

Horticulture Innovation Australia

Final Report

Field Extension Officer for Western Australia

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Vegetables WA

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Summary

Extension of research and development outputs and other information remains a critical factor in advancing the vegetable industry. Along with a range of other extension tools, a key means of achieving this in WA is the provision of a vegetablesWA Field Extension Officer.

There is generally a limited knowledge by the state's growers on how to interact with the national R&D system, and as such a large part of the growers feel disenfranchised and as though they can have little impact on how their levy is being spent. There is a lack of knowledge of how to engage with the system and this has left the growers feeling that WA is potentially being underrepresented in how the R&D projects are being funded.

This project provided critical funds for the Field Extension Officer and enabled the extension of research and development outputs and other information on best practices and technology to be communicated to the vegetable industry in WA. The Field Extension Officer/s were able to develop trust through ongoing relationships and provide the support required over a period of time for growers to implement change. The role also provided a valuable feedback mechanism so that research providers and broader industry are kept aware of issues important to growers.

The project encountered a few challenges along the way including the appointment of a new Field Extension Officer and the difficulties associated with structural change at a national level. As a result, it was difficult to determine quantitative outcomes.

The achievement of reaching 299 participants in 16 Good Practice Workshops and a Young Growers Tour from the 3 September 2014 until 15 September 2015 was very positive. The workshops encompassed topics such as WHS, agronomy, export, and marketing and provided a clear pathway to communicating critical information where it's needed most.

During the same period, 439 grower meetings were conducted (nearly half of all vegetable growers in the state). This is an average of 8.8 per week.

The Young Growers Tour brought together 17 growers (18-40 years) from across the state (4 distinct production zones) for networking and participation in the Vegetables Leadership Summit and later a dinner with the guest speakers. The feedback on this event was also very positive, and a continued focus on the states next generation of growers will be a priority for future activities.

Additionally, in the past 12 months 16 articles were compiled for inclusion in the vegetablesWA magazine, the WA Grower. The full text of these articles can be found on the vegetablesWA website (www.vegetableswa.com.au).

In addition to the strong numbers at events, feedback from growers supports the provision of this role as a means of obtaining ongoing support, free from any commercial imperatives on which other information providers are reliant and may compromise the perceived integrity of their assistance.

As stated by Maureen Dobra, Gingin grower, "growers are very much focused on their own issues and need to have a personal liaison between them and the rest of the world".

"The role of Field Extension Officer is very important to maintain communication and ongoing relationships and give growers options to ask for help as well as keeping them informed of new opportunities to adapt," she said.

Different growers prefer to receive information in different forms, however the overwhelming feedback indicates that face-to-face interaction is the preferred method for a great portion of the industry. As such, the Field Extension Officer role has been seen by the WA industry as an extremely valuable and important contribution for effective communication of information and issues throughout the state.

Keywords

Field Extension, Value Chain, Vegetables, Best Practice, Extension, Growers, Western Australia, Horticulture

Introduction

The Field Extension Officer project was developed to employ an appropriate person to develop trust through ongoing relationships and provide support over a period of time for growers to implement on-farm change. This role was necessary as it was found that short-term projects addressing targeted issues did not create the meaningful relationships that are critical to drive communication and improvements. The role was able to address a wider range of concerns and build trust through various communication techniques and strategies.

This project delivered industry development services for the WA vegetable industry through the employment of a full-time Field Extension Officer.

There were two Field Extension Officers employed over the duration of the project:

- 16 September 2012 – 2 September 2014: Sarah Houston
- 3 September 2014 – 15 September 2015: Dominic Jenkin

The extension of research and development outputs and other information remains a critical factor in advancing the vegetable industry. vegetablesWA provides a range of extension tools to the WA vegetable industry. These include a quarterly magazine (WA Grower), weekly e-news, website, Vietnamese translation services, and partnerships with service providers. However, a key means of achieving extension and information transfer in WA remains the provision of the vegetablesWA Field Extension Officer.

The Field Extension Officer became a trusted source of information that could act as a knowledge broker and facilitate adoption of research outcomes by identifying relevant technology and working closely with researchers to implement appropriate extension strategies. The role allowed growers to individually access research and development outcomes via relevant extension activities, allowing greater penetration than that which was otherwise occurring. The Field Extension Officer also identified other stakeholders in the vegetable value chain that have a role in advising vegetable growers to ensure they were informed about the latest R&D outcomes.

The role provided a valuable feedback mechanism to the broader industry and research providers, ensuring both present and future R&D activities are reflective of issues being faced by the state's vegetable growers. Feedback from the state's vegetable growers supported the provision of this role as a means of obtaining ongoing support, free from any of the commercial imperatives on which other information providers are reliant which may compromise the perceived integrity of their assistance. Whilst there are individual variations, the overwhelming feedback indicates that on-farm, face-to-face interaction is the preferred method for a great portion of the industry. It is often cited as the single most valuable service provided by a Horticulture Innovation Australia funded project or the Western Australian Agricultural Produce Commission (WA APC).

Local vegetable production is largely geared towards the local market, outside of the large and consolidated carrot export industry as seen in Figure 1. Whilst export offers potential for growth due to the drop in the dollar and improved terms of trade, technical and logistical market access remains a barrier for a large number of vegetable commodities. There are some product lines that are produced for interstate markets (for example the cucumbers produced in Geraldton) however these options are limited to seasonal windows or some specific market gaps as logistical and quarantine requirements hamper trade.

Domestic growth in Western Australia has stagnated somewhat in recent years, and a reduction in the state population (Figure 2) and economic growth rates (Figure 3) has led to a drop in the purchasing power of vegetable consumers.

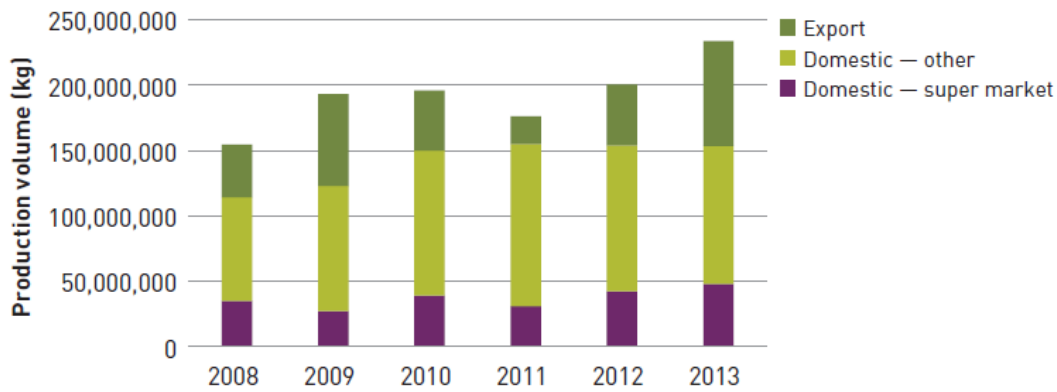


FIGURE 1 Production of vegetables in Western Australia

Source: Agricultural Produce Commission WA, 2014

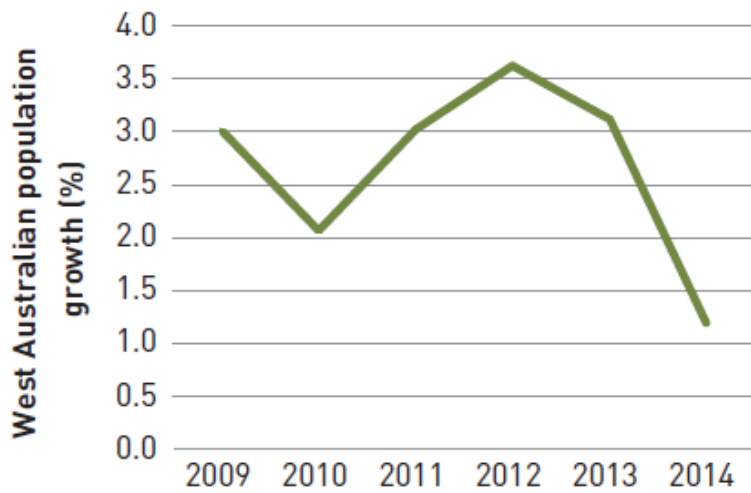


FIGURE 2 Western Australia's population growth rate

Source: Australian Bureau of Statistics, 2014

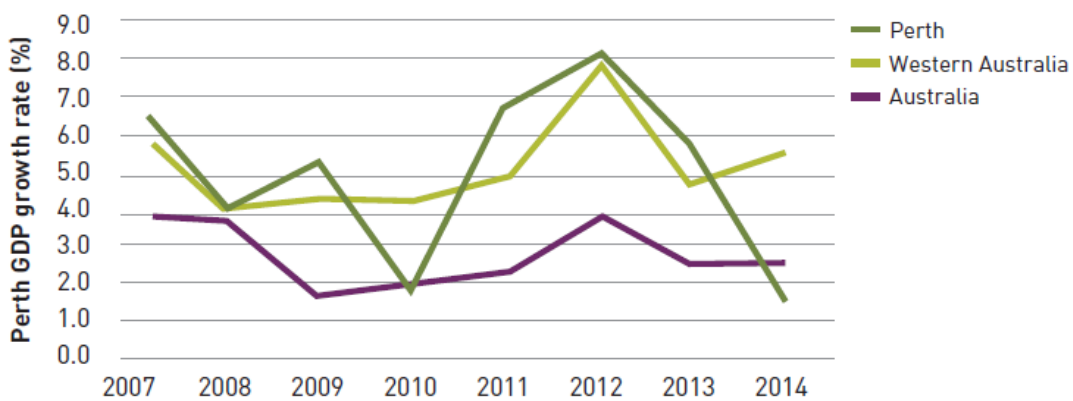


FIGURE 3 Western Australia's and Perth's GDP growth rate

Source: SGS Economics and Planning, 2014

This has resulted in a contraction in the domestic vegetable market with negative volume growth recorded in the last two calendar years at the Perth central markets across the aggregated vegetable commodities (Figure 4).

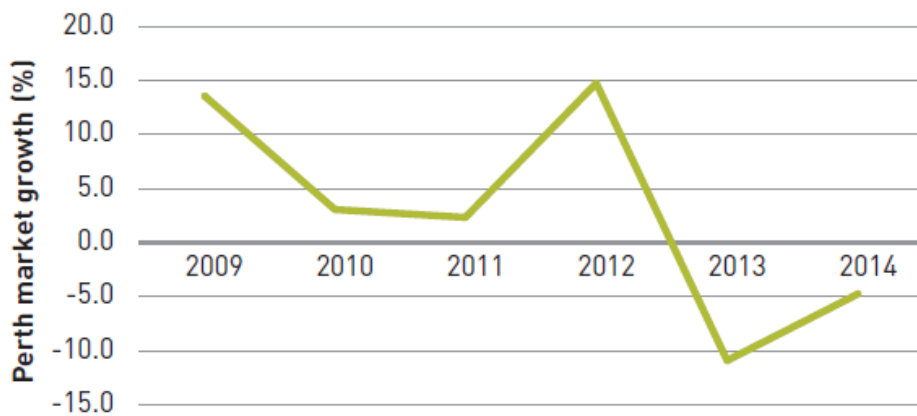


FIGURE 4 Domestic vegetable market growth

Source: Chamber of Fruit & Vegetable Industries WA

Contracting and changing markets have put stress on the state's production systems. There is little help available from the local government as rising debts have led to the Department of Agriculture and Food significantly reducing their capacity to deliver vital services. The impending sale of the central markets which adds another layer of uncertainty for the local growers.

Whilst many vegetable production businesses were geared for growth, responding to the boom of recent years, changes in the local industry have severely impacted their operations and putting pressure on their bottom lines. This stress is leading to some growers making poor production choices, such as overproduction and selling produce below cost.

We have seen in recent times the market becoming increasingly unstable on commodity lines as there is more and more speculative growing of cash crops to try and recoup losses. This instability is impacting the businesses of all producers.

In this environment what is required is great extension of information on market dynamics and what can be done to influence outcomes, focus on opening new markets and continued work on long-term R&D projects to ensure growers remained focused on the long-term interests of the greater industry.

Methodology

Process for employment was to advertise on Seek, Agbiz Careers and through vegetablesWA e-news. A group of candidates were then interviewed.

Sarah was the Field Extension Officer until the 2 September 2014. Sarah has an Agricultural Science (BAGSci Hons) degree and experience working as an Agribusiness Analyst with the National Australia Bank as well as a rural background.

Dominic Jenkin commenced the Field Extension role 3 September 2014 after following the same hiring procedure. Dominic has a Masters in Agricultural Science from the University of Dublin and had previously been working as a Value Chain Executive for the LaManna Group developing and managing collaborative supply partnerships for citrus.

Despite his extensive horticulture experience, Dominic was new to the WA vegetable industry; as such it was an appropriate time to restructure the operating plan of the role to reflect his capacity. This was achieved by analysing industry data, provided by the Agricultural Produce Commission of WA's Vegetable Producers Committee (APC-VPC) to vegetablesWA, to gain fresh insights into the structure of local production systems and consequently resulted in new strategies for the role.

Access to the APC VPC data enabled extension tasks to be more structured and targeted than would have been possible without the data. The database including all of the state's growers, monthly production records and geographical locations, making it possible to target activities in ways previously impossible.

Technology transfer activities could now be planned and targeted to the grower populace in a number of new ways; for example by:

- Product type;
- Production region;
- Production period;
- Irrigation zone;
- Local government area; and
- Production scale.

This enabled a greater efficiency and effectiveness in the delivery of field extension activities and greater productivity in the role.

This information assisted the Field Extension Officer to prepare targeted workshops and relevant, frequent communications, resulting in a greater probability of engagement by industry.

The methodology of extension delivery was part proactive and part reactive. This required a balanced approach, planning of various workshops in each of the state's production regions, but also retaining capacity to respond effectively to ad hoc requests that eventuate in the process of service delivery.

The Field Extension Officer was managed by the vegetablesWA Policy and Program Manager (now CEO) and reported to the 12 grower members of the vegetablesWA Committee of Management.

The vegetablesWA performance management approach incorporated a Work Plan and Learning Agreement allied to required knowledge skills and the Integrated Leadership System (developed by the Australian Public Service Commission). The Work Plan and Learning Agreement detail required milestone and served as the Operating Plan for the Field Extension Officer. Each milestone was broken down into constituent Key Performance Indicators with relevant timeframes for completion.

The updated 2015 operating plan is supplied in the appendix of this report.

Project management and reporting

Reporting which outlined the results achieved from the project was conducted at periodic intervals; these were delivered to both the vegetablesWA Committee of Management, the APC-VPC and Horticulture Innovation Australia.

Internal reporting within vegetablesWA included the participation in weekly staff meetings, quarterly Committee of Management meetings (3 have occurred since 3 September 2014) and the Annual General Meeting which occurred 6 November 2014.

Prior to all meetings with the Committee of Management and the AGM update reports were prepared to summarise activities that had been logged since the previous meeting. The Committee of Management provided project oversight and invaluable feedback which identify regional issues and helped contribute to the delivery of appropriate extension activities.

Two meetings occurred with the APC-VPC, the first of which included an update of activities by the Field Extension Officer and the presentation of projects proposals for funding. The second meeting was where the projects were debated and approved.

Reporting to Horticulture Innovation Australia included the formulation of a new Operating Plan for the position, and Milestone Report

Communications

To ensure an informed approach to the extension, numerous information sources were consulted regularly. This was vital to ensure that the Field Extension Officer was able to facilitate the formation of linkages through the value chain, and the local growers were aware of issues that could impact their businesses. These sources included:

- Horticulture Innovation Australia website
- AUSVEG website, magazine and e-newsletters
- ABC Rural
- Department of Agriculture and Food WA
- Department of Water
- Perth Market City e-newsletter
- Chamber of Fruit and Vegetable Industries vegetable price reporting
- Countryman newspaper
- FreshPlaza e-newsletter
- HortiDaily e-newsletter

By being across local, national and global issues it enabled the provision of more targeted and relevant extension services. Being informed also included engaging in growers in such a manner that they identify local issues and disseminate their experience which can be then shared with the greater cohort of growers.

Outputs

The outputs detailed are for the period from 3 September 2014 until 15 September 2015.

Develop trust and industry unity through ongoing relationships

Engage grower base

The original required target of achieving at least 8 face-to-face grower contacts each week over the 50 working weeks (3 September 2014 to 15 September 2015) over 439 grower contacts were conducted. This is an average of 8.8 per week, 10 percent above the KPI. Initially this target was not being met, as during the first 26 weeks only 155 visits were carried out as opposed to the targeted 208, this was due to the time taken for orientation and developing knowledge about the WA vegetable industry. For the 24 weeks following this, the field extension officer was able to conduct activities more effectively and was able to make 284 contacts in the second period. Across a grower base of over 1,000 members, of the 439 contacts approximately half were unique contacts, whilst half were follow-ups from previous contacts.

The engagement of the grower base was often challenging at times but remains vital in ensuring that the WA growers are being provided with timely and relevant R&D information and that this was being conducted in a manner that was aligned to the need of industry.

Extension of R&D Outputs

Inform growers

With a goal of producing 3 articles for the WA Grower magazine each quarter, in the past 12 months 16 articles were compiled for inclusion in 3 editions at an average of over 5 per edition. The articles included are listed below. The full articles can be found on the vegetablesWA website (www.vegetableswa.com.au).

2014 Summer Edition

- The impacts of supply and demand
- Improving the profitability of production
- Cucumber green mottle mosaic virus
- Ladybirds helping out on the farm
- Patented sticky traps for protected cropping
- Petiole sap analysis

2015 Autumn Edition

- Postharvest chlorination
- Pre-harvest factors affecting postharvest quality
- Strategies for competitive advantage
- Collective bargaining
- Micro-perforations for major improvements in shelf-life
- Controlled traffic farming

2015 Winter Edition

- Ozone 'vaccine' protects against fungal attack
- High Pressure Processing to reduce food waste
- Australian Horticultural Exporters Association
- Export: How does it stack up?

Good Practice Demonstration Workshops/Young Growers Tour

During the course of the past year, from the 3 September 2014 until 15 September 2015, 16 Good Practice Workshops and a Young Growers Tour were conducted. There were a total of 299 participants at a total of 17 events, an average participation rate of 18 growers per workshop. With an aim to achieve a minimum of 240 participants across the state, the Field Extension Officer was able to deliver to 299 participants in the past

twelve months, 59 more participants than targeted.

The workshops encompassed topics such as WHS, agronomy, export and marketing. Whilst the average attendance falls short of the 20 participant minimum, numbers were achieved by holding an additional 4 workshops during the period.

There was provision in the project to conduct a Young Growers Tour; this was conducted in July 2015 in conjunction with the Vegetables Leadership Forum. The Young Growers Tour brought together 20 growers (18-40 years) from across the state (4 distinct production zones) for networking and participation in the Vegetables Leadership Summit and a later a dinner with the guest speakers. The following day a study tour was arranged to expose the group to the full breadth of the value chain from a major supermarket to a vertically integrated grower-packer.

The details of the workshops and the Young Growers Tour are elaborated below.

24 November 2014: Myalup WHS Workshop

A Workplace Health and Safety workshop was conducted in Myalup in response to the occurrence of several on farm audits in the area. Steven Palmer from the Chamber of Commerce and Industry WA was engaged to present at the event and provide technical support on how growers should respond to these audits and rectify any issues that were identified by the auditor.

There were 16 growers in attendance at this workshop and upon realising that most of the issues identified in the audits were communal there was some interest by the group to work together to prepare documentation. The workshop helped the group to feel more confident that they were responding appropriately to the actions required following the audit and were instilling better WHS practices in their respective businesses.

11 February 2015: Albany Regional Workshop

This forum was attended by 8 small to medium scale growers who make up the majority of local vegetable producers. The forum began as a discussion on the status of the local industry to identify their points of comparative advantage. It was noted through this process that most producers have focused their production locally, scaling their operations to supply local markets and supermarkets. This reduced competition is partly due to limitations in climate, water resources and increased costs of logistics.

Local growers have instead evolved to exploit their comparative advantage in supplying the local market, and grow a diverse range of products to suit local consumption. This diversification has also led them to producing a range of high value niche crops that they are able to supply to Perth market. The forum helped growers to identify the strengths of their local industry and to provide technical insight as to how the producers may further exploit advantages that they have over growers in competing regions.

12 March, 26 of March, 7 April and 24 August 2015: Perth Export Forums

The export forums were conducted to assist a group of 7 growers from the north and south metropolitan growing regions to overcome the challenges of entering or expanding export markets. It was structured as a discussion group whereby members could openly discuss the issues they were confronting in opening up markets and building upon group knowledge to build export successes. We covered the suite of export issues including logistics, market access, quarantine requirements, economics, comparative advantage and the nature of competition on global markets. The dominant themes of discussion as a group included:

- Working together;
- Looking at exploiting established options to accessing export markets;
- Investigating new opportunities; and
- Focusing on markets with easy access.

As part of this process Jennie Franceschi of Avocado Export Company was invited to share her experience of exporting and the approach required to attain success on export markets. The export forums are continuing

on an infrequent basis as the group continues to explore their options for expanding markets.

Some outcomes of the group were the attendance of group members in market research trips to Indonesia, Malaysia, Dubai and Hong Kong. The group also compiled a product catalogue that advertised the group's aggregated product range to potential customers.

19 March 2015: Donnybrook

This forum was conducted in response to an immediate market issue. Pumpkin growers from the region were unhappy with the state of the pumpkin market. During this period the market was being oversupplied, however the major chains retained elevated sales prices, which were reducing consumption and exacerbating the problem.

During this forum market information was presented to 8 growers in Donnybrook to provide detail on the market which they supply and the degree to which they supply it. This helped to identify the regions points of comparative advantage to seed a discussion on how these may best be exploited to benefit the region's growers. This included exploring the capacity of the product for more flexible marketing strategies, better relationships with trading partners, more robust supply agreements, and more control over supply-side dynamics. The workshop was attended by 9 of the region's cucurbit growers.

27 April 2015: Geraldton

This forum was principally geared towards the region's cucumber growers. The Geraldton cucumber industry is of great importance on both the state and national level, accounting for up to 80% of national supply of continental cucumbers during their primary supply window.

Whilst being of national importance the growers of the region required assistance in understanding markets and supply-demand dynamics. This event was aimed to upskill the growers on market dynamics and the supply and demand relationship. The Geraldton growers were suffering from a lack of transparency, their physical distance from market and communication problems (low English language skills in predominantly Vietnamese grower group).

Real market data (from the Perth Market Authority - <http://www.perthmarket.com.au>) was used to gain insights into how markets functioned, gain better transparency on market forces and identify opportunities for improving value chain efficiency. This information is particularly salient given the development of another large scale grower in the region that will influence returns in coming years.

There were 12 growers in attendance, with language support from Truyen Vo (Vietnamese Field Extension Officer VG12024).

29 April 2015: Carnarvon

A meeting was called to discuss current market dynamics and forces with a diverse grower group from Carnarvon. There were 19 growers in attendance at this event. The occasion was used to identify the current and emerging trends in the marketing of fresh produce and identify opportunities for better controlling returns.

The growers have suffered in recent years from unstable market conditions (over/undersupply, climatic events, etc.) and as such have felt at mercy of external forces, often without the insight required to enact change. The focus of the evening was to enable growers to see deeper into the value chain and identify opportunities for attaining more control over the sales process and obtaining greater returns.

22 July 2015: Gingin

The Gingin event was conducted in response to a lack of community identified among growers in the Northern Metropolitan growing region. In the area resides some of the largest growers in the state, but due to the scale of their respective businesses they often find they have little time for sharing experiences with their neighbours. This is a detriment to the collective as each individual grower has amassed a great deal of experience that,

when shared, is of great value to the industry as a whole.

The event was organised as an informal gathering of 15 growers to discuss the current and emerging issues that they were collectively confronting and allowing sharing of experience and capacity building among the group. There was positive feedback following the gathering with the group planning to hold similar gatherings more regularly.

30 July 2015: Vegetable Leadership Summit

The Vegetables Leadership Summit was organised under the theme of “Where will the industry be in 5 years’ time” with specific focus on the value chain (from the farm-gate to consumer). The event was structured as a facilitated Question and Answer session with the following panellists:

- Mat Trichet (Business Category Manager Fresh Produce, Coles)
- Tony Galati (Owner, Spud Shed)
- Trish Skinner (President, Chamber Fruit & Vegetable Industries WA)
- Mark Pidgeon (Marketing & Sales Manager, United Exports)
- Mark Rawlings (Co-Founder, You Plate It)
- Don Hancey (Chef/WA Food Ambassador)
- Tom Murrell (Facilitator)

The panellists were chosen to capture the breadth of the downstream value chain and carefully selected to ensure the event was geared both towards engaging the attendees and underlining the opportunities that exist in the vegetable sector. The summit provided the growers with a unique opportunity to engage with the panel to discuss the issues important to them.

To prepare the panel and provide structure to the event the topic was divided into 4 themes, for which we provided a number of questions to seed the discussion of the group. The themes and initial questions are listed below:

Disruption: How consumer trends affect my business

- What role do food trends have in shaping the production environment? Is there a way that they can be approached in a proactive rather than reactive manner?
- Does the media play a role? Is there something as an industry that can be done to ensure greater stability in production and markets?
- What is your role in creating food trends? Can greater collaboration ensure greater capitalisation on opportunities?
- What are our main sources of competition? Is it over our fence; the adjacent region; interstate; other vegetable lines; frozen foods; imports; processed foods and should I see this as an opportunity?

Selling Globally, Buying Locally

- In a commoditised market how can I differentiate my product, sell its story and tap into consumer interests?
- How can I more directly engage with the consumer to shape my business to service their needs?
- What role does export have in growing the WA vegetable industry? What barriers exist to this growth?

Paddock to Plate Value Transformation

- What is the role of the central markets in the current and future vegetable value chains?
- What are the cost pressures that influence the pricing of products and services? How is this trending? What can be done to ensure that these don't simply become another burden for the growers to bear?
- Stepping outside the commodity market: What are the opportunities for adding more value to vegetable products?

Food Waste

- What impact is food waste having on your business? How are you managing this issue? Can this be

improved through greater collaboration

- Specifying products: In a variable environment maintaining rigid quality specifications is a never-ending battle. What is your role in influencing public perception of product quality? Can this be aligned more closely with production to educate consumers and reduce food waste?

Upon the close of the Q&A session there was a cocktail function to allow growers to meet panel members and network with other growers. By all accounts the event was a success with positive feedback and a greater level of engagement from most people in attendance (of which there were 59 growers). The event was also attended by the Executive Director of Irrigated Agriculture at the Department of Agriculture WA.

30-31 July 2015: Young Growers Tour

The young grower's tour aimed to increase the engagement of younger growers (18-40 years) with the broader industry and provide them with an opportunity to participate in industry dialogue and network with other young growers. The two day tour began with participation in an extended program for the Vegetable Leadership Summit and continued the following day with a field trip. Whilst RSVPs were received from 20 young growers to participate in the tour, we only had 17 attend the first day of the program and only 14 on the second day.

The program was as follows:

30 July 2015

- Young Growers reception and networking
- Vegetables Leadership Summit
- Cocktail Function
- Young Growers Dinner

The young grower's reception allowed the young grower participants to meet each other and the staff of vegetablesWA. Following the cocktail function the young growers participated in a dinner that was attended by vegetablesWA staff and the panellists from the Q&A session.

31 July 2015

- Coles Distribution Centre tour
- Loose Leaf Lettuce Company tour
- Lunch and presentation by president of vegetablesWA

The young grower's tour provided a great opportunity for the young growers to interact for an extended period of time to share their experience and increase fellowship amongst the young growers. The growers appreciated the time spent together and work will be done to ensure the group remains in contact.

18 August 2015: Manjimup Brassica Workshop

The workshop was arranged to extend information on the supply and demand relationship for brassica crops using real market data. The workshop also provided the forum to introduce the new online tools being developed by vegetablesWA and identify any regional issues that the growers wished to raise.

Unfortunately, the workshop was only attended with 5 growers, however this represents 30% of the industry in the production region.

18 August 2015: Albany Workshop

The Albany workshop was arranged by David Gray with presenters that encompassed agronomy and the value chain. The presenters at the event were:

- John Cross. (David Gray) New products of interest
- Des May. (David Gray) Water monitoring and managing nutrition
- Nigel Shaw. (Stoller) In-furrow nutrition
- Simon Hazelden. (Agrow Easy) Crop Manager

- Shayne Paskins. (Agquire Rural Holdings)
- Dominic Jenkin. Online tools
- Steve David. (Organic Farming Systems) Soil health

There were 15 growers in attendance and they appreciated the breadth of topics at the event as it was able to engage a diverse grower populous. This is especially important in the Albany region as it is characterised by a diverse group of smaller growers who produce predominantly for the local markets.

9 September 2015: Geraldton

This workshop was convened to discuss how the cucumber harvest season was progressing and to evaluate whether the growers were engaging with their markets. There were six growers in attendance and we used the time to discuss the impacts of the development of a new cucumber farm in the region, the prevailing market conditions of the season and how the market dynamics are affected by interstate production.

This workshop provided the growers in attendance to escape from the operational cycle of the harvest season to share experiences and identify opportunities for future growth and collaboration which included the formation of packing cooperatives and export market development.

9 September 2015: Carnarvon Pathology Workshop

In partnership with DAFWA and the Carnarvon Growers Association (CGA) a plant pathology workshop was arranged to coincide with the Australasian Plant Pathology Conference. The workshops were conceived to make use of the scientists who will be travelling to WA to address local pathology issues. The scientists who participated in this workshop were:

- Len Tesoriero New South Wales Department of Primary Industries
- Denis Persley Queensland Department of Employment, Economic Development and Innovation
- Trevor Wicks South Australian Research and Development Institute (SARDI)
- Brenda Coutts DAFWA
- Barbara Hall SARDI
- Sonya Broughton DAFWA
- Together with local agronomists

Before the workshop the scientists toured the production area to gain insight into the type of issues faced by local growers. The workshop was then structured to allow each visiting scientist to provide their analysis on the issues that they identified in the field tour, which was then followed by a question and answer sessions. There were 43 growers in attendance and the content touched on themes of weather, viruses, bacteria, fungi, insects, best management practices and area wide management.

10 September 2015: Carnarvon Pathology Workshop (Vietnamese language)

This workshop was a replication of the workshop held on the 10 September but delivered with Vietnamese language translation for the Vietnamese growers of Carnarvon. Vietnamese growers represent a significant proportion of the industry in Carnarvon, and there were 15 growers in attendance.

14 September 2015: Wanneroo Pathology Workshop

This workshop was a replication of the Carnarvon workshops but held in the North Metropolitan area of Wanneroo to benefit the growers of that region. There were 37 growers in attendance at this workshop.

Development of Online Tools

In early 2015 project proposals were submitted to the APC-VPC and approved to give the vegetable growers access to a suite of online tools that were designed to make greater use of industry data available. These projects were approved and fully-funded by the WA vegetable industry's fee-for-service. The fee-for-service, collected by the Agricultural Produce Commission, is paid by all vegetable growers and also provides a detailed and valuable dataset of payment records.

The fee-for-service is paid monthly by the state's vegetable growers and represents a record of who is producing what, where, when and to whom they are selling these products. It was conceived that this record, which was previously only being used to audit the fee-for-service collection, could be used to educate growers of the supply side market dynamics and advertise the produce that is available from WA. By giving growers access to this data along with education on how to interpret the data, allows growers to potentially apply greater supply-side controls to influence market outcomes. By giving retailers and importer access to a database of the state's vegetable growers it will facilitate the purchase of WA vegetables and encourage more direct value chains to form.

The details of these two developments are listed below. The Field Extension Officer supported the development of these projects as they were considered as fundamental in educating growers about how to identify and undertake value chain initiatives.

Development of a searchable online database of WA producers and production

This project aims to connect WA vegetable producers more directly to their existing markets and facilitate access to new markets through the development of an online portal. WA producers will be given direct access to buyers in both domestic and export markets through this online search tool, available on the vegetablesWA website. This will also likely be a welcome development for importers and exporters alike to allow them to easily source product and respond quickly to market dynamics. Providing a mechanism for networking in the value chain and for importers, exporters and retailers to easily find supplier will facilitate trade with West Australian producers.

The online portal aims to help connect producers directly to potential buyers/markets, streamlining sourcing of WA vegetables. The project will involve the creation of an online database of WA vegetable producers and detail their seasonal availability of produce. The website will allow potential buyers to search for and source product in the most direct way possible, facilitating greater communication along the value chain will increase consumer alignment. This will help to create more direct value chains with reduced costs.

Constructing a searchable supply calendar on the basis of the data collected by the APC, producers will be encouraged to consent to publishing their product availability and contact details so they may connect more directly with markets. Producers not wishing to engage directly with markets may instead nominate an agent to communicate on their behalf. The participating growers will have the opportunity to advertise their details, upload photos and brands and write a brief profile of their business. Their profile will include a "Contact" form that can be filled out by prospective customers wishing to acquire their products.

CVW Creative was employed for the website development; the online search tool was released to the public in November 2015 on the vegetablesWA website.

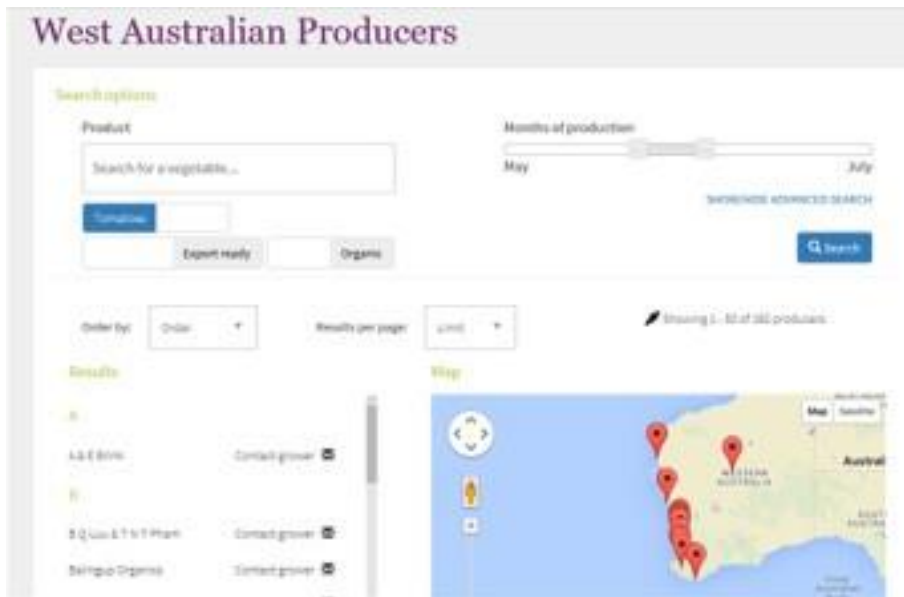


Figure 5: Screenshot of online search tool (image is unclear to hide grower information)

During the development phase this online search tool (Figure 5) was presented to a number of both importers and exporters for comment. It was very positively received by all and they valued it as a tool to facilitate trade.

Development of an online market analysis tool

This project aims to increase the level of access that WA producers have to relevant market data. In what would be a national first, WA producers will be given access to detailed intelligence that could dramatically change the way they engage with their markets.

This tool was designed to collate data from the APC VPC fee-for-service collection records. The data is collected by: producer; line sold; first point of sale; and sales volume.

Outcomes and benefits

- Access to reliable data to assist in business decision making
- Allow producers to analyse supply and demand relationship to make better marketing decisions
- Allow producers to view their market share on their range of products (local and export markets)
- Allow producers to pivot their data to analyse value chains

CVW Creative was employed to develop this tool through collaboration with the Field Extension Officer. A number of screenshots (Figure 6, Figure 7, Figure 8, Figure 9, and Figure 10) display how the growers will interface with this tool.



Figure 6: Dashboard view #1

The dashboard view was designed to give growers an overview of their production and markets across all lines, to summarise broad indicators before allowing them to drill in on particular detail.

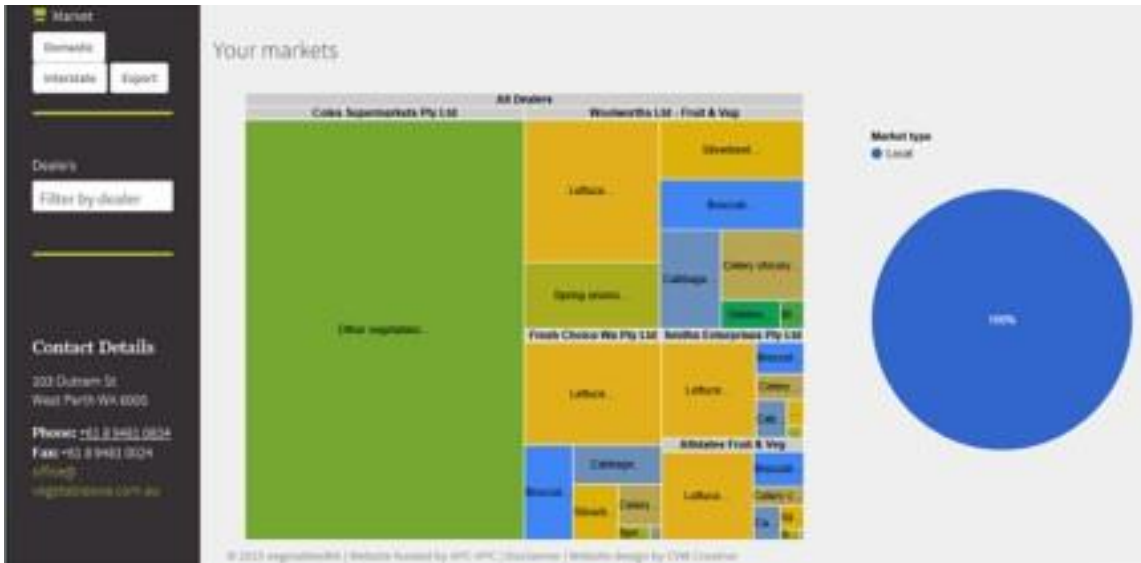


Figure 7: Dashboard view #2

This information they are able to filter by time, market, dealer, and pack-type.

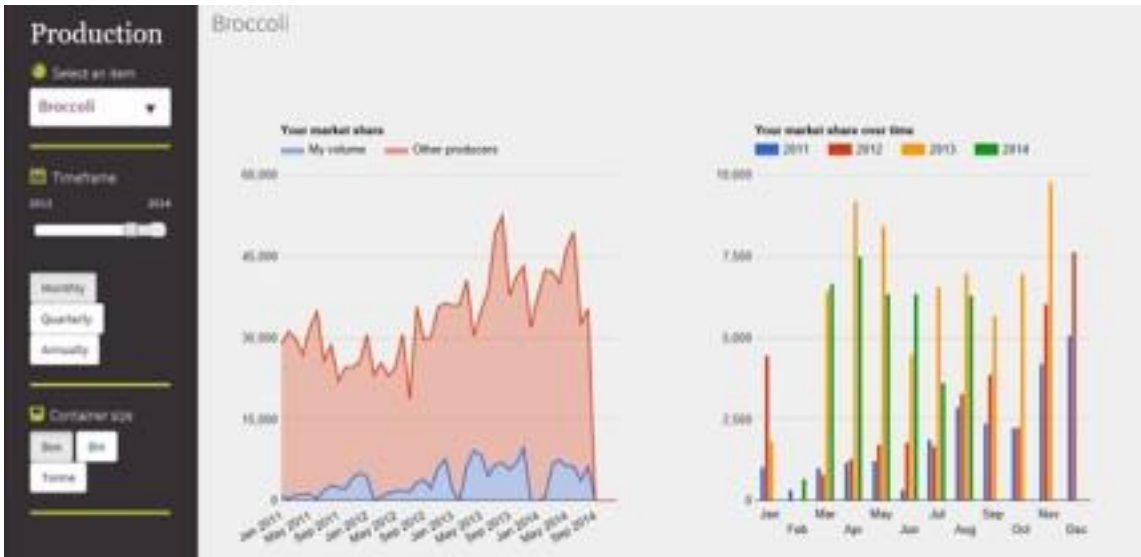


Figure 8: Product-specific view #1

The product-specific search was designed to give growers insight into each of their product lines and the supply dynamics of the state. The first view allows growers to see the total volume of a particular product (in this case broccoli) and their proportional market share. The second graph, displayed in Figure 8, allows producers to compare the current season against previous seasons for the selected period. Like the dashboard this information can be filtered by time period, pack-type, market, and dealer.

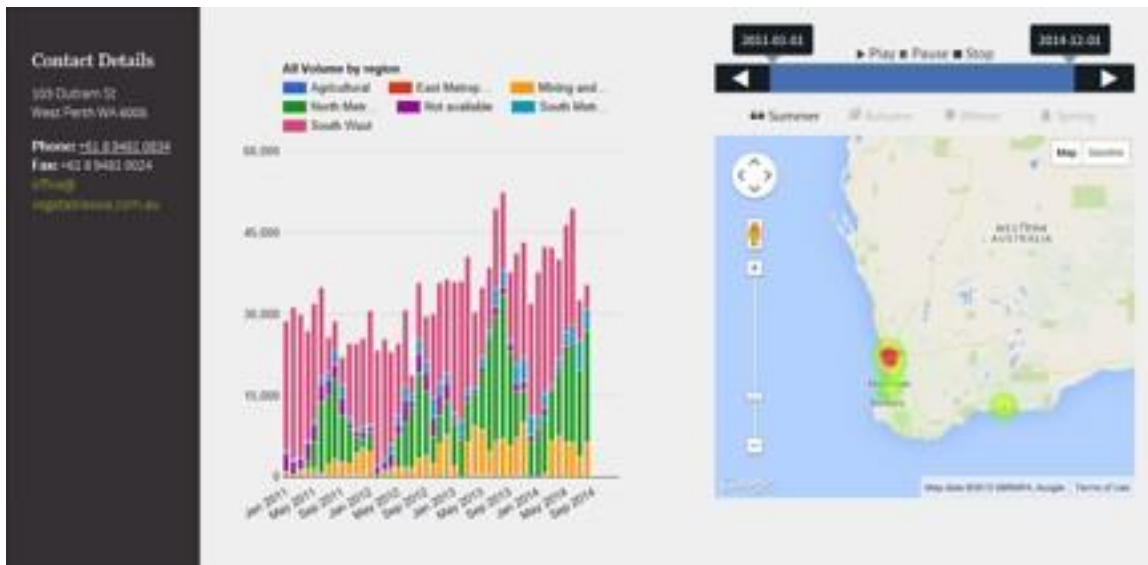


Figure 9: Product-specific view #2

The views presented in Figure 9 allow growers to better understand the seasonal variation in production zones and better coordinate with other regions to ensure supply consistency between shoulder seasons. This information is presented both as a static chart that divides production zones by electoral district but also spatially on a map by postcode. The map is a dynamic heat map that allows the grower to press play and view how the production zones moves geographically across the state by month.

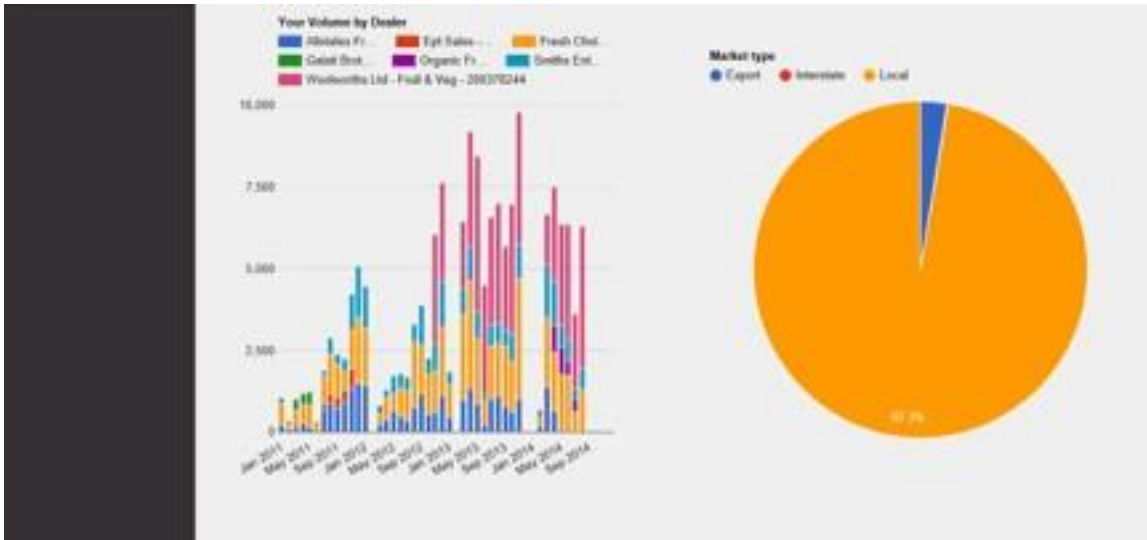


Figure 10: Product-specific view #3

This view looks specifically to the customers and markets that a particular grower serves, allowing them in a broad manner to evaluate their performance.

The interface was designed by the Field Extension Officer to provide a user-friendly interaction with production and market data to enable growers to gain valuable insights into supply dynamics. In preliminary discussions with growers the concept was well received and they are eagerly awaiting the website's release. This website was released in November 2015.

Support and represent WA vegetable growers

The Field Extension Officer was a conduit for information and was relied upon to respond to the needs of the growers and connect them with relevant third parties as required. Whilst engaging the growers through direct contact, these interactions were crucial in gaining important feedback from growers that could be disseminated to vegetablesWA and the greater industry. This service filled a need as growers often felt they did not have the capacity or connections to pursue by themselves.

Value chain improvement and collaboration

Liaison with relevant government bodies and associated industry partners as required assisting with an understanding of what growers need and want. Below is a list of meetings attended by the Field Extension Officer in the last 12 months.

- Department of Agriculture of Western Australia (DAFWA): Introduction to staff within department to allow for future collaboration
- Perth Markets: Met with traders from all of the major wholesalers to introduce myself and help foster greater collaboration between markets and growers
- DAFWA: Stable Fly Project, Carabooda: Update on Stable Fly program and related outcomes
- AHR: On-farm power generation workshop: Organised by AHR, this workshop was to promote investment in renewable energy technology (Project: VG13051). This workshop was attended so the Field Extension Officer may extend knowledge to growers who were not able to attend.
- Food Innovation Australia Limited (FIAL): Food futures clusters - change and innovation in business: In meeting with FIAL, I have now made contact to participate in the development of their "Australian Food Map" and "eCatalogue" and improving their relevance to the horticultural sector.
- FIAL teleconference: provide strategic feedback on the development of eCatalogue and Australian Food Map
- DAFWA: La Grange Presentation: \$5M Royalties for Region project (Broome Shire) update

- Agricultural Produce Commission: Discussed the fee-for-service structure and the potential use of data collected
- Department of Water (DoW): Regional meeting for the Gnamptara mound irrigation area water users
- AD Australia Pty Ltd: Anaerobic digestion plant development in WA
- Chamber of Fruit and Vegetable Industries (CFVIWA): Meet with market agents and identify possibilities for collaboration (e.g. marketing forum proposed for Carnarvon)
- WorldLink: Discuss their capabilities to service export-ready growers in a freight forwarding capacity
- AUSVEG: Meeting with representatives to identify opportunities for collaboration and to identify national R&D communications and information that need to be extended to WA growers
- Australian Organics: met with Industry Development Officer to discuss local organic industry
- EnviroVeg: Discuss program and adoption in WA
- DoW: Provide industry input when required for planning projects, ensure that information received represents the best interests of vegetable growers
- Secure Market Trading Pty Ltd: Discussion data use at markets to assist with the creation of online tools
- WA Integrated Futures: discussion of development of project
- DAFWA: Provide input for "More Dollars per Drop program
- RMCG: Participate in soil workshops to extend information to growers unable to attend workshops (Project: VG13076)
- C-Wise Compost: Collaborate with company to organise trials across the state to promote the use of compost
- Total Precision: Discuss options to increase the uptake of use of precision agriculture in vegetable production. Collaboration for the compilation of an article for the magazine.
- Raymax Lasers: Collaborate for the compilation of an article on perforated packing technology (Perfotec)
- Harvest Fresh Cuts: Work with company to help them to communicate opportunities that exist to supply their packing facility
- J-Mark: Work with company to help them reach out to growers to coordinate supply for their packing facility
- DoW: Provide input for modelling of groundwater uses and production economics, Gnamptara mound
- CFVIWA: Consultation in preparation of strategies for reforming fee-for-service, collaboration in organisation of young growers tour (marketing forum)
- Perth Market Authority: Freshlogic presentation
- Perth Region Natural Resource Management (NRM): Discussion of current NRM projects and opportunities for future joint collaboration
- Chamber of Commerce and Industry WA (CCIWA): Safety and risk and audits
- National Australia Bank: Discuss agribusiness clients to identify opportunities to extend information to growers
- ANZ Bank: Discuss agribusiness clients to identify opportunities to extend information to growers
- Commonwealth Bank: Discuss agribusiness clients to identify opportunities to extend information to growers
- Trade and Investment Queensland (TIQ): Participate in "Exporting Australian broccoli to Japan" conference
- Steritech: Tour of facility and discussion of options for establishing site in WA
- Australian Horticultural Exporters Association (AHEA): vWA is now an associate member of the AHEA, discuss issues pertaining to export of vegetable products from Western Australia and collaborate for an article in the WA Grower magazine
- RIRDC: Participated in a collective bargaining teleconference, providing technical input for upcoming report
- Murdoch University: develop grower database to better store and organise grower records

- TIQ: collaborate in formulation of project to support broccoli export industry expansion
- DAFWA: Attended the Gascoyne food bowl forum in Carnarvon; Met with in country representative for Indonesia market development; Working with Rohan Prince to organise a pest and disease field day for Carabooda/Wanneroo for September
- APC-VPC: Participated in the APC-VPC meeting to provide additional information on project proposals
- C-Wise: C-Wise presented material on their strategic plan for increasing soil health in WA
- Chefs for Gascoyne: Attended the chefs for Gascoyne event
- Farmer Jacks: Met with John Zar to assist business in establishing more direct trading relationships with growers
- TradeVine: New boutique export company starting in Perth looking to expand into vegetable lines, assisted company in understanding challenges of export and will look to link them with growers directly
- Coriolis: Provided input for consultancy looking to work with government in developing strategic plan for agricultural in WA
- Acknowledge: consultants operating out of Carnarvon increase opportunities for growers
- CVW Creative: Meetings and ongoing discussions relating to the development of the new vWA website and online tools
- NRM: Food future WA collaboration along value chain, linking economic outcomes to natural resource management outcomes
- AUSVEG: Travelled to Gold Coast for AUSVEG Convention, including: Minor Use Symposium; Exporting to SE Asia Symposium; and networking with growers, companies, departments, industry associations from across the country
- The Good Food Empire: Discussion on new techniques for processing of carrots, linked him with relevant growers to evaluate opportunities
- Coles: Streamlining supply and communication and reducing regulatory burden on growers
- Spud Shed: Discussed opportunities for export and greater collaboration with growers
- United Exports: Discussed opportunities for increasing exports from Western Australia and points of competitive advantage for the state
- You Plate It: Discussed the status of the modern consumer and how new consumer trends are shaping the production landscape
- CFVIWA: Discussed the upcoming sale of the Perth Market and the implications for growers
- DAFWA (Export): discuss opportunities with DAFWA representatives to devise strategy for export market developments
- DAFWA (Indonesian Trade Office): Met with DAFWA trade office representative to discuss upcoming trip to Indonesia by several WA vegetable growers
- APC: Discussed reform of the made of collection of data to improve future reporting through the online market analysis tool
- Professor David Hughes, International Speaker: Attended breakfast lecture on the "The Global Business of Food"
- Southern Forests Food Council: Met to discuss progression of effort to establish a regional food brand and their plans for the future.
- Indonesian Consulate: Met with representative from the consulate to provide input into the planning for the visit of a group of officials to
- Horticulture Innovation Australia: Attended the Between the Rows presentation in Gingin to be more informed on the re- structuring of Horticulture Innovation Australia
- Azure Capital: Update on the preparation of tender documents for the Perth Market sale, provide letter of support from the industry as part of the submission
- Export Solutions: Regarding trade fairs and encouraging growers to participate
- Pt. Angsa Niaga Buana: Australian company setting up import/export business in Indonesia wishing to link with West Australian vegetable producers to supply market

- Gascoyne Long Table Lunch: Attended the Carnarvon long table lunch
- Export Council: Managing international freight costs

Outcomes

The key outcomes of this project were proposed as follows:

1. Awareness of the national R&D system and outputs
2. Uptake of R&D Outputs
3. Good Practice Demonstration events and Young Growers Development Program 2014/15

The project encountered a few challenges along the way including the appointment of a new Field Extension Officer and difficulties associated with structural change at a national level. As a result, it proved difficult to determine quantitative outcomes. Qualitative outcomes are detailed below.

Awareness of the national R&D system

Whilst no baseline was established it can be stated that by the conclusion of the project the Field Extension Officer had made direct contact in excess of 250 individual vegetable producers. Communication was initiated and maintained through regular personal visits to production sites, telephonic communications, email communications, e-newsletters, technical papers, formal publications, workshops, training sessions, conferences, field trips and market visits.

Feedback from WA vegetable growers supports the provision of this role as a means of obtaining ongoing support, free from any commercial imperatives on which other information providers are reliant and may compromise the perceived integrity of their assistance.

As stated by Maureen Dobra, Gingin grower, "growers are very much focused on their own issues and need to have a personal liaison between them and the rest of the world. The role of Field Extension Officer is very important to maintain communication and ongoing relationships and give growers options to ask for help as well as keeping them informed of new opportunities to adapt," she said.

In terms of the performance of the previous Field Extension Officer, Sarah Houston, Maureen also commented "Sarah was a fantastic communicator and the growers really listened to her. She was particularly effective when working on the stable fly issue along with the Vietnamese Extension Officer," she said (the stable fly project resulted in all 8 Vietnamese growers adopting innovative management techniques).

Different growers prefer to receive information in different forms, however the overwhelming feedback indicates that face-to-face interaction is the preferred method for a great portion of the industry. As such, the Field Extension Officer role has been seen by the Western Australian vegetable industry as an extremely valuable and important contribution for effective communication of information and industry issues throughout the state.

During the project, the Field Extension Officer became the first point of contact for a growers wishing to be linked to information, other stakeholders and third party service providers. While a few growers will download, print, and read through Horticulture Innovation Australia documents in pdf format, there are a large number of growers who are still not adequately utilising this information. This was overcome to a degree through direct engagement and engagement through other media (i.e. WA Grower magazine) but it is difficult to gauge the full extent of the knowledge gaps that occur as a result.

The targeted outcome of increasing awareness of the national R&D system was somewhat challenging during this period due to the transition that Horticulture Innovation Australia was undergoing. Prior to the "Between the Rows" meetings conducted regionally it was difficult to gauge how the structural reforms of Horticulture Innovation Australia would affect the way in which growers would interact with the national R&D system. These meetings did assist in providing clarity on the effects that these changes will have on how growers engage with Horticulture Innovation Australia and the national R&D system, however there has since been only limited time available to extend this information to the growers.

The level of awareness of the national R&D system among this group has improved. The improvement was not uniform across the cohort of producers, but was rather varied, being targeted to the unique needs of the individual growers.

For instance, growers requiring who excelled in their approach to production, but found lacking in their understanding in the value chain were provided with information on the R&D program specific to their needs. This approach enabled the extension activities to be targeted and provision producers with information of great depth and importance.

The state's producers were educated on the many outputs of the national R&D system. They were informed on how to access both the outputs and the partners that produce the deliverables of the national R&D system. It was found that whilst producers were aware of the existence of the outputs, they were often deterred from accessing this information through the lack of awareness of the relevant R&D programs and difficulties in accessing this information. Recommendations were provided as to how this issue may be overcome, some of which are being addressed through the restructure of Horticulture Innovation.

Through a greater understanding of the structure of Horticulture Innovation, its relationship with R&D service providers and levy payers, and how it makes R&D decisions, undertakes R&D projects and communicates outcomes the producers were empowered to be more involved in the R&D system. Greater involvement by growers in the national R&D system will no doubt increase the value of the service provided.

Uptake of R&D Outputs

The uptake of R&D outputs will likely be improved with time as the producers become more familiar with the changes brought about by the transition into the new Horticulture Innovation organisational structure. The continued expansion of uptake of use of the national R&D system will surely continue as growers adjust to the changes and familiarise themselves with the new mode of interacting with Horticultural Innovation and their primary and secondary communication channels.

The uptake will multiply as those who are familiarised with the system. This will be brought about as producers who were introduced with the R&D outputs were also advised on how Horticulture Innovation interacts with levy payers in selecting and undertaking R&D activities. With greater knowledge on how to increase involvement with the R&D system a producer has more ability to influence it and contribute to positive outcomes.

It was deemed that whilst the activities undertaken by the project were appropriate it was impossible for activities to cover the full breadth of the requirements for capacity building in vegetable production value chain. Significant further intervention is required to support capacity development across the spectrum of activities in Western Australia. Regardless of the appropriateness of any program developed it is difficult to plan to mitigate issues of distance, operational responsibilities of attendees and relevance to the complete cohort of growers. Outcomes must be measured as a compilation of piecemeal targeted activities and as such it is often difficult to adequately evaluate their overall success across the complete group.

Good Practice Demonstration events and Young Growers Development Program

Through 16 Good Practice Workshops and a Young Growers Tour conducted a total of 299 participants attended total of 17 events. This series of events proved vital to the West Australian vegetable growers in creating more of a sense of community among the producer population. While by no means a harmonious group, often competitors for market-share, these workshops and events provide a valuable opportunity for producers to interact, share capacity and explore opportunities for alignment. This has proved especially important among the group of young growers who partook in the development program.

One example of a successful outcome from these events is that through a workshop that was designed to improve knowledge of market forces, a number of growers decided to work in collaboration to organise their supply to provide the market with a more consistent volume and quality to try and stabilise the market dynamics and improve relationships with traders.

Evaluation and Discussion

The Field Extension Officer role has been effectively managed by the CEO of vegetablesWA in delivering against work plans and goals. A rigorous selection process has ensured that the role was filled by appropriately skilled individuals who were able to meet the needs of the growers while effectively communicating relevant information.

There was limited quantitative evaluation of outcomes performed during the project. This was partly due to the lack of continuity in staffing the position, and the loss of momentum during this transition. As such the evaluation and discussion will be performed in qualitative terms. This amounted to regular discussions with producers, stakeholders and committee members on the activities and outcomes of the project.

Qualitative feedback indicates that the project successfully achieved its desired goals of increasing awareness of R&D and providing the opportunity for growers to uptake new innovations. Due to the tireless activities of Field Extension Officer and vegetablesWA in engaging with growers,

The project also delivered the essential service of a personal liaison and point of contact for all WA vegetable growers to utilise as-required. Additionally, this service provides the indispensable link between national activity and on-farm reality to ensure that relevance can be maintained.

The activities undertaken by the Field Extension Officer responded to the needs of growers by improving access to relevant information and educating growers on how to respond to market dynamics and better plan production. The role has also been focused on educating growers on new market opportunities and creating creative modes to connect with new customers.

The role has also kept on the pulse of production across the state, being receptive to feedback from the growers and being ready to advocate, connect them to relevant third parties on the state and national level. This continued contact empowers growers by providing them with links and networks that were previously unreachable and giving the growers greater control of their outcomes.

The experience from the project has identified the continued importance for Field Extension Officers to aid levy payers in maximising the returns from the R&D initiated by Horticultural Innovation and for the continual improvement of the vegetable production industry.

Recommendations

- Improve the manner in which Horticulture Innovation Australia makes available information on how the levy is being spent with the goal of delivering a flexible database that would enable growers to engage more directly with R&D outputs.

This could comprise a searchable database of:

- Current/past projects
- Project durations
- Where projects are being conducted
- Project costs
- Relevant commodities
- Relevant markets

Increasing the transparency on how the R&D money is being spent and the outputs from both Horticulture Innovation Australia and its stakeholders will help to build trust with the grower base. This will require innovation in how this information presented, ensuring the manner in which the growers access this data is in an easily digestible format with capacity to allow grower see as little or as much detail as they require.

- Once R&D work is successfully categorised it can be supplied more effectively to the state's growers, for instance when a grower logs in to their product-specific page on the online market analysis tool, provision could potentially be made to provide links to R&D projects relevant to them. The current system that purports to deliver this service is unwieldy and difficult to navigate. When comparing this to the manner in which we are used to accessing information (i.e. via google or the like) you could predict the preferential engagement with open-source information that is easily attained.
- Continued education to the growers on market dynamics to help growers adapt to the new dynamics in the Perth central market, this can be achieved using online market analysis tool.
- The concept of the online market analysis tool was built on the availability of industry data. This model could be replicated for export markets and extended to the horticultural industry through the construction of a similar tool that utilises information available on the UN Comtrade database. This availability of this information is largely unknown to growers (something that many consultants use in their favour) and is something that could provide invaluable information for growers wishing to understand export markets and better position their products. It is conceivable that an online export market analysis tool could be developed by HIA, and extended to growers in a similar manner. This would give growers direct access to the information and reduce the level of duplication that is currently occurring in the provision of desktop market studies.
- On the matter of value chain initiatives, it is recommended that more be done to consult with a more diverse range of stakeholders in the value chain. As the focus of R&D become more geared towards the value chain it would be a mistake to not broaden industry engagement to include more of the people directly engaged. Whilst good relationships may exist with stakeholders who have provided quality research of "traditional" R&D, it is unwise to expect these same stakeholders to deliver effective research initiatives in the value chain without significant prior capacity building in this sector.
- Continue to explore options for West Australian vegetables in either interstate or export markets, can be achieved using searchable online database of WA producers.
- To replicate the searchable database of growers on a national level it may be considered by HIA to work with FIAL and the development of the eCatalogue and Australian Food Map concept. More information available at www.australianfoodcatalogue.com.au and www.australianfoodmap.com.au.
- Work with growers to identify issues requiring R&D action and formulate proposals for projects as the capacity to tender for and undertake research is being lost at the Department of Agriculture and Food of WA.

- Continue fantastic momentum achieved with the recent workshops conducted across the state, this level of engagement has generated a great level of energy within the grower population and they are eager to participate in industry activities. The Field Extension Officer position is crucial to maintaining this momentum and providing solid representation at the national level.

Intellectual Property/Commercialisation

No commercial IP generated

Appendices

Operating Plan 2015

Presented below is the 2015 Operating Plan. This is a refinement of previous operating plans, designed to provide more focus, more structure, more streamlined project management and a program better tailored to the capacity of the Field Extension Officer.

Outcomes	Methodology
1. Develop trust and industry unity through ongoing relationships	
1.1 Engage growers	1.1.1 Engage in regular contact with WA grower base (i.e. face-to-face, phone, email, etc.)
2. Extension of R&D outputs and other relevant information to WA vegetable growers	
2.1 Stay informed	2.1.1 Remain up-to-date with current R&D activities and outputs
2.1.2 Maintain good level of communication with government departments and industry partners	
2.1.3 Attend field days and on-farm and regional events	
2.2 Inform WA vegetable	2.2.1 Extend knowledge through regular growers communication with individual growers
2.2.2 Contribute articles to grower magazines and e-news	
2.2.3 Facilitate workshops on specific issues as required	
3. Support and represent WA vegetable growers	
3.1 Support and represent WA vegetable growers	3.1.1 Participate on behalf of WA vegetable growers in relevant reference groups and committees
3.1.2 Provide technical input on behalf of WA vegetable growers on relevant policy issues	
4. Value chain improvement and collaboration	
4.1 Analyse value chains, identifying opportunities for adapting practices/processes for improved quality, efficiency, profitability, and sustainability	4.1.1 Individual growers (on-farm meetings, business planning, field trials, etc.)
4.1.2 Grower-to-grower (form grower groups/ forums, organise workshops, collaborative growing/investment/marketing initiatives, etc.)	

4.1.3 Grower-to-market (initiatives for vertical integration and greater communication and transparency along value chain, market forums, etc.)

4.1.4 Grower-to-3rd Party (partnerships aimed to build benefits to both parties through greater collaboration, etc.)

5. Project management and reporting

5.1 Project administration

5.1.1 Ensure milestones are achieved in a timely fashion

5.1.2 Monitor and report on project activities

5.1.3 Maintain grower database

Report against Operating Plan 2013-14

NAME: Sarah Houston	POSITION: Field Extension Officer
SUPERVISOR/MANAGER: John Shannon	WORK AREA: Programs

The following achievements cover the period until 3 September 2014.

KEY PERFORMANCE INDICATORS	Methodology	ACHIEVEMENTS in 2013/2014
Outcome 1: Continued awareness and knowledge of state and national R&D amongst WA vegetable growers		
<ul style="list-style-type: none"> • Visit at least 8 growers per week on average • Engage in R&D projects and programs to encourage grower participation and assist in the facilitation of development activities • WA vegetable growers participating in R&D projects 	<ul style="list-style-type: none"> • Ongoing visits to growers on-farm across all growing regions (Perth metro, north and south Perth, Gingin, Myalup, South West, Southern Forests, Albany, Geraldton and Carnarvon) 	<ul style="list-style-type: none"> • Ongoing. Trips have been made to Carnarvon, Albany, South West and Southern Forest regions in the 2013/2014 period, as well as regular visits to growers in Perth and surrounds. At least 55 individual on-farm visits have been made since September 2013. Grower groups have also been organised and hence further growers have been reached during grower group meetings such as in Carnarvon, Manjimup and Albany. Over 100 growers have had face-to-face contact with the Field Extension Officer through on farm visits or workshops during the 2013/2014 period <p>Growers are encouraged during visits and group meetings/workshops to take part in R&D projects and to read national R&D reports relevant to their businesses. Growers are also encouraged to suggest what areas of R&D they are interested in getting involved with in the future and given information on how they can achieve this.</p>
<ul style="list-style-type: none"> • At least 4 articles in the WA Grower magazine each quarterly edition as well as contributions to e-newsletters and other industry publications 	<ul style="list-style-type: none"> • Provide articles on a quarterly basis for the WA Grower magazine. Articles are to focus on topics and information relevant to WA growers to assist in their development and increasing knowledge. Articles should also focus on disseminating national R&D information and other relevant industry material. 	<ul style="list-style-type: none"> • The Field Extension Officer has contributed at least 5 articles to the Summer 2013/2014, Autumn 2014, Winter 2014 and Spring 2014 editions of the WA Grower magazine in the 2013/2014 period. Articles have covered topics such as national R&D projects, good practice and agronomic information, latest innovation and technology as well as other stories relevant the WA growing community.

<ul style="list-style-type: none"> Attendance at field days and on farm or regional events, as well as encouraging grower attendance 	<ul style="list-style-type: none"> Field Officer is to be involved in the planning and organisation of grower events such as workshops, information sessions and field days. A bi-monthly review and update of events schedule should be developed with relevant partners and disseminated to relevant growers and industry partners. 	<ul style="list-style-type: none"> Event schedule is constantly being discussed and developed for WA vegetable growers regarding upcoming events such as workshops and seminars. The events are disseminated to relevant personnel via the vegetablesWA fortnightly e- newsletter as well as through personal visits, phone calls, text messages, faxes and emails from the Field Extension Officer. Since September 2013, a number of workshops have been arranged and delivered to the WA vegetable growers including: <ul style="list-style-type: none"> Concessional Farm Finance Loan Scheme workshops/ Info Sessions AUSVEG Levy payers meeting Energy Efficiency Workshops with NEFF, Wanneroo and Myalup Stable fly grower meeting and field demo, Gingin Albany growers meeting and information night, Albany Workshops and information sessions have been planned and carried out in a regular fashion in conjunction with organisations such as DAFWA, Perth NRM, South West Catchment Council and regional growing groups as per schedule. Currently the vegetablesWA Young Grower forum and a number of regional roadshows are being planned which will be arranged and run during the next few months
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	<ul style="list-style-type: none"> Field Extension Officer is to attend and contributing to relevant industry events and information sessions that may provide beneficial information for the WA vegetable growers. 	<ul style="list-style-type: none"> Attended industry functions and events including: <ul style="list-style-type: none"> Plant Biosecurity CRC Roundtable Leading Ladies Committee meetings Concessional Farm Finance Loan Scheme information sessions Warren Cauliflower Group AGM and grower meeting South West Catchment Council reference group meetings Water Use Efficiency team meetings
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Outcome 2: Maintain a well understood and well represented grower base

<ul style="list-style-type: none"> Provide feedback from growers to vegetablesWA and industry 	<ul style="list-style-type: none"> Ongoing contact and communication with Executive Officer, vegetablesWA Committee of Management and relevant industry stakeholders 	<ul style="list-style-type: none"> Feedback received during grower visits or communication with growers in continually passed back to industry through reports and one-on-one communication with relevant personnel such as vWA Executive Officer, DAFWA Industry Development Officers and project managers. <ul style="list-style-type: none"> Follow up actions are undertaken to ensure growers receive the information they need regarding their questions, queries or concerns. This includes providing growers with contacts (experts or professionals in specific areas), fact sheets, links to websites or other specific material or information.
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	<ul style="list-style-type: none"> • Document important issues/trends and follow up grower queries and concerns. Documented issues that are not R&D were not acted on by the Field Extension Officer (e.g. market transparency). 	<ul style="list-style-type: none"> • Examples of issues and trends received from grower communication in the 2013/2014 reporting period include: <ul style="list-style-type: none"> • Requirement for better management of water allocations and recourses in Carnarvon for local growers • Stable fly control practices working/not working in particular areas around Perth • Transparency within the Perth Market system needs improvement • Growers struggling with cost/price squeeze • Increase in trend towards protected cropping systems • Limited chemistry for control of pests in some product lines (examples being broccoli and leafy greens) • Growers looking for assistance/information about group/regional marketing and branding • Growers interested in export market opportunities • Growers starting to "look outside the box" for market
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Outcome 3: Provide a link between vegetable growers and industry partners by maintaining connections and forming networks with stakeholders/industry partners

<ul style="list-style-type: none"> Attend reference groups and committees as required relevant to industry matters 	<ul style="list-style-type: none"> Maintain regular contact with industry and seek to become involved in industry groups relevant to the vegetable industry 	<ul style="list-style-type: none"> Field Extension Officer is continually active in networking and attendance at industry groups and committees. In the 2013/2014 reporting year, involvement has included the following: <ul style="list-style-type: none"> Leading Ladies Committee member (monthly meeting attendance) South West Catchment Council reference group (two reference group meeting since Sept 2013) DAFWA Water Use Efficiency team meeting in Bunbury (December 2013, April 2014) vegetablesWA Committee of Management Meetings (September 2013, December 2013, March 2014 and June 2014 quarterly meetings) Albany Horticultural Grower group meeting (March 2014) Carnarvon Growers Association committee meeting (November 2013) Warren Cauliflower Group AGM (October 2013) Concessional Farm Loans workshops (January 2014) Perth Region NRM sustainability meetings (December 2013 and February 2014)
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<ul style="list-style-type: none"> Regular communication with government departments and other major industry partners (seed companies, fertilizer companies, consultants etc) 	<ul style="list-style-type: none"> Communication with DAFWA staff in different regions on a weekly basis 	<ul style="list-style-type: none"> Communication with DAFWA staff is continual and depends on key areas of relevance to the industry at the time. Some main contacts during the 2013/2014 period have included: <ul style="list-style-type: none"> Industry Development officers to discuss grower soil and pathogen issues. Industry Development officers to discuss Good Practice methods in vegetable production Project Managers to discuss Stable fly project technicalities and practical trials Business Analysts to discuss development of Business planning workshops for horticultural enterprises Labour specialists, marketing specialists, policy officers and ministerial advisors
	<ul style="list-style-type: none"> Communication with Regional NRM groups on a monthly basis 	<ul style="list-style-type: none"> Weekly communication with Perth NRM to organise soil health workshops, grower visits and industry events that we can work collaboratively on. Soil Health workshop and Industry Networking event are the two projects coming up in the near future. Also regular contact with South West Catchment Council, South Coast NRM and Rangelands NRM.

	<ul style="list-style-type: none"> Ongoing communication with industry partners and service providers to ensure relevant information is included in magazine, e-news or provided to vegetablesWA for dissemination 	<ul style="list-style-type: none"> Communication with industry partners is constant and relevant to what is going on at the time. Examples include: <ul style="list-style-type: none"> Vegetable industry associations (HAL, AUSVEG, VGA, Bundaburg Fruit and Veg Growers, TFGA) Government departments (DoA, DoW, Perth Market Authority, DPI NSW, DPI VIC, SARDI, National Harvest Trail) Seed companies (specifically Rijk Zwaan, South Pacific Seeds, Bejo, Terranova, Syngenta, Lefroy Valley) Chemical and fertilizer companies and resellers (particularly Elders, Landmark, Bayer, Healy's Store, Mirco Bros, Syngenta, Hi-Tech Ag Solutions, E.E. Muir & Sons, BASF) Financial consultants and institutions (such as NAB Agribusiness, Rabobank, Acknowledge, Growing Australia) Private consultants (SoilZone Solutes, RM Consulting Group, Applied Horticultural Research, ESIX Technical Services, GAIA Resources) Other industry associations (Irrigation Australia Limited, FarmSafeWA, Compost WA, AusChem, FruitWest, WA Farmers Federation,) Markets and retailers
<ul style="list-style-type: none"> Organise young grower development program 	<ul style="list-style-type: none"> Organise 2 day young grower development program to increase the networks between growers and enable upskilling and development of the young people in the WA vegetable industry. 	<ul style="list-style-type: none"> Young growers identified and liaised with in preparation for workshop events. Workshop planned for the first quarter of 2015 (date and program content to be finalised)

Outcome 4: Promote good practice to growers by assisting in delivery of results and information from project outcomes and demonstrations

<ul style="list-style-type: none"> Promote the Good Practice project to growers and encourage its use in vegetable production in WA. 	<ul style="list-style-type: none"> Continually speaking with growers about using good practice in their businesses during visits and other communication 	<ul style="list-style-type: none"> With the Good Practice Project being finalised in September 2013, the Field Extension Officer continues to encourage the use of Good Practice in vegetable production during on-farm visits. The Good Practice Guide is referred to and distributed as necessary, including the now available Carnarvon and South West versions of the Guide. The guide was made available in all these versions on the vegetablesWA website, and hence growers are often directed there for further information. <p>Important good practice messages focused on during the 2013/2014 reporting period have included:</p> <ul style="list-style-type: none"> Management of vegetable crop residues for Stable Fly control Irrigation scheduling, water management and involvement in the Water Use Efficiency project Soil health and managing soils effectively (biological, chemical and physical components)
	<ul style="list-style-type: none"> Provide reporting where required in WA Grower magazine, fact sheets or helping with milestone and final reporting of project 	<ul style="list-style-type: none"> A summary and “wrap up” report of the Good Practice Project was written for the Spring 2013 WA Grower magazine by the Field Extension Officer and DAFWA project officer. Five case studies were also prepared and printed as part of the Project and distributed to growers as examples of how Good Practice methods can be utilised and gain successful results in a vegetable business.

<p>Outcome 5: Regular reports on activities and feedback, formal reports to vWA Committee of management and assistance with project reports</p>		
<ul style="list-style-type: none"> Regular verbal contact with vegetablesWA staff and attendance at weekly meetings 	<ul style="list-style-type: none"> Daily/weekly communication with vegetablesWA Executive Officer and staff 	<ul style="list-style-type: none"> Weekly reporting at vegetablesWA staff meeting.
<ul style="list-style-type: none"> Regular contact with vegetablesWA Committee of Management 	<ul style="list-style-type: none"> Maintain strong contact with committee members including monthly report of activities through the CoM update 	<ul style="list-style-type: none"> Regularly in contact with committee members via on-farm visits, phone and email. Monthly report completed for updates each month since Sept 2013
<ul style="list-style-type: none"> Attendance at quarterly vegetablesWA Committee of Management meetings and present Field Extension Officer report 	<ul style="list-style-type: none"> Quarterly reporting and attendance at vegetablesWA CoM meetings outlining the past quarters activities and the following quarters plan 	<ul style="list-style-type: none"> Attendance at September, December, March and June CoM meetings where report was presented.
<ul style="list-style-type: none"> Other reporting activities as required 	<ul style="list-style-type: none"> Contributions to other industry reports as required 	<ul style="list-style-type: none"> Input into Executive Officer and Export Development Manager reports
	<ul style="list-style-type: none"> Milestone and Final reports for projects as required 	<ul style="list-style-type: none"> Completed and submitted final report for HAL project "Continuing on- farm improvements through good practice demonstration and extension" along with DAFWA project officer.
<p>Outcome 6: Effectively manage and deliver projects and assist in policy issues relating directly to growers</p>		
<ul style="list-style-type: none"> Overseeing and handling of projects as required to ensure milestones are achieved and timeframes are met 	<ul style="list-style-type: none"> Work with industry stakeholders and relevant personnel to ensure projects are on track and are working within project guidelines. 	<ul style="list-style-type: none"> Working with vegetables WA team to ensure milestones are met for Field Extension Officer report. Daily duties of Field Extension Officer are structured so as to ensure milestones are met and project is always on track.

	<ul style="list-style-type: none"> • Reports to be completed, reviewed and submitted by the due date 	<ul style="list-style-type: none"> • HAL project "Continuing on-farm improvements through good practice demonstration and extension" was completed and final report submitted in October 2013. Amendments were requested and these completed by January 2014. Finalisation of project occurred in February 2014. • Field Extension Officer milestone report completed and submitted on time. However, amendments and adjustments required and hence final draft much later than due date.
<ul style="list-style-type: none"> • Provide technical input to policy issues as required 	<ul style="list-style-type: none"> • Continuous communication with Executive Officer regarding policy issues • Provide technical input and content to policy issues and submissions when required 	<ul style="list-style-type: none"> • Active in providing technical input and content to policy issues in the 2013/2014 reporting period including: <ul style="list-style-type: none"> • Response to the DoA's Agricultural Competitiveness Issues Paper • Stable Fly regulation updates • Parliamentary inquiry into Fracking in WA
<p>Outcome 7: Increase awareness and provide opportunities for developing skills and knowledge for vegetable growers</p>		
<ul style="list-style-type: none"> • Discussions with growers to emphasize the importance of training and development opportunities 	<ul style="list-style-type: none"> • Use "Talking Business" tools, business knowledge and experts discuss business decision making and skills development with growers 	<ul style="list-style-type: none"> • Discussions during on farm visits and group grower meetings around business capabilities and requirements for future workshops, training and development.

	<ul style="list-style-type: none"> • Document feedback regarding grower requirements for business skills training and development 	<ul style="list-style-type: none"> • Grower feedback suggests very little time to spend on personal or business development. Grower suggestions include having specialists/ experts visit them on farm, short workshops/ information sessions and training courses, and information in magazines/ journals etc. The lack of interest in skills development and training is generally based on being time poor and growers recognise the need for upskilling especially of employees.
<ul style="list-style-type: none"> • Deliver information to growers to enable better/more informed business decisions 	<ul style="list-style-type: none"> • Pass on information to growers in the form of written materials and resources to enable self-development 	<ul style="list-style-type: none"> • Materials including software programs, online tools, worksheets and case studies have been passed on to growers to begin the process of understanding their businesses and developing themselves. Materials and case studies have also been published in the WA Grower magazine, with the "Your Business" and "Your Self" sections being utilised to publish interesting articles about self-development and training opportunities for growers in the Summer 2013/2014 and Autumn 2014 editions in particular.

<ul style="list-style-type: none"> • Build industry capability through connecting growers with industry to allow production and business development and training 	<ul style="list-style-type: none"> • Identify training and development opportunities for growers, assist in arranging information days and training sessions and attend as required 	<ul style="list-style-type: none"> • Continuous scoping, planning and assisting of training and development opportunities run by vWA or by industry service providers to meet the needs of growers has been a top priority for the Field Extension Officer in the 2013/2014 reporting period. • Through grower and industry discussions, a number of development opportunities for growers have been recognised and/or produced. Some that have been delivered in the reporting period or are currently being worked on include: <ul style="list-style-type: none"> • DAFWA "Plan, Prepare, Prosper" workshops for horticultural businesses and food processing businesses • AusChem certification courses • FarmSafeWA Farm Management courses • DAFWA and vegetablesWA "Planning 4 Profit" workshops developed specifically for vegetable producers • Freshcare Training workshops • Grower information evenings • Irrigation and hydraulics workshops • Greenhouse workshops • Other opportunities identified and promoted for growers
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