International Networking for the Australian Vegetable Industry

Richard Mulcahy AUSVEG Ltd

Project Number: VG11707

VG11707

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Milestone 190: VG11707 – International Networking for the Australian Vegetable Industry

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Summary

The International Networking project has been developed to ensure that the Australian Vegetable Industry remains competitive on a global scale, by enabling industry leaders to represent the Australian vegetable sector at international events. In doing so, this establishes and maintains connections with relevant industry players from around the globe.

International networking is also imperative for the future of the Australian Vegetable Industry as it allows for key members of the industry to gain valuable industry knowledge and be privy to new innovations that can be relayed back to Australian growers through various methods of dissemination.

Previous International networking tours have allowed members of the Australian horticulture industry to increase their relationships and contacts overseas. The second year of this International Networking project also provided, for industry leaders, an insight into how other global industries do business and how to showcase Australia in the most rewarding way.

For the final year of this three year project, delegations were sent to India, Europe and China. The first of these educational tours was attended by Vegetable IAC representatives Peter Ward and Denise Ellement. Mr Ward and Ms Ellement travelled to India to participate in the Research and Development (R & D) Workshop: Identification of key research priorities facilitated by the Indian Council for Agricultural Research and Horticulture Australia Limited (HAL). The key objective of this workshop was to identify areas for potential partnership research and discuss collaboration towards mutual priorities.

In 2014 the Australian Vegetable Industry was represented by Mr Richard Mulcahy, AUSVEG CEO and Mr John Brent, Grower and AUSVEG Board Member. The AUSVEG CEO also joined with Mr John Lloyd and Mr Selwyn Snell during meetings with many horticulture industry researchers and suppliers as well as government officials. These meetings were sought by the Australian Horticulture Industry representatives to gain an insight into the advancements being made by their counterparts around the world.

Fruit Logistica has become one of the most important business and communication arenas of the international fresh produce trade. It provided a perfect opportunity for the Australian representatives to develop new networks and revitalise previous relationships with global organisations. Following Fruit Logistica, attendees visited Oxitec at their headquarters in Oxford, London. A meeting was held with company leaders to discuss upcoming technology and the specific application and relevance to Australia. This meeting provided an understanding of Oxitec's revolutionary development in established pest control systems and how it will benefit Australia.

Mr Mulcahy and Mr Lloyd also travelled to Israel and visited pioneering companies including BioBee, a leader in biologically-based Integrated Pest Management (IPM), Natural Pollination and Medfly Control, and Evogene, currently contracted by Bayer Cropscience to develop plant traits to improve yield.

This mission has allowed members of the Peak Industry Body (PIB) the opportunity to open new networks with key stakeholders for Australian Growers, while absorbing fresh ideas and information to bring back to the local industries. New global links, information learnt and contacts created from the overseas networking activities will be made available to Australian growers. This is being achieved by securing speaking opportunities at the AUSVEG National Convention for international presenters and highlighting newly discovered industry developments in industry publications such as Vegetables Australia.

Finally, In April 2014, AUSVEG was represented by Hayden Moore, National Manager – Export Development, at the 'Australia Week in China' trade mission. The objective of AUSVEG's participation in the trade mission were to create relationships within both the Australian and Chinese industries, as well as gathering important information regarding the Chinese markets. This will help inform the on-going efforts of the Australian vegetable industry to access and succeed in the Chinese market.

Progress since Last Milestone Report

Event: Research and Development Workshop: Identification of key research priorities



Location: Bengaluru (Bangalore), India

Date: Thursday 3, Friday 4 and Saturday 5 October 2013

Attendees: Peter Ward – Vegetable Industry Advisory Committee member

Denise Ellement - Vegetable Industry Advisory Committee member

As part of the International Networking project for 2013/2014, Mr Peter Ward and Ms Denise Ellement took part in an Australian delegation to India as Vegetable IAC representatives at the R&D Workshop: Identification of key research priorities. This workshop was hosted jointly by the Indian Council for Agricultural Research and HAL in Bengaluru, India over three days. After the workshop the delegation also participated in site visits.

The workshop was initiated in response to a Memorandum of Understanding signed between HAL and the Indian Council of Agricultural Research. The workshop's major objective was to identify two to five areas for partnership research. The delegation was led by Dr Selwyn Snell, Chairman, HAL and included representatives from the Australian almonds, avocados, mango, processing tomato, strawberries, table grapes and vegetable industries along with researchers from the Department of Agriculture, Fisheries and Forestry Queensland, Tasmanian Institute of Agricultural and various other research institutes.

Participation by Mr Ward and Ms Ellement gave the Australian vegetable industry access to the latest research being undertaken in India and an opportunity to share insights and perspectives with international colleagues. An entire afternoon session was dedicated to vegetable related discussions. This provided a platform for the IAC representatives to voice current issues impacting on Australian growers. From these discussions the workshop participants built industry relationships and begun to establish momentum towards the accomplishment of shared goals by allocating joint resources to tasks and opening communication channels to be used post-workshop.

On the last day of the workshop Mr Ward and Ms Ellement conducted a tour of the Indian Institute of Horticulture Research to further discussions on future research initiatives and meet fellow industry counterparts. During their visit, Mr Ward and Ms Ellement met with Dr Krishna Kumar, Deputy Director General (Horticulture) and former President of the Association for Advancement of Pest Management in Horticultural Ecosystems. Dr Kumar will prove to be a valuable contact for the Australian vegetable industry, and recently spoke at the HAL November 2013 Forum – Global Outlook in Sydney, which was attended by Mr Richard Mulcahy, AUSVEG CEO, and accompanying staff in part to encourage further collaboration.

Event: Fruit Logistica 2014



Location: Messe Berlin, Germany

Date: Wednesday 5, Thursday 6 and Friday 7 February 2014
Attendees: Richard Mulcahy – AUSVEG Chief Executive Officer
John Brent – AUSVEG Board Member and Grower

The 2014 Fruit Logistica, which hosted delegations from 140 countries and over 2,600 exhibitors, was deemed by the Australian attendees to be, once again, a resounding success and a testament to the growing global strength of the horticulture industry. Mr Mulcahy and Mr Brent, who also travelled to Germany to attend the 2014 event, used the full three days to connect with the exhibitors, attend event presentations and conduct side meetings. From their attendance they have been able to build Australia's international vegetable network by securing connections with number of different industry leaders and pioneers who will prove invaluable for Australian Horticulture.

During Fruit Logistica the Australian delegation attended several events meetings held at trade floor stands and at outside venues. Of note were meetings with the New Zealand Plant Food and Research stand and global representatives from Bayer.

Celebrating their 10th consecutive year at Fruit Logistica, Plant and Food Research New Zealand invited the Australian delegates to meet with their new Chief Scientist, Dr Richard Newcomb and discuss current and future areas of study in the vegetable industry. Mr Mulcahy took the opportunity to investigate the company's current vegetable breeding program, which aside from conventional vegetable crops, is also focusing on commodities such as ulluco and oca (both root vegetables). The company's new breeding program has been developed to increase yield and postharvest quality of this exotic produce. It is hoped that development will make the commodities commercially viable for growers who want to branch out into niche markets and meet the growing demand of more experimental consumers. If this program proves successful, Australian growers of other root vegetables, such as carrots or potatoes, who already have some of the required facilities and equipment, could benefit greatly from a commercial development of these commodities.

An event attended by Mr Mulcahy and Mr Brent at the Bayer Stand paid particular attention to recent achievements by their food chain management team in Greece. While the work focused primarily on table grapes, the areas of study looked at downy mildew infestations, crop protectants and methods of the improving yields at low cost, elements which all impact the Australian vegetable industry. As further studies by Bayer extend from this into other commodities there is great potential for Australian growers.

Also of note during the 2014 Fruit Logistica was the innovation award recipients. The winner of the innovation award was chosen by convention delegates according to the criteria of the most outstanding and innovative industry product. The winner was BBQ Grill-Mix, a pack of vegetables in a foil pack. These vegetables are peeled, washed, cut into pieces and sold in a ready-to-cook foil tray designed for the BBQ or the oven. Major features of this product are designed with the consumer in mind. Consumers can see that the vegetables are fresh, and require very little preparation resulting in a healthy, convenient meal. A major theme to arise from the innovation award is that the products must conform with changing consumer needs and expectations. Other nominations for the vegetable industry included Vegetable Crumbs, a pure vegetable coating designed to be used as an alternative to bread crumbs, and a new packaging design for broccoli that claims to increase the shelf life for an additional 5-8 days at 18° Celsius. All of these products

and their developers are being considered as potential presenters for levy funded events as a means of bringing this informing to the Australian vegetable growers.

During the 2014 Fruit Logistica, Mr Mulcahy also met with the levy funded grower study tour, comprised of vegetable growers from around Australia and AUSVEG Deputy CEO Andrew White. Mr Mulcahy, Mr John Brent and Mr Andrew White met with a number of different Industry leaders and pioneers over the three day event and secured contacts that will prove invaluable for Australian Horticulture. Continued attendance by Australian delegates at such events ensures that the local horticulture industry has access to the latest innovations and technologies, allowing Australia to compete with international markets.



Picture 1: Mr Richard Mulcahy and Mr Liam Condon, CEO Bayer Cropscience, at the Bayer stand in Berlin Fruit Logistica 2014.

Picture 2: The Fruit Logistica Trade Show floor.





Picture 3: One of the innovative vegetable products on display at fruit Logistica, Vegecrumbs.

Event: Meeting with Oxitec in Oxford



Location: London, England

Date: Monday 10 February 2013

Attendees: Mr Selwyn Snell – HAL Chairman of the Company

Mr John Lloyd – HAL Chief Executive Officer

Mr Darral Ashton – HAL Director

Mr Richard Mulcahy – AUSVEG Chief Executive Officer Mr Hayden Parry – Oxitec Chief Executive Officer Dr Luke Alphey – Oxitec Chief Scientific Officer

Ms Camilla Beech – Oxitec Regulatory Affairs Manager

Oxitec is a British biotech company, based in Oxford, England, pioneering the management of insect pests through the use of genetic techniques. Oxitec's founder, Dr Luke Alphey, presented at the 2013 Emerging Technologies Seminar held in conjunction with the 2013 AUSVEG National Convention. Dr Alphey's presentation received widespread industry and media attention.

Upon arrival at Oxitec's laboratories, the tour group was given a brief presentation by Oxitec Head of Regulatory Affairs, Ms Camilla Beech. Ms Beech discussed Oxitec's inherited lethality gene technology, whereby lab bred male insects (e.g. fruit fly) are implanted with a heritable lethality gene. These males are then released into the wild, where they mate with females of the same species. The resulting offspring die before reaching adulthood and the local target insect population consequently declines.

Ms Beech discussed the specific applications in Australia, principally surrounding diamondback moth and fruit fly management. The financial aspects of developing packages for different species were also discussed. Oxitec has held meetings with the Australian Office of the Gene Technology Regulator (OGTR) to inquire about the gene technology regulatory system in Australia.

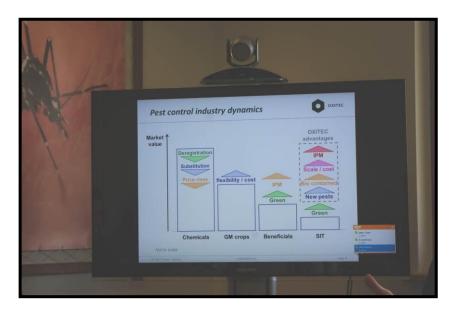
Following Ms Beech's presentation, the group took an in-depth tour of Oxitec's laboratory facilities. Oxitec's laboratories are state-of-the-art, comprising large insect rearing and testing facilities and laboratories. Oxitec staff gave brief summaries of their work and the function of analytical instruments. The group was also able to observe genetically modified mosquitoes.

The Oxitec facilities were extremely impressive and the visit was highly advantageous in nurturing connections between Australian horticulture and Oxitec. Oxitec's genetic insect control technology represents a forward thinking and environmentally friendly alternative for fruit fly management, and the technical and business capacity displayed by their staff shows promise for the technology's future application within Australia.



Picture 4: Dr Luke Alphey and Mr Selwyn Snell, during the meeting at Oxitec headquarters.

Picture 5: An Oxitec slide during their presentation showing the potential of sterile insect technology (SIT) as a pest control measure compared to alternatives.





Picture 6: Mr Darral Ashton, Ms Camila Beech, Mr Selwyn Snell and Dr Luke Alphey, during the presentation.

Event: BioBee Study Tour and meeting with head of R&D



Location: BioBee Israel

Date: Tuesday 11 February 2014

Attendees: Richard Mulcahy – AUSVEG Chief Executive Officer

Mr Lloyd - HAL Chief Executive Officer

Mr Shaul Bassi – BioBee Chief Executive Officer

Mr Shimon Steinberg – BioBee Head Research and Development

Based in Sde Eliyahu Kibbutz in northern Israel, BioBee Biological Systems is a private company and international leader in the field of biologically-based Integrated Pest Management, Natural Pollination and Medfly Control. Their products are sold in over 50 countries, through their subsidiaries and numerous agents and distributors.

A major focus of the day was BioBee's Sterile Insect Technique (SIT) Medfly program, which aims to control the numbers of wild Mediterranean fruit flies by releasing sterile insects into the environment to breed unsuccessfully. This area of study falls under BioFly, a division of the BioBee organisation. If applicable to the Australian market, SIT could become a primary form of pest control for farmers looking to minimize their dependence on pesticides.

In contrast to Oxitec's genetic insect sterilisation technique, BioBee uses irradiation to induce sterility in fruit fly. Irradiation is applied to fruit flies reared in a laboratory and these sterile fruit flies are then released into the wild, acting as a population suppressant. BioBee's innovative production capacity was a major focus of the tour, as they can produce between 75 and 90 million flies a week for release when operating at full capacity.

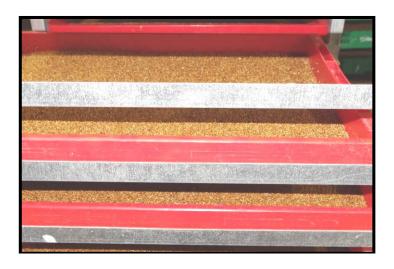
Mr Mulcahy and Mr Lloyd were shown around the premises, including the growing laboratories. Following the tour, a meeting was held with Mr John Lloyd, Mr Richard Mulcahy and Mr Shaul Bassi, BioBee Chief Executive Officer, to discuss export practices regarding quarantine. They group was later joined by Dr Shimon Steinberg, Head of R&D to discuss operating practises and advancements to increase production.

BioBee is also the world's leading producer of *Phytoseiulus persimilis*, an effective natural predator of *Tetranychus urticae* (Red Spider Mite). This product is of great interest as mites can develop resistance to many pesticides over time, and with the recent outbreak of Red spider mite in Australia, alternate methods of controlling this pest are being sought as a matter of urgency.



Picture 7: One of BioBee's irradiation machines.

Picture 8: Trays of Biofly's maggots ready for packaging.





Picture 9: Mr John Lloyd and a BioBee representative in large production laboratory.

Event: Visit to the Agricultural Research Organization, Volcani Centre



Location: Beit Dagan, Israel

Date: Wednesday 12 February 2014

Attendee: Richard Mulcahy – AUSVEG Chief Executive Officer

John Lloyd - HAL Chief Executive Officer

Prof. Ada Rafaeli - Associate Director for International Cooperation & Academic Affairs Mr

Jacob Mualem, Head of Kidum - R&D Applications & Technology Transfer Mrs Olga Tarnopolski - Kidum - R&D Applications & Technology Transfer

The Agricultural Research Organization (ARO) is the research arm of the Israeli Ministry of Agriculture and Rural Development. The organisation accounts for nearly 75% of Israel's agricultural research focusing on plant biology, technology, and environmental issues. It is considered to be the centre of development and dissemination of agricultural R&D in Israel. Currently the institute is focusing on improving the quality and export capabilities of Israeli vegetables and decreasing the space required to grow crops by increasing yields.

Mr Mulcahy and Mr John Lloyd met with Mr Jacob Mualem and Mrs Olga Tarnopolski from Kidum - R&D Applications and Technology Transfer to discuss and compare operations in Australia to those in Israel. The Institute's representatives were also interested to learn how the levy system works in Australia in terms of managing different R & D programs and benefiting the growers.

Kidum - R&D Applications and Technology Transfer is an organisation within the ARO which focuses on the dissemination and practical implementation of the ARO's R&D findings. They aim to transfer the abilities and innovations developed at the ARO to large scale utilisation and commercialisation by private firms and farmers, not only in Israel, but worldwide.

The group discussed current research projects being undertaken by the institute. Of note was the development of dark red vegetables for paprika production and natural red dye production. Although this project is designed for the hot Israeli climate, there is opportunity to adapt the findings of this study to Australia, potential creating new revenue streams for local growers.

The participants then had an open discussion about future cooperation between the Australian and Israeli horticulture industries. Continuing relationships with International horticulture bodies, such as the ARO, is vital to ensuring that Australia is always aware of any new developments allowing them to remain competitive in the global market.



Picture 10: Mr John Lloyd at the Volcani Institute, with members of Kidum - R&D Applications and Technology Transfer

Event: Meeting with Evogene



Location: Rehovot, Israel

Date: Wednesday 12 February 2014

Attendee: Richard Mulcahy – AUSVEG Chief Executive Officer

John Lloyd - HAL Chief Executive Officer

Mr. Ofer Haviv President and Chief Executive Officer

Mr. Martin Gerstel, Chairman

Dr. Hagai Karchi EVP Development and CTO

Mr. Ido Dor, Business Development Ms. Efrat Barak Zadok - IR & PR Associate

Evogene is a plant genomics company based in Israel. They focus on boosting plant traits for increased productivity through advanced breeding and cross breeding techniques. Evogene offers solutions for crop productivity improvement through biotechnology and breeding without genetic modification (GM). They utilise a unique technology infrastructure that is based upon plant genomics and proprietary computational capabilities.

Mr Mulcahy and Mr Lloyd met with representatives from Evogene to discuss the future of plant breeding techniques and seed production. The Evogene Representative discussed the importance of their work, as large portions of the world's consumers now refuse to eat GM food due to negative public opinion. This presents a problem for growers and researchers because the consumer wants cheaper and better quality products, but is not willing to eat the GM food that addresses these issues. Their work provides alternative options for improving plant varieties.

The Evogene solution to this problem is the production of plants with better traits, higher yields and more resistance to diseases through selective breeding, as growers have been doing for centuries. The attraction of Evogene's technique is that it produces marketable plant improvements in a shorter period of time. Evogene's advanced breeding technique utilises unique computerized algorithms that analyse different plant genomes and atmospheric data to produce a breeding plan for a certain variety. This plan includes combinations of plants to be cross bred, and in what conditions this should occur in order to produce a final plant with the desired traits. The ability to pre-map breeding, potentially cutting out the conventional trial and error phase, is a major achievement in this sector.

The Australian market presents many challenges for Evogene, because extreme climates in Australia push plants to the edge, and there are many conflicting habitats to take into account. However, the potential for this technology has already been seen by the major seed companies including Monsanto, Bayer and Syngenta, who have commissioned Evogene to produce seeds achieving their desired plant traits.



Picture 11: Mr John Lloyd at Evogene.

Event: Meeting with Avshalom Vilan (Secretary General of the Israeli Farmers Federation)



Location: Tel Aviv, Israel

Date: Wednesday 12 February 2014

Attendee: Richard Mulcahy – AUSVEG Chief Executive Officer

John Lloyd - HAL Chief Executive Officer

Mr Avshalom Vilan – The Israeli Farmers Federation Secretary General

The Farmers' Federation of Israel is an association of private farmers in Israel which was established in 1920. The Federation is concerned with the professional, economic, cultural and social issues faced by its members, representing growers to the public and to government. The Vegetable Growers Association VGA, was founded in 1934 as part of the Farmers' Federation, and pays particular interest to the needs of Israel's vegetable growers.

Similarly to AUSVEG, the VGA are currently focused on policy issues, developing both domestic and international markets, conducting R&D to the benefit of growers and communicating with growers on related issues.

Mr Mulcahy and Mr Lloyd met with Mr Avshalom Vilan, Israeli Farmers Federation Secretary General, to discuss how they operate to achieve their goals. This meeting allowed both the Australian and Israeli representatives a chance to compare their operations and discuss mutual areas of interest.

It was evident from the meeting that many beneficial networking opportunities will arise from the maintenance of a strong relationship between AUSVEG, HAL and the Farmers' Federation of Israel. Israel is a regular location for levy funded grower study tours, and connections made through the Farmers' Federation are likely to benefit visiting growers, as their assistance could open up new opportunities to visit local companies or Israeli growers that may have otherwise been unwilling.



Picture 12: Mr John Lloyd at the Israeli Farmers Federation.

Event: Australia Week in China 2014



Location: Guangzhou and Shanghai, China

Date: Tuesday 8 to Friday 11 April 2014

Attendees: Mr Hayden Moore – AUSVEG National Manager – Export Development

Senior Australian politicians including Prime Minister Tony Abbott, Minister for Trade and Investment Andrew Robb, Minister for Small Business Bruce Billson and five State Premiers

and one Chief Minister

Senior Chinese Government officials and industry representatives

Senior Australian Government Officials from the Department of Foreign Affairs and Trade,

the Department of Agriculture and the Australian Trade Commission

Australian business leaders, representing businesses with a combined total of over half the value of the businesses traded on the Australian Stock Exchange. Representatives of all

major Australian agricultural sectors where present.

Introduction

The opportunities associated with the economic rise of China have been well documented. China is Australia's largest agricultural export destination, supplying a Chinese food and beverage sector that is estimated to be the largest in the world. However for the vegetable industry specifically, exports to China have been historically low and market access has been difficult.

Reflecting the growing awareness of the opportunity China represents, the vegetable industry has recently invested in Chinese market research projects. The findings from project VG12095 and VG12042 have established that there is a clear opportunity for Australian vegetables in the Chinese market. The stakeholder consultation completed as part of VG12042 revealed "considerable enthusiasm for China as a high priority market for Australian vegetables". This was supported by the research completed as part of VG12095 which found that there was "significant market potential for Australian vegetable exports".

It is clear that to access Chinese markets, the Australian vegetable industry must overcome the substantial regulatory and trade barriers that exist. Phytosanitary protocols for a vast majority of Australian vegetables to enter Chinese markets do not currently exist (and hence direct fresh vegetable exports are largely prohibited). The process of gaining market access for vegetables is ambiguous and can take a long time. Currently, vegetable commodities need to be prioritised through the Office of Horticultural Market Access, followed by negotiations with Chinese authorities led by the Australian Department of Agriculture.

It is imperative that these trade barriers are addressed, however this will require a strategic approach from the Australian vegetable industry involving coordination between industry, government, growers and other stakeholders.

Given the high potential of the Chinese vegetable market, as well as the on-going uncertainty of market access to China, AUSVEG's National Manager – Export Development, participated in the 'Australia Week in China' trade mission, Australia's biggest ever trade mission. Highlighting the significance of the mission, it was described by the Minster for Trade and Investment Andrew Robb as one of the "great achievements in Australian commercial history".

The objectives of AUSVEG's participation in the trade mission were:

- Information gathering on behalf of the industry on the political, economic and security environment of China as it relates to Australian vegetable exports.
- Further our relationships with Chinese Government and industry representatives
- Represent the interests of the Australian vegetable industry to the Chinese market, in particular to signal the long-term intent of the industry to gain market access and build trading relationships.

7 April 2014 Guangzhou - Networking Opportunity

Mr Hayden Moore, AUSVEG National Manager – Export Development, attended a networking opportunity for the Agribusiness delegation of the Australia Week in China trade mission. Mr Moore met staff from Austrade and the Australian Consulate General in Guangzhou, including Austrade General Manager – International Operations (East Asian Growth Markets), Mr David Landers, and Austrade Deputy Consul-General and Senior Trade Commissioner, Ms Julie-Anne Nicholls. Also participating in the delegation, and in attendance at the networking event, were representatives of other horticultural commodities and all major Australian agricultural sectors, reflecting the importance of the Chinese market to Australian agriculture.



Picture 13: Mr Hayden Moore with Australian and Chinese agricultural industry representatives at the 'Australia Week in China' trade mission

8 April 2014 Guangzhou - Seminars and Networking Lunch

Mr Moore attended the launch of the Australia Week in China Program by Minister for Small Business Bruce Billson. A welcome briefing was provided by Austrade and Mr Rob Williams, the Agriculture Counsellor (Technical) for the Australian Government Department of Agriculture based in Beijing. Mr Williams noted that demonstrating effective treatment of fruit fly (and regional fruit fly freedom) to the Chinese authorities was a major priority. The horticultural commodities currently prioritised for market access negotiations are summerfruit, mainland apples, lychees, avocadoes and blueberries.

The next session attended by Mr Moore was a 'Brand and Business Building in China' seminar. This seminar outlined the importance of acknowledging the scale and diversity of China. It was noted that a common mistake was to view China as one market, when it is in fact made up of many different, highly competitive markets. To succeed in these markets, products require effective differentiation and branding. The increasing

use of e-commerce and social media was noted as a very important trend in China, particularly relating to the purchase of foreign goods. E-commerce also has a number of risks, for example brand equity can be eroded through the illegal copying of brands.

The fast growth of China also means that the supply chains (particularly cold chains) have not matured, and often lack reliability and efficiency. This remains a major challenge of trade in general, but also of ecommerce, with many of the major e-commerce providers having to build their own supply chain to facilitate business.

The next session was titled 'China's Quarantine and Inspection Process for Imported Food'. This presentation was given by officials from the China Customs and Quarantine Inspection Unit (CIQ) in Guangzhou, Guangdong. The Chinese official noted that the Chinese Government see food security as food 'self-sufficiency'. The Chinese quarantine system is administered by the 'General Administration of Quality Supervision, Inspection and Quarantine' (AQSIQ). This body also operates 35 regional China Inspection and Quarantine (CIQ) branches. The AQSIQ clearly place the responsibility for food safety on food producers and processers. At a high level, the process for importation of food in to China involves three steps of making an 'Import Declaration', 'Implementation of Inspection and Quarantine', and finally the 'Issuing of Sanitary Certificate'.

An Australia Week in China official Guangzhou networking lunch reception was then hosted by the Minister for Small Business Bruce Billson.



Picture 14: Mr Hayden Moore, Minister Bruce Billson and Australian produce exporter Lisa Liang at a networking event.

9 April 2014 Shanghai - Shanghai Agribusiness Forum and Site Visits

The Agribusiness Forum hosted on this day included presentations and networking opportunities. The first presentation, 'Feeding One Billion Consumers' was by Mr Patrick Vizzone, Regional Head of Food & Agribusiness, Asia, National Australia Bank. This presentation noted that by 2050, the world's population is expected to grow to over 9 billion and the value of global food consumption should increase by 75 per cent. Incredibly, China is expected to account for 43 per cent of this increase and much of the heightened demand for agricultural products.

The size of Chinese markets mean that "ripples from Chinese markets can cause tsunamis in international markets". An example was given of a shortage in domestic Chinese pork supply in 2006 leading to 500 per cent increase in the volume of United States of America (U.S.) pork exports to China within one year. It was also noted that domestic Chinese agricultural prices were generally increasing as greater food safety regulation was being developed by Chinese authorities.

Mr Vizzone also highlighted the potential role of Chinese investment in Australian agriculture. This could be a means of overcoming Chinese market access issues (utilising the 'pull-through' of agricultural products by Chinese investors). It was noted that this was a contentious issue in Australia, however the trade benefits of 'integrated' investment and supply chains should be carefully considered in this debate.

The second presentation was by food safety consultant Mr Frank Gibson and was titled 'China's Agricultural Supply Chain Modernisation and Food Safety'. Mr Gibson reviewed the well-publicised Chinese food safety scares, which he put down to unbalanced investment in food supply chains over the past two decades. Mr Gibson noted the disparity between the traditional farming methods that continue to dominate Chinese food production and the high food safety expectations of modern Chinese consumer. While modernisation of food supply chains was long overdue, the pace of modernisation and complexity of the food supply environment also has major risks – some of which have eventuated.

It is clear that Chinese consumers are demanding an increase in food safety standards, meaning that there are few issues of greater priority to the Chinese government. This creates opportunities for foreign companies not only to supply product to Chinese markets to meet consumer demand, but also to bring knowledge and capabilities to the Chinese markets and build partnerships with Chinese industry that may be beneficial for both parties.

Following this seminar the agribusiness delegation participated in a site visit and briefing at Shanghai Asia Pacific International Vegetable Co. Ltd. (SAPIV). SAPIV operates green production certified greenhouses and a processing and packaging facility that supplies domestic and export markets. SAPIV was founded in 1997 with the assistance of Australian co-investment but is now wholly Chinese owned and operated. Mr Moore attended the briefing from Mr Roy Lim, Managing Director of SAPIV, and inspected the greenhouses, food processing and packaging facilities. Mr Lim indicated that Chinese demand for 'green certified' produce had increased significantly in recent years. He expected this demand to outpace supply for some time, which presented a major opportunity for imported goods to China (including from Australia). The harsh winters in the North of China also meant there was a large seasonal gap that Australian exports could exploit.

Picture 17: The agri-business delegation inspects greenhouses at the Shanghai Asia Pacific International Vegetable Co. Ltd.



10 April 2014 Shanghai - e-Commerce Seminar and Site Visits

The opening briefing and welcome was given by the Minister for Trade and Investment, Andrew Robb.

The first session was an expert panel focussed on the rise of e-commerce in China and featuring several esteemed Chinese business people. By way of introduction, it was noted that in 2013, China surpassed the U.S. as the world's largest on-line retail market. The Chinese on-line market also provides the opportunity for online trade of Australian agricultural goods (including fresh produce). The experts outlined that e-commerce empowers Chinese consumer choice, but also that it can bring suppliers/exporters closer to the consumers they ultimately supply, providing a greater opportunity for effective marketing and brand building. In the case of food, e-commerce also facilitates the consumer's knowledge of food provenance. From a marketing perspective, the 'paddock to plate' stories resonated strongly with Chinese consumers.

The risk of supply chain breaking down was again highlighted. The trend of rising Chinese affluence is moving west from the eastern seaboard of China, a trend that was exacerbating supply chain issues. To counter this, major e-commerce platforms (e.g. JD Online) have created their own supply chain businesses. It is imperative for smaller e-commerce operators to find reliable supply chain partners.

An example of e-commerce platform for horticultural products in China is 'fruitday.com', an on-line site for the sale of imported fruit in China. Fruitday.com has built its own cold storage and logistics systems to provide fresh fruit to consumers, in addition to a 48-hour response mechanism for after-sales issues. Fruitday.com has achieved a number of firsts for fresh produce in the Chinese market, including Zespri kiwi fruit from New Zealand and cherries from Tasmania. Mr Moore met with the co-founder of fruitday.com, Mr Loren Zhao, who was very interested in increasing the scope of imported products to include Australian vegetables in the future.

Following this session, JD On-line hosted an Australian products promotion with an Australian food products showcase.

Picture 15: Minister for Trade and Investment Andrew Robb at JD Online's Australian products promotion launch.



The delegation then visited the Shanghai Free Trade Zone. The site visit included the Yangshan Deep Water Port and the Yangshan FTZ Imported Food Exhibition Centre, an imported food display area associated with the port.

The Shanghai Free Trade Zone is the first free trade zone supported by the Chinese government and represents a testing ground for a number of economic reforms. The Yangshan Free Trade Area is one of three areas integrated into the Free Trade Zone, including Yangshan Deep Water Port and the onshore logistics and

bonded warehouse area. The significant benefit of the free trade zone is that goods can be imported to the free trade zone without attracting import tariffs. These goods may be subject to duties before leaving the free trade zone, however these would be paid by the importer. Normal quarantine restrictions still apply in the free trade zone.



Picture 16: Mr Hayden Moore at the Yangshan Deep Water Port (part of the Shanghai Free Trade Zone).

11 April 2014 Shanghai – Seminar and Gala Lunch

A panel session was held on 'Setting up Business in China - the Essential Building Blocks', including Alistair McLean, Practice Leader of Corporate Finance at PwC, Terry Newman, Owner of Huzhou Huanyou Muye, Jackie Yun, Managing Partner of Wagas and Evan Guo, CEO of Zhaopin Ltd.

The main theme of discussion was that the quickly evolving Chinese market places, particularly e-commerce market places, presented significant opportunities for Australian businesses. New customer channels and business models could be developed, however these markets were also highly competitive, requiring a large degree of adaptability.

In relation to agri-business, it was reiterated that there are opportunities to leverage Australian 'know-how' in agricultural production. An example of this is the AustAsia organisation, which has become one of the biggest dairy producers in China with a total dairy herd of 55,000 cows. The success of this operation was built on bringing Australian production knowledge, management techniques and food safety policies to China. The major risks for agri-business in China were livestock/horticultural disease, industry credibility, lack of reliable business partners and changing Government policy.

Following the seminar, Mr Moore attended the Australia Week in China 2014 Gala Lunch. The Gala Lunch hosted by the Prime Minister of Australia, the Honourable Tony Abbott MP, who was accompanied by the Minister for Trade and Investment, the Minister for Small Business, five State Premiers, one Chief Minister and hundreds of business people. The Prime Minister outlined the successful trade outcomes of the wider North Asian trade mission, including the successful conclusion of negotiations for a Free Trade Agreement in Japan and the signing of a Free Trade Agreement in Korea.

During this event, Tourism Australia launched its new global campaign 'Restaurant Australia'. In 2014, Tourism Australia will partner with relevant industries to showcase to the world why 'There's Nothing like Australian Food and Wine'. This promotion is expected to have positive marketing outcomes for the exporters of Australian fresh produce.



Picture 18: Prime Minister Tony Abbott addressing the Australia Week in China Gala Lunch.

Overall, Mr Moore's attendance on the Australia Week in China trade mission was successful in creating key relationships within both Australian and Chinese industry, as well as gathering important information regarding Chinese markets. This will help inform the on-going efforts of the Australian vegetable industry to first access, and then succeed, in China.

Communication/Extension activities

During the first IAC meeting after the conclusion of the workshop in India, Mr Ward and Ms Ellement provided the IAC committee members a review of their visit, discussing their findings and potential areas of future study. The attendees' participation in the delegation to India and information gained from the workshop has since been used as a source of reference for decisions on projects, most recently on a project for adaptive pest management for horticulture, citing current study undertaken in India.

At the 2014 Fruit Logistica Mr Mulcahy and Mr Brent were active in speaking to various members of the global agriculture industry to discuss the position of Australian vegetables within the international market and also to promote Australia as a viable source of high quality produce. Australian R&D was also discussed and future opportunities were flagged with new service providers.

In addition to numerous general discussions with attendees at Fruit Logistica, Mr Mulcahy and Mr Brent also held one-one-one meetings with key people to provide further in-depth information on the Australian horticulture industry, and to also gain information from international counterparts that may be beneficial to Australian growers.

The 2014 AUSVEG National Convention this year in Cairns will be used as a platform to communicate topics highlighted in this recent project period. Speaker session positions are being allocated to companies that highlighted recent achievements of benefit to Australian growers during meetings at Fruit Logistica. Notably, Ms Christine Brunel Ligneau, Bayer's Global Food Chain Manager based in Germany has been confirmed as a keynote speaker during the convention. Also AUSVEG's many speaking opportunities will be used to convey new research and international perspectives gained from the trip.

The information gathered on the Australia Week in China trade mission will be communicated to growers through existing channels such as the AUSVEG Weekly Update and industry publications. Importantly, this information will also help focus future investment in gaining market access to China.

Next steps

AUSVEG continues to monitor and consider international events for which a representative from the Australian horticulture industry may be required to attend, ensuring the industry is kept up-to-date with new developments and advancements on a global scale.

AUSVEG hopes that additional international projects will be funded in the future as this project has shown value to many facets of the vegetable industry.