 Industry needs to work with the ABS and ABARES to increase the detail of survey data to capture relevant statistics on the major horticulture industries;
- 🌱 HIA should publish a statistical database on line to provide ready access to relevant horticulture information which is currently available in multiple places (data on GVP, production, grower numbers, hectares, enterprise size, exports, imports, consumption etc);
- 🌱 APAL should assist HIA to progress the establishment of and updates to a tree registry and crop estimates program.

vi) Market Development and Market Access

- 🌱 Market access needs to be pursued to provide opportunities for apple and pear growers to gain or regain entry into premium fresh product markets;
- 🌱 Protocols need to be made simpler and remain a priority for the Department and Minister if the

- benefits of the Free Trade Agreements are to be captured;
- 🌱 Market in-sights and market intelligence should be continuously gathered by relevant industry development agents as well as by state and federal government representatives and disseminated to growers and exporters to build knowledge of market trends and opportunities;
- 🌱 Tools to enhance industry and Government export confidence and capability should be enhanced: e.g. update of the industry's Integrated Pest Production Manual; and the production of the Hierarchy of Preferred Disinfestation Treatments;
- 🌱 APAL should continue to pursue the development of tools to improve grower export capability e.g. through an online registration systems for protocol markets, regionally delivered pre-harvest training and the formation of grower exporter alliances to increase scale and longer lines of supply;
- 🌱 APAL should continue to manage the sharing of lessons learned from successful export initiatives and best practice from across horticultural and agriculture to the apple and pear industry; commodities;
- 🌱 R&D needs for export market access and protocol improvement continue to be assessed and progressed through APAL and HIA;
- 🌱 Relationships with key government and related decision-makers (e.g. Chinese) should be pursued to improve access requests for mainland apples and pears; e.g. CIQA – APAL MoU for apple and pear collaborative industry initiatives need to be completed and executed to drive and fast-track market access;
- 🌱 APAL pursue funding mechanisms to provide business decision-making tools to aid optimization of pack-house facilities to improve export quality control and increase export scale and supply lines;
- 🌱 The Export Strategy be finalised and lodged with HIA and DoA.

Other observations and recommendations

- 🌱 The role of industry development in underscoring business sustainability is frequently underestimated. There is information asymmetry between growers and government (regulations) and marketers and buyers (volumes and prices). An informed and trusted industry development program ensures the ongoing transfer of knowledge, skills and networks in appropriate settings, enables innovation, provides invaluable industry consultation and the identification of opportunities and barriers;
- 🌱 The socialised industry development role (where levies fund activities) is pivotal across horticulture industries as it is across most of agriculture because of market failures. That is, the benefits of industry development are non-excludable and can be captured by all rather than select businesses that might pay for it;
- 🌱 Experienced and respected industry development managers can be very effective and efficient conduits for innovation and research adoption. They can catalyse collective action and provide invaluable pre-scoping of projects and programs;
- 🌱 Industry development staff within each peak industry body are informed and connected and therefore a valuable conduit for government communications and also used to provide feedback

into the design of future government programs;

- 🍏 Anecdotally growers find industry development services contribute to their knowledge and confidence. They also help governments implement and successfully deliver key industry outcomes;
- 🍏 Many past and present horticulture industry projects have difficulty capturing and evaluating outcomes. It is thought that regular industry confidence surveys could better capture attitudinal and business performance changes and assist in the attribution of industry outcomes. However the appetite for completing surveys in the apple and pear industry is low and so need to be well designed and targeted.

Scientific Refereed Publications

No scientific refereed articles were published under this project.

Intellectual Property / Commercialisation

No commercial IP was generated as part of this Project

References

Not applicable

Acknowledgements

The Board of APAL provided guidance for this project.

Appendices

A selection of articles produced through APAL communication channels: website blog, Australian FruitGrower Magazine and weekly e-news Industry Juice are reproduced below. These include

Appendix 1: Reduce energy costs and save

Appendix 2: Are you investment ready?

Appendix 3: Employers obliged to provide payslips

Appendix 4: Top Chinese greengrocer seeks Tassie apples

Appendix 5: Data to help with business decisions

Appendix 6: Fruit sales via mobile booming in China

Appendix 7: Breeding a market winner

Appendix 8: Growers support seasonal workers

Appendix 9: Taiwanese delegation visits Australia

Appendix 10: Apples next on trade priority list for China

Appendix 11: Building industry initiatives with China

Appendix 1: Reduce energy costs and save

Posted on October 6, 2015

Growers interested in upgrading their old equipment with new, energy efficient technologies may be interested in speaking with the Clean Energy Finance Corporation (CEFC).

The CEFC have developed an asset financing program to support small and large scale projects. They have begun to partner with private sector businesses, such as large commercial banks, to facilitate and provide funds for energy efficiency, low emissions and renewable technology related programs in Australia.

APAL Industry Services Manager Annie Farrow said the opportunities from the program should prompt growers to better understand their energy costs and seek ways to reduce them.

“Research conducted as part of APAL’s ‘Watts in Your Business’ project, funded by the Commonwealth Department of Industry, found that on average, apple and pear businesses can save \$16,300 per year from cost effective upgrades with a payback period of six years or less.

“With interest rates at record lows, businesses may wish to examine how the lessons learned from the ‘Watts in Your Business’ project could be applied to their circumstances to cut energy bills.”

There are a couple of options to consider in regards to the types of finance available.

- Energy Efficiency Equipment Bonus

In July the CEFC teamed with the National Australia Bank (NAB) to provide \$120 million of finance that supports energy projects of up to \$5 million per business.

The CEFC-NAB program will finance a broad range of activities, including higher fuel efficiency vehicles, variable speed pumps for irrigation, upgrades to refrigeration and solar infrastructure. The program is available across a broad commercial base with a particular emphasis on agribusiness and regional Australia.

- Energy Efficient Loans

CEFC also works with the Commonwealth Bank (CBA) to co-finance energy-efficiency, low emissions and small-scale renewable projects to help businesses reduce energy costs. The Energy Efficient Loan can be used to finance up to 100 per cent of the asset purchase price, allowing borrowers to preserve working capital for other purposes, and loan terms can be aligned to the effective life of the equipment.

Loans will typically range between \$500,000 and \$5 million under this \$100 million project. The loans can be used across a wide array of energy savings technologies, including energy efficient lighting, industrial refrigeration, energy efficient motors, pumps and fans, solar systems and battery storage and variable

speed drives.

Peter Radevski, from Radevski Coolstores and recipient of APAL's 2015 National Awards for Excellence Environmental Award, has utilised the Energy Efficient Loan finance through the CBA and CEFC twice. "Through this program Peter has been able to access \$1.15 million towards the refrigeration upgrade and \$4.2 million for a new fruit grader and solar PV installations," Annie said.

Published as: <http://apal.org.au/reduce-energy-costs-save/#sthash.3PecuO8o.dpuf>

Appendix 2: Are you investment ready?

Annie Farrow, Industry Services Manager, APAL

Posted on June 17, 2015

Investment is important to boost productivity, gain a competitive edge, and exploit new opportunities to grow your business.

At the recent AGRIVICTORIA – STATE OF OPPORTUNITY summit Neil Lane, Program Manager – Farm Business Management Capabilities with Dairy Australia, said that being investor ready will help business owners become more accountable, profitable, better able to manage risk and articulate opportunities and understand their business better.

APAL Industry Services Manager Annie Farrow attended the summit where Neil said it's important for family businesses, in particular those with multiple owners (parents, siblings or children), to treat each other as investors. "Neil also said if the business has loans then the bank should be treated as an investor in the business too," says Annie.

"It's important to remember that being investor ready means asking hard but critical questions and being prepared to justify why family members should continue to provide equity in the business and why banks should extend new loans.

"Growers should remember that being investor ready will enable them to pitch to potential equity providers should they wish to gain additional funds to expand to new orchards or post-harvest facilities. Likewise, it helps pitch to a buyer for those thinking of selling the farm.

"I strongly encourage anyone looking to become 'investor ready' to read Neil's insightful guide outlining three key steps:

1. Pitch your investment opportunity;
2. Assess the compatibility of potential investors with the goals and characteristics of your business; and
3. Negotiate an agreement.

"This is a really useful tool for growers looking to expand and develop their business," Annie says.

Published as: <http://apal.org.au/are-you-investment-ready/#sthash.mQTK07UE.dpuf>

Appendix 3: Employers obliged to provide payslips

Posted on October 21, 2015

Apple and pear growers are reminded that, by law, all Australian employers must provide their employees with regular payslips. And those employing backpackers should be prepared for them to insist on receiving payslips along with signing their Working Holiday visa employment verification form.

As of 31 August 2015 anyone applying for a second Working Holiday visa must provide payslips to show they have completed 88 days of specified work in regional Australia.

APAL Industry Services Manager Annie Farrow says that some employers may not have encountered these kinds of requests from their backpackers in the past.

“Previously, employees on a Working Holiday visa have been able to submit a form to Border Force to prove their work record.

“And now, the changes to the application process mean they must provide specific documentation to prove they’ve completed their required three months work, under proper working conditions,” Annie said.

The Working Holiday Maker program allows young adults from eligible partner countries to work in Australia while having an extended holiday and work must not be the main purpose of their visit.

For more information visit the Department of Immigration and Border Protection website or contact 131 881.

Published as: <http://apal.org.au/employers-obliged-to-provide-payslips/#sthash.hfoHSwTM.dpuf>

Appendix 4: Top Chinese greengrocer seeks Tassie apples

Annie Farrow, Industry Services Manager, APAL

Posted on January 27, 2015

Pagoda, possibly the world’s largest greengrocer chain, is hoping to purchase Tasmanian apples this year. Frank Hong, the Director of Overseas procurement for Pagoda, said that the Tasmanian product would match the offerings of the store.

Pagoda comprises an extensive chain of small greengrocer style stores, although it specialises in fruit (carrying 54 categories) and does not carry vegetables. With headquarters located in Shenzhen, Pagoda was established in 2001. In the last few years the company has undergone rapid expansion, to nearly 1,000 outlets and is now opening new stores at a rate of 50 outlets per month. Clearly the store has become popular amongst Chinese consumers.

“We pitch Pagoda as being ‘everyone’s home garden’,” Frank advised when he met with a delegation of horticultural growers, exporters and industry representatives late in 2014 as part of a Victorian government trade mission. Following up on the mission, Frank and the Head of Procurement, Mr Qidong Zhu, visited Australia in January 2015 where they met with APAL.



Inside, Pagoda outlets are small with narrow aisles, but they are strategically located in high-foot traffic and residential areas to encourage regular visits.

“We provide convenience: as we are located in high foot traffic areas and in residential areas,” said Frank. “Stores open at 8am and close at midnight. The level of service provided to consumers is important to us too, so all store managers are required to work the afternoon shift when foot traffic is highest.

“Our point of difference is the professionalism of the 6,000 staff who undergo extensive training in product handling and end use.”

Although the stores are quite small at 50-60 square metres, the range of fruit on offer is extensive. The Guangzhou store visited by the trade mission offered an array of tropical and temperate fruits in light-filled, clean and orderly display shelves. Both domestic and imported fruit was on sale including: American red pears (A\$7.9/kg), South African Anjou, Japanese Crystal pears (A\$22.4/kg), Japanese Mutsu apples (A\$29.9/kg), American Royal Gala, American Red Delicious (A\$6.38/kg) and Granny Smith (A\$6.49/kg) as well as New Zealand Queen and Pacific Rose. All prices quoted are member prices.

Pagoda operates a two price system, one for members and one for non-members. Membership, which is “in the millions”, does not require a sign-up fee but rather a mobile phone number. As part of the sale the mobile number is logged which allows Pagoda to collect an immense amount of data about the consumer such as the products they buy, the frequency of sale, and the dollar spend per sale. The data is analysed and used as a marketing tool.



Apples are individually wrapped for sale in Pagoda outlets, selling for between A\$6 and A\$30 a kilogram depending on the variety and country of origin.

For example, specials and the promotion of new season produce are advertised through SMS. Frank reports that the average purchase is 30RMB (A\$5) per customer, with customers purchasing three to four times a week. On average, each store has 240 buying customers per day. Pagoda’s turnover from fruit sales amounts to around US\$300–US\$400 million per annum across all stores.

The split between imported and domestic fruit sales is roughly even in turnover value for the Pagoda chain, though imports represent about 30-40% in volume terms. Apples account for about 16% of sales value – the largest single fruit item – but this represents high volume at relatively low value as most (about 95%) of the apples sold by Pagoda are domestic Fuji.

For the 5% that is imported, Pagoda sources from Japan (Fuji), New Zealand (Gala, Envy and Pacific Rose), the US (Red Delicious), Chile (Gala) and South Africa (Fuji). Frank suggests that imported fruit from Australia is not yet well developed, although in 2015 the company intends to import apples from Tasmania.

For Pagoda, flavour is the key driver when sourcing product.

“Consumers want flavour,” said Frank. “Colour and size are important but eating quality is our key focus and we are looking for crisp and flavoursome apples. But I am concerned about the Australian price point.”



Pagoda's Frank Hong (right) shows the Victorian trade delegation of growers, government officials and APAL around Guangzhou in September 2014.

Pagoda's apple sales are increasing along with all fruit sales, but table grapes and cherries rank as more popular (when in season), followed by apples and then citrus (oranges).

Less than 5% of the imported fruit is purchased directly from growers with the majority sourced from wholesalers in the Guangzhou market.

"There is an increasing desire to source direct from growers," said Frank. "This is the reason for my visit to Australia and also New Zealand.

"We are building a 10,000 square metre distribution centre in Shanghai and this will mean some shift to sourcing through the Shanghai wholesale market and using the Shanghai port."

Being 'fashionable and creative' is a strong corporate value and all stores comprise ambient and refrigerated displays, a mix of loose and packaged offerings as well as gift baskets. Like most of their imported product, apples are repacked at the distribution centres and sent to stores in 10kg boxes. Store managers then repackage apples into 4-5 piece trays, with the large Japanese Fuji sold by piece.



Pagoda is one of the largest greengrocers in China with 1,000 outlets that it plans to increase by 300 in 2015.

The small size of each outlet, the focus on freshness and the high turnover necessitates daily deliveries into stores from central distribution centres. Store orders are placed online with daily deliveries made from one of the 32 distribution centres located across the country.

Benchmarking is also very much part of the Pagoda culture, with the sales of all stores recorded online and available for each store manager to compare performance on a product by product basis via a mobile phone app.

Pagoda is committed to opening an additional 300 stores in 2015 (with a target of 10,000 stores by 2020). At this stage all stores are located in Tier 1 and Tier 2 cities in China (see *Deconstructing China as an export destination*, Australian Fruitgrower July 2014), and the emphasis this year will be on expanding stores in Shanghai.

Annie Farrow visited Pagoda as part of the October 2014 delegation of horticultural growers and exporters accompanying the then Agricultural Minister Peter Walsh on the Victorian Trade Mission to China.

Published as: <http://apal.org.au/top-chinese-greengrocer-seeks-tassie-apples/#sthash.651JlJhn.dpuf>

Appendix 5: Data to help with business decisions

John Dollisson CEO, APAL

As you progress your pruning and other activities to prepare for the new season it's time to think again about better managing our markets. You will have seen in my previous editorials and in the presentations that I have given during recent grower visits that we are much better placed with data now. This assists us in understanding the domestic and export markets, but we still need better data on production and cold store stocks.

To this end we have commenced an industry data project with AgFirst that will see the development of a

Tree Registry database (numbers of trees by variety, area planted, and age of trees), a pack shed production survey and for the first time a detailed crop estimate so we can plan the season ahead in January. We are assisting AgFirst to set up the necessary data and contact so that this project will be as effective as possible in the future management of apple and pear sales. As we get closer to the start of the data collection we will inform you of the benefits and the data required. I look forward to your support with this project.

You will see in this edition a regular article on industry data from our resident statistician Charley Xia, this month on levy data and its use. Each month we will pick a topic that should assist you both in understanding the industry better and hopefully improving your profitability.

One of the most frequently asked question in our recent grower visits is: "What new variety should I plant?" To assist we will compile a list of the new apple and pear varieties with relevant information so you are at least aware of the varieties, their owners, their agents, their heritage and their characteristics. But in terms of answering the question 'Which is the best to plant?' – well this needs a crystal ball, because at the end of the day the market or the consumer will decide.

Finally I would like to thank all the growers we visited over the last month, your input is invaluable and my best source of learning.

Published as: <http://apal.org.au/wp-content/uploads/2014/08/AFG-Aug14-final-LR.pdf>

Appendix 6: Fruit sales via mobile booming in China

Annie Farrow, Industry Services Manager, APAL
Posted on July 27, 2015

Creativity in online fruit marketing continues to drive rapid growth in imported fruit sales according to Eric Li, Vice President of, and in charge of global sourcing for, Shanghai Yiguo, one of China's leading e-commerce companies.

Addressing the Asia Market Insights Conference in Shanghai in May 2015, Li referred to his company's Pacific Queen marketing campaign, which provided an analogy between the electronic 'Apple' to that of New Zealand fruit.

"The campaign focused on fun, cool and fashionable – creating passion among younger generation consumers. We sold 60,000 apples in the first hour, and 138,000 in two days," reported Li.

Li said that online sales provided unique sales and marketing advantages over bricks and mortar sales.

"Being able to tell stories and showcase the origin of the fruit through words, pictures and video is a major advantage," said Li. "That information reaches a wide range and number of customers instantaneously.

"The ability to collect and analyze consumer data to launch targeted marketing campaigns is another advantage, and is particularly useful for introducing new products to the market. There is direct customer interaction and feedback is easily obtained. Online sales provide opportunities to create cost effective event marketing to boost sales and brand awareness. Finally, we are able to use tools like pre-sale orders to determine consumer preferences ahead of time and reduce pressure on logistics."

Yiguo sells imported and domestic fruit online to around three million consumers across 50 cities in China.

Yiguo delivers marketing messages and stories daily to millions of customers throughout China through websites, mobile apps and text messaging to drive sales. In addition Yiguo partners with other high-traffic websites with targeted customer groups to promote brands and products.

“We hold online and offline promotional events including tasting, nutrition lectures, cooking and baking classes, as well as recipe sharing. We find that event marketing and online PR approaches deliver tremendous sales results,” said Li.



Providing a value-added service has been hugely successful for Yiguo. Having hired professional chefs and nutritionists to research recipes and interact with customers, their website now has more than 1,800 recipes promoted under the tag line of “natural ingredients + simple cooking for everyday life”. The recipes will enable Yiguo to work towards providing a one-stop online shop for all food and ingredients used in any particular recipe.

Yiguo has strong connections with international fruit brands. It was the first online retailer to sell Zespri kiwi fruit, sold eight containers of Sunkist oranges in the ten days prior to this year’s Lunar New Year, and sold approximately 37 containers of cherries in the January 2015 season (averaging one container per day). Yiguo has also promoted and sold Mr. Apple, Mevi avocados, North-western Cherries and Chilean Blueberries and has links with Citrus Australia.

The exponential growth of fruit sales through online channels is part of a wider online sales phenomenon that is gripping China. Li says that China has now surpassed the US to become the world’s largest e-commerce market.

“Total online retail sales reached US\$450 billion in 2014, a growth of 49 per cent from 2013 compared with the US growth rate of 15 per cent,” said Li. “Online retailing accounts for just under 11 per cent of

the total retail value across China, with growth of business-to-consumer sales rising faster than that of consumer-to-consumer, like e-bay or gumtree, sales, due to the fact that consumers are demanding higher quality goods and services.

“There are 300 million online shoppers in China, compared with 191 million in the US. On 11 Nov 2014, Tmall, the largest online business-to-consumer platform, alone achieved a sales value of US\$9.1 billion within one day.”

One of the most phenomenal trends is the switch from using personal computers to mobile phones for online purchases. Li quotes figures from iResearch, Inc. that suggests that 98.5 per cent of online retail sales in China were undertaken through a PC in 2011, but this had declined to an estimated 67 per cent by 2014. By 2018, analysts expect that PCs will account for only 38 per cent of online retail sales with mobile phones accounting for 62 per cent.

Yiguo, which was founded in 2005, provides perishable foods (fruit, meat, dairy products and seafood) to around three million consumers across more than 50 cities in China. The popularity of online shopping for fresh produce in China can be attributed to a number of factors according to Li.

“The rising number of affluent households is a key factor,” said Li. “But with serious pollution throughout China and frequent food safety scandals, consumers have started to pay more attention to healthy lifestyles, traceable sources and appropriate processing.

“Yiguo offers a convenient way for consumers to access safe and healthy fresh produce and they are willing to pay more for reliable food.”

The potential for further growth is enormous according to Li, with the number of high-income households expected to double by 2020. These households are mostly concentrated in the coastal areas and Tier one and two cities. Ready access to online infrastructure is supporting the Chinese appetite for safe imported food.

Published as: <http://apal.org.au/fruit-sales-via-mobile-booming-china/#sthash.U7OV3LIN.dpuf>

Appendix 7: Breeding a market winner

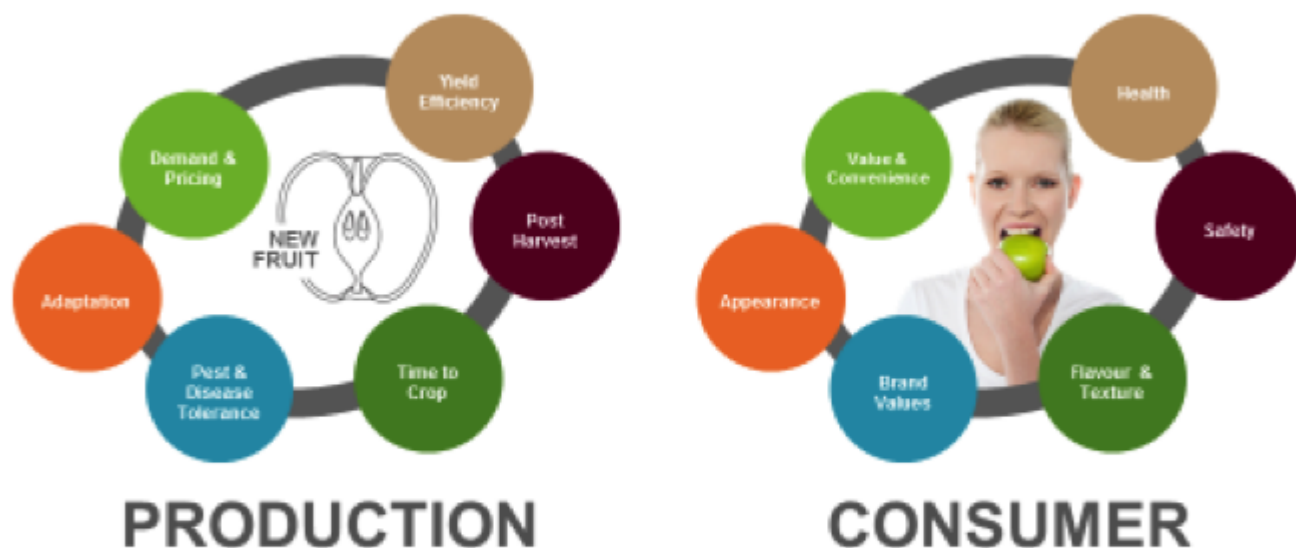
Posted on November 18, 2015

By Peter Landon-Lane, CEO at Plant & Food Research, New Zealand.

When developing premium, new cultivars breeding is just the beginning, with consumer, production, and post-harvest research required across the value chain.

New varieties can offer growers, marketers and retailers a crucial point-of-difference and competitive advantage in the global marketplace. Having a point of difference is crucial when developing a new variety that will be a ‘winner’.

Delivering to expectations



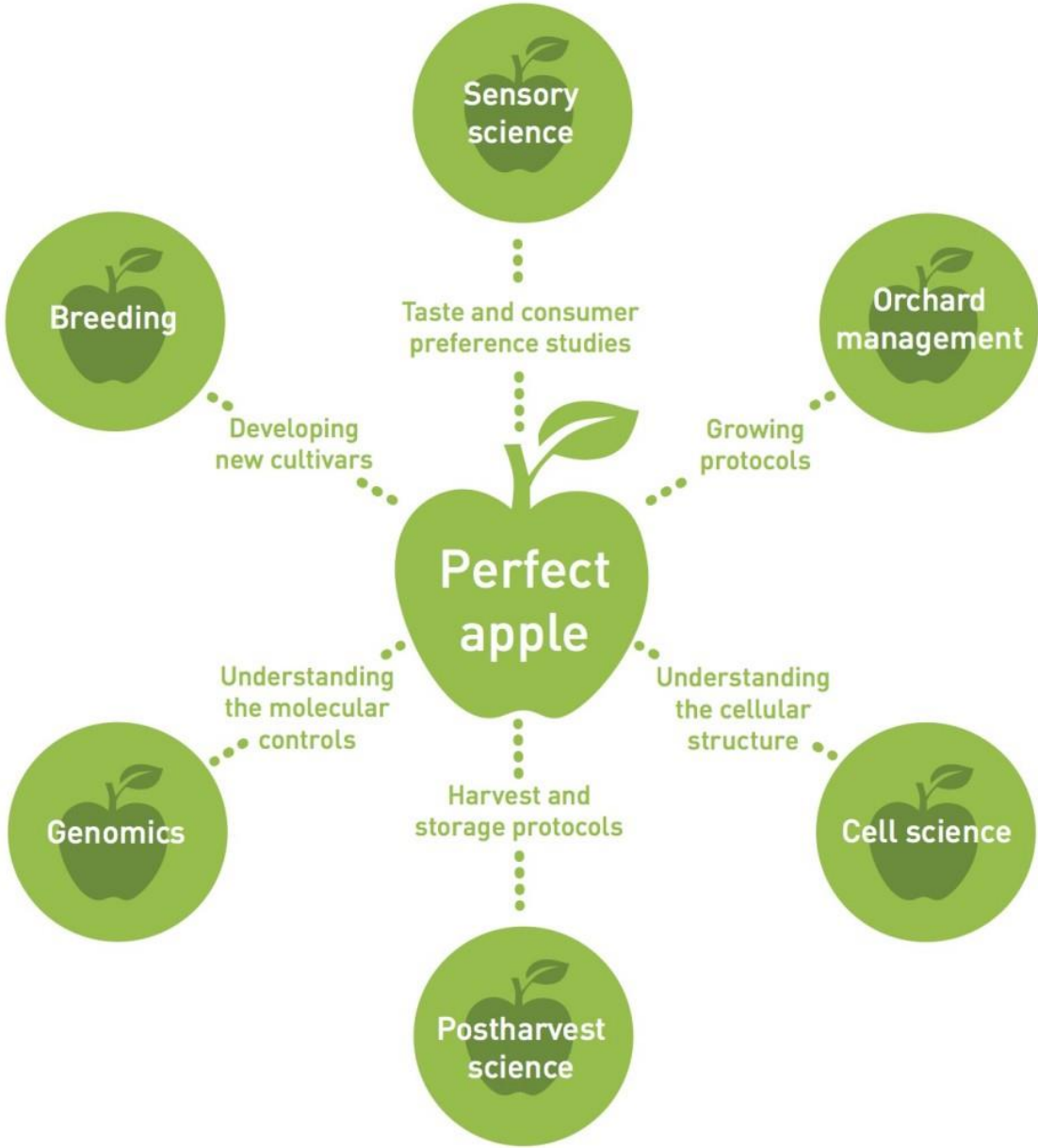
The key factor in success is to deliver consumers what they want; but consumers are all different, so research on sensory perceptions and preferences is vital. Consumers have different taste preferences for a wide variety of factors associated with taste and texture. A number of studies have shown that a liking for apples, for example, often falls into two groups based on their preferences for:

- High sweetness and high acid: examples of apples in this category are Jazz™, Envy™ – bred by Plant & Food Research, New Zealand (PFR) – also Braeburn and Granny Smith
- High sweetness and low acid (most preferred category): Pacific Rose™, Pacific Queen™ – bred by PFR – also Fuji

In between, but less likely to be the preference of a consumer, are apples which are moderate sweetness and moderate acid, such as Red Delicious and Golden Delicious.

Success doesn't grow on trees and "new" doesn't imply or generate success. There are a lot of factors that need to align to create game-changers. It's vital to understand what the industry needs as well as what consumers want. It's a balance of both drivers. New varieties must have producer traits including good yield, good machine harvesting properties, disease resistance and the like. Yet, at the same time they must also deliver on desired consumer traits such as the right flavour profile, texture and colour.

Once you've decided what you are aiming for in a new cultivar, it's important to start with high quality genetic material with a strong expression of the desired traits — start with good ingredients as it pays to choose your germplasm parents well. Our track record for successful new cultivar development is based on an extensive germplasm collection in key crops that provide the genetic diversity needed to drive innovation. PFR invests considerable time and effort to select and improve good parental stock with a strong expression of desirable traits.



Breeding is a numbers game

We cross from 10-100 parent plants every year, to generate up to 50,000 kiwifruit seedlings per year and 12,000 apple seedlings. The more accurately we can breed, the faster and better the results. We have about 60ha of apple research orchard across three sites (although our plantings are much closer than would be the case on commercial orchards).

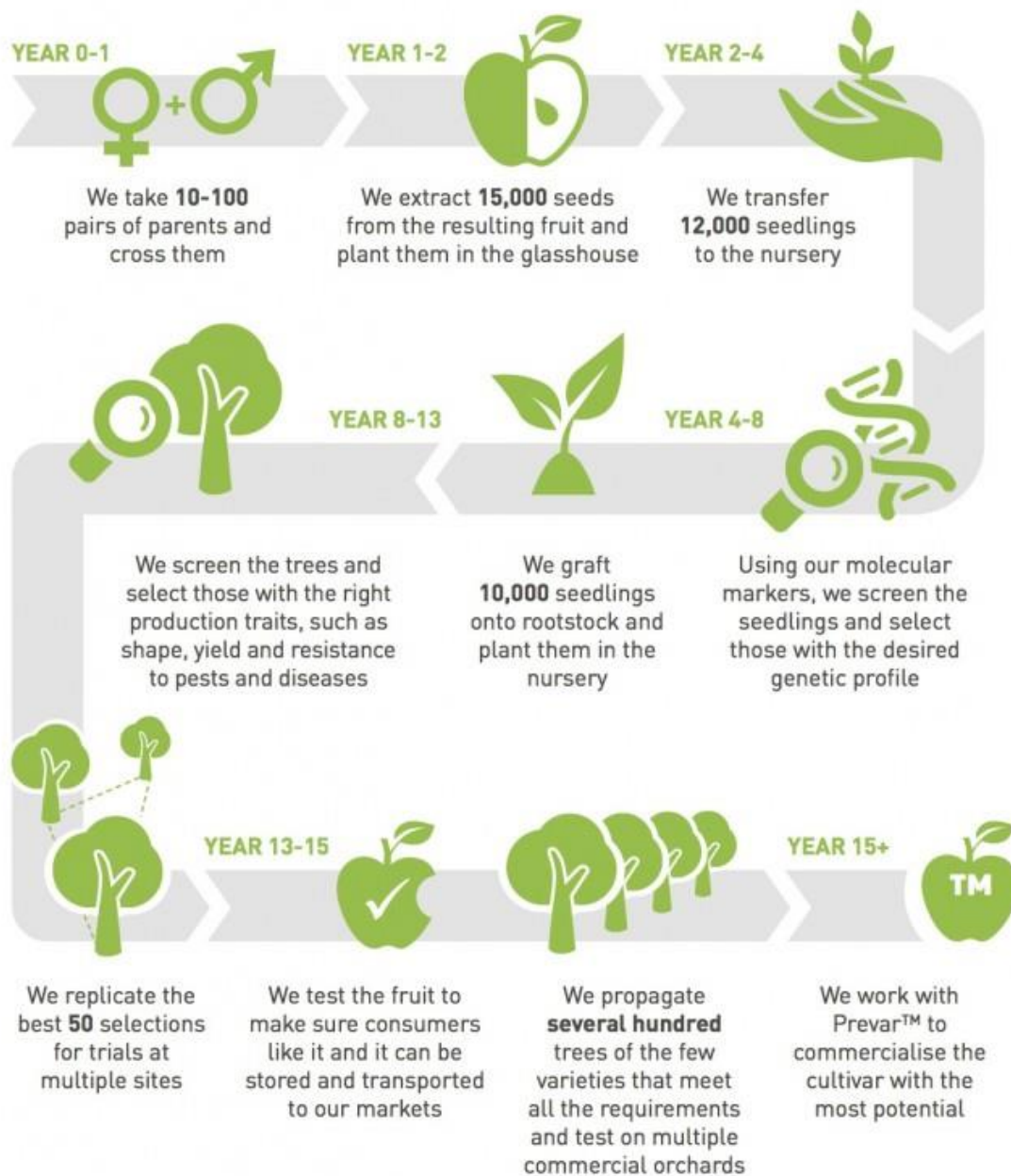
Accelerating breeding through technology can deliver target cultivars in time to meet emerging trends. For example, genomics helps identify genes and their function. This in turn helps improve the accuracy of breeding and consequently reduces the time and cost it takes to develop a potentially commercially successful variety. Likewise, cell science provides knowledge used in postharvest work. Plant physiology informs on-orchard productivity research. So new cultivars almost always need research done to determine how to manage production for maximum productivity; harvest, packing and storage protocols to maximise shelf life and eating qualities.

Assuming you have good genetic material, the challenge then lies in doing the work – the art and science of plant breeding. Science-wise, PFR focuses on breeding skills, pollination, propagation and seedling development. Testing the cultivar in multiple locations is important to ensure that there is genotype stability across environments and regions. But there is an 'art' to it as well; an ability to pick winners and see potential. Like many new cultivars, the original Gold kiwifruit 'Hort16A' might not have been a global success if people didn't take a risk that its initial low orchard productivity could be overcome (which it was).

Looking at the opportunities that new germplasm, planting material or variety might afford, PFR focuses on whether it would deliver: unique flavours and aromas; novel flesh colours; health benefits, as well as appearance (size, skin colour and shape). Production compatibility with rootstocks and production sustainability are also important influencing factors.

PFR continuously innovates to increase breeding volume throughput, speed and accuracy. Examples include the use of genetic markers (eg red flesh apples); whole genome selection; stacked traits to identify durable resistance to pests and diseases; tissue culture and embryo rescue for hard to propagate crosses; selection of parents which mature and flower faster; and, manipulation of nursery temperature, lighting and atmosphere to accelerate growth.

Elite cultivars are one side of the equation, partnering with the right growers and marketers is the other. This is critical to ensure great cultivars become great commercial success stories. New cultivar development is designed to produce premium cultivars that consumers are willing to pay a premium for.



The ingredients of a successful plant breeding programme are:

- Close partnership and strong alignment between R&D and the business;
- Define your target based on consumer insights, coupled with production and supply requirements;
- Use good parental material with genetic diversity and strong expression of desired traits;
- Use science, technology and continuous improvement to drive improvements in throughput volume, speed and accuracy in the breeding pipeline; and
- Support new cultivars with research on consumers, production, and post-harvest.

This is an edited version of a presentation made by Peter Landon-Lane at the 2015 Asia Fruit Congress, Hong Kong.

Published as: <http://apal.org.au/breeding-market-winner/#sthash.IVEBGj2X.dpuf>

Appendix 8: Growers support seasonal workers

Annie Farrow, Industry Services Manager APAL

Posted on November 11, 2015

Anecdotal evidence from apple and pear growers suggest that Pacific Islanders employed under the Seasonal Worker Programme can be significantly more productive than backpackers.

This supports a finding from the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) that seasonal workers employed under the 416 visa harvested fruit at a much faster rate than their working holiday maker, or 417 visa holding, counterparts.



Gilbert picking at Vernview Orchards, Victoria.

Seasonal workers were on average 22 per cent more efficient than working holiday makers according to the ABARES study. New seasonal workers were 13 per cent more efficient and returning seasonal

workers 27 per cent more efficient than the backpackers.

APAL Industry Services Manager Annie Farrow recently spoke to a South Australian grower who said the Seasonal Worker Programme has significantly increased the productivity in his orchard.

“About one half of my summer thinning and harvest staff are from Vanuatu and half are supplied by a contract labour firm, either backpackers or unskilled Australians. First year seasonal workers are about 20 per cent more efficient than workers supplied by the contract labour firm,” he said.

“But, repeat seasonal workers are about 40 per cent better. This last season I engaged the pruners to come back from Vanuatu to help with that task, because their efficiency more than paid for the cost of international flights.”

More productive workers



One of the Tongan nationals working during harvest at Newton Orchards, WA.

Paul Good, APAL Director and Operations and Market Development Manager at Newton Orchards in Manjimup, agrees that seasonal workers are productive. “Our business is very supportive of the Seasonal Worker Programme and we intend to get workers back for the 2016 harvest season. This would equate to approximately 10 per cent of the workforce we need at harvest. These will be from our original crew of six to 12 people – individuals who are tried and trusted workers.

“If I look at the performance of the workers for the first two years, it was very pleasing. The crew in those first two years had a very high rate of productivity when picking apples for harvest. They would pick the apples almost bruise free – the single largest issue that affects our pack-out rates and hence profitability.

“Many of the workers already had good practical skills, which meant they were relatively quick to learn new skills and tasks. Most of the original crew have a good work ethic and some exceptional – they really care about doing a good job. The crew worked together to help and motivate each other.”

Paul said that repeat workers passed their knowledge and experience onto other seasonal workers, so new workers quickly became ‘up-skilled’.

“In general repeat workers are great, regardless of whether they’re seasonal workers or backpackers. They come readily equipped with the knowledge of the jobs and tasks at hand, so our productivity from those workers is very high. The Tongans were happy to do any job, and seem to really like the more physical jobs such as ‘reflective matt’ rolling and netting (often challenging for backpackers). It’s great to walk into your orchard and see people working hard, hearing them laughing and singing,” Paul said.

Consistent and reliable workers



Gilbert and Michel picking apples at Vernview Orchards, Victoria.

Yarra Valley grower Sue Finger from Vernview Orchards says that she was unsatisfied with labour hire contractors who churned backpacker staff continually and were concerned that they may have been employing illegal labour or not paying their workers correctly.

"We could not allow possible exploitation and our productivity was being compromised by the staff churn. This increases administration and particularly training costs and made building stable picking teams impossible," Sue explained.

About four years ago Sue became involved in the Seasonal Worker Programme, first engaging another approved employer to look after their labour needs and then becoming an approved employer herself.

"With the advent of the Seasonal Worker Programme, our business has changed so we schedule workers to arrive to do the task, ensuring better productivity and enhanced profitability. We do the work in a timely manner. Our research is indicating that you are best to have five workers for a week rather than one worker for five weeks. This research now dictates the scheduling of hand thinning, hand pruning and other manual requirements as well as harvest work.

"Last season we had four Pacific seasonal workers arrive in mid-October. They helped place temporary netting over the trees, hand thinning and putting out reflective matting. These workers then started on the early harvest. In March six more seasonal workers arrived to cope with the harvest, with an overlap of local workers to ensure that fruit was picked in optimum condition. By mid-April the first tranche of Pacific workers returned home. The remainder continued with the harvest until May and then they attended to bringing in nets, reflective matting and commenced pruning. The last workers returned to Vanuatu in July."

Lobbying for labour

APAL recently presented evidence to a hearing of the Joint Standing Committee on Migration for its inquiry into the Seasonal Worker Programme. "We advised Members of Parliament that while less than five apple and pear growers currently use the Seasonal Worker Programme, we hope that many more of the industry's 600 growers would give greater consideration to the benefits it provides," Annie said.

"It is true that for most – but not all – growers, there is a ready supply of casual unskilled labour from

the pool of international backpackers. We advised the Joint Standing Committee that the apple and pear industry relies heavily upon this scheme and that it was critical that it remain in place, including the second year option for those working in regional Australia in industries like horticulture.”

New rules associated with the program should make the proposition of employing seasonal workers more attractive to growers. For example, the rule that required employers to guarantee a minimum of fourteen weeks’ work has been removed, although approved employers must guarantee a minimum average of 30 hours’ work per week. Seasonal workers can be employed for up to six months at a time and those recruited from Kiribati, Nauru or Tuvalu can be employed for up to nine months.

Changes to the cost sharing arrangements have also improved the attractiveness of the Seasonal Worker Programme. The approved employer is still responsible for paying for the entire return international airfare and domestic transfer costs for seasonal workers to and from their work location. However, the approved employer can now recover any amount over \$500 from these transportation costs. For example, if the return international airfare costs \$1,200, and the domestic transfers to and from the work location cost \$300, the employer can recover up to \$1,000 from the seasonal worker’s pay over the course of their employment.

Growers advised APAL that the process of gaining approved employer status imposed a substantial administrative burden and was a major impediment to taking on seasonal workers. APAL will continue to work with the Department of Employment to reduce the costs associated with the program so all growers can enjoy the improved productivity that seasonal workers apparently bring to the orchard.

Published as: <http://apal.org.au/growers-support-seasonal-workers/#sthash.LQjOBqWp.dpuf>

Appendix 9: Taiwanese delegation visits Australia

Posted on November 30, 2014

Annie Farrow (Industry Services Manager, APAL)

Taiwan’s Institute of Economic Research (TIER) and Council of Agriculture visited Australia in October to gain a better understanding of Australia’s fruit industries.



The Taiwanese delegation visiting Australia to better understand Australia’s horticultural industries.

Hosted by the Office of Horticultural Market Access, the Taiwan delegation met with APAL's Industry Services Manager Annie Farrow.

"Mainland Australia lost access to export pome fruit to Taiwan in 2006 when the Taiwanese Government banned imports of all commodities listed as hosts to Queensland fruit fly," explains Annie. "Australia lodged an application to regain access in 2012 and we await advice on the progress of that application."

Taiwan represents a good market for Australian apples, pears and nashi because consumers purchase a lot of fruit and the volume of imported fruit continues to climb. Taiwanese people consume 127 kg of fresh fruit per person per year – making them among the largest fruit consumers in the world.

Moreover, in 2013, Taiwan imported 144,127 tonnes of apples and 10,740 tonnes of pears.

"Exploring possible business opportunities and cooperation with Australian fruit farmers to learn about variety licensing and contract cultivation was another key area of interest for researchers from TIER," says Annie. "For example, TIER has looked at the Pink Lady™ model extensively which they may wish to apply to some fruits that are grown in Taiwan."

Published as: <http://apal.org.au/taiwanese-delegation-visits-australia/#sthash.K3KVNBDdb.dpuf>

Appendix 10: Apples next on trade priority list for China

Posted on November 28, 2014

Annie Farrow (Industry Services Manager, APAL)

Australia's new Agriculture Counsellor – Technical in China, Adam Balcerak, recently visited orchards in Victoria and is committed to getting Australia's mainland apples access to China.

Prior to departing for his new post in Beijing as Australia's new Agriculture Counsellor – Technical, the Department of Agriculture's Adam Balcerak took time out to visit a number of horticulture farms and packing sheds in Victoria in mid-November.

Adam has most recently worked in the south-east Asian section of the Trade and Market Access division of the Department of Agriculture and is familiar with protocol negotiations. Adam acknowledges that this recent visit to meet growers from across the key horticulture industries has provided a good introduction to the myriad of expectations around China access.

"My work program will be driven out of Canberra in the sense of priorities across the agriculture sector including the priorities within horticulture," said Adam. "But the trip around Mildura to meet with almonds, citrus and table grapes and the visits to apples in Narre Warren North and cherries in Wandin on the outskirts of Melbourne has exposed me to the visions that each industry has for China and the particular issues they face in improving existing access or gaining new access. I thank APAL very much for organising the trip."

Adam has a big role to play in assisting the Australian agricultural sector to build a sustainable export presence in China. He will act as one of two on-ground Department of Agriculture officials to promote Australia's agricultural interests in China, facilitating trade and pursuing Australia's agri-food trade policy objectives.

His key focus will be to work with Chinese officials to progress technical market access issues, of which there are many. The livestock, grain and dairy sectors all have market access issues to varying degrees. For horticulture, the list is also long. In the immediate term Australia is seeking access for nectarines. The application for access for Australian stone-fruit into China was first lodged in 2006 but finally a trade protocol is believed to be imminent.

According to Rowan Little, General Manager at Montague Fresh, the Chinese market for nectarines and plums will be important to the Australian stone-fruit industry.

"Just to get 3-4 per cent of product off the domestic market and into exports in the last few years has had a staggering impact on grower returns," said Rowan. "Growing that export base and capturing a small slice of the market prior to Chilean product arriving in China will similarly be of enormous benefit."

Once the protocol is signed Montague Fresh plan to export the bulk of product directly to Chinese retailers rather than into the wet market. Montague Fresh has visited China a number of times in recent years to identify target retailers and build relationships prior to trade.

"Nectarines and plums are delicate and require specific handling and storage knowledge so having direct relationships with the retailer is important," explained Rowan. "But we will also be able to assist those retailers to market our branded products."

"Nevertheless, we will probably also place some product through the wet markets because that importer then has a vested interest in monitoring and ensuring that no copy-cat unlicensed brands enter the Chinese market."

Once the stone-fruit protocol is signed mainland apples will move into first spot on the market access queue for Australian horticulture. The site visit by Adam provided an opportunity for APAL and Montague Fresh to stress the importance of mainland apples remaining as the next fruit to be assessed by Chinese officials for resolution around a trade protocol.

Montague Fresh Marketing Manager and APAL Director Scott Montague said, "as is the case for stone fruit, shifting product into export markets will help keep domestic apple prices firm. Export avenues provide growers with another suite of buyers and helps dissipate the pressures created by the competitive domestic trade."

This point was a major focus of discussions at the July Key Stakeholders Roundtable where the major industry players gave commitments to work toward greater export volumes. The Chinese market is incredibly important to Australia's mainland apple industry, particularly as plantings of 'Cripps Pink' continue to dominate, accounting for over 50 per cent of the crop in some regions. To avoid Pink Lady™ apples from becoming a commodity, volumes need to be shifted offshore.

In recent submissions to government, APAL has stressed that industry has no pretences that we could ever hope to compete for the attention of the Chinese middle class consumer, despite their numbers exploding. We are too costly compared with Chile and New Zealand, our main southern hemisphere competitors, as well as the USA. Instead, we believe that Australian apple and pear growers should focus their attention at the elite consumer who wants and can afford a high-priced premium product that is safe, clean, green and Australian. Initiatives to establish a Pink Lady™ brand presence in China have commenced.

"The Chinese market for mainland Australian apples is some time off," said Scott. "We first lodged the application for access for both stone-fruit and mainland apples into China in 2006. We hope that the

access for mainland apples doesn't take as long as the stone-fruit protocol has."

The nature of the forthcoming protocol for stone-fruit into China is not yet known. It will be most disappointing if it specifies a sea freight protocol and not an air freight protocol as well.

"We need to be able to get our produce into the Chinese markets before the Chileans do," said Rowan. "There is little difference between the cost of air freight and shipping freight for us and the freight obviously handles much better by air because of the considerably shorter time frames involved.

"Chile can only airfreight into China via Los Angeles and the additional time lags and airfreight charges adds to their overall costs. So we have an airfreight advantage.

"Australian product quality is much better than Chile's partly because they pick early to keep fruit firm during the long sea voyage. So the Chinese will pay more for the better quality Australian product. But the price for Australian fruit will be driven down once the Chilean sea freight enters the market – just because of the sheer volume involved. So we really will need an airfreight protocol," Rowan added.

On a final note Adam said that building rapport with the key Chinese officials and trying to understand the level of influence that various organisations might have on speeding up the resolution of commercially-workable trade protocols will take him some time.

"Nevertheless, I am keen for industries to contact me when they are in China so that I can assist with introductions and discussions around creating sustainable and profitable trade with China," concluded Adam.

Published as: <http://apal.org.au/apples-next-trade-priority-list-china/#sthash.6LJMkik9.dpuf>

Appendix 11: Building industry initiatives with China

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Annie Farrow (Industry Services Manager, APAL)

Learning from the Chinese import authority, the General Administration of Quality Supervision Inspection and Quarantine (AQSIQ), that they have commenced the information gathering stage for the import risk assessment of Australian mainland apples into China was a terrific outcome of short visit to Beijing that John Dollisson and I made in May.

AQSIQ works closely with the China Entry & Exit Inspection and Quarantine Association (CIQA), China's national association that represents import, export and quarantine associations. Our joint meeting with AQSIQ and CIQA enabled APAL to keep informed about the strong and tangible initiatives we have commenced in China, which will benefit both the Australian as well as the Chinese apple industries.

Over recent years it has become increasingly apparent to APAL and Summerfruit Australia Limited, as well as the Australian and Victorian governments, that access to the Chinese industry can progress if industries in both countries collaborate. This is also true of other Asian nations; with cooperation between the Japanese and Australian meat sectors a good and successful example. In apples, New Zealand and Chile both have initiatives within China.

Industry initiatives

In addition to meeting AQSIQ and CIQA, APAL met with the Ministry of Agriculture, the Chinese Academy of Agricultural Sciences (CAAS) and the Apple Industry Association of China. During our discussions with all parties we outlined four initiatives backed by the Australian apple industry:

1. Pink Lady® in China
2. Variety evaluation
3. IPM for China
4. Training Chinese growers

Pink Lady® in China



APAL's Annie Farrow and John Dollisson met with Chinese officials to help build collaboration and support market access for mainland growers to China.

The first initiative centres on improving the profitability of China's growers by licencing a small volume of Cripps Pink to be grown and marketed under the Pink Lady® brand, which is owned by APAL on behalf of Australian growers. The first sales (of around 100 tonnes) of Chinese Pink Lady apples were made into Shanghai in 2015 with strict controls exercised over the quality and branding, using a single distributor and carefully selected retail and online outlets supported by in-store and other marketing materials.

As is the case elsewhere in global markets, the Pink Lady branded apples attracted a price premium at the retail level. APAL's aim is to assist the Chinese growers to achieve a 1RMB per kilogram (a 20 per cent) price improvement when growing and selling under the brand. In addition to improving profitability for local growers and giving them exposure to the disciplines that surround a branded product, this initiative has and will continue to generate goodwill for Australia from Chinese authorities.

So, how does this help Australian growers? Firstly, it helps build the Pink Lady brand in the eyes of the Chinese consumer. Although there is still a long way to go, the initiative helps the Chinese to become familiar with the brand and the attributes it represents. Building brand recognition is important to increase sales of Pink Lady apples in China from all sources. Given APAL has the potential to collect a royalty from every Pink Lady apple sold, this means additional funds that can be reinvested for the benefit of Australian growers. For example, in recent months APAL has used Pink Lady funds to build a better Infopome platform to collate and share cool store stock data.

Some effort to build the brand in China using French, New Zealand and Chilean Pink Lady apples has taken place over recent years, but quality and consistency in supply issues have prevented a strong marketing campaign and good brand penetration. The Chinese produce a very high quality Cripps Pink and with APAL controls, the product was able to meet the strictly enforced international Pink Lady product specifications.

Of course building the brand is also important for Australian growers in the medium term. When mainland Australia secures access to China our growers will need a ready consumer market for our high quality Pink Lady apples. It is better to start brand building now rather than await access – otherwise we would start well behind the eight ball.

The exclusive arrangement with a single company from Fuping County to supply apples under the Pink Lady brand has developed from a decade of hard work by APAL's Intellectual Property Manager Garry Langford. This involved an assessment of the size of the Chinese Cripps Pink crop, identifying a company that is a reliable partner and a growing area within China that could supply product to meet specifications.

It is important that the initiative starts and remains for the foreseeable future, on a very small scale. China is a market notorious for counterfeits. Additionally, there is little understanding amongst growers generally, as well as distributors, wholesalers and retailers, about the 'rules' of operating under intellectual property protection. APAL also needs to ensure that the trial of Pink Lady apples grown in China can deliver to specifications and meet the brand building objective before any growth in the volume is permitted.

It is fortuitous for Australian growers that the goodwill generated by this initiative is further enhanced by the location – Fuping County is the ancestral home of President Xi's father. It is also a very poor county and some years ago local agronomists encouraged farmers to switch away from dairy and/or to convert some blocks from Fuji into Cripps Pink. This made a significant improvement to farm profitability and a video interviewing local growers on this is posted below.

Variety evaluation

During our meeting with Chinese officials, APAL indicated that we would continue to evaluate varieties in China. Prevar™, a company jointly owned by Pipfruit New Zealand, Plant and Food Research New Zealand and APAL, currently has seven red pears, one green pear and five apple varieties under assessment in China as part of a worldwide evaluation program. Through an arrangement with the Zhengzhou Fruit Research Institute (ZFRI) the varieties will be evaluated against growing conditions in China as well as against Chinese consumer taste preferences.

Many of the pears are interspecific, with attributes taken from both Asian and European pear varieties and bred with Asian tastes in mind. If successful, Prevar will negotiate commercialisation of the varieties with appropriate Chinese partners. This second initiative has the potential to provide commercial returns to Prevar and therefore decrease the need for direct Australian investment into Prevar.

IPM for China

For the third initiative, APAL advised the Chinese officials that we have entered into a Memorandum of Understanding (MoU) with the aforementioned ZFRI to assist with the development of an Integrated Pest Management (IPM) system for China. Signed in August 2014, the MoU affirms that each party will explore funding opportunities to enable an IPM system to be developed that meets the needs of growers

– initially, licenced Pink Lady apple growers.

Currently apple growers in China bag individual pieces of fruit as a means of managing pests. But this is labour intensive and the cost of labour is rising rapidly in China as people continue to move away to the cities. With food safety a high priority in China, the replacement of pest management through a greater reliance on chemicals is not seen as a viable alternative.

So how does this initiative help Australian growers? Once again, protecting the Pink Lady brand is critical. Using the local Chinese product to fill their seasonal window depends upon the product meeting international specifications and an IPM system will help the local growers achieve that. Importantly, helping the local growers realise improved profitability and exposing them to the premium that the Pink Lady discipline brings will assist in regulating the brand within the market. It will be in the interests of the licenced growers to ensure that illegitimate product does not reach the market.

Training Chinese growers

In the fourth initiative, APAL is working collaboratively with Fruit Growers Tasmania and the Tasmanian Government to explore ways to assist agronomists in Shaanxi province to receive training in IPM. This program was outlined in a MoU signed by Tasmanian Premier Will Hodgman with the Shaanxi provincial government last year at the time of the visit by President Xi.

MoU between China and APAL

Following our presentation of the four initiatives, the Chinese officials welcomed the assistance and collaboration provided by APAL and Australian apple growers. They duly noted that Australian growers were seeking cooperation from the Chinese in regard to assisting with our access request for mainland Australian apples into China and early consideration of access for Australian pears (which has yet to be lodged formally).

The discussions were most beneficial and we have agreed with CIQA and CAAS that we would enter into a MoU that outlines the collaboration as described here. Such agreements strengthen our relationships and build goodwill between our respective industries. We hope to sign this MoU when John Dollisson and I return to China for the Fruit & Vegetable Trade Fair in Beijing in September.

The fact that AQSIQ has commenced the information gathering stage of the import risk assessment for mainland apples is very much welcomed. Australia first lodged an access request for apples and stone fruit into China in 2006. In 2010, the Australian and Chinese authorities agreed upon an orderly four by four access queue; with Australian table grapes and cherries gaining access first, followed by Australian stone fruit and then apples.

The protocol for nectarines is still being finalised but we would hope that trade could begin with the new season in October. In the meantime, APAL will be busy working closely with the Department for Agriculture to ensure that all information requirements are provided to China's AQSIQ as early as possible and that the import risk assessment is progressed speedily.

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