

FINAL – Due date 25th September

Alpine Valleys Dairy Pathways Project response to Parliamentary Inquiry into Agricultural Innovation.

Terms of Reference

The Committee will inquire into and report on the role of technology in increasing agricultural productivity in Australia. The inquiry will have particular regard to:

- improvements in the efficiency of agricultural practices due to new technology, and the scope for further improvements;
- emerging technology relevant to the agricultural sector, in areas including but not limited to telecommunications, remote monitoring and drones, plant genomics, and agricultural chemicals; and
- barriers to the adoption of emerging technology.

Background

The **Alpine Valleys Dairy Pathways Project** commenced activity in 2011 and represents a collaborative investment in the challenges of building a vibrant and sustainable dairy industry in North East Victoria. The project involves input and investment from farmers, local communities, milk processors, peak industry bodies, and local and state government.

The project represents a serious attempt to build a wholistic and integrated framework for meeting the challenges of doubling agricultural production in the dairy sector by 2025. (See <http://www.towong.vic.gov.au/business-investment/local-business-investment/agriculture/north-east-diary-growth-plan.asp>). It has been well documented and has recently been the focus of PhD Thesis through the University of Melbourne (see references).

The plan is built on the premise that some key issues will need to be tackled to maximize the potential for future investment in dairy to occur. Growth is both desirable and possible - but not without changing some key elements of culture and practice in the region.

The three primary areas for focus in relation to changing culture and practice are

- Accelerating uptake of profitable farming practices including adoption of both existing and new technologies and increased uptake of business principles.

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- Developing a new model for supporting successful farm transitions that allows the next generation of farmers to enter the industry, and the existing generation to feel more comfortable about stepping back.
- Building a stronger engagement with local communities to ensure that the role, value and opportunities agriculture presents for local wealth creation, local jobs, diverse careers and desirable lifestyles are appreciated and supported.

Focus area links to Innovation and Technology

Accelerated uptake of profitable farming practices

The dairy industry is undergoing a technological transformation in relation to

- Animal performance/fertility
- Feedbase/nutrient use efficiency
- Resource management
- Farm business management

Significant investment is occurring industry-wide in these key areas - and new technologies are emerging at a rapid rate for farmers to consider and potentially assimilate.

A key role of the Alpine Valleys Dairy Pathways project has been to create a culture and environment of information-sharing amongst farmers to facilitate technology uptake where profitable and appropriate to the local environment.

This has involved the development of an innovative model for funding agricultural extension – supported by the State Government, local milk processor, and Dairy Australia. The region now boasts one of the highest completion rates for key industry extension programs, and highest national participation rates in farmer-based learning activities.

There is a vibrant and active culture around learning in dairy – which provides a terrific platform for review and assimilation of new technologies.

The approach is focused on farm profitability – and the understanding that return on investment (financial), and improved farming lifestyle outcomes, will be two of the key criteria driving the uptake of successful technologies.

A major concern for the region is the poor mobile phone coverage and slow internet download speeds. Many of the new technologies and applications are built on a digital platform and their uptake is limited in the region because of poor digital service delivery.

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The next generation will accelerate technology uptake

A major driver for engagement and investment in dairy for the next generation of farmers is that they will be able to capitalise on their investment in new technology to improve both the wealth creation and lifestyle components of farm operation. The next generation are more likely to invest in new technologies than the generation about to retire.

The Alpine Valleys Dairy Regional Growth Plan identified the issues related to dairy farm succession as one of the important barriers to dairy sustainability and growth for the region. 2011 ABS census data showed that over 60% of dairy farm owner managers in the Alpine Valleys are over 50 years old, making it one of the oldest dairy farming cohorts in Australia.

The shape of the industry is transforming rapidly with farm amalgamations and increasing herd size. Dairy farm numbers in the Alpine Valleys declined by 37% in the period 2000 – 2012, but milk production per farm increased by 57% over the same period.

One of the greatest risks to dairy growth is the loss of high quality agricultural land from dairy to less intensive agricultural systems. There is prima facie evidence from the Alpine Valleys Dairy Pathways project to suggest that many of the current cohort of retiring dairy farmers are choosing to discontinue dairy because they have not been able to find a pathway to successful transfer to the next generation.

From a technology uptake and land viability perspective the project has identified the challenge of successful dairy farm transitions as a key component of industry growth for the region.

To achieve this goal the Alpine Valleys Dairy Succession project has undertaken to design and trial a practical intervention which will assist families with getting started with farm succession planning.

Outcomes from this work indicate

- Less than half of the 180 dairy farms in the region are clear on how succession arrangements will work on their farms
- Most farms have not had discussions around succession with their professional advisors
- Only 23% of existing farms have developed any form of documented or robust plan to manage the transition process
- Over 40% of the respondents have requested support for reviewing their arrangements because they do not know how to get started.

The project is currently working with 15 case study farms to trial a new intervention which will assist farmers with getting started with succession planning. The intervention appears at this stage to be highly cost effective and is being supported by the local professionals because it is allowing them access to clients who had previously been reluctant to seek professional advice.

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The relationship between Agriculture and the community needs to be reinvented.

Improved farm technologies will assist with improving the relationship between agriculture and the communities which support its operation. One of the major challenges facing dairy growth is the poor image of the industry. The broader perception of the industry is one of long hours, hard work, a potentially dangerous work environment, and driving an unsociable lifestyle. This is hardly a platform to generate excitement from the next generation.

An outcome of this is that schools in the Alpine Valleys do not strongly advocate careers in Agriculture, and there is a challenge attracting the best and brightest back into the industry. This is despite the fact that the region supports some of the most agriculturally dependent economies in Australia with 23% of the jobs in the Towong Shire reliant on agriculture.

The poor image of dairy is not held by most current dairy farmers, who regard their lifestyle and wealth creation options very positively. The Alpine Valleys project has been working closely with local schools and local farmers to rebuild the relationship with their communities with some very positive local outcomes.

In a project involving science and agriculture students at Tallangatta Secondary College, the project has worked with the school to introduce the students to some of the best local agriculture professionals, and the role that technology plays in their working lives. In addition the program has allowed these students to visit the Dairy Futures CRC in Melbourne, and gain an appreciation of the “cutting edge” of dairy and agricultural research.

One of the main goals is to introduce the brightest and best regional students to the opportunities available in Agriculture through studying science at a tertiary level.

The project has been very well received and the Alpine Valleys project is considering how it can be expanded both within Tallangatta Secondary College and to other schools in the region. Our schools need to learn how to engage with agriculture in an exciting, affordable and achievable manner.

Summary and Invitation

This submission has demonstrated the importance of accelerating technology adoption as a fundamental component of supporting transformational change within the dairy industry in Australia. It has highlighted that the people component is the key to technology adoption.

When seen in a local context technology adoption must be integrated into a broader change management strategy that is based on challenging and reinventing the local culture as it relates to agriculture. We need agriculture to be seen as profitable, sustainable, and desirable by the next generation, and technology will play a crucial role in supporting this outcome.

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By developing a framework for significantly growing dairy in North East Victoria the Alpine Valleys Dairy Pathways project is ambitious in its scope. The project has developed a vehicle for collaborative support and action amongst the key stakeholders who are interested in dairy growth at all levels.

We would welcome the opportunity to demonstrate the key features as outlined in this submission – and why we think the work presents some useful findings for the work of this parliamentary inquiry. In particular the project is demonstrating how investment is best placed in terms of strengthening the growth and development of sustainable agriculture and sustainable rural communities.

We would be particularly pleased to organize a briefing on these themes for the committee in the region if this was seen as useful.

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