

Food Safety and Traceability

- What has the industry learnt from the recent floods and are we better prepared for future disasters?
- How well prepared is the industry for a food safety scare?

Executive Summary

The Queensland floods of 2011 caused vast damage to life, property and infrastructure in the horticultural industry. The losses to the industry are currently estimated at \$225 million. The experiences of the industry during this tragic time can be evaluated to build a stronger and more robust risk management plans for use in future industry incidents. The key areas learnt from the flooding disaster include clear terminology in insurance policies, constant open and honest communication and the corporation of all stakeholders in the recovery process. The recent crisis of the violent E. coli strain in Germany is showing the industry how vulnerable it is hearsay and unfounded accusations carried in social and viral media. It is hoped the industry will be able to learn from the incident in Germany to prevent an incident and form a strong response plan if and when a food safety incident occurs.

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The 2011 Queensland floods caused widespread damage across the state of Queensland. The damage and rebuilding has been estimated to cost the nation billions of dollars. The damage to the primary industry sector is estimated to be \$875 million, with the fruit and vegetable sector incurring losses of \$225 million (Queensland Reconstruction Authority, 2011b). The major effects to the industry which from the floods include loss of produce in field, loss or orchard trees, increased disease instance, inability to harvest or plant crops and damage to infrastructure for transportation and storage of produce.

The overview of insurance policies is an essential step to ensure our ability to recover from future natural disasters. Many home owners and producers have been faced with the tragic and hard realisation that they are not fully insured for the damages to their property. In most cases this is a result of the insurance providers and the ambiguous definition of 'flood'. For example many policies will not cover the damage of the Queensland floods as most policies only cover flash flooding from storms and not flooding from a river. It is therefore vital that clearer terminology be used to define what is covered by insurance policies.

This insurance issue is highlighted in the article published by The Courier-Mail; Farmer wants to keep on truckin'. Tony Mansfield's main business is to transport produce from the Rocklea based Brisbane Markets to other local markets; the floods resulted in the loss of the trucks he uses to transport produce. The insurance provider will write off his trucks, however Tony Mansfield's normal business activities and income are not able to be re-established until his trucks are up and running. On another note, many homeowners and farmers have found that the insurance company will not cover the full cost of the flooding damage to their property (Tilbury A., 2011).



Figure 1- The inundation of Brisbane Markets (Food Chain Intelligence, 2011)



Figure 2- flood cleanup of the Brisbane markets (Murdoch L. and Neil M., 2011)



Figure 3- Flood damage to roads interrupting the produce supply

The Brisbane Markets at Rocklea was inundated by floodwaters on Tuesday 11th January 2011 (Figure 1). Despite this some market wholesalers were able to continue trading at alternative sites to maintain some produce supply. By the 14th January the cleanup and sanitisation of the market began, with all the stakeholders playing a key role (Figure 2). The market was able to resume trading, although at a limited capacity on January 17th. The supply of produce available to trade was limited by the damage to infrastructure such as cool rooms, roads and storage facilities (Brisbane Markets Limited, 2011).

As shown by Figure 3, many roads were washed out by floodwaters which interrupted the transport of produce from the farm to the markets. The Queensland Reconstruction Authority calculated that 9,170 km or 27% of road in the state of Queensland were affected by the floods, as of May 5th 6,934 km of the road have been recovered (Queensland Reconstruction Authority, 2011a). In the media this issue was widely shown through pineapples in Yeppoon. The damaged roads around Yeppoon prevented growers from sending 480 tonnes of pineapples worth \$5 million to the Brisbane markets. Without the alternative transport arrangements by barge provided by the government the produce would have been spoilt and lost (Australian Food News, 2011).

At the 2011 Fresh connections Elton Miller from the DEEDI spoke of the Queensland Governments perspective of natural disasters such as the Queensland floods. In his presentation he outlined the importance of honest and open information and communication between the leadership and the stakeholders and media (Miller E., 2011). I believe this method of passing information to all the stakeholders worked well during the crisis and should be considered in future incidents, both in natural disasters and food safety. I feel that we are better prepared to respond to future disasters as the industry can review its responses and actions from the 2011 floods and use its experiences to further develop risk management plans.

At the 2011 Fresh Connections I spoke to Tony Gibbs from Gibbs Bros about food safety in Australia. In his opinion as fruit and vegetables are predominately eaten raw it is only a matter of time before we experience an incident similar to the E. coli outbreak in Germany (Gibbs T., 2011). Tony was also concerned about how a food safety incident of this nature has the potential to bring the entire horticultural industry to its knees based on unfounded evidence.

The current E. coli incident is a prime example of what results when little accurate information and evidence is available to the public. The blame for the outbreak has been 'linked' to Spanish cucumbers, German bean sprouts, lettuce and most recently fenugreek seeds from Egypt. In most of these cases the finger has been publically pointed at these sources based on epidemiological investigation without any hard evidence of the pathogen being in the produce or at the farm.

As a result of all these accusations flying around in viral media and social networks false accusations are very damaging to the image and profitability of the industry. For the Spanish cucumber producers the damage to their reputation is costing \$260 million each week in cancelled orders and lost reputation (Tremlett G. and Pidd H., 2011). The E. coli incident shows how it is critical to have solid evidence before playing the blame-game as unfounded accusations may cripple the industry.

It may prove useful in the future for farmers to undertake regular pathological testing to ensure that their produce is safe for consumption, this could be undertaken as a cooperative within a region to minimise the operation costs of a laboratory. Regular testing might protect the image and reputation

and image by providing the producer with records that show that their produce is not the source of the crisis. Another development in the industry may be to adopt a system similar to the livestock identification scheme for fruit and vegetables, allowing produce to be traced back through the supply chain to the producer in the event of a food safety scare.

Nursery & Garden Industry Australia

What steps to take in a crisis situation

NGIA - protecting the assets and wellbeing of the Australian Nursery Industry!

- 1 Phone 02 9876 5200**
 - If you suspect a possible crisis
 - If you are experiencing difficulties that may become a wider crisis
 - If you aren't coping with a crisis
- 2 Wait for more information**
 - Wait for NGIA to issue you with the 'industry message'
 - Refer all enquiries to NGIA
 - Refer the media to NGIA
- 3 Support the industry message**
 - Maintain the industry's position at all times

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Figure 4- An example of an incident response plant/risk assessment (Bennett R., 2011)

To prevent such an incident occurring in the Australian horticultural industry it is important to have a risk management plan (Figure 4) which details the procedures and responses to be taken in the event of an incident. Clear communication to stakeholders as well as media and public in an honest and open manner (Miller E., 2011), similar to the government response to the 2011 floods, is also an ideal communication method to avoid a similar situation to the German E. coli incident. In my opinion I believe that if the industry maintains an updated risk assessment and maintains a constant vigilance to monitor produce for safety threats they will be well prepared for a future food safety scare.

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