

# Unravelling the mixed messages of sustainability in agriculture

Jane Trindall (Innovation Consultant), Associate Professor Richi Nayak (QUT),  
Dr Alan Woodley (QUT) & PhD candidate Zoe Mellick (QUT)

As part of the 2019 round of On Prime, CSIRO's research entrepreneurship program, we interviewed people working in sustainability to find out if there is customer value in automated sustainability reporting software. What we learnt about the value of sustainability data and reporting in agriculture today was refreshingly clarifying.

## Insights in summary:

- The complexity of sustainability can be paralysing.
- Sustainability is important but it competes with other priorities.
- Consumers will pay a premium for a story. Consumers cannot deal with and are not interested in detailed data.
- Third party audits are a trusted way to manage risk for market access.
- Data on top sustainability priorities can increase buying power for producers along their supply chain.
- It is hard to collect good quality sustainability data.
- The use of an automatic data-driven software for sustainability reporting is not a reality now. Collaboration is more important.

## Insights in detail:

### Insight 1: The complexity of sustainability can be paralysing

Sustainability is a vast and ever evolving topic, covering a range of issues from modern slavery, natural capital, climate risk, carbon and water footprints and animal welfare. The reasons for undertaking or investing in sustainability initiatives are equally broad and range from market access, premiums, risk management and maintaining social licence.

While the Global Reporting Initiative and the United Nations Sustainable Development Goals (UN SDGs) provide guidance to establish targets and disclose targets, it's not as simple as this and there are thousands of bespoke green initiatives and standards developed for various products, supply chains, jurisdictions and sectors. It's often difficult to decide which standard to follow.

Sustainability reporting is now commonplace. Multi-national food and clothing companies (brands, retailers, chemical and seed companies) have set ambitious targets, mobilised teams to get there and report their progress annually. For Australian producers, sustainability frameworks and programs are largely developed by industry bodies. As an example, in the wool industry where there is lots of competition for fibres a strong sustainability framework is important to the market, but a key challenge is ever changing policy along the supply chain.

### Insight 2: Sustainability is important, but it competes with other priorities.

Global multi-national agribusinesses can have different teams with different internal drivers focused on sustainability or procurement and operations. A sustainability team may be responsible for longer term sustainability priorities including carbon and water footprint of their supply chain while procurement team is driven by saving money for the company. Often for companies and executives, sustainability was overshadowed by more urgent or important issues or risks for the business – like keeping factories running, managing risk and human safety.

Procurement is only one way to improve sustainability and longer-term contracts to include quality competitiveness and innovation can be used to increase the sustainability and resilience of supply chains.

### **Insight 3: Consumers will pay a premium for a story. Consumers cannot deal with and are not interested in data.**

Agri-businesses use marketing instead of data to rebuild trust and brand loyalty. Earlier this year, Australian dairy farmers were hit hard by low milk prices. Under immense industry and public pressure, the retailers lifted the price of their generic brand milks. Consumers paid extra because it made them feel good about helping dairy farmers who they love.

The Australian egg industry is under immense pressure from consumers to be transparent about hen welfare and living conditions. Egg companies are responding with marketing – pictures and videos of chickens and the grass living free range life to improve brand loyalty. And consumers will pay for a story as long as it makes them feel something.

To maintain trust and social licence, telling a story that can be backed by evidence and managing opportunistic behaviour are important. Very few consumers are interested in knowing the details or going into the depth of the data. What they see, they believe.

### **Insight 4: Third party audits are a trusted way to manage risk for market access.**

Universally, food supply chains use ‘tick the box’ auditing to check tier one suppliers meet minimum compliance thresholds. Audits are used to manage risks such as food safety and biosecurity. Audits rarely attract a premium but are critical for market access. Third party audits are a trusted measure where self-assessments are not. Audits have commonly been used to maintain social licence, for example, the Forests Stewardship Certification Scheme was set up in response to concerns about native forests and has been pivotal for Australian foresters to maintain market access over a number of decades.

The disadvantages of auditing are that they are time consuming and labour intensive, farmers often resist auditing and verification can be difficult. Audits don't keep pace with changes in regulations and trends and not a lot of data is collected or stored. Beyond compliance, companies can find it hard to get data on the sustainability of suppliers.

### **Insight 5: Data on top sustainability priorities can increase buying power for producers along their supply chain.**

Where data can show evidence of on-farm practice which is better than the average this could attract a premium depending on the acuteness of the risk/issue for a buyer.

If a buyer needed to meet their own sustainability targets and a particular supplier could make a significant contribution to that, then this gives a supplier more negotiating power.

For example, grains producers using variable rate fertiliser were compared to a blanket rate of nitrogen baseline and the retailer calculated the carbon savings and claim the reduced carbon footprint as part of their sustainability reporting. Measuring the baseline and progress makes sense for high priority issues like energy, carbon and water.

Transparency on product quality can be equally or more important and difficult to obtain. Most buyers want a quality product and good value for money. Avocado consumers are interested in ‘what's under the skin’ they want to buy a ripe avocado with a nice colour and eating texture, and while the Better Cotton Initiative provides some guarantee that cotton has been sustainably grown, it doesn't guarantee the quality of cotton.

### **Insight 6: It is hard to collect good quality sustainability data.**

Organisations are keen to report and benchmark sustainability for their businesses. However, they find it difficult to articulate what indicators they want to report and where can they obtain the information on those indicators.

There exist no standalone tools or databases that can be used in data collection and reporting. Data exists hidden amongst complex programs and reports or doesn't exist at all.

Organisations need to have customised programs and dedicated staff to run those reports. This is both time consuming and cost ineffective.

### **Insight 7: The use of an automatic data-driven software for sustainability reporting is not a reality now. Collaboration is more important.**

With the advancements in machine learning and artificial intelligence, it is possible to automate the process of collecting sustainability related data appearing on websites and reports.

We explored a prototype based on these techniques that scrapes and processes publicly available data (such as websites and reports) for measuring and reporting the state and trend of agreed sustainability indicators.

We found that sustainability reports are developed infrequently (annual or less) and the software may not save enough time or money to warrant investment. Sustainability reporting is also difficult to automate.

There isn't a lot of data available and when it is, it can be hidden behind closed websites requiring permissions or requires manipulation to be comparable over time.

Significant information tailoring is required to both influence change and provide value to the company and stakeholders (internal and external) who are more or less interested in sustainability.

Commonly a Sustainability Manager or consultant is employed/engaged to do this complex task. The software will add value if it can be used regularly to report and benchmark sustainability performance.

The other issue raised was concern relating to the sharing of any data collected on environmental sustainability. Privacy and commercial sensitivity and an unclear value proposition were common reservations to sharing data.

Right now, supply chain collaboration could create value by aligning rewards for practice change, identifying information needs and data gaps and building trust for data sharing.

## In conclusion

There are good reasons for Australian agricultural value chains to work together to improve sustainability. The National Farmers Federation in their 2030 vision estimate that there is \$5 billion worth of value in premium markets for sustainable produce for Australian farmers.

Although we did not find customer value in an automated sustainability reporting system, we were able to explore assumptions and gain new insights into the value of sustainability for producers not always clearly articulated. We found supply chain collaboration to be more important right now. If a technical solution were to create value, our interviews revealed it would need to focus on collecting data for the select things that matter, be trusted by farmers and reduce the burden of data collection.

The On Prime process has highlighted the value of staying in touch with what's happening in the industry and we would like to thank everyone who participated.



*Acknowledgment to the Cotton Research and Development Corporation who provided funding for this project.*



# FRUITHAUL

## REFRIGERATED PRODUCE DISTRIBUTION



*Proudly servicing Queensland Strawberry Growers for 30 years*

**(07) 5495 6777 | [www.fruithaul.com.au](http://www.fruithaul.com.au)**

**12 Concorde Place, Caboolture QLD**

