

Food for thought

A LOOK AHEAD

Seven years before Ravensdown was set up in 1977, there were roughly half as many people in the world as there are now. Forty years from now, there will be about two billion more human mouths in the world. Yet the amount of land devoted to farming is *falling*.

The future of food raises some big questions, but one thing we can be certain about. The world needs our farmer shareholders to create food and we are going to have to be smarter about how that happens. The good news is that Ravensdown can help them with smarter farming.



CEO Greg Campbell
looks ahead

Improving the nutrient system

Whether our customers are creating food for animals or humans, there are two things they all have in common. All that food comes from New Zealand's soil and the nutrients that are removed in the process need to be replaced.

This is the nutrient cycle – the way plant necessities such as nitrogen, sulphur, phosphorus and potassium (to name only four) move through the soil and natural environment and into the food we eat.

Ravensdown invests in science, research, manufacturing and training so it can offer advice, products and services to help improve the efficiency of this nutrient system. The science and technology is often changing as new findings emerge and, as a co-operative with expertise in nutrient systems, we have a vital role to play in sharing the subsequent insights.

In the medium-term, there are exciting developments in terms of soil diagnostics, spreading accuracy, technologies to reduce nutrient losses, fertiliser coatings, grass seed varieties and animal breeding, which will mean better use of nutrients and less potential waste as ways to reduce environmental impact.

Society is still debating the use of genetic technologies but these could also play a role in creating more nutrient-efficient plants and animals which could eventually have an effect on reducing nutrient loss to the environment.

Value not volume is the key

New Zealand currently has the potential to feed a maximum of about 40 million people a year. So the question for the agrisector becomes 'which 1% of the world's population are we going to serve given our environmental responsibilities?'

Trends such as the ageing population, urbanisation and the growth of the middle classes in developing countries mean there are growing numbers who will pay more for safe, sustainably-grown food with an authentic pasture-based story and that has been produced with the environment in mind.

When faced with commodity protein that can be churned out as insect flour, synthetic meals or factory-farmed fodder, New Zealand's "craft" food – grown by real people who care – will command a premium.

We will help farmers tell their genuine stories. We can help them show how they take their environmental responsibilities seriously and how they use technology to

precisely diagnose what their land needs. The traceable and auditable maps that we supply mean they will be able to assure buyers that those farmers know how much of which fertiliser was applied where: all with the aim of lessening the impacts on our precious natural resources.

Joining the dots and providing the proof becomes easier when internet-connected sensors across the whole farm operation capture and relay data. This 'Internet of (agri) Things' means there are opportunities to give farmers tools to clearly visualise and share the consequences of their decisions. We are preparing for a convergence of digital and physical worlds.

Social change: the challenge and opportunity

Social licence is a process where society extends or withholds its support for a sector or an individual business. It's fair to say that compared to 40 years ago, farming seems to be framed more often as the villain than the hero.

Younger people who will shape the workforce of tomorrow will avoid a company that is not doing the right thing. They want to join forces with a force for good and for their work to make a difference.

While it doesn't appear on our balance sheet, our reputation is the most valuable

What smarter farming means to us



asset we possess. Therefore, one of the main risks for a co-operative like ours is that in the future we may be seen as a potential "polluter" – this we refute. Our contribution to New Zealand is positive and we'll be taking that message to new audiences using new channels while listening and acting on any genuine concerns among the community.

The reputation of the shareholders we serve also matters a great deal to us and we will continue to support and speak out for the farmers who are learning, listening and improving their practices.

We are helping farmers reduce their impact so there is rightly an expectation that the co-operative will walk the talk on its own environmental performance. We anticipate greater usage of e-vehicles, improved efficiency of nutrient use, more efficient processes, a focus on recycling and reduced power consumption. These are just some of the short-term initiatives in the pipeline.

We will be extending our environmental report which has been running since 2001 to help the community make up its own mind about how we are tracking.

Long-term thinking

It's about kaitiaki: long-term thinking and stewardship; building something lasting, something collectively we can be proud of.

As farming faces disruptive trends that could destroy or deliver more value, Ravensdown is evolving so that the children of today and tomorrow are better off for all of us being here.

Farming with heart

Precision agriculture is about the right amount of the right inputs in the right place, applied at the right time. Smarter farming is also about always having the right reason – the focus on the environment, community, progress, iwi and mana.

Nourishing Kiwi soils

We provide the nutrients that nourish New Zealand's soil which, in turn, feed the plants and animals that deliver the products that can command a premium on the world stage.

Smarter farming is all about smarter choices for the environment. We pay attention to sales of course, but as a farmer-owned co-operative, it's not our policy to sell farmers more than they need.

Extending social licence

Anyone who has anything to do with farming and Ravensdown must go home safe and sound. A better New Zealand can't be built on anything less.

Farmers and those involved with the sector earn their social licence and need to move up from acceptance to approval and aim for admiration. Smarter farming is the way to make that happen.
