

Extension of vegetable production and biosecurity BMP to SEQ LOTE vegetable growers

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Summary

LOTE (language other than English) vegetable growers producing horticultural crops in the Lockyer Valley and Greenbank- Logan areas represent a significant number of farming enterprises with this number steadily increasing in recent years.

This project used “old-school” extension and communication techniques to target this group of horticultural producers in the Lockyer Valley and Greenbank-Logan areas.

A well-attended forum, held at Gatton Research Facility, commenced the trust development process between growers and government which provided the basis for a focus on productivity, including pest and disease management, best management practices, biosecurity and food safety.

The use of an interpreter was key to the effectiveness of engagement and information sharing which allowed for enhanced understanding of the issues and solutions.

On farm, one-on-one engagement was also a critical methodology utilised in building the relationship and trust with potential participants given there had been very little was known of this demographic.

A highlight of the project was a forum held at the Gatton Research Facility Conference room which attracted more than 35 growers plus industry and supply chain representatives.

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Background

Little is known about the demographics of vegetable growers in South East Queensland (SEQ) that speak a language other than English (LOTE). In particular the number of growers, origin, production areas and crops produced.

Discussions with industry and supply-chain participants involved with the LOTE growers indicated a suspicion that the existing knowledge of best management practices for vegetable and appropriate biosecurity principles were quite limited. It was perceived amongst these advisors that the main challenges preventing knowledge transfer was language barriers, communication and engagement methods.

These growers therefore could pose a substantial risk to the whole Australian horticultural industry from potential environmental (chemical and biological) contamination, chemical misuse, food safety, workplace, health and safety and biosecurity infringements. Furthermore, if infringements in these areas did occur, the whole Australian horticultural industry could face national and international public scrutiny.

This project aimed at engaging with the LOTE vegetable growers in SEQ to determine some baseline demographics and BMP and biosecurity needs and determine methods to engage and communicate with these growers.

This project has strong links to DAF strategic plan, in particular, **Manage biosecurity risks, Drive innovation and productivity through research, development and extension** and **Improve sustainability of agriculture**.

Project Objectives

- Engage with LOTE growers in South East Queensland in particular the Lockyer/Brisbane Valley and Greenbank-Logan areas
- Gain a better understanding of the demographics of this grower type
- Assist LOTE horticultural growers gain an improved knowledge of pest and disease best management practices
- Reduced risks for biosecurity, biological or chemical residue infringements for the Queensland vegetable industry.

Methodology

Lockyer and Brisbane Valley

1. *Initial engagement with strategic industry and supply chain service providers to generate interest by key stakeholders:* these critical contacts provided recommendation on what has worked and more importantly “not” worked so project staff didn’t repeat the same mistakes. These contacts also pointed us toward key LOTE community leaders.
2. *Engagement with LOTE community leader:* these people were critical to engage prior to any further work progressing. They also provided suggestions of where an appropriate translator could be sourced. This was critical to bridge not only the language barrier but to gain the trust and respect by local LOTE growers.
3. *Identification and contracting of a LOTE translator:* a post-graduate student at the University of Queensland (Gatton campus) was recommended by the LOTE community leaders and senior staff at the University of Queensland. This translator was a Vietnamese national that had studied widely in Australia including his current post-graduate (PhD) research on the

supply chain of plums. The translator was contracted using the “casual” employment arrangement through DAF.

4. *Forum date and development of flyer:* A suitable date was established for a forum to be held at the DAF Gatton Research Station Conference Room. A “double-sided” flyer was developed with details in English on one side and details in Vietnamese provided on the other side.
5. *Flyer distribution:* The locations of LOTE farms were identified by local knowledge and the use of Google maps. DAF staff used this as a basis for “cold-calling” into the farms and establishing an initial relationship. A 15-20min discussion was held at each farm to gauge the key priority issues for the grower and also to identify any issues that perhaps the grower hasn’t identified but appear to be a key business and/or industry risk
6. *Identification of priority issues and forum speakers:* A strategic project decision was made which focussed on the “engagement” of the LOTE growers, rather than only addressing long-term cultural challenges associated with WH&S, environmental management and other employment arrangement (payment and leave) issues. As such, the identification of relevant issues for this project focussed on the following:
 - a. Production
 - b. Pest and disease management
 - c. Chemical handling and safety basics

Speakers were identified that had expertise in these issues and also an engaging presentation manner.

7. *Additional resources:* Staff sourced relevant information from various avenues that were already translated into Vietnamese. Horticulture Innovation Australia, Vegetables WA, local chemical and seed representatives all provided appropriate resources.
8. *Event:* This focused on bringing LOTE growers together with other service and supply-chain providers. The agenda focussed on pest and disease identification and best practice and included an introduction by the DAF facilitator, three speakers of about 20min each (allowing for questions afterwards) and a social BBQ afterwards.

Greenbank-Logan

1. Identification of farm locations: Google earth was used to identify farm locations
2. Liaison with service providers: advice from service and supply-chain advisors operating in the area suggested a one-on-one model was best and a longer-term project could focus on group extension activities.
3. One on one drop/on-farm discussion with HIA funded Vietnamese extension material and other appropriate Vietnamese brochures from various international chemical and seed companies.

Results

After initial consultation with chemical and fertiliser resellers it was evident that a potential large number of LOTE growers existed. LOTE growers make up a significant portion of reseller businesses in The Lockyer Valley.

Some evidence of engagement existed including one company employing a Vietnamese sales representative and some chemical labels translated into Vietnamese.

Discussions with growers that were considered community leaders involving the translator endorsed the need for training in BMP and biosecurity; however it was considered that this would be a challenge.

One on one farm cold calling using google maps was an interesting process. It became obvious that maps were out of date, with a large number of greenhouses and production areas not identified on the current available imagery.



Figure 1 Typical google earth image of target area showing greenhouses and vegetable production areas.

There were a large number of growers, the majority Vietnamese speaking, with limited knowledge of English. Flyers were dropped for the proposed Gatton meeting to approximately 30 farms located to the North of the Warrego highway to Coominya and east to Lowood. , A large number of farms were also locked or unattended.

The majority of farms visited had some sort of protective cropping structure. Generally, low cost, low engineered structures producing Lebanese and continental cucumbers were present.

There are a large variety of vegetable crops grown in this sector. Many crops were grown for the expat (recently immigrated to Australia) and Asian decent consumer including bitter melon, long melon, hairy melon, angled luffa, various types of eggplants, okra, various types of chillies, garlic, ginger, zucchinis, capsicums, and various types of leafy vegetables.



Figure 2 Left to right, angled luffa, okra, long melon and bitter melon.

General management practices of the LOTE growers could be considered below best when compared to local conventional crop production and severe lack of quality assurance procedures. However, BMP for these crops is basically unknown and some of the observed practices challenge traditional thinking and provide the opportunity for enhanced pest management recommendations.

Grower Seminar

More than 35 Vietnamese growers from the Lockyer Valley and five industry and supply-chain service providers attended the forum held in March 2016 at the Gatton Research facility. Key presenters included:

- John Duff – DAF Entomologist. His presentation focussed on Integrated Pest Management principles and looking after beneficial insects
- Zara Hall – DAF Research Scientist. This presentation focussed on BMP of disease management
- Dr Len Tesorario, NSW DPI, and Dr Cherie Gambley DAF pathologist, presentation focussed on the common challenges associated with protected horticultural production including on-farm biosecurity.

An informal BBQ was held to allow time for all attendees to network and discuss issues in a more casual environment.





Figure 3 - 7 Seminar at Gatton Research Facility, March 2016.

No formal monitoring and evaluation was conducted as part of the forum, however, informal feedback and comments from a variety of attendees including Vietnamese growers, industry representatives and DAF staff indicated that:

- Great to get the Vietnamese horticultural community together
- There is a lot to learn
- These types of events need to happen every six-months or so
- Really great vibe
- Great mix of growers and industry representatives
- This type of activity should be held every 6 months or so

Greenbank – Logan

With regard to the Greenbank-Logan area, we followed advice from a number of service providers operating in the area. The LOTE horticultural growers in the Greenbank-Logan region were engaged in a one-on-one basis. Ten farms were visited, discussions started and appropriate translated technical extension material delivered.

Google maps were again found to be inaccurate as a lot more greenhouses and vegetable farms were present than were mapped. Satellite imagery, while useful, also presents challenges such as picking chicken shelters from greenhouse structures.

An opportunity to engage the Vegetables WA dedicated Vietnamese field extension officer, Truyen Vo, whilst he was in Queensland for a conference, was also used with this group of growers. Truyen a Vietnamese national engaged in rigorous conversation with growers he visited.

His conclusions were:

- Definite need for information communication,
- Limited trust due to language barriers with the DAF staff,
- Appreciation of the effort to engage.



Figure 8 VegetablesWA LOTE field extension officer discusses issues with local LOTE grower, June 2016.

Conclusions/Significance/Recommendations

From physical observations, Google maps and discussion with industry, a large number of LOTE growers exist in SEQ.

There is a need from these growers for information transfer around production, biosecurity and business issues.

A highlight of the project was the successful forum held at Gatton Research Facility which attracted 35 growers and a further 10 industry service providers. Key themes for the event focussed on productivity including pest and disease management and best management practices.

Another highlight was the alternative approach taken in the Greenbank-Logan area where one-on-one engagement resulted in the sharing of industry developed extension material that had been translated into Vietnamese.

Key Messages

- LOTE vegetable growers are a significant demographic in SEQ.
- Traditional and existing methods of communicating R,D&E have missed this demographic, targeted and relevant information needs to be developed and delivered in appropriate ways.
- LOTE producers grow a large range of crops that are not intended for western consumers and underlines the potential to further develop this market both domestically and internationally.

Where to next

- Feedback from project participants indicated that regular communication and engagement will be needed to capitalise on the establishment of relationships and initial engagement success. Investigations have commenced to consider options to deliver upon this.
- Lockyer Valley Growers Inc will be kept informed of the learnings from this project which may be of use to them as part of their role in the National Vegetable Extension Network.
- Basic desktop studies have commenced to determine trade and demand for Asian vegetables in Asia.

Budget Summary

Total budget for this project was below \$1,000

Significant costs were BBQ at grower seminar \$600

It was intended to use casual rates to pay the interpreter, however the interpreter waived this fee as he would prefer the work experience and other assistance from DAF to complete his studies.

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