

Shaping NZ Food & Fibre Future

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Our Future Challenge

NZ will continue to be a major producer of commodity foods & fibre in the years ahead, particularly for international food manufacturers.

Will this be enough, given increasing global competition & protectionism?

We need to:

- **better engage & understand consumers, emerging market segments & new supply chains**
- **be well connected internationally & think seriously about the threat & benefit of new technologies**
- **Increase Primary Sector R & D**
- **Build stronger entrepreneurial capabilities**
- **Build brands (tell the story)**

Where is NZ Place?



Feeding the 1-2% of wealthy consumers globally, who ideally probably want to buy locally.

Do we understand their attitudes and wants in 5 years, 10 years, 20 years?

How will we segment markets?

What does it mean for what we produce in 10-15 years time?

Do we have to increasingly produce behind national borders?

How do we increase our connectedness (e.g. multi-national networks)?



An External View



New Zealand's Untapped Potential:

Universities & IP

Business Culture & Workforce

Gateway to the East

Untapped Potential: Business Culture & Workforce

Ranked seventh in the UN's 2014 International Development Index

Perennially ranked among global elite in ease of doing business

Quality of education means high quality workforce

Ideal for development of innovative global companies

Potential to use New Zealand's business environment for Beta sites (POC's, Clinical Trial...)

Untapped Potential: Gateway to the East

Free Trade Agreement with China

Free Trade Agreement with ASEAN regional block

Free Trade Agreement with Australia

Gateway to the markets of the East within the culture and laws of the West

Bonus: Excellent relations with West

Implications for New Zealand

Many pieces in place for innovation

Knowledge of commercialization lacking

Global mindset lacking

These challenges for NZ = Investment Opportunity

~5 year window of opportunity before falling behind

Some things we need to do

- Greater understanding & connectedness to international consumers & new supply chains (e.g. more Kiwi landing pads?)
- Selling the knowledge & benefits of NZ farm systems globally (including the nutritional value of pasture based systems)
- Rising protectionism: NZ companies establishing more subsidiaries & productive assets behind national borders?
- Greater focus on science & innovation to develop new products/services, increased productivity & protect our biosecurity (e.g. MPI Future Primary Sector R & D roadmap or seconding international entrepreneurs)
- Access to new biotechnologies (e.g. gene editing). Farmers will continue to innovate

What do New Zealand farmers need to remain competitive?



- Better understanding of consumers
- Building brands to tell the story



Farm Productivity

- New Pastures
- New farm systems
- Networked Farms
- Robotics
- Competitive regulations



2016 Major Policy Priorities

The Top 3

1. **Environment:** water policy (quality, quantity & nutrient leaching), climate change
2. **Health & Safety:** policy, education & compliance
3. **Primary sector research & technology priorities:** science system capabilities, research priorities & spending, access to technology, product & services

Other Key Areas

- ▶ **RMA:** policy at a national level and ongoing RMA processes at a regional and district level
- ▶ **Urban Perceptions:** “talk” about the primary sector & social licence
- ▶ **Adverse Events:** biosecurity, physical, economic
- ▶ **Employment Standards:** policy, education and compliance
- ▶ **Annual and long-term council plans**

Precision farming

Information driven (millions of sensors), software orientated, networked smart machines (robotics), detailed information.

Examples:

Data collection

Remote sensing

Spatial mapping

Precise navigation

Automatic record keeping

Cloud computing

Soil & water management

Rounding up cattle

Crop irrigation

Breeding habits in animals!



**BUT: How do you get it to work at a local level on small farms?
(e.g. lack of broadband coverage in many areas, siloed data & often
inadequate products)**

Do we Dismiss?

Disruptive Technology-Synthetic Foods



Will synthetic foods provide cheaper alternatives to feed a hungry world?

2013: \$325, 000 synthetic Hamburger produced in the Netherlands. Today it costs less that \$12

Synthetic Milk is being produced in America

Silicon Valley is interested!