AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

 © Copyright AFBMNetwork

Industry development: involving the whole industry in practice change

Danielle England[1] and Susie Murphy White[2]

[1]Department of Agriculture and Food Western Australia,10 Doney Street Narrogin Western Australia
[2]Department of Agriculture and Food Western Australia, 3 Baron-Hay Court, South Perth, Western Australia
Email: Danielle.England@agric.wa.gov.au

Abstract. The adoption of on-farm assurance processes is generally not favoured by farmers, but many industry organisations recognise their importance in maintaining market access and meeting community demands for sustainable farming. A Department of Agriculture and Food project aimed to increase the adoption of on-farm food safety and environmental management assurance programs in Western Australian agriculture by supporting industry organisations to develop and deliver their own food safety, environmental and animal welfare assurance processes rather than implement new systems. Throughout the three-year project, industry organisations played a vital role in the development, delivery and ongoing maintenance of assurance programs. A network of industry stakeholders was developed to share information on program development and delivery, and to maximise funding opportunities. Through this network industry organisations were able to deliver programs that were relevant to WA farmers and that better met market and community demands for sustainable farming.

Background

Industry organisations, including agribusiness, farmer groups, and corporate and statutory organisations, play a vital role in the success of any change management (extension) program. These organisations often provide the funding, on-ground implementation capacity, and important networks or knowledge to extension programs. But identifying and harnessing their support is often left to chance.

Farming for the Future was a project initiated by the Minister for Agriculture in 2005. Its objective was to ensure that "Western Australia's food and fibre industries have the information and processes required to ensure they can meet the growing demand to demonstrate that the food and fibre they produce is clean and safe, and is not degrading the environment".

Farming for the Future addressed this objective on two levels. Firstly it worked with industry to establish current recommended practices (CRP) for sustainable agriculture. These CRPs were published in sets of baselines for each of the major agricultural and horticultural industries in Western Australia (WA). These were the dairy, grains, sheep, beef, pastoral, horticulture, poultry and pig industries.

Secondly it began working with industry organisations to ensure assurance processes, such as food safety and environmental assurance programs, were in place to meet current and future market and customer demands. The industry organisations involved in the project came from the same eight major industries mentioned above, but the level of support provided to each industry varied depending upon the stage of development of their assurance program, their delivery method, funding opportunities, and/or market demands.

The subject of this paper is how these industries were identified and supported in their journey towards demonstrating their environmental sustainability. It will also discuss the impact of this support, and the development and delivery of the different environmental assurance programs in three case study industries: dairy, broadacre agriculture and horticulture.

Project planning

The project began by identifying industry organisations (stakeholders) that had already begun to invest (either with time, money or enthusiasm) in developing food safety or environmental assurance programs to meet market or community demands. They were easily identified using a program logic model and the project outcomes and activities laid-out in a project log-frame. While these are usual project management steps, these initial, yet critical, project activities are sometimes missed in industry development work. This project showed that a small investment of time early in a project to develop a clear project plan can demonstrate and lead to practice change.

The key stakeholders were the organisations who would have a direct impact on the on-farm adoption of food safety and environmental assurance programs. Key stakeholders were identified for each of the key industries (dairy, grains, sheep, beef, pastoral, horticulture, poultry and pigs), and the project began to work closely with the identified industry

organisations to facilitate the development and delivery of their food safety and environmental assurance programs.

The key stakeholders within each industry came from a range of organisational structures including grower groups, statutory bodies, corporations and agribusiness. For the success of the project, and the on-going adoption and maintenance of the on-farm assurance processes, it was important the project cooperated with these organisations to ensure pragmatic program development and optimum on-farm delivery.

This planning process showed that project participants need to be clearly identified and their objectives recognised in the development of any industry development program for it to be a success.

Role of government

Farming for the Future was a Ministerial project managed from within the Western Australian Department of Agriculture and Food (DAFWA). The role of government in this project was not to create new programs, nor was it to accept responsibility for each industry's sustainability programs. Its role was to support the relevant industry bodies to build their own environmental assurance or environmental sustainability programs, using existing (or complementary) industry programs.

At the start of the project many of the key industries had begun to initiate projects to develop or deliver environmental assurance programs with funding from the Australian Government's EMS Pathways to Sustainable Agriculture Programme. So while funding was available, the development processes, technical knowledge on the role of an assurance process in the market, and information on sustainable farm practices were missing. These were some of the areas in which government was able to play a role.

The project helped industries to identify and develop the relevant technical advice from within government departments and private enterprise. This information was then used by the industry organisations to develop their environmental assurance programs.

Training for industry participants was facilitated by the project using the Australian Government's EMS Pathways to Sustainable Agriculture Programme funding to introduce members of the industry organisations to the skills required to develop and deliver environmental sustainability programs. This served as a useful introduction to environmental sustainability and assurance programs.

The project was also able to act as a conduit between the key industries to ensure optimum networking and sharing of ideas. The training programs and forums allowed industries to network as they developed their environmental sustainability programs.

Stakeholder management

Identifying and then creating meaningful relationships with each of the key stakeholders was the key to the project's success. To create meaningful relationships, the project team worked closely for the first 12 months with each of these stakeholders.

By working one-on-one with each industry, the project members identified goals for the development and delivery of on-farm food safety and environmental assurance programs in each of the key industries. To achieve these industry goals, the stakeholders required different levels of support from the project.

For many of the key industries, as was mentioned before, funding was often not an issue, but development support was critical. Support from the project team included managing technical on-ground trial activities, the facilitation of strategic industry direction, and general information, advice and encouragement in the development of their environmental sustainability programs.

Stakeholder network

Most of the key industries really wanted to swap ideas, techniques, development tools and experiences with other industries who were working through the same issues. Thus a stakeholder network was created that helped to tailor the project's support to these industries.

The network fostered relationships between the key industries, maximised future funding opportunities, and allowed them to share information, tools and training opportunities. The outcome of the network was that it enabled assurance processes and sustainability programs to be developed faster than if the key industries had worked in isolation, and ensured consistency between industries' in identifying and researching sustainable farm practices.

Industry outcomes

Industry organisations bring to a project a large amount of background information, networks and drive. This was particularly the case in the Farming for the Future project.

There are two reasons why this was important for the project. Firstly in today's funding environment (public, private and statutory), project funding is designed around industries creating and delivering many of the on-farm changes for the adoption of sustainable agriculture. Thus it makes sense for industry change consultants to understand and work with these organisations to ensure the desired change occurs in a sustainable way.

Secondly because the assurance industry is 'market driven', and many of the food safety processes are already managed by industry, it was imperative that industry organisations had a good understanding of the environmental assurance process. This meant they needed access to quality technical information and processes, and adequate funding to ensure the environmental assurance processes were developed in a professional manner.

For industry organisations to develop and deliver environmental assurance programs, they required a set of skills, knowledge and attributes that were different to those they had used in past projects. For each industry organisation this mix of needs was different, depending on the basic skill and knowledge set, and also industry goals.

Three examples are presented from the dairy, broadacre agriculture and horticultural industries. The examples outline how the project supported the development and delivery of environmental assurance or environmental sustainability programs in each of the industries. The key stakeholders and outcomes for these three industries are shown in Table 1.

Table 1. Summary of the stakeholders and outcomes - Farming for the Future project - demonstrating the importance of stakeholder networks in achieving industry development.

	Key stakeholders	Key deliverables
Dairy	Western Dairy DAFWA	Development of Dairy SAT and DairyCatch environmental best practice guidelines.
Broadacre agriculture	CBH Better Farm IQ Primaries of WA MIG BBG	Development of EU Eco-Label assurance process and an integration of the management systems (food safety and environmental).
Horticulture	Vegetables WA Swan Catchment Council DAFWA	The Walking the Walk project worked one-on-one with vegetable growers to develop environmental assurance plans that could be audited through the Freshcare™ Environmental Code of Practice.

Dairy industry

Western Dairy (a grower initiated research and development company) was supported in its on-farm pilots of DairySAT by the Farming for the Future project. DairySAT was the dairy industry environmental self-assessment tool developed by the industry to address key environmental issues.

Unlike many of the other industry groups, Western Dairy had extensive national and state support for the development of Dairy SAT, and for the development of the DairyCatch environmental best practice guidelines. Dairy was the leading industry group who trialled the development and delivery of on-farm environmental programs in WA. They provided an example for many other network participants to learn from.

The dairy industry presented their learnings early in the project at network forums and training programs alongside other key industry participants. They outlined to other members their industry consultation and engagement processes, and provided a case-study industry from which other groups could learn.

The industry pilots of Dairy SAT showed that facilitator support was essential for the delivery of on-farm environmental programs, and that on-farm change had occurred as a result of the programme. However, changes in direction and investment within the industry meant that Dairy

SAT was not fully implemented outside these pilot groups, missing an opportunity for the widespread on-farm adoption of environmentally sustainable farm practices.

By working closely with the WA dairy industry at the start, Farming for the Future was able to provide support to the industry as it developed its processes to demonstrate its environmental sustainability. Whilst the resulting Dairy SAT program was not on-going, the industry met its milestones in demonstrating its sustainability and is well positioned should the market or community drivers for demonstrating sustainability become stronger.

Western Australian broadacre agriculture

Primaries of WA Pty Ltd is a major wool buyer within WA. In cooperation with The Merino Company (TMC), a major international wool processor and garment manufacturer, Primaries identified a market need for sustainably produced wool. To meet the specific market requirements outlined by TMC, Primaries clients (WA woolgrowers) were required to have an externally audited ISO 14001 (environmental) certification.

Primaries already had a good understanding of market requirements for sustainably produced wool, sustainable production systems and processing. However there was a need for them to develop an understanding of the assurance processes which track the wool from the farm to the garment, and the options available to WA wool growers to meet this specific market demand.

The CBH Group's Better Farm IQ program was already operating within this target industry. It had 30 per cent of WA grain growers food safety assured, and a network of integrated quality controllers (IQC's) (or auditors) across the broadacre areas of WA. Better Farm IQ recognised that most grain growers in the state also managed livestock enterprises, and thus offered sheep and cattle food safety assurance programs to compliment the grain assurance program. The focus by Better Farm IQ on farmer requirements for an integrated management system meant that it was an obvious choice for Primaries to work with them to meet wool market demands.

Whilst Better Farm IQ focused on food safety, the requirements from TMC were for environmental assurance. Better Farm IQ had already developed a working relationship with the Mingenew-Irwin Group (a grower group) and was externally auditing their environmental management system for growers in the Mingenew-Irwin area. A similar relationship was encouraged by Farming for the Future between Better Farm IQ and the Blackwood Basin Group's BESTFarms environmental management system. Both environmental management systems are aligned with ISO14001.

A large proportion of the Primaries clients were meeting the requirements for EU Eco-Label, and it was a desire of the company to maintain this level of certification. Primaries and Better Farm IQ worked cooperatively to develop an assurance process to meet EU Eco-Label requirements, and for it to be externally audited. This process allowed Primaries staff to gain a greater understanding of the technical aspects of on-farm assurance, how it related to their industry, and the opportunities it provided their business.

So through the network established by Farming for the Future, the key stakeholders were able to deliver an integrated management system (food safety and environmental management) for WA woolgrowers. It built on existing knowledge and processes, and ensured industry outcomes were achieved.

As a result of this process each stakeholder is responsible for the on-going development of the different programs, for the on-farm delivery, and for market assurance. However the key Farming for the Future project objective has been met, of ensuring that the processes required by the WA broadacre agriculture industries are available to demonstrate their quality and environmental sustainability.

Horticulture

At the beginning of the Farming for the Future project the national horticultural industry had begun to develop the Enviroveg self-assessment tool and Horticulture for Tomorrow guidelines for environmental assurance using Australian Government NHT Pathways to Industry funding. The Department of Agriculture and Food (DAFWA) (including the Farming for the Future project) participated in the consultation and development of these resources and had begun to build its knowledge of assurance programs through the process.

Freshcare™ is the leading food safety and quality assurance body for WA horticulture producers. It used the Enviroveg self-assessment tool and Horticulture for Tomorrow guidelines to develop the Freshcare™ Environmental Code of Practice. Whilst the previous tools had allowed farmers to self-assess their environmental actions, Freshcare™ Environmental provided an auditable

code of practice (or environmental assurance program) that enabled growers to gain environmental certification and meet market needs.

WA's peak vegetable industry body, Vegetables WA, had a good understanding of food safety and quality assurance processes and had already begun to meet domestic and international market requirements in this area. However they had also identified changes in international market requirements for certified environmental assurance, and were starting to address these within industry programs.

The WA horticultural industry attracted Australian Government NLP Priority National Projects funding to deliver environmental assurance locally to meet these market requirements for environmental assurance. Using this funding the Good Practice Guide for the Swan Coastal Plain was developed by Vegetables WA with technical knowledge from the Department of Agriculture and Food (including Farming for the Future) and further funding from Perth Region NRM. The Good Practice Guide documented sustainable farming practices for the Swan Coastal Plain, an important pre-cursor document to any audited environmental management system.

A partnership was developed between Farming for the Future and Vegetables WA that enabled the Walking the Walk project to be instigated. The Walking the Walk project worked one-on-one with vegetable growers to develop environmental assurance plans that could be audited through the Freshcare™ Environmental Code of Practice.

The Walking the Walk project developed environmental management system skills within the industry. It helped growers to develop an environmental assurance plan that aligned with national programs and resources, and helped them to understand environmental assurance processes and requirements of their production systems.

At the conclusion of the Walking the Walk project, the market drivers of maintaining market access or increased financial returns were lacking, and the local Freshcare™ food safety and quality assurance auditors were not qualified to audit environmental plans. Thus the participating growers were not able to be certified.

However as a result of this project Vegetables WA growers have prepared environmental plans, and will be ready to meet market demands should the market or community drivers for demonstrating sustainability become stronger. This demonstrates the benefits of industry, government and NRM groups working together to achieve shared goals.

Conclusion

By working with a range of key stakeholders across WA agricultural and horticultural industries, the Farming for Future project has encouraged the development and delivery of environmental assurance programs to meet the growing demand to demonstrate that the food and fibre these industries' produce is clean and safe, and is not degrading the environment.

It has done this by facilitating an active network of industry stakeholders that has enabled information to be shared, technical knowledge of assurance processes to be developed, and funding opportunities to be maximised.

Currently market and community drivers are not strong enough to encourage the wide-spread adoption of environmental assurance processes, but evidence (Batt 2006) suggests these will strengthen over time.

With support from the Farming for the Future project, Western Australia's key agricultural and horticultural industries have developed environmental sustainability programs, delivered them on-farm and have prepared their industry for any future market or community demands to demonstrate sustainable farming practices.

Acknowledgements

We acknowledge the leadership of Jon Warren (DAFWA) and the management of John Noonan (DAFWA and Curtin University) in the development and delivery of the Farming for the Future project, and in writing this paper.

References

Batt P Noonan J and Kenyon P (2006) *An analysis of global trends for food safety and quality management for the Australian food industry*. Commonwealth Department of Agriculture and Food, Canberra. A report compiled by the consortium led by Curtin University of Technology. July 2006.