Australian Dairy Industry

Response to the Productivity Commission Study

Costs of Doing Business: Dairy Product Manufacturing

Represented by

Australian Dairy Industry Council and

Dairy Australia

Contacts

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The dairy industry supply chain comprises several elements: raw milk production, processing and manufacturing, marketing and distribution, and the retail and export of dairy products (figure 1).

The Commission is seeking views on the nature of the linkages between dairy product manufacturing costs and other parts of the supply chain, and the countries that should be used to assess the relative costs of doing business for Australian dairy product manufacturers.

Introduction

The Australian Dairy Industry Council (ADIC) is the dairy industry's peak policy organisation that provides whole of industry policy. It represents both dairy farmers, through Australian Dairy Farmers (ADF), and dairy companies, through the Australian Dairy Products Federation (ADPF). The ADIC is supported by Dairy Australia (DA), the dairy industry-owned service body.

The ADIC welcomes the opportunity to provide comment to the Productivity Commission's study into the Cost of Doing Business: Dairy Product Manufacturing. The dairy industry is one of Australia's major rural industries. Based on farm gate value of production, it is ranked third behind the beef and wheat industries. There are approximately 6,400 farmers producing over 9 billion litres of milk annually.

The dairy industry is the largest value added food industry, contributing $13 billion at wholesale to the economy. It is estimated that more than 40,000 people are directly employed in this industry on farms, manufacturing, transport, distribution and research and development. As a major regional employer, the industry adds value through the processing of milk to produce drinking milk, cheese, butter, cream, yoghurts and a range of specialty products. The estimated value of farm production is $4 billion annually and total value added production (ex factory) is $13 billion.

The dairy industry is also one of Australia's leading agrifood industries in terms of adding value to Australia's primary produce. Much of this processing occurs in rural areas, thus generating significant employment and economic activity in country Australia.

The dairy industry exports approximately 45% of manufactured or further processed product, to over 100 countries, making Australia the seventh largest trader of dairy products on the world market.

Our export markets are concentrated in the Asia/East Asia regions, with Japan being our largest customer, followed by Singapore, Malaysia, Indonesia and China. In terms of our major export products, they are cheese, milk powders (including infant formula), butter, milk, and other dairy ingredients such as casein and whey products.

What are the key elements of the Australian dairy industry supply chain that influence dairy product manufacturing costs?

1. Supply of raw milk

i. Dairy manufacturing and processing efficiency depends on a reliable and constant supply of raw milk.

ii. The seasonality of milk supply (with peak season volumes in Victoria/Tasmania harvested between September-November) affects processing efficiency.

iii. Outside of peak season, a significant part of the dairy manufacturing sector is forced to run at lower capacity: facilities with milk powder dryers run at lower capacity between January and August, and some are forced to shut-down given the high fixed cost associated with such capital intensive plant; most cheese facilities (and by extension whey) are run at more constant capacity levels; butter facilities also run at fairly constant capacity; drinking milk and other fresh (e.g. yoghurt) plants require constant supply but do not require as high a level of capital investment and are not required to operate at full capacity (24/7).

iv. Historically, Australian processors have attempted to manage this milk supply challenge to efficiency through plant design: that is, by opting for smaller dryers (for example, combining at one manufacturing site, two 6 tonne per hour dryers instead of one 12 tonne per hour dryer) to enable shutdown during off-peak when milk supply is too low to maintain efficiency (a 20 hour operational day is required to run such plant efficiently). Australian supply conditions have made 4-6 tonne dryers the optimal size dryer.

2. Transport

i. Milk is highly perishable product with a short life before processing: raw milk requires processing within 48 hours after pick up.

ii. Milk product manufacturing plants must consequently be located in close proximity to farms and commodity-oriented manufacturing has evolved in the regions.

iii. Fresh milk manufacturing facilities in contrast must be in close proximity to their local urban markets given that the cost of transporting bulk milk is lower than that of the finished product. Hence, such plants are invariably in urban areas. Transport of fresh product requires smaller, refrigerated trucks capable of operating in urban distribution areas.

iv. Manufacturers' decisions about the size of raw milk tanker transports are contingent upon local infrastructure conditions: for example, B-double tankers are used where local road conditions are suitable. Transport options are generally limited to road due to the lack of availability, or where present flexibility, in rail.

v. Efficient transport of milk is required from farm to factory, factory to market for domestic supply, and factory to port for export product.

vi. Transport of bulk commodity products from factory to port is more efficient than transporting raw milk to factory.

vii. The below illustrates fuel requirements for transport of major product groups (in terms of litres of fuel consumed per tonne of final product):

Table 1: Average volume of diesel required for transport of raw milk to processing site and final products to warehouse

	Full Cream Milk	Chocolate Milk	Fresh Yoghurt	Bulk Cheddar	Bulk Butter	FCMP/ SMP	Whey Protein Concentrate
Fuel consumed	Litre consumed per tonne of final product						
Raw milk transport (LNG)						8.5	
Raw milk transport (diesel)	1.2	0.4	1.0	10.8	10.8	15.8	20.2
Transport to warehouse (diesel)	0.0	0.7	3.1	4.1	4.1	3.2	3.2
Transport other (diesel)	0.0	0.0	0.1	0.4	0.4	0.2	0.2

Source: *Final report: Processing Carbon Footprint of the Australian Dairy Industry prepared for Dairy Australia and Australian Dairy Products Federation*, February 2013

Energy

i. Energy is a key component of dairy processing; dairy manufacturers use energy from both electricity and thermal sources. The manufacturing of whey and milk powder are the most energy-intensive processes:

Table 2: Number of sites producing analysed products per state and electricity required to produce each product

State		Vic	NSW	Qld	Tas	Electricity required, weighted average (kWh / tonne)
Products	Butter	6	1		2	185
	Cheddar	3	2		1	219
	Chocolate milk	1	1	1		43
	Fruit yogurt	2				193
	Full cream milk	1	1	1		49
	Milk powder FCMP/SMP	5			1	380
	Whey protein concentrate	1			1	1,146

Source: *Final report: Processing Carbon Footprint of the Australian Dairy Industry prepared for Dairy Australia and Australian Dairy Products Federation*, February 2013

Table 3: Number of sites producing analysed products per fuel source. Thermal energy required to produce each product

Fuel		Natural gas	Briquettes	Black coal	Lignite	LPG	Saw dust	Biogas	Thermal energy required, weighted average (MJ/tonne)
Products	Butter	4	2		2		1	1	1,174
	Cheddar	3	1			1	1	1	1,397
	Chocolate milk	2		1					133
	Fruit yogurt	2				1			746
	Full cream milk	2		1					220
	Milk powder FCMP/SMP	6			1			1	8,332
	Whey protein concentrate	2						1	11,916

Source: *Final report: Processing Carbon Footprint of the Australian Dairy Industry prepared for Dairy Australia and Australian Dairy Products Federation*, February 2013

i. Electricity is required for running plant including pumping, refrigeration, lighting and other mechanical processes.

ii. Thermal energy is required for processes including pasteurisation and evaporation.

iii. Products such as bulk cheddar and butter are generally stored for longer periods, as part of the production process: for example, cheddar is aged over 3-18 months; the majority of butter is produced during the spring peak and subsequently sold over several months.

Table 4: Weighted average amount of energy, fuels and refrigerants used during storage

	Bulk Cheddar	Bulk Butter	Full Cream Milk	Fresh Yoghurt	Chocolate Milk
Diesel (kg/tonne)	0.2	0.0	0.2	0.0	2.6
Electricity (kWh/tonne)	1.4	5.3	0.2	0.1	2.2
LPG (kg/tonne)	0.3	0.4	0.0	2.0	0.0
Ammonia (mg/tonne)	99.0	45.3	0.0	0.0	0.0
R134 (mg/tonne)	1.1	1.3	0.0	0.0	0.0
R22 (mg/tonne)	0.0	0.0	0.6	0.0	0.7
R404 (mg/tonne)	7.9	9.4	0.0	0.0	0.0

Source: *Final report: Processing Carbon Footprint of the Australian Dairy Industry prepared for Dairy Australia and Australian Dairy Products Federation*, February 2013

Table 5: Average storage time

	Full cream milk	Chocolate milk	Fruit yogurt	Cheddar	Butter
Days (range)	~ 1	~ 1	~ 1	120-180	21-180

Source: *Final report: Processing Carbon Footprint of the Australian Dairy Industry prepared for Dairy Australia and Australian Dairy Products Federation*, February 2013

iv. Natural gas is currently the most efficient and economic fuel for the production of steam, other fuels used where gas is not available include:

- Butane

- o Wood chips
- o Coal – brown and black
- o Electricity

v. The following indicates fuel sources for selected manufactured products:

Table 6: Number of sites producing analysed products per fuel source. Thermal energy required to produce each product

Fuel		Natural gas	Briquettes	Black coal	Lignite	LPG	Saw dust	Biogas	Thermal energy required, weighted average (MJ/tonne)
Products	Butter	4	2		2		1	1	1,174
	Cheddar	3	1			1	1	1	1,397
	Chocolate milk	2		1					133
	Fruit yogurt	2				1			746
	Full cream milk	2		1					220
	Milk powder FCMP/SMP	6			1			1	8,332
	Whey protein concentrate	2						1	11,916

Source: *Final report: Processing Carbon Footprint of the Australian Dairy Industry prepared for Dairy Australia and Australian Dairy Products Federation*, February 2013

vi. Dairy manufacturers' energy-related investment continues, although there are challenges in meeting the costs that must be incurred to achieve greater efficiencies. As noted in the recent Australian Dairy Industry Council (ADIC) response to *The Agricultural Competitiveness Issues Paper* (See Appendix A, attached):

'…dairy manufacturing projects that were part of the Clean Technology Food and Foundries Investment Program in the 2012-13 year included more than $25 million investment in equipment upgrades including installing heat exchange, solar PV and/or gas alternatives for water heating and power, and equipment upgrades for refrigeration and lighting. Investment in clean technology is expected to reduce emissions intensity at some dairy plants by up to 50%. Unfortunately, this Clean Technology program is now closed and comparable investment in these types of projects is unlikely to continue…… for a dairy manufacturer to upgrade to new energy efficient refrigeration or to switch to solar power could require a capital cost of several hundred thousand dollars with a payback period of 3 – 20 years.'

(Source: *Australian Dairy Industry response to the Agricultural Competitiveness Issues Paper, Appendix A)*

3. Labour

i. There is a trend towards lean manufacturing and increasing the extent of automation in dairy manufacturing in order to achieve greater efficiencies. This ongoing trend is expected to remove some component of labour cost.

ii. However, there are also challenges for manufacturers in attracting skilled workers to what are invariably small rural towns; this challenge becomes even more acute when there is significant competition from large corporations in sectors such as mining.

4. Water

i. Water is vital to dairy manufacturing as it is used in cooling and heating, production of steam, cleaning, and other operational activities required in the manufacturing all dairy products.

ii. Water supply must be reliable and large: a rule of thumb is that a plant with an intake of 1 million litres of milk requires approximately 1.5 million litres of water.

iii. More than 80% of water supply for dairy manufacturing comes from mains water (town supply), the remainder comes from onsite recycling at dairy manufacturing facilities.

Effluent and waste disposal

i. Dairy manufacturing generally creates significant liquid waste: a rule of thumb is that a plant with an intake of 1 million litres of milk generates approximately 1.7 million litres of waste water. Consequently, treating the waste necessitates significant investment by manufactures and local water authorities. This investment generally goes into waste water treatment plants.

Which international competitors should the study focus on? What factors need to be accounted for in making cross-country comparisons?

i. **New Zealand:** One dominant company (co-op structure), Fonterra, but also several smaller agile competitive players; a larger scale of raw milk production on a similar generally pasture-based platform (18.8 billion litres in 2012-13) has enabled the NZ industry to establish larger plants with greater economies of scale; also greater economies of learning with longstanding market development, product and processing research and development. NZ is the largest dairy trading nation; supported by industry policy and regulatory framework; compared to Australia, the NZ dairy industry has greater influence on government policy by virtue of the sector's contribution to NZ GDP (around 8%). NZ exports over 95% of milk production (in milk equivalent terms). NZ exports are primarily in whole milk powder (WMP) (43%), skim milk powder (SMP) (14%) and cheese (11%) [Aforementioned percentages and those below are

based on available GTIS country level export volume data for calendar year 2013 (omitting dairy mixtures)],

ii. **Ireland:** Aggressive overseas expansion by Irish dairy manufacturers; smaller raw milk production base (around 5-6 billion litres) with six companies processing 80% of the milk, Glandia, Kerry Group, Dairygold, Carberry foods, Lakeland dairy and Tippary Coop.Ireland has a similar scale of processing and are developing a strong market presence in value added products and export markets; recent industry policy and regulatory changes in the EU (especially, removal of quotas in 2015) are encouraging significant investment from farm to factory; according to Irish industry sources, Ireland exports over 80% of milk production and accounts for 15% of the global supply of infant formula (source: http://www.fdii.ie). The largest share of Irish exports is in infant powder, 32% in 2013, followed by whey powder (15%), cheese (14%) and SMP (12%).

iii. **The Netherlands:** With one dominant company (co-op structure), Friesland Campina, but 20 significant companies in total; aggressive overseas expansion by Dutch dairy manufacturers, draws on a milk pool of 10 billion litres; recent industry policy and regulatory changes in the EU are encouraging significant investment from farm to factory; The Netherlands exports around 60% of its milk production, making it the EU's biggest exporter with 25% of total EU exports (source: http:/ http://www.nzo.nl). The Netherlands' exports are spread across cheese (19%), Infant powder (15%) and WMP (14%). Over the 2009-13 period, total Netherlands dairy export volumes have grown at a CAGR of 2% [based on available GTIS country level export volume data omitting dairy mixtures].

iv. **USA:** A large, fragmented industry with around 90 billion litre production base; greater reliance on non-pasture based production platforms, historically domestically focused but more recently displaying more aggressive interest in exports with companies and industry bodies (DEC, CWT) cooperating in expanding export oriented activity beyond its traditional focus (Mexico), growing market share in Asian markets such as China, Korea and Japan; growing manufacturing capabilities outside of fresh dairy into ingredients such as milk powders and whey and significant investment in new plant (see http://www.usdec.org). US exports are focused on SMP (26%), Whey Powder (23%), Lactose (16%) and Cheese (15%).Total US dairy export volumes have grown at a very high CAGR of 18% (2009-13).

As noted in the ADIC submission to the Agricultural Competitiveness Issues Paper:

The US industry is seeking to increase its export presence and has delivered a fourth consecutive year of record exports by volume. New investments in milk powder production capacity and ongoing programs to better meet international specifications and gain market share by US processors are likely to see further inroads made in coming years.

The Australian dairy industry is also facing subsidised competition from the US industry-funded Cooperatives Working Together (CWT) program.

The CWT program is subsidising American export products such as cheese and butterfat and displacing Australian origin product in key dairy markets in Asia. This is having the additional affect of undermining those commodity prices.

(Source: Australian Dairy Industry response to the Agricultural Competitiveness Issues Paper, Appendix A)

v. **Uruguay:** Aggressive growth ambitions, although the raw milk production base is just over 2 billion litres, utilising mainly pasture-based systems with one major exporter, Conaprole, but around 15-20 companies in total engaged in export trade; like NZ a small domestic population long focused on exports to Latin American markets, Uruguay has been expanding exports significantly, and exports around 70% of milk production to around 65 countries (source: Dairy Investment Opportunities in Uruguay, Government of Uruguay, 2012): total Uruguayan dairy export volumes have grown at a CAGR of 10% (2009-13).

vi. **Argentina:** Aggressive growth ambitions; growing manufacturing capabilities in ingredients such as cheese and whey; also generally built on pasture-based systems, a raw milk production base of just over 10 billion litres, OECD/FAO suggest farm base growth is constrained by high land prices and potential competition for land from soy farmers (sources: Dairy Development in Argentina, Cappellini, 2011; OECD/FAO Agricultural Outlook 2011-2020). Like NZ, Argentine export product mix by volume is weighted towards WMP: over the last 5 years, 45-50% of Argentine dairy exports have been in WMP; recently there has been an increased proportion in whey powder (20% in 2013 up from 13% in 2009); cheese accounts for the next greatest share (around 13%). Total Argentine dairy export volumes have grown at a CAGR of 5% (2009-13).

What cost variables lend themselves to international comparisons?

1. Farmgate milk prices

Table 7: Estimated indicative average farmgate milk prices for selected supply regions (US cents per litre)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU-25	31	35	35	34	42	50				
EU-27							36	40	47	42
US	26	34	32	27	41	39	27	35	43	40
Canada	43	47	51	57	62	64	63	71	75	74
NZ	20	23	22	21	45	27	31	45	40	38
Australia	18	21	25	24	40	34	28	38	42	40

(Source: Dairy Australia)

2. Energy

i. More energy is required in the manufacture of ingredients such as whey and milk powder products; available data to hand from industry sources comparing total energy requirements:

Table 8: Indicative average energy in production—Ireland vs Australia

KWh/tonne	Ireland	Australia
Butter	363	511
Cheese	814	607
Milk powder	4012	2694
Whey	4613	4456

(Source: Dairy Australia and Benchmarking Resource Efficiency in Irish Dairy Processing, Environment & Green Technologies Department, Enterprise Ireland – Dr Robert Geraghty)

ii. Variation in the above implies that there are differences in the environments (eg. Climate, humidity and ambient temperature) and efficiencies (eg. plant design including energy recovery capability) which impact on relative costs.

3. Labour

i. Dairy farm workers

Table 9: Australia: indicative labour rates for dairy farm workers

Job category	Pastoral Award 2010 classification	Remuneration range (55 hour week)	Hourly rate
Assistant farm hand	FLH1	$33 - 45,000	$16.50 -18
Farm hand	FLH3	$38 - 50,000	$18-22
Senior farm hand	FLH5	$40 - 60,000	$20-22
Production manager	FLH7	$60 - 80,000	$22-25
Senior production manager (Farm supervisor)	FLH8	$80 -100,000	$25-30
Business manager	No award	$100 -130,000	$30-40

(Source: http://www.thepeopleindairy.org.au/engagement-reward/pay-rates.htm#Managers)

Table 10: New Zealand: indicative labour rates for dairy farm workers

Position	Mean TPV*
Dairy Assistant	$39,803
Dairy Assistant Herd Manager	$46,256
Dairy Herd Manager	$56,061
Dairy Farm Manager	$70,336

**An employee's salary plus any other benefits equals their total package value.*

(Source: http://www.fedfarm.org.nz/publications/media-releases/article.asp?id=659#.U2b0hL5--70 -- The Federated Farmers/Rabobank Farm Employee Remuneration Report 2013)

ii. **Dairy factory workers**

New Zealand: indicative labour rates for food and beverage factory workers

- Food and beverage factory workers without experience usually earn $14 per hour
- Food and beverage factory workers with some experience usually earn $16-$24 per hour

(Source: http://www.careers.govt.nz/jobs/manufacturing/food-and-beverage-factory-worker-/about-the-job)

Table 11: Australia: indicative labour rates for dairy factory workers

[Extracted from Annual Wage Review 2012–13]

Classification level	Minimum weekly wage	Minimum hourly wage
	$	$
Level 1	622.20	16.37
Level 2	640.20	16.85
Level 3	664.80	17.49
Level 4	687.60	18.09
Level 5	724.50	19.07
Level 6	747.20	19.66

Note: Levels 1 and 2 are basically no prior experience, and a little on the job training.
(Source: https://www.fwc.gov.au/documents/awardsandorders/html/pr536738.htm)

4. **Capital**

   i. Anecdotal evidence suggests that access to capital is a more significant issue for smaller to medium scale manufacturers;

   ii. Farmers also face challenges in accessing capital; manufacturing sector growth is predicated on farm production growth.

   iii. According to some industry observers, industry-wide the farm production base reportedly requires five times the dollar amount of total capital investment to grow milk supply.

5. **Land**

   i. In Australia, land with suitable infrastructure in close proximity to raw milk production as well as markets (ports and urban areas) is relatively scarce, compared to, say, parts of the United States (Southwest), Europe (Eastern regions) and South America (Uruguay and Argentina).

6. **Market access – International**

   Further time and research is required to provide information on this point.

7. **New Zealand's trade agreement with China; see Australia's with others.**

   Further time and research is required to provide information on this point.

What cost factors are relevant to public policy? Why?

i. Energy: Infrastructure cost (investment and maintenance)

As noted in the ADIC submission to the Agricultural Competitiveness Issues Paper:

'The industry is also a large user of both electricity and gas in manufacturing. Dairy processing companies are among the top 300 energy users in Australia, and were therefore liable for the carbon tax. Their international competitiveness is highly sensitive to changes in energy costs, but also inadequate reliability of supply in regional areas where most factories are located. In particular, dairy's manufacturing sector in particular, many of which have no viable alternatives to gas power, are concerned about long term domestic gas supplies and prices as the momentum to export gas builds.

Power interruptions can cost companies dearly when they affect the processing of this perishable product. Power interruptions can cause product to be wasted during processing, and reduce output…

With many dairy manufacturers now moving further down the path of plant automation and control systems, even a small disruption to power, in the milliseconds, can cause considerable down time, downgraded product as well as potential damage to electronics.

The cost of increased investment in network infrastructure is passed onto farm businesses, but the reliability of power supply in many regional areas remains inadequate. The dairy industry is seeking policy reform to ensure that infrastructure upgrades are undertaken so that regional areas enjoy the same reliability of electricity supply as urban areas, without a price premium for a service that urban Australians take for granted.

The dairy industry wants to see a more competitive market in regional areas, where farmers and manufacturers frequently have less choice in electricity suppliers than in urban areas, and are therefore limited in their capacity to switch supplies and negotiate better deals.

Government has a critical role to play in regulating the energy sector to ensure that Australian regional industries can access reliable, secure energy supplies at prices that enable them to remain internationally competitive.'

(Source: Australian Dairy Industry response to the Agricultural Competitiveness Issues Paper, Appendix A)

ii. Infrastructure: water, internet, suitable road and rail networks

As noted in the ADIC submission to the Agricultural Competitiveness Issues Paper:

''…periods of drought or low water availability put pressure on production options, and milk production levels, and this has a flow-on impact on milk companies and regional economies. Regulation of water resources needs to be achievable, practical and cost-effective, while optimising social, economic and environmental outcomes. The Government needs to work with the dairy industry as part of adapting the wider community to reduced water availability.'

(Source: Australian Dairy Industry response to the Agricultural Competitiveness Issues Paper, Appendix A)

iii. Investment:

- tax policy (R&D, LAFHA, depreciation, primary production incentives);
- competition policy;
- research/science policy (support for CRCs, CSIRO, RDCs, universities)

iv. Market access:

- tariff/quota reduction through trade agreements;

As noted in the ADIC submission to the Agricultural Competitiveness Issues Paper:

'Internationally, with no multilateral agreement on trade reform in sight, Australia's ability to negotiate significant FTAs with commercially meaningful outcomes will be critical to maximising returns for the industry. The bilateral agreements negotiated by competitor countries will also have an important bearing on trade flows, access to, and profitability in markets of choice.

It has been well reported that the NZ-China FTA has given New Zealand, one of Australia's largest competitors in dairy products trade, preferential market access in China. The estimated trade and financial benefits for the New Zealand dairy industry have grown rapidly since implementation of the China - New Zealand FTA on 1st January 2008. The six year period (2008-2013) has witnessed a:

- *Four and a half fold increase in WMP imports to 562,604 tonnes*
- *Almost eight fold increase in SMP imports to 123,919 tonnes*

The financial benefits to New Zealand origin milk powders from lower tariffs versus those paid by competitors are estimated to have risen to between $40 and $50 million in 2014. This advantage grows annually as the NZ-China FTA tariff reduction schedule matures each year.

(Source: Australian Dairy Industry response to the Agricultural Competitiveness Issues Paper, Appendix A)

- support for export business development (e.g. Agricultural counsellors; Austrade)

As noted in the ADIC submission to the Agricultural Competitiveness Issues Paper:

'***Agricultural counsellors***

The Department of Agriculture, Agricultural Counsellor program needs to increase regional coverage in South East Asia and the Middle East. In addition to existing posts, the program should be expanded into the following three key emerging markets: Vietnam, the Philippines, and Saudi Arabia. These countries are high potential growth markets whose needs can't be adequately met through existing posts (for example, the Thailand post's coverage of key growth areas in South East Asia).

Agricultural Counsellor posts play a major role in Australia's efforts to: remove or lower market access barriers for agricultural products; facilitate trade; monitor emerging international issues; help resolve quarantine issues; and, provide briefings and assist with visiting delegations.

Where Department of Agriculture, Agricultural Counsellors are located in markets, they can more effectively engage directly with local officials/government representatives to address access issues as they arise, and work proactively to identify and prevent non-tariff barriers affecting dairy imports.

As well as representation in key markets, representation in key competitor countries is also beneficial. Given the role of the EU and the US as agricultural policy setters, on-the-ground representation for Australia means issues can be addressed before they develop. Moreover, in the case of the EU, the Commission is reluctant to engage directly with industry so government representatives are needed as facilitators. A case in point has been consultations on Geographical Indications (such as those on Danbo and Gouda Holland). Expansion of Agricultural Counsellor positions in emerging markets should not be at the cost of existing posts.

International trade support structures

The structures that protect Australian exporters' ability to defend against technical and regulatory barriers also rely on a capability to operate effectively in:

- *World Trade Organisation (WTO) dispute settlement processes*
- *International standard setting forums (Codex, OIE, WCO)*
- *Monitoring and responding to WTO Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) notifications*

FTA and bilateral review committees

The effectiveness of Agricultural Counsellors also relies on being able to draw quickly on expertise back home, in the Department of Agriculture, as well as agencies like Food Standards Australia New Zealand and Australian Pesticides and Veterinary Medicines Authority. These resources are also critical to responding to technical barriers and need to be maintained as a priority.

As an export-oriented industry, international regulatory frameworks are important to Australian dairy.

The dairy industry invests significant resources in monitoring and contributing to international standard setting, but much of this can only happen at a government-to-government level. It is a critical role for the Australian Government to continue to actively contribute to and take a lead in these international processes to support exports.

Government also needs to continue close collaboration with industry to ensure its efforts are focused on priority issues and achieve practical outcomes that can be implemented by industry.

Consistency of approach

Like other food industries in Australia, the dairy industry needs protection from exotic diseases. A strong, science-based biosecurity and quarantine system is non-negotiable. However, another element of maintaining our livelihood is access to overseas markets. To maintain this access, we need to ensure Australia does not leave itself open to criticism, complaint, challenge and ultimately trade sanctions because of an unnecessarily harsh quarantine regime.

Australia's leadership in international forums also means maintaining a commitment to both the spirit and the letter of WTO agreements in biosecurity and quarantine systems, and to international standards such as Codex Alimentarius.

The dairy industry has consistently argued for regulatory harmonisation at national and international levels, whenever possible. To facilitate exports, Australia regularly asks other countries to adopt Codex standards as a matter of course, and to adopt standards that allow for good agricultural or veterinary practice in Australia, where this is not already covered in Codex. In the interest of facilitating trade, the internationally accepted standards (Codex) should be adopted as a matter of principle wherever possible. Australia's credibility in negotiating access relies on a consistent and science-based approach.

(Source: Australian Dairy Industry response to the Agricultural Competitiveness Issues Paper, Appendix A)

v. Food security and food safety:

- support for Biosecurity Australia, DAg on technical trade barriers and related matters

As noted in the ADIC submission to the Agricultural Competitiveness Issues Paper:

Promoting the Australian food safety system

Government should more actively and consistently promote the Australian food safety system, seeking greater acceptance of our system as meeting importing country requirements, and reducing costly additional requirements (for example audits, port of entry testing).

The Department of Agriculture also needs to actively promote the Australian food safety system and seek acceptance by importing countries. The Codex framework offers opportunities to support these principles with importing country governments and seek to streamline overseas requirements. This would reduce the regulatory impost on food exports from Australia.

Equally as important, the Australian dairy industry has sought to have a streamlined approval to domestic and international food safety regulations. The Department of Agriculture, as the competent authority for approving dairy exports, has accepted the national dairy food safety system where national food safety standards are implemented by state food authorities and the Department recognises the state systems. Dairy businesses, while still having multiple commercial audits, are now subject to a single food safety audit for domestic and export requirements. This is a good model that needs to be actively promoted.

A robust biosecurity regime is fundamental to a dairy industry that is safe, productive and competitive in the international market. Protecting the dairy industry, agriculture, and the wider community from biosecurity incidents, and being prepared for a robust and efficient response to biosecurity issues requires ongoing commitment to investment in biosecurity.

For the dairy industry, preparedness for foot and mouth disease is a particular priority. Foot-and-mouth disease (FMD) has been described as the single greatest threat of any disease to Australia's livestock industries. A large outbreak of FMD has the potential to reduce Australian Gross Domestic Product by $10.3 to $16.7 billion, having significant repercussions on our economy. The Australian dairy industry seeks specific funding for FMD preparedness.

...Australia's enviable reputation for safe quality food relies on robust systems that manage potential risks.

(Source: Australian Dairy Industry response to the Agricultural Competitiveness Issues Paper, Appendix A)

Cost and competitiveness of dairy product manufacturing in Australia

The Commission is seeking information on the key costs of dairy product manufacturers in Australia, the relative shares of these costs and any changes in cost structures that have occurred in recent years.

What are the key costs facing dairy product manufacturing businesses in Australia (for example, raw milk costs, physical capital costs, labour costs, intermediate input costs (such as energy), regulatory compliance costs and so on)?

i. Energy costs associated with milk powder

ii. Unavailability of natural gas in rural regions increases the costs associated with alternative energy, such as butane, wood chips and electricity to produce steam.

i. Availability of labour in rural regions, especially in management/ specialist technical roles (engineering, food technology, science, and maintenance)

ii. Costs of capital and risks associated with milk supply and international market prices.

iii. Cost of transport from farm to factory and factory to market including ports

iv. Front of labelling requirements

v. Nutrition

vi. Country of origin

To what extent are these costs amenable to policy action?

i. Labelling requirement

As noted in the ADIC submission to the Agricultural Competitiveness Issues Paper:

Most Australians are failing to meet the recommended minimum consumption of dairy products in the 'core' food group each day. To empower consumers and minimise their confusion on healthier food choices, it is important that any regulatory approaches such as the Front-of-Pack Labelling (FOPL) scheme are aligned to the Australian Dietary Guidelines, conveying clear and consistent evidence-based ratings.

FOPL is also an example of a regulatory approach where the costs to industry and the government are high, and yet the public benefits are not so clear. As noted above, the dairy industry endorses a commitment by Government to best practice regulation processes and considers these processes should be applied to the proposed FOPL scheme.

(Source: Australian Dairy Industry response to the Agricultural Competitiveness Issues Paper, Appendix A)

ii. Nutrition guidelines

iii. Container deposit scheme

iv. Infrastructure upgrades and maintenance for the supply of electricity, gas and high speed data communication.

v. Road and rail infrastructure to improve efficiency for the transport of milk from farms (e.g use of B double tankers to pick farm milk) and efficient transport of finish product from factory to market. Most factories are in rural regions and require long distance transport to market.

vi. Due to the geographical spread of dairy farms in specific regions the building of efficient high throughput factories will require milk to be transport longer distance to more centralised factories. (refer study conducted by Cornell University)

What is the relative significance and rate of change of these costs?

Further time and research is required to provide information on this point.

What are the main risks facing dairy product manufacturers (for example, the volume and variability of raw milk supply, cost variability and so on) and how are these managed? At what cost?

i. Reliability of milk supply volume will partially mitigate risks of investment in technology and new processing capacity.

ii. International dairy commodity prices cannot be effectively hedged; long-term supply arrangements are used in some cases by major manufacturers; forward selling of commodities volumes is often vulnerable to price risk as agreements incorporate price rise and fall clauses reflecting changes in commodity prices.

iii. Foreign exchange rates: Australian export dairy trade is conducted in USD and so manufacturers are exposed to foreign exchange rate risk. Companies determine their own hedging policies to manage such risks, for example, through the use of derivatives.

How do dairy product manufacturing costs differ across states (or regions) and product categories?

i. Domestic fresh dairy- reduction in margins due to supermarket pricing, especially in QLD and NSW

ii. Export products – cheese and milk powder require high milk throughput and reliable supply to maintain production levels

iii. High dollar value investments in milk powder dryers require full utilisation of plant and equipment to cover fixed costs incurred.

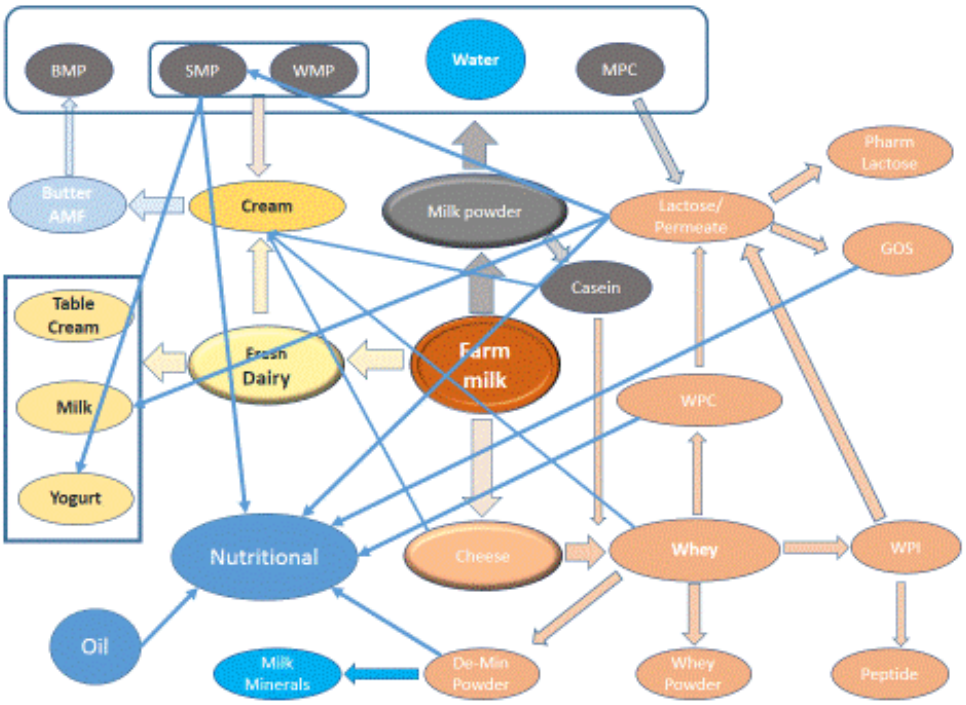
How does production scale or scope (that is, producing a range of products versus a single output) affect unit costs of output?

Table 12: Raw milk intake in Australian dairy industry

Caterory - Size	Number of Companies	Total Litres	%
More 1 BL	3	5,707,561,767	61%
More 100ML	11	3,321,998,901	36%
More than 10ML	6	180,833,950	1.9%
More than 1ML	24	78,068,346	0.8%
more than 100,000 L	14	4,335,357	0.05%
less than 100,000L	8	361,385	0.004%
	66	**9,293,159,706**	**100.0%**

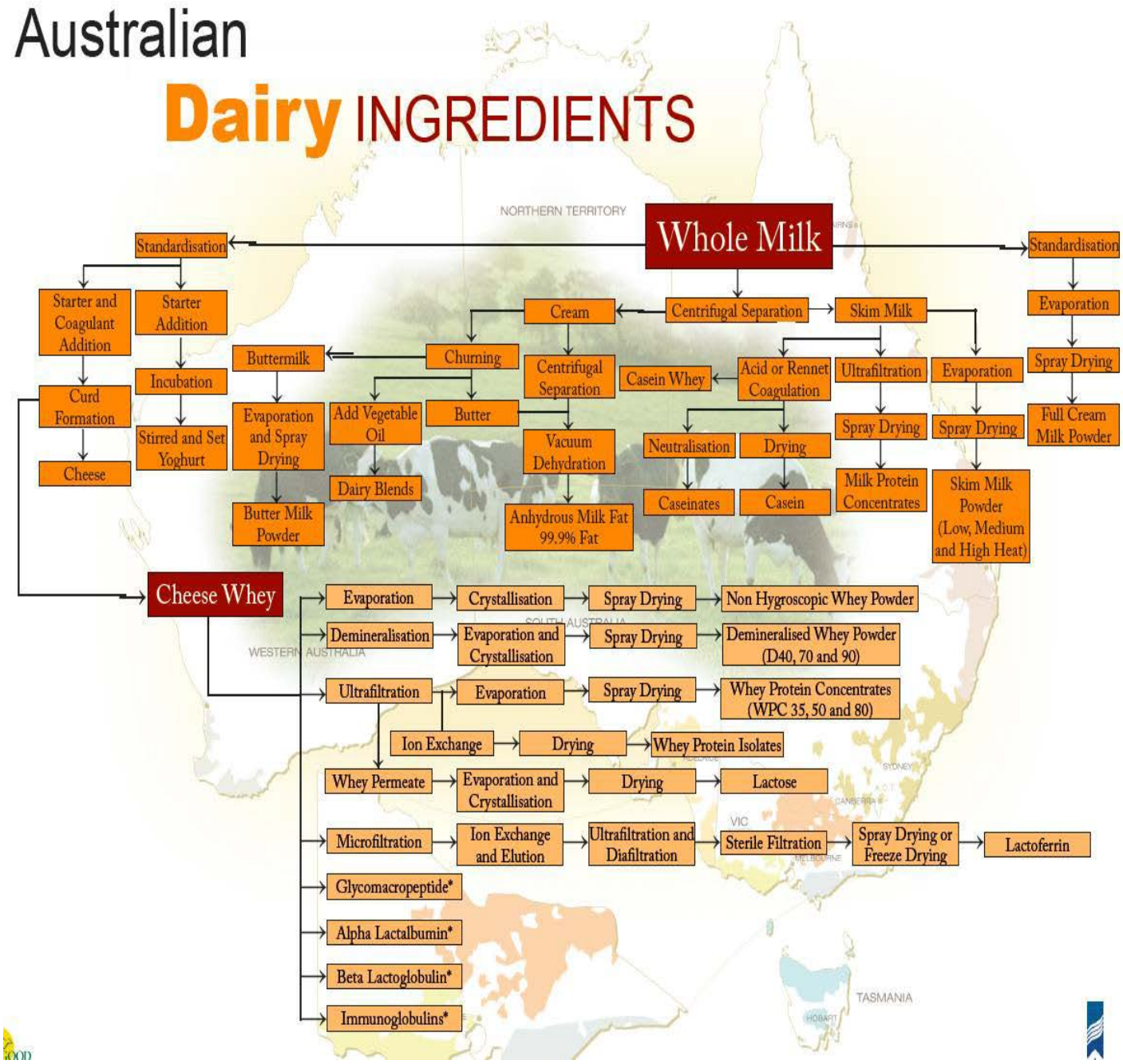
(Source: Dairy Australia)

i. High risks are associated with manufacturing a single product; dairy processing does not generally produce a single product each products have by products; even liquid milk and yoghurt factories invariably produce some by-products, such as cream, as the below illustrates:



(Note: oil in the above refers to vegetable oil; source: Dairy Australia)

ii. Consequently, large dairy factories are not single product factories, and most likely have minimum raw milk volume requirements of 150ML per year. The nature and composition of dairy products mean that there are always by-products, e.g. Cheese and whey, SMP and butter, butter and BMP etc, as the below illustrates in more detail:



What other factors (for example, the value of the Australian dollar, access to investment capital, labour supply and capability) affect dairy product manufacturing costs?

Refer to earlier references

To what extent have recent developments in technology, productivity improvements and changes in consumer preferences affected dairy product manufacturing costs in Australia?

- Recent developments in dryer technology and energy efficient production have been vital to maintain productivity improvements and remaining internationally competitive.
- Consumer changes- high value whey products (sports and functional products).

What are the long-term opportunities for innovation in Australian dairy product manufacturing?

i. **Increase in research and development funding especially in accelerating technology transfer from research done outside Australia**.

Areas that require attention (not in order of importance)

Computer aided process control, Artificial Intelligence and high speed data communication

Dairy processing is highly computerised process and the transfer of data throughout the factory and from factory to corporate offices is vitally important in:

- improving process control
- utilising real time process monitoring and control
- diagnosing and rectifying problems remotely
- managing the flow of raw materials from source to the end user
- rapid detection of quality issues

Improve management of factories from centralised management centres

Robotics

- The use of robotics in dairy processing factories is increasing. Currently robots are used in packaging systems, palletising and the movement of materials including driverless forklifts. This work needs to continue to make sure that the factory stays at the forefront of new technologies as they develop to maintain and improve process efficiency.

Energy and water efficient processors and lighting

- This is a key and growing issue as energy costs increase and water becomes a scarce resource in some regions.

Technologies to support the transport of raw milk over longer distances

- To improve processing efficiency factories have to become larger and process higher volumes of milk this requires milk to be transported longer distances from farm to factory. This requires new knowledge and technology to ensure product quality and food safety.

Extension of shelf life for fresh and raw milk

- Markets in SE Asia are now increasing the demand for fresh milk and new technologies are required to transport fresh farm milk to these regions.
- Ability to supply domestic markets from larger more centralised factories.
- Supply fresh milk to rural regions that don't have dairy farming.

Development of renewable energy supply

Better integration of waste management in rural towns with centralised waste water treatment and treatment of high saline waste streams

- All dairy factories face an increasing requirement to better manage their waste streams. In some rural towns there can be up 3 waste water treatment plants, domestic, dairy, and meat processing. A better integration and use of new technology to recover energy and reuse the water would be a much better economic and sustainable outcome for the community.
- The production of high value dairy products sometimes producers an high saline waste stream, these products streams could grow in capacity if these waste streams are better managed

Utilisation of whey from small and medium size cheese factories

- The growth in small to medium sized cheese factories have resulted in waste disposal issue. The whey from these factories becomes a waste issue. Due to volume of whey is uneconomic to process this valuable source of protein and carbohydrate.

Integrating dairy research in universities with science and engineering courses.

- In the past dairy research was a separate department in some universities. Currently food science, dairy and nutrition are all amalgamated into one department. It would be beneficial to could dairy research through cross functional

Support for commercialisation and technology of research in Australia and around the world

- The relative small size off the dairy industry in Australia means that it cannot sustain a completely separate research base in Australia. The most cost efficient option is to collaborate with large research institutes around the world. Especially in the Netherlands, Ireland, France and USA.

What changes in cost structures (if any) have occurred in recent years, and what changes are anticipated in the medium term? How has deregulation affected dairy product manufacturing costs?

i. Increases in electricity prices over and above inflation

ii. Predicted increases in gas prices: some observers suggest prices will double in the short-term

iii. Increases in diesel prices

iv. Exchange rate volatility: imported inputs including European plant and equipment have been cheaper in recent years, supporting capital investment; yet, adverse movements in exchange rates will make inputs more costly.

Dairy product manufacturing in a global context

International cost structure comparisons can provide insights into the relative cost of doing business for Australian dairy product manufacturers.

What are the key costs facing dairy product manufacturers in competitor countries? What are the relative shares of these costs?

i. Farmgate milk price
ii. Energy
iii. Investment
iv. Skilled labour - costs may be lower in South America however the availability of skilled staff is similar around the world especially engineering and science
v. Research, development and innovation
vi. Transport both land and sea
vii. Labour.

What are the main areas of cost advantage or disadvantage for Australian dairy product manufacturers relative to international competitors? What are the key determinants of these cost differences, and how can public policy in Australia affect them?

i. Scale of production
ii. NZ v Australia – Two factories (each) produce more milk powder than Australia
iii. Ireland v Australia – similar scale with Ireland investing heavily in milk powder to take advantage of the removal of EU quotas 2015. This also applies to The Netherlands.
iv. New emerging markets for exports are Brazil, Chile and Uruguay

Are there non-cost factors that advantage (or disadvantage) Australian dairy product manufacturers relative to international competitors?

i. Manufacturers have long-established relationships with major customers and reach into all corners of the world.
ii. Australia has enjoyed good, long-term trading relationships with key Asian markets such as Japan and ASEAN members.
iii. Australian origin product enjoys an image of 'safe, clean and green.'
iv. Geographical proximity to growth markets in Asia is an advantage to some extent, although a short term one as international logistics and manufacturing networks develop.
v. Lack of supply growth is a disadvantage as customers observe declining export volumes and are concerned about the industry's long-term ability to supply.

vi. Industry structure represents both disadvantage and advantage: namely, the majority of the milk pool is now processed by large multinational companies (Fonterra, Lion [Kirin], Parmalat [Lactalis], WCB [Saputo]); hence, while this pattern of ownership exists, there is no incentive for collaboration or co-operation to build a single dominant national manufacturer (like Denmark's Arla, New Zealand's Fonterra or The Netherlands' Royal Friesland Campina). However, the presence of these companies brings stability, processing and R&D capabilities which benefit the industry.

vii. However, as noted in the ADIC submission to the Agricultural Competitiveness Issues Paper:

Unlike New Zealand, where the one company (in this case Fonterra) dominates the competitive landscape, Australia's dairy industry has well over 100 registered dairy processors, who each compete for milk as well as domestic and international supply contracts. No single milk manufacturer has a dominant position across the complete national Australian dairy industry. This can influence the negotiating position of Australian processors with domestic retailers, particularly in areas that are limited to domestic fresh milk supplies.

(Source: Australian Dairy Industry response to the Agricultural Competitiveness Issues Paper, Appendix A)

Policy influences

The policy, regulatory and institutional environment in which the Australian dairy product manufacturing industry operates will influence the productivity and competitiveness of manufacturers and their suppliers.

Do Australia's policy, regulatory or institutional arrangements impose unnecessary costs on Australian dairy product manufacturers? If so, how and to what extent?

- Tariff barriers and FTAs that do not go far enough or cement in high tariffs for a longer period of time.

  As noted in the ADIC submission to the Agricultural Competitiveness Issues Paper:

  'Australia sells almost half its annual milk production directly into export markets as manufactured food products and ingredients. At the same time, Australia applies minimal barriers to commercial dairy imports. The dairy industry therefore recognises the importance of remaining competitive in a global market. Regulatory burdens and high costs in areas such as labour, energy and infrastructure all affect the competitiveness of the industry.

  There are opportunities to streamline current regulations, and reduce their burden through: harmonisation across commodities, nationally and internationally; reducing reporting requirements; reducing overlapping or duplicative regulations; and improving poor or inconsistent enforcement resulting in patchy compliance and a playing field that is not level.

  The overview of 'Government interactions with the food industry in food safety regulation' on page 162 of the green paper is useful and shows the complexity and breadth of regulation in this area. However, the pressure to increase the food industry's regulatory burden is mainly coming from interests outside traditional areas of food regulation, such as environment and public health.

  For example: A trend to regulated programs requiring actions to 'save' energy, water or waste instead of using market place mechanisms (for example, Container Deposit Schemes being considered by COAG's Standing Committee on Environment and Water).

  An apparent disconnect between the drive to achieve public health objectives through food regulation, and the efforts to reduce the regulatory burden and pursue evidence-based policy (for example, health claims; front of pack labelling).

  The potential for regulatory burden also comes from the combined impact of many small regulatory changes that, when considered by themselves, are not overly burdensome, but in the context of the range of existing regulations and other requirements add unnecessary complexity and cost. All proposed regulations should look at the context and existing regulations first.

  (Source: Australian Dairy Industry response to the Agricultural Competitiveness Issues Paper, Appendix A)

APPENDIX A

Australian Dairy Industry

Represented by

Australian Dairy Industry Council Inc. and

Dairy Australia

Response to

The Agricultural Competitiveness Issues Paper

April 2014

About the Australian Dairy Industry Council

The Australian Dairy Industry Council (ADIC) is the dairy industry's peak policy body. It co-ordinates industry's policy and represents all sectors of the industry on national and international issues through its two constituent bodies, **Australian Dairy Farmers Ltd** (ADF) and the **Australian Dairy Products Federation** (ADPF). The ADIC aims to foster, promote and protect the interests of the Australian dairy industry by driving a whole of industry approach to dairy policy and the development of the dairy industry.

About Dairy Australia

Dairy Australia is the national services body for dairy farmers and the industry. Its role is to help farmers adapt to a changing operating environment, and achieve a profitable, sustainable dairy industry. As the industry's research and development corporation (RDC), it is the 'investment arm' of the industry, investing in projects that can't be done efficiently by individual farmers or companies.

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Contents

Key points

Australian dairy is a $13 billion farm, manufacturing and export industry, with an extremely positive future. Dairy's value to the Australian economy, jobs on farms, in manufacturing and service sectors, the towns and communities it supports, as well as the ongoing health and wellbeing of Australian families, are a compelling basis for Government attention and support.

Australia's 6,400 dairy farmers produce around 9.2 billion litres of milk a year, with potential to grow substantially over the next decade to meet growing international demand, particularly in South East Asia, China and the Middle East. The industry directly employs 43,000 Australians on farms and in dairy processing, while more than 100,000 are employed in dairy service sectors.

This submission outlines the Australian dairy industry's position on the issues identified in the Agricultural Competitiveness Issues Paper. It highlights how dairy farmers and the broader dairy industry are constantly investing, adapting and innovating for a profitable, sustainable and productive future. It also highlights that Australian Government actions will be pivotal in securing not only the dairy industry's future, but Australia's hard-earned reputation for as supplier of quality, safe dairy products.

Australian dairy believes the Government needs to focus on the following four priority areas in the short to medium term, if the dairy industry is to fulfil its potential.

Trade

Improved market access is crucial, with established trading partners, including China; and new and emerging markets in South East Asia and the Middle East. This means not just removing restrictive tariffs and quotas, but also focusing on the growing problem of technical market access barriers.

To capitalise on the clear trade opportunity for Australian dairy, the following actions are required:

- Government to work with the dairy industry to conclude Free Trade Agreements, in particular the China FTA, that provide genuine liberalisation of market access for all Australian dairy products and that reduce Australian dairy's competitive disadvantage with its major global competitors.
- Government must increase resources for the Department of Agriculture's Agricultural Counsellor postings to help remove barriers to trade (including non-tariff barriers) in key international markets such as Vietnam, the Philippines and Saudi Arabia.

Research, Development & Extension (RD&E)

Farm profitability and productivity continue to be constrained by high input prices, water reform, energy costs, labour shortages, low retail milk prices, rising community expectations on environmental and other farm management practices, and increasing pressure on the domestic value chain.

Efficient and effective extension is more important than ever if dairy farmers are to adapt to these challenges, improve their profits, and gain the confidence to invest in growing their business. Effective extension is a function of Government, industry and service providers collaborating to make the best possible use of the available funding and resources.

To meet this need, the following actions are required:

- Government and industry to develop a new joint approach to extension that grasps the emerging opportunities to drive structural change, delivery change and to transform the way that the dairy industry engages with dairy farmers.
- Government to invest in extension programs through Research and Development Corporations (RDCs), to deliver extension services according to who is best placed to achieve outcomes on a case by case basis. This includes more funding for agricultural education and training, and the increased use of industry and vocational education and training sector resources to build capability in the private sector. Opportunities to grow capability through professional development and accreditation of advisers must be further explored and better resourced.

Overseas labour access

Dairy's future depends on attracting, training and retaining the next generation of farmers, food scientists, processing workers, and industry service providers. The dairy industry has been actively developing and implementing strategies to attract, retain and develop a skilled workforce, but in the short term, immigrant labour will help fill dairy's acute skills shortage.

To meet this need, the following actions are required:

- Government must work with industry to streamline and fast-track the application and approvals process for 457 visas for skilled dairy workers.
- Support for the dairy industry's application for a Labour Agreement to improve access to skilled overseas workers.
- Extend the duration of 417 and 462 visas from six to 12 months.
- Government to include dairy on the list of eligible industries for the Seasonal Worker Scheme and on Schedule 1 of the Skilled Occupation List, and revise Australian and New Zealand Standard Classification of Occupations (ANZSCO) skills descriptions for dairy farm managers and workers to align with the Pastoral Award and relevant courses under the Australian Qualifications Framework.

On-farm capital investment

It is well recognised that capital investment in the dairy sector can increase efficiency and productive capacity. Such investment contributes to incomes, infrastructure and employment, often in regional areas. It can also help Australia gain access to new export markets.

At the same time, many Australian dairy farmers have been struggling under the burden of increased debt levels and now find themselves unable to effectively capitalise on improved market conditions. Investment on-farm is desperately needed and Australian dairy farmers are being increasingly exposed to alternative models of attracting capital into their businesses without merely increasing bank debt.

The Australian Government should support this investment agenda through the following actions:

- Be proactive and positive in driving the investment discussion and looking for ways to drive capital through a broad range of models, derived from both on and off-shore sources.
- Provide regulatory certainty in order to underpin confidence for investment in dairy farm assets.

A full list of ADIC policy priorities is attached at attachment one (page 34).

The Importance of the Australian Dairy Industry to the Australian Economy

The Australian Dairy Industry Council (ADIC) and Dairy Australia (DA) contends that our industry is an industry with an extremely positive future and one that is worth investing in.

The ADIC is the dairy industry's peak policy body. It co-ordinates industry policy and represents all sectors of the industry on national and international issues. The ADIC represents farmers (through Australian Dairy Farmers), dairy product manufacturers and milk processors (thorough Australian Dairy Products Federation) and has the task of bringing these bodies together to form a united view on issues affecting the dairy industry.

DA is the industry-owned national service organisation. It is fully accountable to its members - those levy payers who elect to become members - and the peak industry bodies. Dairy Australia invests the Dairy Service Levy, matching government funds and other money in activities across the dairy supply chain—from paddock to plate—to get the best outcomes for farmers, the dairy industry and the broader community.

Australia's 6,400 dairy farmers produce around 9.2 billion litres of milk a year, with potential to grow substantially over the next decade to meet growing international demand, particularly in South East Asia, China and the Middle East. Realising this growth potential and expanding the industry's economic, social and environment benefits depends on a positive national and international operating environment.

The Australian dairy industry's people and world leading practices create jobs for generations and careers for life – making the dairy industry one of the most important rural industries in Australia, directly employing 43,000 people.

As opposed to many agricultural industries, the Australian dairy industry has a strong and vibrant manufacturing sector, particularly in regional communities, that value adds raw milk into a wide range of healthy and nutritious dairy products for consumption both within Australia as well as to over 100 export destinations across the globe.

Dairy ranks fourth in agricultural exports—valued at $2.76 billion—with a 5% increase in export volumes last year alone. Value-added processing activities delivered an agricultural industry with a wholesale value of dairy products in excess of $13 billion a year.

Australian dairy farmers operate in a deregulated and open market and have done so for over a decade. At an average of just over US$40 per 100kg of milk solids last year, Australian dairy farmers generally received a price comparable to many of the major producing countries. The fact that around half of Australia's milk production has been exported over the last decade reflects this high level of competitiveness.

While many farmers recognise the opportunities offered in growing international dairy markets, short-term variations in returns and profitability have strained finances and are challenging confidence, underlining the 'two-speed' dairy industry development in recent times. Fluctuations in international prices and other variables such as the price of feed are key factors that influence farm viability.

As in the farm sector, the milk processing sector is undergoing continuing rationalisation. This has resulted in improved factory capacity, as larger operations have improved their efficiency and economies of scale. While contributing a relatively small share of total global milk production (<2%), the Australian dairy industry comprises a more significant 7 % of global dairy trade and is the fourth largest global trader of dairy products.

The sustainability criteria of the Australian dairy industry are well established and places the industry in good stead for the foreseeable future. In late 2012, the Australian dairy industry launched a Sustainability Framework with the vision to enhance livelihoods, improve wellbeing and reduce our environmental impact so that the Australian dairy industry is recognised worldwide as a responsible, responsive and prosperous producer of healthy food. In 2013, we set targets and measures against our objectives for a sustainable industry. For example, it is a target to "Increase the future

competitiveness and profitability of the Australian dairy industry" and a number of measures have been set around this.

The Australian Dairy Industry Sustainability Framework

The Australian dairy industry has developed a whole-of-industry Sustainability Framework which aims to:

- Enhance livelihoods across the industry
- Improve community and animal wellbeing
- Reduce our environmental impact

The Sustainability Framework leads the industry's push to be more sustainable and will help drive practice change where necessary for farmers and processors. It is a framework for keeping the Australia dairy industry in business for the long term.

The Framework was developed in consultation with industry representatives and other stakeholders including customers, retailers, government, regulators, NRM groups and leading interest groups.

In 2012, the Australian dairy industry, under the leadership of the Australian Dairy Industry Council (ADIC) and supported by Dairy Australia, has endorsed the Framework, targets and performance measures, while recognising that there is still further work to be done in some areas.

Over the past 12 months we have reviewed all current activity benchmarked against the Framework, and identified where performance improvement is still needed. We have committed to achieving key targets, and we're working to establish performance measures underpinned by baseline data.

We've brought this work together in the Australian Dairy Industry Sustainability Framework Progress Report 2013. The Progress Report demonstrates our commitment to the Framework, our principles of transparency and accountability, and outlines where we are and where we need to continue to do more.

Implementation of the framework will continue in 2014.

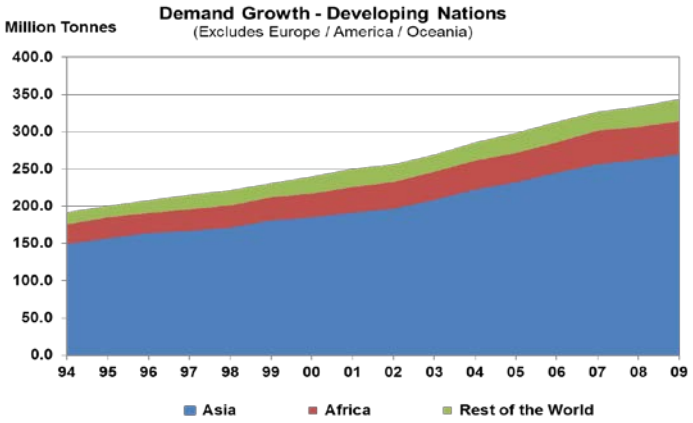
Dairy farmers and processors have a strong track record, working to be economically viable while improving the health of the environment, workforce and the broader community. They understand the core role that industry prosperity plays in sustainability.

Requirements to meet environmental and social responsibility do not translate into direct dollar returns. Most businesses wanting to demonstrate their credentials place the burden to do this on their suppliers – and it ripples along the chain.

Some brief facts about the contribution made by the Australian dairy industry:

1. The Australian dairy industry is a $13 billion farm, manufacturing and export industry.
2. The Australian dairy industry directly employs 43,000 Australians on farms and in factories, while more than 100,000 Australians are indirectly employed in related service industries.
3. With a farmgate value alone of $4 billion, the Australian dairy industry enriches regional Australian communities, where 1 in 8 Australians live.
4. Dairy products are one of the largest container exporters through the Port of Melbourne.
5. Australia is the fourth largest dairy exporter in the world, accounting for 7% of global trade.
6. Major export markets include Japan, China, Singapore, Indonesia, Malaysia and the Middle East.
7. Australia would save $2 billion a year in healthcare costs if every Australian consumed the minimum recommended daily dairy intake.
8. Dairy farmers are environmental caretakers. The industry has a strong record of continuous improvement in water and energy efficiency, and protecting soils and biodiversity.

9. The Australian dairy industry is well positioned to capitalise on growing global dairy demand, particularly from the emerging markets within Asia and the Middle East (as highlighted in the chart).

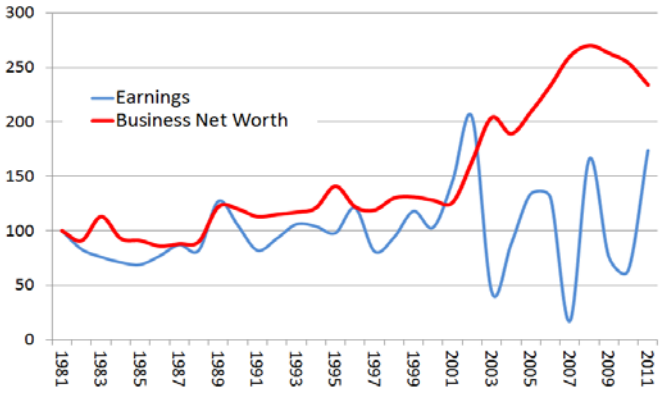


Industry volatility is hurting confidence

Increasing levels of market and margin volatility of the industry (see Chart below) in the last five to six years has served to undermine confidence in the outlook for many farmers who are seeking reliable returns on which to build a longer term future. In turn, Australia's competitive position on the global market has suffered and we have been unable to effectively capitalise on the growing demand in the region over the past decade. Australian dairy farmers operate in a deregulated and open market and have done so for over a decade with the only government involvement being administration of food standards and safety assurance systems. Consequently, international markets and prices are the major factors determining the price received by farmers for their milk.

At an average of just over US$40 per 100kg of milk solids in 2012, Australian dairy farmers generally received a price comparable to many of the major producing countries (see Figure 2).

While farmers experienced approximately a 10% drop in farmgate pricing in 2012/13, the projections for 2013/14 suggest a closing price of $6.80-$7.00, which may be tempered later in the year due to export competitive pressures.



Annual change in dairy performance, Australia (1991 = 100)[2]

Australia's competitive position has changed over recent years. Farm cost structures have increased in response to the need to adapt to drier conditions, with rain fed pastures contributing a lower proportion of the total feed available. Despite the increased rainfall in the last couple of seasons, farm cost structures have not returned to those of a decade ago. At the processor level, lack of volume growth and the resulting lack of scale efficiencies has resulted in a lack of infrastructure expenditure leading to little or no productivity gains. Consequently, Australia's share of international trade has trended down as local milk production has contracted over the past decade. Reversing this trend is now a major focus of the dairy industry's strategy as highlighted at the recent Australian Dairy Farmers' Summit.

Government has a role to play in a competitive dairy industry through measures such as negotiating commercially meaningful Free Trade Agreements, facilitating research and development and minimising the regulatory burden on industry.

Response to questions in the white paper

1. Ensuring food security in Australia and globally

What opportunities exist to expand agricultural production in Australia and how can we take advantage of them?

How can farm businesses, food manufacturers and the retail sector be more responsive to domestic and global food demand and better integrate into domestic and global supply chains?

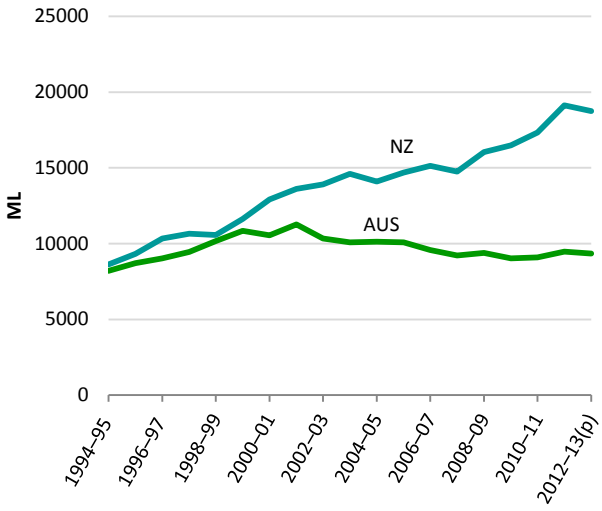
Do farmers have access to timely, relevant and accurate information to fully inform production decisions to meet domestic and global food demands?

What opportunities exist for exporting Australian agricultural technology, marketing skills and expertise to improve global food security outcomes?

Milk production growth

Strong growth characterised the dairy industry through the 1990s, but that growth has stalled in the last decade. In the meantime, our major export competitor New Zealand, has expanded significantly.

The industry has experienced a slow recovery from drought with rains returning in recent years replenishing storages and restoring irrigation levels. Milk production growth in 2011/12 of 4% was the strongest in a decade, but 2012/13 will see approximately a 2% reduction due to dry conditions in SE Australia.



The dairy industry has made strong productivity gains in the last two or three decades but further improved gains on individual farms will rely on new technologies or techniques developed through R&D. As with New Zealand conversion farms may be an option.

The outlook for 2013/14 is for relatively stable production, based on surveyed herd growth intentions, cow condition and assuming normal seasonal conditions offset limited fodder reserves. Southern exporting regions should lead growth given positive global prices. Production in domestic supply regions is likely to be flat in response to market signals, such as $1 per litre milk, and uncertainty around supply contracts.

Based on production intentions for three-year growth recorded in the 2013 National Dairy Farmer Survey and assuming reasonable seasonal conditions and prices, milk production could range between 9.8 and 10.2 billion litres by 2015/16. Further afield, ultimately profitability will be the key driver of growth for the Australian dairy industry.

Food security - biosecurity

The dairy industry believes that future food supply is tied to the ongoing viability of food industries. Food businesses along the supply chain must be both profitable and sustainable in the long term to ensure Australians continue to have access to a nutritious, secure food supply.

Dairy's strong exposure to the international market supports its competitiveness and sustainability, which are essential for maintaining domestic and global food security. The Australian dairy industry is highly flexible, adaptable and industrious which can create more value and investment opportunities for our customers. Our proximity to key Asian markets, our variety of processing companies, factory

sizes, and our broad product range is an advantage compared to some key competitors who are more focussed on large commodity business.

The Australian dairy industry is still a relatively low cost producer of dairy, however, it is the diversity of companies who are involved in producing and exporting dairy products that is a key differentiator. World scale companies such as Murray Goulburn and Fonterra Australia export a vast array of products and specifications themselves. In addition the mid-size and smaller companies have the flexibility to adapt products specifications, logistics and support that add to this diversity. Increasingly this capability is extending to the development of branded retail and foodservice products.

There is an opportunity for the Australian dairy industry to leverage the diversity, flexibility and proximity to our key markets through the story it tells about Australian dairy.

The Australian dairy industry enjoys the favourable animal and plant health status and production environment in Australia which contributes to the profitable production and leads to benefits in trade and market access for dairy products and more broadly to the Australian economy.

Australia's biosecurity system recognises and provides protection from biosecurity threats to industry, the Australian economy, the environment and to human health. The dairy industry supports government's high level reform themes that underpin the approach. That is that our system is:

- Implementing a risk-based approach to biosecurity management;
- Managing biosecurity risk across the continuum – offshore, at the border and onshore;
- Strengthening partnerships with stakeholders;
- Being intelligence-led and evidence-based;
- Supported by modern legislation, technology, funding and business systems.

The dairy industry recognises the value of the national government providing leadership in the control and management of serious threats and the need to ensure cooperation between jurisdictions for the most efficient and effective outcomes. Industry wants national consistency and certainty and does not want duplication. As a major exporting nation of agricultural produce it is important that Australia's import risk management is cognisant of expectations for export market access.

Information needs of dairy farmers

Among the challenges for the dairy industry is the need to ensure industry decision making and policies are developed in an informed manner with the most accurate available information. The goal of dairy activities in this area is ultimately aimed towards enhancing industry decision making abilities by providing the right information, at the right time, for a more profitable Australian dairy industry.

A variety of data is used extensively in analysis of specific issues of importance facing industry stakeholders in the dairy industry at national, state and regional levels, including:

- data to be used by industry in its regular research planning and performance reporting requirements;
- data to enable accurate monitoring of trends in the productivity and profitability of dairy farms, including the provision of results for selected regions; and
- data to enable the development of information and analysis that supports improved business planning and decision making and improved policy development.

In relation to on-farm business decision making, the dairy industry is working to develop a performance benchmarking tool called DairyBase. The objective of DairyBase is to provide dairy farmers, service providers and industry with access to a national database of accurate physical and financial information for more effective farm comparisons and industry analysis that can be used to:

- Enable dairy farmers to compare their business - both against others and against themselves over time.
- Contrast business performance of dairy farmers in different regions and districts within regions, as well as differing farm systems and farm sizes.
- Assist with the standardisation of key performance indicators so that terminology is clearly understood by a majority of dairy farmers and rural professionals.

- Measure business performance of dairy farmers and the industry, and monitor this over time or during periods affected by adverse operational conditions.
- Provide industry organisations (Dairy Australia, ADIC, ADF, ADPF and State farmer organisations) with data to enhance presentations and submissions to government agencies.
- Provide government agencies (e.g. DEPI and University groups) with greater opportunity to enhance training in economic based systems research.
- Provide government researchers and policy makers with access to data for use in determining research priorities and in policy formation.

In addition, there is a comprehensive suite of additional information and tools made available to dairy farmers via DA and other sources that inform on-farm decision making. These include tools to inform heifer rearing and feed conversion efficiency through to market information.

Export of dairy research, information, technology and marketing

The Australian dairy industry collaborates effectively internationally on pre-farm gate research and development for the benefits of the Australian industry and its global collaborative partners. Specifically, Dairy Australia has Collaborative Agreements in place with DairyNZ (New Zealand), Teagasc and Animal Health Ireland (Ireland) and DairyCO (United Kingdom). These partnership agreements facilitate the effective exchange of technology, capability and skills for dairy research and development, ensuring that Australian research levy funds are leveraged to their full potential. The current rural Research and Development Corporation (RDC) model provides an effective platform for this level of international collaboration and exchange.

Collaboration is also taking place on an international level relating to dairy marketing activities. Our marketing and promotional activities are shared widely across international dairy networks where global issues and ideas are explored. The Global Dairy Platform and International Dairy Federation both have annual marketing forums in which Australia takes an active role. Universal issues such as sustainability and health and nutrition are tackled both from a research, practice and promotional aspects.

These efforts have evolved in the Australian market through the recently developed Legendairy promotional platform. This campaign recognises that the Australian dairy industry has a magnificent story to tell which will restore confidence and relevance in the minds of many. The challenge for the Australian dairy industry is to rally and enable our strongest voices, whether they are farmers, consumers or the influential shapers of our society to tell this story.

Legendairy is designed to inspire confidence in dairy people, build trust with consumers and win respect from those who influence the industry's operating environment. The Legendairy platform has been developed to traverse multiple audiences both domestically and internationally. It is built on a solid messaging framework underpinning a sustainable industry – Improving Wellbeing, Enhancing Livelihoods and Reducing Impact.

2. Farmer decisions for improving farm gate returns

What are the drivers and constraints to farmers adopting alternative business structures, innovations or practices that will assist them in improving farm-gate returns?

What tools, skills and advice do farmers need to effectively adapt and respond to the risks they face?

What alternative actions or measures by governments, farmers or others would result in improved financial performance at the farm gate?

What approaches could be used to encourage improved drought preparedness?

During drought, what measures are most effective in supporting long term resilience?

How can new farmers be attracted to agriculture and how can they succeed?

Adaptation − Improved drought preparedness

Drought has a direct impact on farm gate returns and competitiveness. The long drought prior to 2008 resulted in a significant reduction in Australia's milk production and we are still recovering

production to the pre-drought levels. The impact of the drought is still fresh in the minds of many of our international customers.

ADIC supports a focus on drought preparedness as the primary means of supporting farmers to minimise the impact of drought on returns. The dairy industry has prepared information and provided extension to support farmer decisions in areas such as water management and feed management. Farmers need to be able to make rational decisions based on sound advice. This can be difficult in the midst of a drought. As well as providing information and extension, supporting farmers to access professional advisers, such as financial or business advice (focused on decision-making for drought), will assist farmers to be well placed to remain viable for future droughts.

There are policy opportunities to support farmers in drought preparedness. We understand that the Intergovernmental Agreement (IGA) on National Drought Program Reform still has status but its implementation from 1 July 2014 is unclear as the implementation plans due in December 2013 do not appear to be available. The responsibility for oversight of the IGA is currently unclear with the removal of SCOPI. The IGA provides a useful base for a drought preparedness program. Further consideration is required as the implementation plans are developed to ensure that the program covers all opportunities. For example, we consider that there is considerable opportunity for improvements in tax, depreciation, and deductions for water or food storage infrastructure, but it is not clear that this would be within the scope of the IGA. In addition, there is scope for improvements to the framework for Farm Management Deposits.

While drought preparedness should always be the primary part of a drought program, in-event support will also need to be provided as part of a comprehensive program. The drought support package announced in February 2014 demonstrates an important commitment to drought relief. The successful roll out of the package will now be the test. There can be pitfalls in financial support packages and getting these to the right farmers.

Communication and working directly with farmers in need is the only way to really assist with farmer decisions. Farmers in need will not always come forward and ask for help, especially in group situations or public centres. Key principles should be applied to in-event support including simple quick application processes, assistance with application processes, clear criteria and guidelines around eligibility, consistency across states, and a focus on supporting those farm businesses most affected by drought (i.e. not rejecting affected farmers because of other external factors beyond the control of the farm business).

Previous natural disaster response programs provide useful learnings and examples to draw on for the current package or any future packages. We strongly endorse the Commonwealth government working with the state governments collectively to achieve consistent approaches and accessibility to the loans. Social support measures must also be an integral part of in-event support. As noted above, support for professional advisors could also be a valuable investment to support long term resilience as well as immediate issues.

Attracting new dairy farmers

Rural and regional communities need to be attractive places to live as well as work. Infrastructure must be of a high standard, providing access to good road and rail transport links with cities and/or larger regional centres, high-speed internet access, reliable mobile phone coverage, and good quality health and education services for families. This basic infrastructure makes regional, rural and remote areas attractive places to invest for business, which then provides employment opportunities and in turn more money for local shires and councils to invest in community infrastructure such as parks, libraries and sports facilities.

In addition to the details covered within section 5, overarching strategies to attract new farmers/workers to agriculture include:

- *Farm viability* is critical to attracting young people. Dairy farms will only be attractive places for young people if they are able to (i) achieve an acceptable standard of living (ii) invest to counter the potential for declining terms of trade, and (iii) invest to match broader community increases in earning (keep up with opportunities on offer in society).
- *Working conditions* on dairy farms must match those of other jobs on offer, or young people who start in dairy will not stay. There is clear evidence that it is not attraction, but retention of people that is the more persistent challenge. Flexibility (in work hours and timing), personal growth and

development (including career paths) and enjoyable work environments are reported as key conditions that employees valued alongside pay rates that are competitive for farming[1]. Good working conditions are important for farm owners too of course, but sometimes they are traded for wealth creation.

- *Vibrant communities* are an important factor in retaining a rural workforce. Opportunities for partners and family members often make or break the decision to stay. Access to hospitals, recreation facilities, casual and permanent employment off farm are all needed. An adequate dairy service sector is also important. This is an interdependent relationship - there must be a sufficient number of farms in a district to sustain a viable, well-serviced dairying community.

3. Enhancing access to finance

How do we better attract private capital into farm investment?

What examples are there of innovative financing models that could be used across the industry?

What would encourage uptake of new financing models?

What alternative business structures could be developed for farming that also retain ownership with farm families?

How can foreign investment best contribute to the financing and productivity growth of Australian agriculture?

Investment and the Australian dairy industry

It is well recognised that capital investment in the dairy sector can increase efficiency and productive capacity. Such investment contributes to incomes, infrastructure and employment, often in regional areas. It can also help Australia gain access to new export markets.

At the same time, many Australian dairy farmers have been struggling under the burden of increased debt levels and now find themselves unable to effectively capitalise on improved market conditions. Investment on-farm is desperately needed and Australian dairy farmers are being increasingly exposed to alternative models of attracting capital into their businesses without merely increasing bank debt.

The Horizon 2020 project (a joint initiative of Dairy Australia, the Australian Dairy Industry Council and the Gardiner Foundation) also identified that there is a significant need for a capital injection into Australian dairy farming if we are to realise a profitable growth agenda towards 2020. It found that:

1. The Australian dairy industry is competing for capital, which would provide a potential spur to the growth of dairy farm production over time;
2. The Australian dairy industry have a relatively poor understanding of those opportunities and the investment models available to both farmers and potential investors; and that
3. Understanding the attributes of investment attraction will improve the effectiveness of industry promotion and capacity building efforts.

This is supported by figures adapted from the *Greener Pastures* report released by ANZ in 2012. This analysis found that for the Australian dairy industry to attain a level of growth equivalent to that experienced by New Zealand's dairy industry over the last decade (2002-2012), an additional $10 billion of capital injection on-farm is required by 2020. Furthermore, this analysis found that for the Australian dairy industry to regain its share of global dairy trade lost since 2002, a further $6 billion of capital injection on-farm is required by 2020.

Clearly with figures such as these, the Australian dairy industry, with the support of Government, needs to be proactive in driving the investment discussion and looking for ways to drive capital through a broad range of models, derived from both on and off-shore sources.

There are opportunities for investment throughout the dairy supply chain in Australia, including farm services, farm production, processing, logistics and distribution. This section focuses on investment within production dairy or "inside" the farm gate. Opportunities beyond this should be explored directly with the relevant entities.

[1] Nettle, R.A., Semmelroth, A., Ullah, A., Zheng, C., Ford, R. (2011 in progress) The retention of people in dairy farming – what is working and why? Research report to the Gardiner Foundation, The University of Melbourne

Australian dairy farm business ownership structures

There are a variety of potential business structures which may be implemented by investors into dairy farming businesses. Broadly, these fall into three categories, namely:

1. Owner operation

In this scenario, the owners of the land manage the farm business themselves, with or without additional staff. Obviously a more hands-off approach to routine farm management is possible where a farm manager and team of staff are employed to operate the farm on a day-to-day basis. However, even where a full management team is in place, the farm owner is still responsible for staffing and financing the operation, including compliance with employee health and safety requirements, industrial awards, working capital and financial management, procurement, administration etc. It is possible to delegate these tasks to certain agricultural asset managers, who are experienced in managing farms for absentee owners. However, potential investors should note that ultimate responsibility for employee health and safety, animal welfare and business solvency rests with the business owners.

2. Sharefarming / Co-Investment / Equity Participation

Sharefarming, or share dairy farming, is the term used within the industry to describe an arrangement whereby two parties, the farm owner and a 'sharefarmer', operate a dairy farm business together. This could also be construed as a form of co-investment or equity participation whereby two parties come together to own and operate the business under an overarching agreement.

This style of agreement could be driven by an existing farmer looking to obtain capital to expand operations, or through an investor looking to establish a mutually beneficial partnership with a current farming business. The concept of sharing the equity in a farming business, whilst not new to Australian agriculture, is certainly one that requires time, effort and negotiation to obtain a clear and equitable agreement.

3. Leasing

Leasing a dairy farm is the most "passive" option for an external investor as it essentially removes all responsibility for employment, farm management, asset management and financial control. For a farmer it becomes attractive when the cost of leasing is lower than their net returns and/or cost of capital. It also enables a farmer to expand their operation with a limited amount of risk. Farm leases are typically negotiated on the basis of a fixed return on assets, or a fixed amount per acre/hectare. It is worthwhile examining new leasing arrangements that provide a higher return to lessors which gives a greater return on capital providing an increased incentive to enter these arrangements.

Fund Investment in production dairy industry - Institutional investment in dairy production is reasonably limited within the Australian dairy industry. Within Australia there is currently no retail investment fund pathway into the sector and there are a limited number of wholesale funds available to institutional investors. While there have been other opportunities to invest in sectors within the dairy industry, the wholesale and retail fund industry has struggled to find the opportunities to invest that can meet their required benchmarks.

What is needed to drive investment into the Australian dairy industry?

The Australian dairy industry has recognised that it need to do a better job in presenting its credentials in order to attract much needed capital into the sector. At the recent Australian Dairy Farmers' Summit, investment was listed as a key priority need for the industry and a program of analysis and coordination is subsequently in the process of being developed to facilitate this need.

However, in addition to industry activities (both at a collaborative and individual entity level), it is recognised that the regulatory environment does and will continue to play a vital role in how successful the Australian dairy industry is in attracting capital. This will underpin confidence and certainty for investment in dairy farm assets.

4. Increasing the competitiveness of the agricultural sector and its value chains

How might existing laws and regulations be changed to address any market power imbalances in the agricultural supply chain, without limiting prospects for global-scale firms developing in Australia?

How can the agriculture sector improve its competitiveness relative to other sectors in the economy?

Which examples of overseas approaches to improving agricultural competitiveness have relevance for Australia?

Whole supply chain approach

The Australian dairy industry needs to be viewed as integrated supply chain. Milk is a perishable product, which must be processed before it can be sold commercially. As a result, dairy production is integrated across the supply chain: dairy farmers cannot operate without domestic processing capacity, nor can processors survive without domestic farm milk supply. While the rhetoric around an 'integrated approach' acknowledges this, few of the practical actions proposed address issues that cut across the supply chain.

Significant regional differences continue to characterise the Australian dairy industry – based on market and product mix, farmer confidence as well as current and future growth prospects.

Like the national economy, the dairy industry continues to be characterised by "two speeds" – growth and consolidation in exporting regions, contrasted with faltering confidence and contraction in domestic milk regions.

For most farmers in south-eastern Australia, international conditions determine prices and industry confidence. In Queensland, Central and Northern New South Wales, and Western Australia, however, the industry is geared toward domestic fresh milk supply. Ongoing intensity in retail competition, unsustainable pricing of milk at $1 per litre, disruptions caused by changes in private label supply contracts and uncertainty surrounding processor milk requirements have undermined farmer confidence and supply stability.

While overall supply remains good, these regional differences affect the food system within regions, and, ultimately, the sustainability of a local fresh milk supply. Analysis at the national level fails to show this nuanced picture, particularly the de-linking of pricing in the 'drinking milk' states from international prices becoming apparent.

Competition in the dairy manufacturing sector

As in the farm sector, the milk processing sector is undergoing continuing rationalisation. This has resulted in improved factory capacity, as larger operations have improved their efficiency and economies of scale. The lack of growth in milk production over the past decade has relieved the pressure on Australian dairy companies to continue to invest in increasing processing capacity, at least in the short to medium term. Instead, the challenge has been to remove surplus capacity and to utilise the existing capacity as profitably as possible.

The Australian dairy manufacturing sector is diverse and includes farmer-owned co-operatives as well as public, private, and multinational companies. Farmer-owned co-operatives no longer dominate the industry and now account for around 35% of Australia's milk production. The largest co-operative is Murray Goulburn accounting for nearly 33% of national milk output.

Other Australian dairy companies cover a diverse range of markets and products, from the publicly listed Bega Cheese Limited; to the privately owned Regal Cream (Bulla Dairy Foods), Burra Foods and Longwarry Food Park to name just a few; together with many highly specialised cheese manufacturers. Large multi-national dairy companies have operated in the Australian dairy industry for many years and currently include Fonterra (New Zealand), Kirin (Japan) and Lactalis (France).

Despite the fact that Australia is a relatively large player in terms of its share of international dairy trade, none of Australia's dairy companies are in the top 20 manufacturers in terms of milk processed and turnover. This has brought about renewed calls by a number of the larger Australian dairy processors to bring about further rationalisation within the Australian dairy processing landscape in order to obtain the scale necessary to compete with international giants such as Fonterra, Arla and Friesland Campina.

The dairy industry has not taken a position on what is the ideal level of rationalisation required within the Australian dairy processing sector but has recognised that an even regulatory playing field is desirable as competition for processing resources intensifies. The potential for inequities were highlighted in the recent bidding for Warrnambool Cheese and Butter, where timing variations between the Australian Competition Tribunal (ACT) and the Foreign Investment Review Board (FIRB) processes placed certain companies at a competitive disadvantage. This was an unfortunate situation that could act to limit shareholder choice and opportunities for mergers.

Mandatory Code of Conduct

It has been the firm position of Australian Dairy Farmers (ADF) that the introduction of a mandatory Code of Conduct is necessary to balance the market power of the major retailers, along with the appointment of a Supermarket Ombudsman with teeth to oversee compliance with the Code, including significant financial penalties.

Unlike New Zealand, where the one company (in this case Fonterra) dominates the competitive landscape, Australia's dairy industry has well over 100 registered dairy processors, who each compete for milk as well as domestic and international supply contracts. No single milk manufacturer has a dominant position across the complete national Australian dairy industry. This can influence the negotiating position of Australian processors with domestic retailers, particularly in areas that are limited to domestic fresh milk supplies.

Gene technology

Just as consumers have enjoyed technological advances in areas like telecommunications and transport, plant scientists have also been using new tools and techniques to develop better plants. Plant breeding and improvement, like medical science, utilises a whole suite of technologies including computers, high power microscopy and molecular biology.

Gene technology is one of these tools. It has been around for over twenty years and underpins most biological research. It allows researchers to understand the functions of different genes within a plant and to modify these functions to improve the plant's qualities.

Genetically modified (GM) crops are 18 years old and are currently grown around the world in 27 countries by over 18 million farmers across 175 million hectares. Farmers across the globe have chosen to adopt new GM varieties for their economic and environmental benefits. Despite this strong global uptake, they are not permitted to be planted in many States of Australia, although they have received Federal regulatory approval for their environmental and human health safety.

The Australian dairy industry is a long-term investor in gene technology research, particularly work to develop new pasture varieties. Current modelling suggests that one of these research projects, high energy ryegrass, could deliver a benefit of $300 per hectare to Australian dairy farmers.

In order to realise the benefits of R&D investment in dairy gene technology, and that of many other GM crops currently under development in Australia, there are two fundamental requirements. Firstly, a clear and transparent regulatory system is required to deliver confidence to all stakeholders – including farmers, researchers, and investors (local and global). The dairy industry supports the Office of the Gene Technology Regulator and the Act which underpins this system, but believes that if State-based GM crop assessments are to continue, they must be conducted on a sound and technical case-by-case basis with clear and transparent market and trade criteria.

Secondly, the community must understand the role of GM in the future of agriculture including the role of GM in innovation, productivity, global competitiveness, profitability, environmental benefits and consumer price. If consumers do not understand and accept (or at least not oppose) GM technology, it cannot be successfully delivered to the market. It is not a role for the dairy industry alone to educate the public about gene technology. Genetically modified varieties of barley, canola, cotton, lupins, safflower, sugarcane, ryegrass, wheat and white clover are currently being developed in Australia. Designing and rolling out a successful conversation with the Australian public about GM will need government leadership and cross-commodity involvement.

The government therefore has an important role in providing a clear and predictable path-to-market for this research to enable Australian farmers' access to improved plant varieties, which allows them to remain globally competitive.

5. Enhancing agriculture's contribution to regional communities

What impact does the growth of populations in regional centres and the decline in more rural or remote townships have on farming businesses and the agriculture sector?

How can the agriculture sector best contribute to growth in jobs and boost investment in regional communities, including indigenous communities?

What community and policy responses are needed in rural and regional communities to adapt and change to new pressures and opportunities in the agriculture sector?

How do we attract the next generation of farmers?

Dairy's contribution to the regions

As highlighted in the introduction, the Australian dairy industry makes an enormous contribution to regional economies. The table below demonstrated how this contribution can be further broken down against the eight major Australian dairy production regions. The dairy industry is confident that the economic contribution made by the dairy industry will continue to grow as the industry capitalises on the immense opportunities that exist for the sector, particularly in overseas markets, such as the burgeoning Asian region. Ultimately, the ongoing profitability of the Australian dairy supply chain will underpin the industry's ability to grow, and in doing so, expand the economic contribution of the sector.

As mentioned previously, a supportive Federal, State and Local regulatory environment that recognises the dairy industry's economic contribution to local communities and their economies, will continue to play a vital role in attracting capital and underpinning the confidence for dairy farmers to grow production. There must also be ongoing investment in regional infrastructure and communities to ensure they are strong and viable.

2012/13 Australian RDP Breakdown

		Sub-Tropical Dairy	Dairy NSW	Gipps Dairy	Murray Dairy	WestVic Dairy	Dairy SA	Dairy WA	Dairy TAS	AUST
Dairy farms	No.	680	490	1,480	1,515	1,370	268	160	437	**6,400**
Cows in milk & dry	000	115	150	422	383	350	72	65	149	**1,706**
People employed on farm	No.	2,000	2,250	4,907	5,840	5,503	2,500	250	1,500	**24,750**
People employed in processing	No.	1,250	4,250	3,321	3,953	3,725	750	750	1,000	**19,000**
People directly working in dairy	No.	3,250	6,500	8,228	9,793	9,229	3,250	1,000	2,500	**43,750**
Volume of milk produced	Million Lts	579	722	1,892	2,252	2,122	536	337	760	**9,201**
Share of National milk production		6.3%	7.8%	20.6%	24.5%	23.1%	5.8%	3.7%	8.3%	**100%**
Value of milk leaving farms	$M.	$310	$335	$715	$852	$803	$205	$151	$305	**$3,677**
Dairy farm contributions to economy	$M.	$248	$268	$572	$681	$642	$164	$121	$244	**$2,941**
Value of dairy products exported	$M.	$47	$148	$680	$810	$763	$14	$44	$244	**$2,750**
Share of National exports - value		2%	5%	25%	29%	28%	1%	2%	9%	**100%**
Volume of dairy products exported	000 tonnes	13	36	192	229	216	4	41	69	**799**
Share of National exports - volume		2%	5%	24%	29%	27%	0%	5%	9%	**100%**

Attracting the next generation of farmers

Young farmers are the future of the dairy industry. The perpetual question about this future is how to make the industry attractive to the next generation as a place to work and/or invest. This is not a trivial or easily addressed question; scratch the surface and some deep-seated issues are evident. It is not simply resolved by 'positive image' campaigns or training courses. It is primarily rooted in the viability of individual dairy farm businesses.

This opens a number of significant issues such as affordability of agricultural land (in relation to its agricultural earning capacity), difficulty for young people to achieve the capital required to purchase land and have enough equity in the business to manage volatility (this also makes it harder for the current generation to exit), having enterprises of sufficient scale that they can compete with financial returns from other investments, having farm businesses with the capacity to survive in a volatile market (ride out the poor years), and having workplaces that offer decent work and career paths for individuals.

Despite the fact that these are tough issues, the dairy industry has already conducted research and begun to pilot programs to identify solutions.

Industry and Government actions

Dairy's future depends on recruiting, training and retaining the next generation of farmers, food scientists, processing workers, and industry service providers. The dairy industry has been actively developing and implementing strategies to attract, retain and develop a skilled workforce (for example Cows Create Careers, National Centre for Dairy Education Australia, Dairy Innovation Australia, postgraduate scholarships).

Cows Create Careers - farm module

The Cows Create Careers – Farm module is an innovative Dairy Australia and Regional Development Program that is delivered across 22 dairying regions in Australia. It provides a platform to introduce students to the Australian dairy industry. The major objective of the program is to create awareness and promote careers in the dairy industry including dairy farm pathways.

What is involved in the program?

- Program handbook for teachers and students is provided to the school by Dairy Australia
- Dairy farmers deliver two calves for a 3 week period to the school
- An industry advocate visits the school to talk to students about their career pathway
- Students work in teams of 4-5 to complete assessment tasks
- Students and teachers attend a presentation and awards ceremony and win prizes
- Media coverage of the project such as print media, radio and television

Participation of Schools in Australia

- In 2013, 8,357 students from 183 schools participated in the program
- 366 dairy farmers and industry advocates volunteered their time to be part of the project
- The project has a retention rate of approximately 90% of schools each year
- Since its inception, 42,450 students have participated in Cows Create Careers

The project has been very successful and has grown significantly since its launch in 2004 and also includes a dairy manufacturing module.

It is the dairy industry's view that government policy and funding decisions are undermining industry programs to attract and retain more people in dairy.

Specific issues include:

- *Lack of funding priority for Vocational Education and Training (VET) courses* targeted at industries with acknowledged skill shortages, such as dairy. Specific issues (mostly state-based) include the need to recognise 'Agriculture dairy farmer workers and managers' on

skills shortage lists for eligibility to state and federal programs, and the ineligibility for funding of people with existing qualifications, even in areas of skills shortage.

- In many instances, the models supporting VET vary depending on the jurisdiction in which they operate, leading to a disjointed approach to training.
- *Red tape in the 457 Visa approval system* leading to delays in recruiting skilled employees from overseas to fill skills shortage gaps. Some of the challenges with the current process involve DIBP staff being unaware of the skill requirements for many on-farm roles, and a lack of understanding about skills and training recognition from overseas training institutions.
- The six-month time limits on employment with a single employer under subclass 417 and 462 visas contribute to high turnover within the dairy industry.
- The lower overtime penalty rate for the essential daily services of "feeding and watering stock" does not recognise that milking twice daily is an essential requirement in the care of dairy cows. The Award needs to be updated to include "milking" as an essential service relating to penalty rate classifications, similar to "feeding and watering stock." Potential labour market flexibility in the processing sector should be examined in addition to the above point.
- *The Fair Work Australia Modern Award Review (Pastoral Award [MA000035]) minimum engagement provisions, where no minimum* engagement provisions or a minimum engagement of two hours instead of the current three hours would better reflect the working practices on dairy farms and facilitate employment and productivity.
- Structural impediments to teaching of food science and technology by universities, including cost of appropriate teaching models.
- Dairy isn't currently recognised as a seasonal industry, meaning that it cannot access short-term labour under the Seasonal Workers Programme.

There is also an opportunity for the Australian Government to support campaigns like Legendairy and Cows Create Careers with programs that also support agriculture as a career option. These may include measures such as design of the school curriculum to influence children's attitudes to the sector.

Dairy labour agreement

Dairy, like most other agricultural commodities, suffers a chronic skilled labour shortage. While the industry invests heavily in programs to recruit, train and retain skilled workers within Australia, closing the gap from the local workforce will take time. In the meantime, recruitment of overseas workers offers a short-to-medium-term solution.

Farmers currently have two main options: sponsoring management level workers for 457 Visas, or hiring backpackers on working holiday visas for a maximum permitted six months. The latter is disruptive for the business, while the former is proving time-consuming and frustrating.

Farmers seeking 457 Visas for prospective employees report excessive paperwork, and subjective assessment by departmental caseworkers as to whether a 457 Visa is justified for the proposed duties. Another problem is the ANZSCO skill base criteria, which only recognises overseas workers with a degree or greater; in dairy's case, this restricts recruitment to highly qualified farm managers.

While farmers may be in need of farm managers, they are also in need of senior skilled farm hands responsible for many daily operational tasks including milking cows, detecting/treating animal health issues and animal husbandry.

Labour agreements between an employer and the Commonwealth offer a solution. These agreements are designed to address a genuine, systemic labour market shortage, rather than accommodate an employer's preference for a particular overseas worker, and may include skilled occupations that are not on the approved list for 457 Visas. Labour agreements are generally effective for two to three years, and allow for temporary and permanent visas to be granted.

Preparing a Labour Agreement application is time-consuming task requiring specialist expertise beyond the resources of most individual farmers. Based on the experience of the pork industry, Dairy Australia is helping industry to prepare a Labour Agreement application for several farm businesses as a 'pilot,' with a view to setting the standard that could lead to an industry-wide template agreement in future.

Any workforce development strategy should extend beyond the agriculture sector, and explicitly acknowledge and address people issues across the whole food sector. The strategy should consider how to address areas of skills shortage, such as food science and technology, food safety and microbiology and agriculture, for example through targeted scholarships.

The strategy should also consider the importance of making living and working in regional areas attractive to the next generation. Dairy employs more than 43,000 people directly on farms, in factories and in associated transport roles across regional Australia. Strategies for upskilling this regionally-based workforce are critical, and would be facilitated by infrastructure such as high-speed internet in regional areas through the National Broadband Network.

6. Improving the competitiveness of inputs to the supply chain

How can rural industries and governments better identify, prioritise and fund research, development and extension?

How can land, water and other farm inputs be more effectively deployed to better drive agriculture sector productivity, while maintaining or enhancing the natural resource base?

What skills including specialised skills and training, will be required in the future and how can these be delivered and uptake encouraged?

How can we attract workers to agriculture – particularly in remote areas?

How can we promote career pathways for the agriculture sector, including models to enable younger farm workers to gain broader industry experience?

What irrigation, transport, storage and distribution infrastructure are required to support the food and fibre production systems of the future and how should this be funded?

Research and development

As recognised in the Australian Government's Rural Research and Development Policy Statement, the current rural Research and Development Corporation (RDC) model (particularly as it applies to dairy) remains fundamentally sound and effective. Strong, industry-based RDCs have a key role to play in delivering desired outcomes because of their unique positioning and capacity to translate broad, high-level knowledge into effective industry-based innovation and solutions.

Yet the Research and Development environment is changing. The requirement to better engage and support dairy farmers to identify and act on opportunities within their farm businesses and respond to pressures for change from other stakeholders is escalating. Hence, there is a need to deliver more effective and efficient extension services to dairy farmers, in an environment of increasing challenges and diminishing capacity to address these challenges. The industry challenge is to achieve on-farm practice change at the pace and scale required to improve on-farm returns across the majority of dairy farmers.

The Australian dairy industry faces five challenges in relation to supporting on-farm change and innovation:

1. The diversity of farm systems and businesses is increasing
2. Roles and responsibilities in extension delivery are changing
3. Government funding of public extension delivery is in decline
4. Extension capability needs building
5. Novel approaches to increase dairy farmer adoption of innovation are required

Actions to address this issue include providing suitable investment support through Research and Development Corporations (RDCs) for extension delivery according to who is best placed to achieve outcomes (e.g. collective, public, private, vocational education and training sectors) on a case-by-case basis. This includes ensuring that public, vocational education and training is adequately resourced, and that industry and vocational education and training sector resources are increasingly used to build capability in the private sector. Opportunities to grow capability through professional development and accreditation of advisers must be further explored and better resourced.

The value of research and development to the Australian dairy industry

A study titled "*The Impact of Innovation on the Dairy Industry over the Past 30 Years"*, commissioned by the Department of Primary Industries and Dairy Australia in 2011, evaluated the benefits of industry and government investment in research, development and extension as well as findings to improve future investment. The report detailed the pivotal role of research, development and extension in the phenomenal increase in the dairy industry's productivity over the past 30 years, given the challenges it has faced.

It found dairy industry output had expanded 90 per cent over the past 30 years and milk production on a per hectare basis had increased by nearly 200 per cent. Yet despite milk production rising from an average estimated 2878 litres to 8419 litres per hectare, the amount of grazing land used by the industry to achieve this feat had actually fallen by around 30 per cent since 1980. These gains have been largely due to increased pasture production and utilisation, feed supplements and genetic improvement leading to more efficient cows.

The report also found that had it not been for the dairy industry's innovation, its output would have declined by an estimated 23 per cent over that time due to a cost price squeeze and the depreciation and obsolescence of technology.

Extension resources are under pressure

Currently extension is often referred to in the context of agricultural innovation systems, along with research and development. Extension is about change and in a broad sense can be seen to include all activity that motivates and equips farmers to improve their skills and practices, including education, vocational training and information services. The term 'adoption' is commonly used and provides an apt description of farmers applying new technologies and innovations. For a number of years the 'D' component of R,D&E has been generally under-resourced in agriculture. The dairy industry has recognised this and, through Dairy Australia, is currently co-investing with The Victorian Department of Environment and Primary Industries (DEPI) in this area.

All Australian agricultural industries are moving into a new era of extension following an extended period of time that has seen the reduction in public extension services, which most sectors, including dairy, have historically been heavily reliant on. The requirement to better engage with and support dairy farmers to identify and act on opportunities within their farm businesses, and to respond to pressures for change from other stakeholders, is escalating. Many farmers have disengaged from conventional extension and there is a need to deliver better, more focused and relevant extension services to them in order to drive practice change.

Regardless of the decline in public extension, a new approach to extension is needed that grasps the opportunities that are emerging to drive structural and delivery change, and to transform the way that the dairy industry engages with dairy farmers.

The traditional pipeline of extension capability has diminished, yet collective or private sector contribution to build extension capability has not developed adequately to fill this void. Dairy Australia has provided scholarships to develop RD&E capability in the past, but this has often taken an ad hoc approach. A more strategic approach is required in future to provide support to agriculture students to build greater extension capability and encourage them to utilise this capacity in the dairy industry.

There will continue to be growth in the use of advanced information and communication technologies in agriculture, providing information to farmers in novel ways. However, there will always be a requirement to maintain a level of face-to-face communication. Farming is already socially isolating for many farmers, and with declining farmer numbers this may become a more widespread issue. It is likely that farmers will always put a high value on personal contact in extension.

Extension efforts should be focused on issues for which there would be substantial benefits to farmers from changing their practices, especially if those new practices would also generate benefits for the broader community (e.g. environmental benefits). Extension would not focus on practices that farmers already have good knowledge about and have decided not to adopt, because non-adoption is a clear signal that the practices do not generate sufficiently large private benefits. The heterogeneity of farms and farmers should be recognised when looking at reasons for non-adoption. This more sophisticated approach to planning extension effort will require greater collection and analysis of information.

Dairy Australia has assumed greater responsibility for leading, managing and funding extension delivery to dairy farmers into the future. Provision of more efficient and effective extension services delivering greatest benefit for Australian dairy farmers requires a broad level of industry coordination and collaboration. Dairy Australia's motivation is to provide leadership, influence and resources to deliver this outcome. Significant additional levy funding and management effort will be required to support this commitment to achieving improved extension services for Australian dairy farmers.

Cross-sectoral approaches

Achieving the productivity growth required, while not increasing environmental risk, requires funding for research, development and extension. New skills, new technologies and new ways of doing business are required to balance increasing competition for resources, while remaining profitable. The dairy industry therefore supports further research into soil and water and other natural resource base issues. One avenue for this research is the existing rural Research and Development Corporation (RDC) network, which is already developing cross-sectoral strategies in areas including water, soils and climate change. Dairy Australia is actively engaged in these strategies and is leading strategy development in water.

Cooperative Research Centres

Cooperative Research Centres (CRC) play an important role in developing new science and R&D capacity within the industry. Their close association with industry enables industry-relevant commercial outcomes.

The Dairy Futures CRC has taken extremely positive steps towards developing technologies that will potentially double the rate of genetic gain of the Australian dairy herd. Similarly, the development and use of CRC technologies to boost pasture productivity are also yet to realise their full potential but may deliver transformational improvements to Australian dairy industry productivity.

While the Australian dairy industry is hopeful that the technologies being developed within the Dairy Futures CRC will be available for industry use by the end of the CRC funding period, it is vital that government closely monitors programs such as these to ensure that funding streams are secured so that research programs can fully reach their potential.

Collaboration

Dairy Australia collaborates extensively with a range of institutions including universities, R&D organisations, international research agencies, NGOs and cooperative research centres (CRC). Through collaboration Dairy Australia intends to have access to leading practices and knowledge that Dairy Australia can leverage in the delivery of our own Strategic Objectives, as well as ensuring that the broader policy and national research and development objectives of government are realised as efficiently as possible.

In total, Dairy Australia invests approximately $19 million in collaborative projects. Approximately $800,000 of this is invested in initiatives with other RDCs such as the Grains Research & Development Corporation, and the Meat & Livestock Association.

Food processing innovation

The dairy industry acknowledges that much of the value in the food industry is generated post-farm gate where significant innovation also occurs. The dairy industry adds value through processing to produce drinking milk, cheese, butter, milk powders, cream, yoghurts and a range of specialty products. This value-added processing delivers an agricultural industry with a wholesale value of dairy products in excess of $13 billion a year.

Increasing productivity for food therefore relies on research, development and extension, and commercialisation all the way along the supply chain. Milk, unlike many other raw materials, must be processed to preserve its integrity. This strengthens the focus on a supply chain approach to value-adding in this industry. With comparatively low domestic dairy prices and a competitive international market, innovation to drive improvements in dairy manufacturing and processing is imperative.

Research and development-led innovation includes improvements in all parts of the processing chain – improved equipment and processes that create production efficiencies as well as new product development.

Accordingly, Dairy Australia invests in innovation across the supply chain. In particular, Dairy Innovation Australia Limited (DIAL), established in 2007 and led and funded by the dairy processing industry in conjunction with Dairy Australia, responds to this need for innovation. Working as a single entity with multiple Australian dairy companies, DIAL provides a precompetitive research capability much greater than could be achieved through an equivalent level of individual company R&D activity.

Sector-specific, industry-led innovation hubs such as DIAL have proved successful in generating and directing R&D investment in areas of market failure, and translating this collectively funded research to commercial outcomes.

Dairy workforce development and competitiveness

Dairy farms have become increasingly complex to manage. As farms grow, reporting and compliance requirements grow more complex, and technology plays an expanding role in milk production, the skills of the people required to successfully run a dairy farm are changing. Farm business management skills are becoming increasingly important as complexity on-farm grows.

The learning needs of dairy farmers span the entire range of on-farm knowledge, skills and values. They range from the basic technical capabilities of milking and machinery operation to those underpinning highly sophisticated management of multi-million dollar enterprises. At all levels from the most junior member of the team to the manager, successful operation requires the ability to perform certain tasks (skills), a certain level of information and understanding (knowledge), and a set of values, perspectives and ways of dealing with people and problems (attitudes) to allow optimum outcomes. If these three dimensions are not recognised separately, as often happens, the critical one of attitudes drops off the list and focus is given to the more easily taught dimensions of skills and knowledge.

Survey of dairy labour needs

The 2012 National Dairy Farm Survey paints the changing picture of farm management and labour structures. The proportion of dairy farms operated by a single person, or with a partner, was 29% in 2012 compared to 43% in 2007. Nationally, some 68% of farms operate with paid employees, up from 64% in 2011. An estimated 32% of paid staff are employed on larger farms (comprising 301 to 500 cows), which represent 24% of all dairy farms across the industry. Thus people management skills, as well as animal and technology management, are becoming more critical.

The needs of the owner/operator are the logical starting point for a learning-oriented farm and industry. If that person does not recognise that learning as integral to success in life and business, they are unlikely to pursue learning opportunities for themselves, or encourage others in their family or workforce to do so. This throws into sharp relief the fundamental importance of attitudes such as: willingness to identify one's own deficiencies, acceptance of the reality of continuous change and the need to adapt with change or even trigger it; valuing others; willingness to ask "dumb" questions; pride of workmanship; capacity to respond intelligently to contingencies. These qualities are most effectively learned through participation in well-designed adult learning activities as well as through reflection on personal experience.

The dairy industry has developed an industry endorsed Farm Career Pathway which identifies the key roles within the industry and the skills and knowledge required to perform these roles competently. The industry invests in the National Centre for Dairy Education, an alliance of eleven Registered Training Organisations across Australia, to deliver training programs to meet these skill requirements.

The Dairy Industry is also developing a Stepping Stones process which clearly demonstrates the steps that young people can take to progress through the industry, and importantly outlines the skills, knowledge, experience, equity and support needed before progressing to the next step. The kit will also include worksheets that allow a farm manager to have career conversations with their staff and develop a training plan for their next steps.

Food processing workforce development

People issues are not just confined to the farming sector − labour supply issues facing the food processing sector should not be ignored.

Reforms to agricultural education alone will not address issues facing food processing such as shortages of skills in food science and technology, microbiological risk, and process optimisation. The food industry requires people with skills to enable multidisciplinary approaches to allow companies access to appropriately trained problem solvers and innovators.

(NB: see section five for specific issues and actions needed to address these issues)

Freight infrastructure

Growth in the dairy industry relies on improved road, rail and port infrastructure, infrastructure to support efficient water use, a reliable and expanding power supply, infrastructure to support research, development and training, and infrastructure for supporting industries (for example, feedmills).

Road infrastructure examples relevant to the dairy industry include:

- Stock underpasses to assist in managing biosecurity risks
- Maintenance of bridges identified as crucial for access to farms in an emergency
- Rural road capacity to enable more efficient milk collection
- Transport
- Expanded operation of B-triples to reduce truck traffic and improve efficiencies

The dairy industry supports efforts to build the evidence base on food industry trends and market changes to inform infrastructure planning. The industry also supports an integrated approach across jurisdictions that supports resolution to the infrastructure constraints faced by the dairy industry.

The dairy industry also encourages Government to examine the competitive settings around freight infrastructure such as ports that can often operate as monopolies and are able to charge/recover monopoly rents that are often passed on to others in the supply chain. This can hamper the competiveness of Australian dairy on international markets for which the industry depends.

Energy

ABARES has identified that electricity accounts for 2.4% of total dairy farm operating costs, compared with 0.8% in livestock/cropping enterprises. This is because electricity is dairy farming's main energy source, not the transport fuels on which cropping, sheep and beef grazing rely.

Energy usage patterns and costs in dairies over time are highly complex, and highly individual to each farm business. They reflect factors such as:

- Size of the herd, and type of milking system (eg. rotary milking platform or herringbone)
- Milk production systems, whether seasonal or milking all year around
- Age and operating efficiency of plant such as milking machines and refrigeration
- Seasonal conditions, which may affect the timing and number of cows milked
- Seasonal conditions, which may affect the timing and extent of pumping for irrigation
- Environmental policy decisions pushing dairy farmers to install new, more energy intensive irrigation technologies to reduce water use and increase environmental flows in rivers
- Upgrades or efficiency measures undertaken to reduce consumption and therefore costs
- Renegotiation of tariffs or contracts with energy companies to reduce costs

Analysis commissioned by Dairy Australia indicates that typical dairy farmers are now spending between $20 and more than $100 a day on electricity to power their dairies. Rising tariffs, environmental fees such as the carbon price and renewable energy incentives schemes and rising network charges have contributed to daily costs rising 33-100% for many farms since 2010.

Similarly, large dairy farms with milking herds of more than 600 cows are paying between $75 and $300 a day for power, up from between $50 and $150 in 2010. Daily energy consumption over the period has remained fairly steady.

The industry is also a large user of both electricity and gas in manufacturing. Dairy processing companies are among the top 300 energy users in Australia, and were therefore liable for the carbon tax. Their international competitiveness is highly sensitive to changes in energy costs, but also inadequate reliability of supply in regional areas where most factories are located. In particular, dairy's manufacturing sector in particular, many of which have no viable alternatives to gas power, are concerned about long term domestic gas supplies and prices as the momentum to export gas builds.

Power interruptions can cost companies dearly when they affect the processing of this perishable product. Power interruptions can cause product to be wasted during processing, and reduce output

for sale. Unreliable power supplies also affect farmers, who can lose milk and therefore income if, for example, refrigeration is shut down and milk cannot be cooled to food safety standards. With many dairy manufacturers now moving further down the path of plant automation and control systems, even a small disruption to power, in the milliseconds, can cause considerable down time, downgraded product as well as potential damage to electronics.

The cost of increased investment in network infrastructure is passed onto farm businesses, but the reliability of power supply in many regional areas remains inadequate. The dairy industry is seeking policy reform to ensure that infrastructure upgrades are undertaken so that regional areas enjoy the same reliability of electricity supply as urban areas, without a price premium for a service that urban Australians take for granted.

The dairy industry wants to see a more competitive market in regional areas, where farmers and manufacturers frequently have less choice in electricity suppliers than in urban areas, and are therefore limited in their capacity to switch supplies and negotiate better deals.

The dairy industry has also sought more transparent pricing on bills. Most bills opened by dairy farmers combine all charges – consumption, network, environmental fees, and the carbon price – into a single tariff. This has led to confusion among farmers as the different drivers behind their rising costs, and allowed power companies to confuse the extent to which repealing the carbon tax may results in lower energy costs. Rising energy costs are a constraint, as farmers are generally price takers and cannot pass additional costs to the consumer.

Government has a critical role to play in regulating the energy sector to ensure that Australian regional industries can access reliable, secure energy supplies at prices that enable them to remain internationally competitive.

State and Federal governments also play a critical role in ensuring that the development of new energy sources such as unconventional gas mining do not undermine the safety, sustainability and integrity of agricultural production, or the surface and groundwater on which they rely.

Unconventional gas mining

Unconventional gas mining may have implications for water quality and availability, the integrity of aquifers, and the integrity of waterways from which stock may drink. These potential implications arise from the mining techniques themselves, and the disposal of produced water. In this context the dairy industry would be concerned about 'streamlining' approvals systems for new energy development that involve weakening requirements for baseline environmental monitoring on fugitive gases, surface and groundwater water quality and quantity, aquifer integrity and waterway health.

Similarly, the dairy industry would not support any move to reduce requirements for ongoing monitoring throughout the project life and a reasonable period afterwards. All data should be available on a national and publicly accessible environmental monitoring system to improve the understanding of unconventional gas mining's effects on farms and farming areas.

Farmers must also have the right to voluntary access to their properties. Access agreements must ensure that landholders are not liable for incidents resulting from third-party access from mining and unconventional gas operations, and that land is rehabilitated to its original conditions when the mine is decommissioned.

Energy efficiency is a significant opportunity for reducing energy costs as well as greenhouse emissions in the dairy industry, as the industry is a large user of electricity on farm, and both electricity and gas in manufacturing. Some on-site energy generation technologies may also supplement energy efficiency (such as cogeneration or solar PV or solar thermal).

Dairy farmers are already embracing renewable energy technologies, with 40% of farms in 2012 having installed some form of renewable energy installation (such as heat pumps or solar water heating). Dairy farmers have also been quick to take up 1700 energy assessments co-funded through Dairy Australia and the Federal Government's Energy Efficiency Information Program. The audits are

identifying many no or low cost energy efficiency and energy reduction opportunities, as well as options that are more expensive but have significant cost savings and greenhouse gas abatement.

But for all these opportunities, there are significant capital cost barriers. In many cases, federal and state rebate programs assisted farmers with the upfront capital costs, and thereby increased their participation.

Dairy manufacturers are also embracing new clean technology. For example, dairy manufacturing projects that were part of the Clean Technology Food and Foundries Investment Program in the 2012-13 year included more than $25 million investment in equipment upgrades including installing heat exchange, solar PV and/or gas alternatives for water heating and power, and equipment upgrades for refrigeration and lighting. Investment in clean technology is expected to reduce emissions intensity at some dairy plants by up to 50%. Unfortunately this Clean Technology program is now closed and comparable investment in these types of projects is unlikely to continue.

The emerging question is how to finance large, up-front capital costs for equipment upgrades and renewable energy options in tight economic conditions. For example, installing heat recovery pre-heaters and variable speed drives on vacuum and milk pumps on dairy farms have an estimated capital cost of $5000-$17,000, with a 4 – 20 year payback period. Similarly, for a dairy manufacturer to upgrade to new energy efficient refrigeration or to switch to solar power could require a capital cost of several hundred thousand dollars with a payback period of 3 – 20 years.

Water

The dairy industry is a major water user for both irrigation and in the dairy. Across Australia, water availability, security and efficient use are critical drivers for agricultural productivity and food security.

Without careful natural resource management, dairy farmers do not achieve productive farming systems and profitability. Managing water use and land use is integral to farm management. The way Government regulates water availability and affordability will directly impact on the profitability and future of the Australian dairy industry.

Dairy farmers in both irrigated and dryland areas are steadily adapting their practices to produce more milk with less water. However, periods of drought or low water availability put pressure on production options, and milk production levels, and this has a flow-on impact on milk companies and regional economies. Regulation of water resources needs to be achievable, practical and cost-effective, while optimising social, economic and environmental outcomes. The Government needs to work with the dairy industry as part of adapting the wider community to reduced water availability.

A 2013 cost-benefit study looking at irrigation upgrades on ten dairy farms in Northern Victoria and NSW Southern Riverina, found that farm upgrades delivered environmental, social and economic outcomes. The report found that while farm upgrades cost the Government around $3,700 a megalitre (ML) for water savings for the environment, at the same time this investment delivered gross productivity gains to farmers worth an average $9,800/ML and that increased farm production generates additional regional economic activity worth $6,200/ML. There is a clear case for Government to continue support for investment in water infrastructure – both on-farm infrastructure and community infrastructure such as dams, covered waterways to reduce evaporation, and methods to improve water capture.

The Murray Darling Basin accounts for approximately 25 per cent of Australian milk production. With the Basin Plan now in implementation phase, farmers need certainty in aspects of the Water Recovery Strategy if they are to plan and adapt. The proposed 2750GL of recovery for the environment will be a significant achievement. As part of this, up to 1500GL have been identified for buy-back or State recovery, but there is flexibility in the make-up of the 2750GL. With a significant reduction in annual average water available for irrigation, trade and carryover (approximately 26 per cent), dairy farmers will need to boost their productivity by 20-25 per cent if milk production is to recover to pre-drought levels with this much less water.

A confirmed 1500GL cap will provide certainty for farmers to plan for a productivity challenge that is already very tough. The Government now needs to provide a clear plan on how this will be

implemented, including through investment in water infrastructure that will contribute to meeting targets.

7. Reducing ineffective regulations

How well do regulations affecting the industry meet their policy objectives?

What opportunities are there to reduce ineffective or inefficient regulation?

Which regulations are disproportionate to the risks they are supposed to address?

How do we coordinate across governments to reduce regulations whose costs exceed their benefits?

The dairy industry would welcome ongoing mechanisms to identify regulatory reform opportunities. This should include regular stocktakes that look at the burden of the sum of regulations – individual Regulatory Impact Statements miss the cumulative increase in regulatory burden. The Productivity Commission's series of annual reviews of the burdens on business have been useful, but need to be continually renewed.

While numerous government statements talk about reducing the regulatory burden and the importance of evidence-based regulation, a gap remains between the agreed best practice principles, and what actually happens[2]. For example, in 2010-11 only 75% (decision-making stage) and 71% (transparency stage) of Australian Government regulatory proposals complied with government's own best practice regulation requirements[3]. This demonstrates a lack of commitment to best practice regulation processes, which is at odds with the rhetoric around reducing the regulatory burden.

Dairy industry participants recognise the importance of frameworks, especially for food safety and environmental sustainability. However, policy and regulation regimes also have significant impact on the cost structures of many agricultural enterprises including dairy farmers and processors.

The Dairy industry, like other Australian food industries, cannot carry any more regulatory costs or disincentives to innovation than essential. Australian exporters need to continue to compete on price, quality and delivery against rising competition.

Government should therefore reaffirm its commitment across all government sectors to the Best Practice Regulation principles and approaches.

Private sector standards, self, and co-regulation

Regulatory issues faced by the dairy industry go beyond formal regulation, and in many cases commercial imposts have far greater impact. Examples are numerous in the food industry and include HGP free beef, sow stall free pork and permeate free milk. While government does not have a role in developing commercial standards, they can't be ignored when considering regulatory burden and impacts.

The dairy industry generally supports self-regulatory and co-regulatory approaches, where appropriate. However, these can also have a regulatory burden (including reporting burdens) and still need to be evidence-based, well-designed, practical, consistent with good regulatory principles, and respond to actual market failure.

AgVet chemical regulation

Agricultural and veterinary (agvet) chemical regulations have been one area of particular concern in recent years for dairy farmers. In this light, the dairy industry has supported the government's initiative to modernize and simplify the legislation and to reduce the red tape associated with the use of agvet chemicals on Australian farms. Effective agricultural chemicals and veterinary medicines are critical for successful farm businesses and the importance of responsible use of chemicals is well understood and supported by the dairy industry.

Dairy farmers need access to safe, affordable and effective agricultural chemicals and veterinary medicines in order to manage pests and diseases that would otherwise threaten production of safe food. This is also important to achieve satisfactory animal health and animal welfare outcomes.

[2] Productivity Commission (2012) *Regulatory Impact Analysis: Benchmarking*, Draft Research Report, Canberra
[3] Office of Best Practice Regulation (2011) *Best Practice Regulation Report 2010-11*, Department of Finance and Deregulation, Canberra

The dairy industry supports the removal of the requirement for agvet chemical re-approval and re-registrations, particularly where these products have a history of safe use. The re-registration process has been an unnecessary burden with little justification. The reforms will reduce red tape, improve efficiency and avoid the loss of established treatments.

The dairy industry looks forward to the introduction of the proposed legislative reforms and their implementation by the Australian Pesticides and Veterinary Medicines Authority.

Front of pack labelling

The dairy industry does not support the Government initiative to introduce the Health Star Rating Front of Pack Labelling Scheme (FOPL) in its current form. While we acknowledge the scheme is not yet finalised, in its current form, the scheme is a clear example of 'regulation' not meeting its policy objectives. Under the scheme, the rating of core dairy foods remains inconsistent with the Australian Dietary Guidelines and will not achieve the objectives of the scheme to guide consumer choice towards healthier food options. For example, 'core' dairy foods including every day foods such as regular fat cheddar, ricotta cheese and yogurt are identified as core foods in the Australian Dietary Guidelines yet at just 1 – 2.5 stars they are currently rating below discretionary foods and less than the core foods benchmark set for the revised Health Star Rating Calculator of at least 3 stars.

Most Australians are failing to meet the recommended minimum consumption of dairy products in the 'core' food group each day. To empower consumers and minimise their confusion on healthier food choices, it is important that any regulatory approaches such as the FOPL scheme are aligned to the Australian Dietary Guidelines, conveying clear and consistent evidence-based ratings.

FOPL is also an example of a regulatory approach where the costs to industry and the government are high, and yet the public benefits are not so clear. As noted above, the dairy industry endorses a commitment by Government to best practice regulation processes and considers these processes should be applied to the proposed FOPL scheme.

8. Enhancing agricultural exports

How can industries and government respond to the key challenges and opportunities to increase or enhance exports?

How can the Government best take advantage of multilateral and bilateral trade negotiations (including through the World Trade Organization and through free trade agreements (FTAs)) to advance the interests of the sector?

How can engagement between industry and government on market access priorities for Australian agricultural products be improved, including informing negotiations on FTAs?

What changes could be made to biosecurity arrangements, both in Australia and in other countries that would enhance global trade in agricultural products?

How do we provide the appropriate biosecurity controls at minimum cost?

The Australian dairy industry's long-term growth and profitability is linked closely to its status as a world competitive producer that can develop and retain global market positions.

Demand for dairy products will continue to grow with the expanding middle class in emerging markets such as China, South East Asia and the Middle East, changes in diet and increasing urbanisation together with a rising global population.

Given the right environment, the Australian dairy industry is well positioned to capitalise on this growth. While the opportunities offered by growing international dairy demand are well understood, a key question in the medium term is whether the Australian dairy industry's growth rate is sufficient to maintain relevance in an expanding global market for dairy products. A large proportion of dairy farmers are signalling little appetite for growth as the pressures on management, cash flows and profitability increase. From this perspective, a lot of what government can do to facilitate exports has been discussed in response to Issue 6: A competitive and productive food industry.

A goal such as doubling exports is meaningless. Concentrating on increasing profitability along the supply chain through exports is a more useful goal than continuing to increase the volume of low-value commodity goods.

Government should focus trade development programs on increasing the value of what is exported, rather than just increasing volumes. This is linked to the importance of innovation in process and product technologies to achieve additional value, and government's role in supporting this innovation, including through a food regulatory framework that encourages innovation. Trade strategies should also focus on helping existing exporters increase exports, rather than simply seeking to expand the number of exporters.

Trade agreements

Internationally, with no multilateral agreement on trade reform in sight, Australia's ability to negotiate significant FTAs with commercially meaningful outcomes will be critical to maximising returns for the industry. The bilateral agreements negotiated by competitor countries will also have an important bearing on trade flows, access to, and profitability in markets of choice.

Government should pursue comprehensive trade agreements with all relevant countries and regions (within Asia: China, Indonesia, and India). This is critical to building long-term business partnerships and defending existing commercial positions.

The Australian dairy industry is pleased that the Australian Government has managed to secure a trade deal with the Republic of Korea in recent months. Once ratified, this deal will help to minimise the competitive disadvantage that Australian dairy exporters have faced in that market since the United States and European Union secured their own FTAs with Korea.

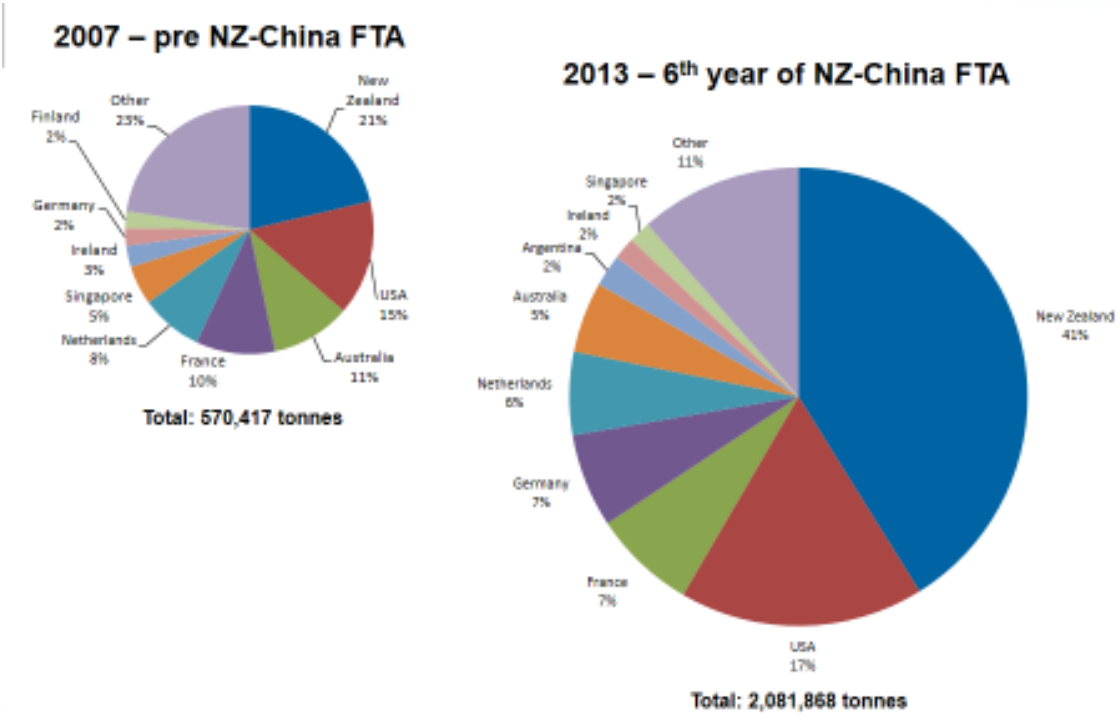
While the industry acknowledges that there are some minor gains for dairy from the recently completed Japan FTA, overall, the ADIC has been extremely disappointed by the outcome with this key trading partner. The deal will mean the Australian dairy industry will save just $4.7 million in the first year of its implementation rising to an estimated $11.6 million by 2031. This is a very small saving from the $120 million of total tariffs currently paid to the Japanese Government by Australian dairy exporters.

The dairy industry's attention now shifts to the FTA with China, now our largest dairy export market.

It has been well reported that the NZ-China FTA has given New Zealand, one of Australia's largest competitors in dairy products trade, preferential market access in China. The estimated trade and financial benefits for the New Zealand dairy industry have grown rapidly since implementation of the China - New Zealand FTA on 1st January 2008. The six year period (2008-2013) has witnessed a:

- Four and a half fold increase in WMP imports to 562,604 tonnes
- Almost eight fold increase in SMP imports to 123,919 tonnes

The financial benefits to New Zealand origin milk powders from lower tariffs versus those paid by competitors are estimated to have risen to between $40 and $50 million in 2014. This advantage grows annually as the NZ-China FTA tariff reduction schedule matures each year.



In negotiating trade agreements, streamlining requirements and technical barriers is also important. For example, when Tariff Rate Quotas are used, the administration of these quotas in Australia or in the importing country can be so costly and burdensome as to undermine any competitive gains from having access to the quotas.

As well as opportunities in Asia, the dairy industry sees significant opportunities in the Middle East. A comprehensive trade agreement with the Gulf Cooperation Council (GCC) should also be pursued. This is critical not only to open up new opportunities, but to defend existing share given that the NZ-GCC FTA, once ratified, will give New Zealand preferential market access in the GCC countries.

From a competitive perspective, EU and US policy reforms will also play a role in shaping future dairy trade flows as the removal of EU production quotas and the likely development of a new US Farm Bill signal a new type of engagement with the international market. This in turn may change the markets in which Australia competes.

The US industry is seeking to increase its export presence and has delivered a fourth consecutive year of record exports by volume. New investments in milk powder production capacity and ongoing programs to better meet international specifications and gain market share by US processors are likely to see further inroads made in coming years.

The Australian dairy industry is also facing subsidised competition from the US industry-funded Cooperatives Working Together (CWT) program.

The CWT program is subsidising American export products such as cheese and butterfat and displacing Australian origin product in key dairy markets in Asia. This is having the additional affect of undermining those commodity prices.

A further issue is that the increased use of non-tariff barriers in priority markets is affecting trade in agricultural goods – including dairy products. The Australian Government should increase its capacity to work (in collaboration with industry) to identify and react to existing and new non-tariff barriers in order to minimise impact on trade.

Agricultural counsellors

The Department of Agriculture, Agricultural Counsellor program needs to increase regional coverage in South East Asia and the Middle East. In addition to existing posts, the program should be expanded into the following three key emerging markets: Vietnam, the Philippines, and Saudi Arabia. These countries are high potential growth markets whose needs can't be adequately met through existing posts (for example, the Thailand post's coverage of key growth areas in South East Asia).

Agricultural Counsellor posts play a major role in Australia's efforts to: remove or lower market access barriers for agricultural products; facilitate trade; monitor emerging international issues; help resolve quarantine issues; and, provide briefings and assist with visiting delegations.

Where Department of Agriculture, Agricultural Counsellors are located in markets, they can more effectively engage directly with local officials/government representatives to address access issues as they arise, and work proactively to identify and prevent non-tariff barriers affecting dairy imports.

As well as representation in key markets, representation in key competitor countries is also beneficial. Given the role of the EU and the US as agricultural policy setters, on-the-ground representation for Australia means issues can be addressed before they develop. Moreover, in the case of the EU, the Commission is reluctant to engage directly with industry so government representatives are needed as facilitators. A case in point has been consultations on Geographical Indications (such as those on Danbo and Gouda Holland). Expansion of Agricultural Counsellor positions in emerging markets should not be at the cost of existing posts.

International trade support structures

The structures that protect Australian exporters' ability to defend against technical and regulatory barriers also rely on a capability to operate effectively in:

- World Trade Organisation (WTO) dispute settlement processes
- International standard setting forums (Codex, OIE, WCO)
- Monitoring and responding to WTO Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) notifications

- FTA and bilateral review committees

The effectiveness of Agricultural Counsellors also relies on being able to draw quickly on expertise back home, in the Department of Agriculture, as well as agencies like Food Standards Australia New Zealand and Australian Pesticides and Veterinary Medicines Authority. These resources are also critical to responding to technical barriers and need to be maintained as a priority.

As an export-oriented industry, international regulatory frameworks are important to Australian dairy.

The dairy industry invests significant resources in monitoring and contributing to international standard setting, but much of this can only happen at a government-to-government level. It is a critical role for the Australian Government to continue to actively contribute to and take a lead in these international processes to support exports.

Government also needs to continue close collaboration with industry to ensure its efforts are focused on priority issues and achieve practical outcomes that can be implemented by industry.

Consistency of approach

Like other food industries in Australia, the dairy industry needs protection from exotic diseases. A strong, science-based biosecurity and quarantine system is non-negotiable. However, another element of maintaining our livelihood is access to overseas markets. To maintain this access, we need to ensure Australia does not leave itself open to criticism, complaint, challenge and ultimately trade sanctions because of an unnecessarily harsh quarantine regime.

Australia's leadership in international forums also means maintaining a commitment to both the spirit and the letter of WTO agreements in biosecurity and quarantine systems, and to international standards such as Codex Alimentarius.

The dairy industry has consistently argued for regulatory harmonisation at national and international levels, whenever possible. To facilitate exports, Australia regularly asks other countries to adopt Codex standards as a matter of course, and to adopt standards that allow for good agricultural or veterinary practice in Australia, where this is not already covered in Codex. In the interest of facilitating trade, the internationally accepted standards (Codex) should be adopted as a matter of principle wherever possible. Australia's credibility in negotiating access relies on a consistent and science-based approach.

Promoting the Australian food safety system

Government should more actively and consistently promote the Australian food safety system, seeking greater acceptance of our system as meeting importing country requirements, and reducing costly additional requirements (for example audits, port of entry testing).

The Department of Agriculture also needs to actively promote the Australian food safety system and seek acceptance by importing countries. The Codex framework offers opportunities to support these principles with importing country governments and seek to streamline overseas requirements. This would reduce the regulatory impost on food exports from Australia.

Equally as important, the Australian dairy industry has sought to have a streamlined approval to domestic and international food safety regulations. The Department of Agriculture, as the competent authority for approving dairy exports, has accepted the national dairy food safety system where national food safety standards are implemented by state food authorities and the Department recognises the state systems. Dairy businesses, while still having multiple commercial audits, are now subject to a single food safety audit for domestic and export requirements. This is a good model that needs to be actively promoted.

A robust biosecurity regime is fundamental to a dairy industry that is safe, productive and competitive in the international market. Protecting the dairy industry, agriculture, and the wider community from biosecurity incidents, and being prepared for a robust and efficient response to biosecurity issues requires ongoing commitment to investment in biosecurity.

For the dairy industry, preparedness for foot and mouth disease is a particular priority. Foot-and-mouth disease (FMD) has been described as the single greatest threat of any disease to Australia's livestock industries. A large outbreak of FMD has the potential to reduce Australian Gross Domestic Product by $10.3 to $16.7 billion, having significant repercussions on our economy. The Australian dairy industry seeks specific funding for FMD preparedness.

As has been indicated previously, Australia's enviable reputation for safe quality food relies on robust systems that manage potential risks. A further area of potential risk is from imported animal feeds. It is critical that Australia ensures not only that there are appropriate legislative and biosecurity arrangements in place, but that they are implemented. This means that imported animal feeds must have robust and verified production systems in place to manage potential risks associated with chemical contaminants, invasive species and/or animal health.

The current procedure whereby a small sample of imported animal feed is inspected or tested at the border is inadequate to manage the potentially substantive risks – especially as animal feeds may not be homogeneous products and the potential hazards not uniformly distributed throughout the animal feed.

Attachment 1

Australian Dairy Industry Council
Policy Priorities Summary

Trade

- Conclude FTAs, in particular the China FTA and the Trans-Pacific Partnership, that provide genuine liberalisation of all dairy products and commercially meaningful opportunities for Australia's dairy industry, to reduce its comparative disadvantage to its major global competitors.
- Increase the number of Agricultural Counsellor postings to help remove barriers to trade (including nontariff barriers) in key international markets such as Vietnam, the Philippines and Saudi Arabia.

RD&E Funding

- Increase total Commonwealth expenditure on agricultural RD&E by one per cent (of total Government expenditure on RD&E) by 2016 to ensure innovation and growth in the dairy industry continues, and boost productivity along the supply chain.

Industrial Relations

- Remove the 3-hour minimum engagement requirement from the Pastoral Award or make it more flexible to acknowledge the unique workforce requirements of the dairy industry.
- Include "milking" under essential services in the Pastoral Award 2010 relating to penalty rate classifications, similar to "feeding and watering stock" to recognise that milking is an essential part of animal care.

Immigration

- Streamline and fast-track the application and approvals process for 457 visas for skilled dairy workers, and reverse the restrictions on 457 visas introduced by the former Government.
- Second a Department of Immigration and Citizenship (DIAC) Departmental Liaison Officer to ADF to assist farmers with immigration matters.
- Extend the duration of 417 and 462 visas from six to 12 months.
- Include dairy on the list of eligible industries for the Seasonal Worker Scheme and on Schedule 1 of the Skilled Occupation List, and revise Australian and New Zealand Standard Classification of Occupations (ANZSCO) skills descriptions for dairy farmers to align with industry skills descriptions.

Farmer Health, Safety and Wellbeing

- Commit $1.2 million over four years towards a Farm Safety Assessment Program, providing grants to fund a 3-hour farm safety assessment (at $300 per assessment) to farmers, conducted by an independent safety consultant.
- Provide the National Centre for Farmer Health with funding of $500,000, matched by the Victorian Government, to enable them to continue their valuable work in raising on-farm awareness of the importance of health, safety and general well-being.

Infrastructure

- Provide funding for strategic regional infrastructure projects beneficial to agriculture and regional communities.
- Deliver on the pre-election promise for funding for current and future rounds of the Roads to Recovery program.

Finance and Risk Managements

- Provide ongoing resources for the Rural Financial Counselling Service to offer one-on-one sessions for farmers experiencing extreme financial hardship.
- Introduce a new program, similar to the Commonwealth's $5,500 Professional Advice and Planning Grants for drought-affected farmers, for farmers experiencing extreme financial hardship.
- Commit to an improved Farm Finance Package including revised criteria for dairy farmers under extreme financial hardship and improved drought assistance measures.

Biosecurity

- Invest in preparedness for Foot and Mouth Disease and emergency disease response capability and surveillance.

Competition Policy

- Establish a mandatory Code of Conduct covering the whole supply chain to balance the market power of the major retailers and appoint an Ombudsman with the powers to ensure compliance.
- Modify the ACCC Collective Bargaining authorisation for dairy farmers to strengthen the bargaining position of dairy farmers, providing further balance in market power to dairy farmers.

Agricultural Education

- Classify agriculture and related tertiary courses (Agricultural Science, Agribusiness, etc.) under the National Priority band for Commonwealth HECS-HELP assistance.
- Deliver on the Government's $2 million pre-election promise to incorporate food and fibre education into the National Curriculum.

Energy/Carbon Tax

- Accord dairy processors Emissions-Intensive, Trade-Exposed (EITE) status under any carbon pricing scheme until all major dairy competitors are subject to similar schemes.
- Provide a BAS claim rebate for carbon price costs on power bills for dairy farms, similar to the diesel rebate for cropping and grazing enterprises.
- Ensure adequate funding in emissions reduction programs, including related research, to assist the dairy industry in undertaking energy efficiency assessments, and to transition to renewable energy technology and energy efficient equipment.

Water

- Murray Darling Basin Plan implementation – confirm a clear plan for capping buybacks at 1500GL, and delivering 600GL in infrastructure works and 650GL in environmental works.

Healthy Soils and Waterways

- Provide funding for on-farm nutrient testing and management plans to reduce farmers' fertiliser costs, boost soil productivity, and keep waterways and lakes clean.
- Provide funding for integrated biodiversity management on farms that boosts productivity, such as shelter belts for stock and fencing off waterways.

Agricultural Competitiveness White Paper Resourcing

- Provide sufficient resources for the implementation of recommendations generated from the Agricultural Competitiveness White Paper.
- Utilise existing research from the National Food Plan (please see the ADIC and DA submission in response to the National Food Plan Green Paper at attachment 2) and the Asian Century White Paper to assist with implementation of the above recommendations.

Attachment 2:

Australian Dairy Industry Submission to the National Food Plan Green Paper 2012

Australian Dairy Industry

Represented by

Australian Dairy Industry Council Inc. and

Dairy Australia

Response to

National Food Plan Green Paper

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The Australian Dairy Industry

The dairy industry is one of Australia's major rural industries. Based on farm gate value of production, it is ranked third behind the beef and wheat industries. There are approximately 6,900 farmers producing close to 9.5 billion litres of milk annually, for a farm gate value of just under $4 billion.

The dairy industry welcomes the chance to present this submission in response to the National Food Plan green paper.

This is a joint submission from the Australian Dairy Industry Council (ADIC) and Dairy Australia.

The ADIC is the national peak policy body for the Australian dairy industry and represents all sectors of the industry on issues of national and international importance. Its constituent organisations – the Australian Dairy Farmers Limited (ADF) and the Australian Dairy Products Federation (ADPF) – represent the interests of dairy farmers, manufacturers, processors and traders across Australia.

Dairy Australia is the dairy industry-owned service company, limited by guarantee, whose members are farmers and industry bodies, including the ADF and the ADPF.

Key points

Australia's food policy framework

- The National Food Plan needs to achieve an integrated vision for food, beyond just DAFF's sphere of influence. A Ministerial Food Forum, and arrangements with states and territories through COAG, should be structured to support this.

Australia's food security

- A State of the Food System should be undertaken on a regional basis, to properly reflect regional issues and needs.

Safe and nutritious food

- The National Food Plan should put forward specific strategies to improve integration with National Nutrition Policy, and to improve partnerships between government and primary industry bodies to increase consumption of core foods.

A competitive and productive food industry

- A working group to prepare a workforce development strategy should be established as proposed in the green paper. This should extend beyond the agriculture sector, and explicitly acknowledge and address employment and training issues across the whole food sector.
- Government should develop a national strategy on the consistent application of modern biotechnology (including genetically modified crops) in agriculture.
- The current rural Research and Development Corporation (RDC) model (particularly as it applies to dairy) remains fundamentally sound. It is an effective avenue for addressing cross-sectoral issues by way of strategies developed through the RDC network. Additional government funding should be directed to these areas of cross-sectoral investment.
- Alignment of research and development post-farm gate is also critical. The dairy industry supports the National Food and Nutrition Research and Development and Technology Transfer Strategy as a vehicle for better collaboration, as well as sector-specific, industry-led innovation hubs such as Dairy Innovation Australia Limited (DIAL).
- Government should introduce ongoing mechanisms to identify regulatory reform opportunities and should reaffirm commitment to the Best Practice Regulation principles and approaches. Reforms to the regulation of minor use chemicals should be pursued as a priority.
- Australian Dairy Farmers (ADF) is keen to participate in a forum to examine options to better manage supplier/supermarket chain relationships that results in action to balance the market power of the major retailers.

A strong natural resource base

- Further research into soil and water, and other natural resource base issues is supported − the existing RDC network offers an avenue for investing in this research

Food trade and market access

- The capacity for direct representation on specific trade issues in key markets should be increased, particularly through the DAFF International Agricultural Counsellors. Vietnam, Philippines and Saudi Arabia are high priorities for expanding the Counsellors network.
- The Imported Food Control Act 1992 should be reviewed, and the review should also consider the need to develop an Imported Feed Control Act to manage risks from imported animal feed.

Strategic policy priorities

Dairy supports the National Food Plan's key outcome of:

> *A sustainable, globally competitive, resilient food supply, supporting access to nutritious and affordable food.*

Achieving this outcome requires a truly integrated vision across government. While the green paper has recognised the breadth of influences on food, the proposed practical actions are concentrated in areas within DAFF's direct sphere of influence. This is a missed opportunity.

The Australian Government needs to broaden its approach. To this end, dairy has identified the following priority strategic policy areas:

- Investment in research, development and extension
- Market access
- People
- Health and nutrition
- Supply chain issues

While some of these fall outside what is covered in the green paper, the dairy industry believes it is nonetheless important to highlight how practical government action in these areas will improve the National Food Plan's capacity to achieve its key outcome.

1. Investment in research, development and extension

Substantial ongoing government investment in agricultural and food processing innovation is required to keep boosting productivity along the supply chain.

The current rural Research and Development Corporation (RDC) model (particularly as it applies to dairy) remains fundamentally sound and effective. Strong, industry-based RDCs are uniquely positioned in their capacity to translate broad, high-level knowledge into effective, industry-based solutions. The existing rural RDC network also provides an avenue for increasing research in cross-sectoral issues.

Cooperative Research Centres also play an important role in developing new science and research and development capacity within the industry. Their close association with industry enables industry-relevant commercial outcomes. The Dairy Futures CRC in particular is making a valuable contribution to the dairy industry,

Alignment of research and development post-farm gate is also critical. The dairy industry supports the National Food and Nutrition Research and Development and Technology Transfer Strategy as a vehicle for better collaboration, as well as sector-specific, industry-led innovation hubs such as Dairy Innovation Australia Limited (DIAL).

The design of investment is also important, particularly translating research findings on new technologies and farming systems into general productivity gains. Any review of research investment models also needs to consider appropriate support for development and extension.

2. Market access

Increasing use of non-tariff barriers in international markets is constraining market access for dairy exports. DAFF Agricultural Counsellors play a major role in removing or lowering such barriers, because they can more effectively engage directly with local officials to address access issues as they arise, and work proactively to identify and prevent non-tariff barriers affecting dairy imports.

Increasing the number of Agricultural Counsellor postings is among the most effective measures the Australian Government (DAFF) could take to maintain and expand market access. To this end, the dairy industry urges the government to expand the Agricultural Counsellors postings program into the following three key emerging markets: Vietnam, the Philippines, and Saudi Arabia.

3. People

The future of dairy depends on recruiting, training and retaining the next generation of farmers, food scientists, processing workers and industry service providers.

The dairy industry has been actively engaging in strategies to attract, retain and develop a skilled workforce. However, government policy and funding decisions are undermining industry programs to attract and retain people in dairy. Specific issues include:

- Lack of priority of Vocational Education and Training (VET) funding into courses targeted at industries with acknowledged skill shortages, such as dairy.
- Red tape in the visa approval system leading to long delays in recruiting skilled employees from overseas to fill skills shortage gaps – a review of this process is necessary, in particular 457 Visas, to streamline and improve industry access to overseas workers to fill skills shortage gaps.
- Fair Work Australia Modern Award Review minimum engagement provisions not reflecting working practices on dairy farms.

The industry welcomes the National Food Plan proposal to establish a working group to prepare a workforce development strategy focusing on ways to better use existing labour and skills initiatives.

The strategy should extend beyond the agriculture sector, and explicitly acknowledge and address employment and training issues in food processing.

4. Health and nutrition

The dairy industry recognises the need for policy and regulatory initiatives to address the increasing rates of obesity and related non-communicable diseases in Australia. It is critical that these policies and initiatives recognise the health benefits of diets based on nutrient-rich, core foods such as milk, cheese and yogurt, rather than focussing on a narrow range of negatively perceived nutrients. This is consistent with the most up-to-date scientific evidence as recognised in the evidence statements used to develop the National Health and Medical Research Council (NHMRC) draft Australian Dietary Guidelines.

Poorly targeted or non-evidence based efforts that reduce dairy consumption are a regulatory burden on industry, and could be counterproductive in achieving the desired health outcomes. The Australian Government needs to support an evidence-based approach to encouraging healthy eating, starting with the Australian Dietary Guidelines based on the NHMRC's own evidence statements showing consumption of milk, cheese and yogurt is linked to positive health outcomes. Low dairy food intake is a serious problem in Australia. Most Australians don't currently consume enough core dairy foods to access these health benefits.

5. Supply chain issues

Australian Dairy Farmers (ADF) is keen to participate in a forum to examine options for better managing supplier/supermarket chain relationships that results in action to address and balance the current excessive market power of the major retailers. It is vital that farmers and farmer representatives are involved in this forum from peak bodies such as the National Farmers Federation and the ADF.

In particular, the ADF supports:

- A code of conduct for supermarket companies in their dealings with processors and farmers; and,
- Establishing an ombudsman to enforce compliance, investigate complaints from a whole-of-supply chain perspective, administer a cost-effective dispute resolution process with appropriate penalties, and publicly report.

Response to questions in the green paper

Chapter 3 – Australia's food policy framework

3.1 Do you agree with the proposed outcome and objectives outlined in this green paper to guide the Australian Government's development of food-related policy and stakeholder consultation mechanisms?

Integrated vision

Government activities that affect food cover a wide range of areas including policy, regulation, education and training, investment in research and development, and industry development. Currently this involvement is piecemeal, inconsistent, sometimes overlapping and often defined by capability and available policy tools rather than any shared understanding of roles and responsibilities or overarching strategy.

The National Food Plan needs to achieve an integrated vision across multiple departments, beyond just DAFF's sphere of influence. While the discussion and objectives in the green paper recognise the breadth of influences on food, the practical options proposed are concentrated on actions in areas within DAFF's direct influence, missing an opportunity to achieve a truly integrated vision across government.

The dairy industry is concerned that while 'objectives' are set in areas beyond DAFF's direct influence, there is no indication that the relevant agencies support these objectives or the integrated vision for food policy. Actions in other areas of government may undermine or compete with the National Food Plan's overarching objective. Our response to Chapter 5: Safe and Nutritious Food, and Chapter 7: A Strong Natural Resource Base provides some examples.

Whole supply chain approach

'Food' industries need to be viewed as integrated supply chains. Milk is a perishable product, which must be processed before it can be sold commercially. As a result, dairy production is integrated across the supply chain: dairy farmers cannot operate without domestic processing capacity, nor can processors survive without domestic farm milk supply. While the rhetoric around an 'integrated approach' acknowledges this, few of the practical actions proposed address issues that cut across the supply chain.

Our response to Chapter 6: A Competitive and Productive Food Industry provides some examples of actions that should be extended to other areas of the supply chain.

3.2 The Australian Government is seeking feedback on a number of alternatives to improve leadership and stakeholder engagement on food policy issues. These alternatives are set out in Section 3.4.1.

Do you have a preference for a particular alternative or a specific suggestion for another mechanism that would provide better leadership, coordination and stakeholder engagement on food policy issues in Australia?

A robust and long lived commitment to an integrated vision for food policy and commitment to implementing the actions proposed in the National Food Plan will be essential to encourage investment in the long-term future of the food industry. The mechanisms proposed are less important than achieving better engagement and alignment across all policies impacting on food. This needs bipartisan support, and commitment beyond short-term political cycles.

Ministerial Food Forum

To the extent that a Ministerial Food Forum is structured to ensure an integrated vision of food policy, the dairy industry supports the establishment of a forum.

The forum should include key Ministers (such as: Agriculture, Health, Industry and Innovation, Environment, and Trade) to reflect the integrated food supply chain and the potential for food to provide health solutions. Others should also be able to be included when actions within their portfolios will affect the food industry (for example, the Chemicals of Security Concern work in the Attorney General's portfolio, which is aimed at terrorism activities but has potential implications for food production), or where otherwise relevant (for example, Infrastructure, Education and Training, Climate Change).

The terms of reference for the forum should focus on ensuring all impacts of policies affecting food are considered, that the policies are not undermining efforts in other areas, and providing a mechanism for developing cross-cutting solutions.

Stakeholder Committee

A Stakeholder Committee to provide advice on food issues would need to comprise representatives from all supply chain sectors, including primary producers, processors, and retailers. While the committee may provide one useful avenue for engagement, it should not be seen as a replacement for wider industry consultation.

COAG arrangements

These mechanisms also need to coordinate with food policy setting through COAG and associated Ministerial Councils, recognising that states and territories have responsibility for much of the policy affecting food.

Current arrangements, as stated in the green paper, are through the Standing Council on Primary Industries (SCoPI), and the Legislative and Governance Forum on Food Regulation.

In practice this means that the avenues through which 'food issues' are addressed are either focused only on the primary production end of the supply chain, or are about regulation.

For many of the challenges the system is being called upon to address, regulation (in the form of formal standards etc) will not be the best outcome, nor are they just primary production issues.

As it currently stands, there is no way for any improvements in integration at the federal level to be reflected at COAG, except through the Legislative Forum on Food Regulation. Recognising that 'food policy' does not equal 'food regulation', the dairy industry supports the green paper proposal of 'increasing engagement with states and territories, through COAG, on food-related policy using the National Food Plan as a reference point for improved coordination.'

Chapter 4 – Australia's food security

4.1 Do you agree with the analysis that, broadly speaking, Australia is food secure? If not, why not? Please be specific and provide evidence to justify your position. What additional data could the government draw on to measure Australia's food security?

Food security

The dairy industry broadly agrees with the green paper's analysis of Australia's food security.

The future of the food supply is tied to the ongoing viability of food industries. Food businesses along the supply chain must be both profitable and sustainable in the long term to ensure Australians continue to have access to a nutritious, secure food supply. To support this, consumers need to value the food they purchase, beyond short-term price concerns.

Dairy's strong trade position supports its competitiveness and sustainability, which are essential for maintaining domestic and global food security.

Our responses to Chapter 7: A Competitive and Productive Food Industry, and Chapter 8: Food Trade and Market Access are also relevant here.

State of the Food System report

To be useful, a State of the Food System report should be undertaken on a regional basis, to reflect regional food system issues.

For example significant regional differences continue to characterise the Australian dairy industry – based on market and product mix, farmer confidence as well as current and future growth prospects.

Like the national economy, the dairy industry continues to be characterised by "two speeds" – growth and consolidation in exporting regions, contrasted with faltering confidence and contraction in domestic milk regions.

For most farmers in south-eastern Australia, international conditions determine prices and industry confidence.

In Queensland, central and northern New South Wales and Western Australia the industry is geared toward domestic fresh milk supply. Ongoing intensity in retail competition, unsustainable pricing of milk at $1 per litre, disruptions caused by changes in private label supply contracts and uncertainty surrounding processor milk requirements have undermined farmer confidence and supply stability.

While overall supply remains good, these regional differences affect the food system within regions, and ultimately the sustainability of a local fresh milk supply. Analysis at the national level fails to show this nuanced picture.

The data collected for a State of the Food System report will be important to support evidence-based policies and programs in the future that properly reflect regional issues and needs.

4.2 The Australian Government is seeking feedback on the option of working with state and territory governments and the food industry to develop strategies to mitigate risks and maintain continuity of the food supply in a major emergency. Section 4.5 of Chapter 4 outlines some options. Do you support these options? Do you have specific suggestions for other options or strategies?

Food supply in an emergency

The dairy industry is actively engaged with and supports current efforts to maintain the continuity of the food supply in a major emergency, and is keen to contribute to further work, as outlined in the green paper.

During an emergency/natural disaster, transportation and particularly road access are critical to ensure milk can be moved from farm to factory, and final products can be supplied to retailers

and on to consumers. This also applies to the transport of emergency supplies for livestock welfare and ongoing production.

In recent emergencies (for example floods in Victoria and Queensland) the industry worked with authorities to ensure transport access was maintained wherever possible. Communication with industry and practical flexibility (for example mapping safe routes and allowing milk trucks through otherwise closed roads) are important in an emergency.

Resumption of power is also critical to allow continued milking and alleviate animal welfare issues, as well as for cooling milk so that it does not have to be discarded.

4.3 Do you agree with the analysis of the factors that contribute to individual food security? Do you support the approaches outlined? Do you have specific suggestions for other options or strategies?

Individual food security

Clear integration is important between the National Food Plan, a National Nutrition Policy and efforts to ensure that all Australians consume healthy amounts of nutritious core foods.

Currently individual food security tends to be measured by access to fruits and vegetables. However, Australians generally do not consume enough dairy foods to get their minimum recommended intake of essential nutrients. Under-consumption is even more marked in vulnerable groups such as teens and the frail elderly, for whom the health implications of poor nutrition are even more serious.

This issue needs to be addressed with a clear integrated policy framework, as discussed in our response to Chapter 5: Safe and Nutritious Food.

Chapter 5 – Safe and nutritious food

5.1. The Australian Government has strategies, policies and programs in place to:

- ensure all Australians have access to a safe and nutritious food supply
- support healthy lifestyles
- reformulate foods, improve food labelling and educate consumers
- improve nutritional outcomes for Indigenous Australians
- provide a comprehensive and effective food safety regulatory environment
- build capacity to control known and emerging food safety risks.

This green paper provides details of these initiatives and outlines the Australian Government's future policy directions, including the development of a national nutrition policy.

Are there additional issues the government should focus on in its future policy directions? What factors should the government consider in developing new, and reviewing existing, polices and programs?

Nutritious food

The dairy industry recognises the need for policy and regulatory initiatives to address the increasing rates of obesity and related non-communicable diseases in Australia. To successfully address these important issues it is critical that policies and initiatives recognise the health benefits of diets based on core foods, rather than focussing on a narrow range of negatively perceived nutrients. This is consistent with the most up-to-date scientific evidence as recognised in the evidence statements for core dairy foods (milk, cheese and yogurt) used to develop the draft Australian Dietary Guidelines.

Efforts to encourage healthy eating (such as front of pack labelling, school canteen guidelines, health claims regulation and the Food and Health Dialogue) should promote and recognise the health benefits of core foods recommended in the Australian Dietary Guidelines, particularly those that are currently under-consumed.

The health and economics case to encourage increased dairy consumption is strong. Low dairy intake is already a serious problem in Australia – seven out of ten females and six out of ten males (12 yrs +) fail to get their minimum recommended intake[1]. The situation is worse for teens[2]. New research indicates the estimated healthcare cost attributable to low dairy product consumption is comparable with total spending on public health in Australia ($2 billion in 2009-2010)[3].

Poorly targeted or non-evidence-based efforts that reduce dairy consumption are not only a regulatory burden on industry, but could be counterproductive in achieving the desired health outcomes.

Integrating the National Food Plan with National Nutrition Policy would have real benefits by putting nutrition policy in the context of the food system, and the foods people actually eat, rather than focussing on a narrow range of nutrients.

The National Food Plan should put forward specific strategies to improve integration. The proposed Ministerial Food Forum may go some way to achieve this, but given the increasing pressure to pursue nutrition outcomes through food regulation, a more structured collaboration may be required.

Australian Dietary Guidelines

The National Health and Medical Research Council (NHMRC) is proposing to encourage Australians to consume "mostly reduced-fat" dairy products in its current review of the Australian

[1] Doidge & Segal (2012) Most Australians do not meet recommendations for dairy consumption: findings of a new technique to analyse nutrition surveys. *Australian and New Zealand Journal of Public Health* 36: 236-40.
[2] Baird, DL, Syrette, J, Hendrie, GA, Riley, MD, Bowen, J and Noakes, M. (2012) Dairy food intake of Australian children and adolescents 2–16 years of age: 2007 Australian National Children's Nutrition and Physical Activity Survey., *Public Health Nutrition*.
[3] Doidge, Segal & Gospodarevskaya (2012) Attributable risk analysis reveals potential healthcare savings from increased consumption of dairy products. *Journal of Nutrition* 142: 1-9 (*In Press*).

Dietary Guidelines. This proposal ignores the NHMRC's own evidence statements confirming that the many health benefits of milk, cheese and yoghurt apply to all dairy products, not only reduced fat varieties. This perpetuates a perception that regular fat milk, cheese and yoghurt are somehow unhealthy and linked to obesity – when in fact, the NHMRC 2011 review of the evidence confirmed that the many health benefits of milk, cheese and yoghurt apply to all dairy products, not only reduced fat varieties.

The Australian Government needs to support an evidence-based approach to encouraging healthy eating, starting with Australian Dietary Guidelines based on the NHRMC's own evidence statements.

Addressing all core foods

Initiatives devised to encourage healthier food choices also need to address the range of core foods that are under-consumed, not just fruit and vegetables.

For example, the COAG National Partnership Agreement on Preventative Health provides funding to state health departments for implementing nutrition policy. One desired outcome is to increase the proportion of the population who meet national guidelines for healthy eating. However performance measures are focused mainly on fruit and vegetables. As a result state health departments focus their activities only on fruit and vegetable consumption, rather than reflecting all core foods that are under-consumed.

The National Food Plan should consider ways to improve partnerships between government and primary industry bodies (including rural Research and Development Corporations) to increase consumption of core foods.

Improved data

Evidence-based policy making in the Australian context requires regular, coordinated population health and nutrition surveys, along with a robust health and nutrition research program.

The current Australian Health Survey 2011-13 is urgently required to update the data from the 1995 National Nutrition Survey, and the extension of the health information collected is a useful step forward. To properly support evidence-based policy this information needs to be collected much more frequently and consistently.

Food safety

The dairy industry has a history of working with federal and state regulatory agencies to ensure food safety regulations are outcomes-focused, science-based and proportionate to risk. This streamlines the common objectives of both government and industry for safe dairy food production, without added regulatory burden. Furthermore, it allows businesses to innovate and incorporate technology changes while continuing to identify and manage their food safety risks.

The Australian food safety system needs to be actively promoted and all supply chain participants encouraged to continue to undertake their responsibilities.

Chapter 6 – A competitive and productive food industry

6.1 This green paper sets out the government's proposed approach for supporting productivity growth and global competitiveness in the food industry, which includes: a market-based policy approach; ongoing reforms to improve biosecurity and help industry adapt to climate change and drought; fostering and investing in innovation; building human capability and a skilled workforce; better regulation along the supply chain; effective competition laws; and broader infrastructure investments and regulatory reforms.

Are there gaps or deficiencies in this proposed approach?

Australia sells almost half its annual milk production directly into export markets as manufactured food products and ingredients. At the same time, Australia applies minimal barriers to commercial dairy imports. The dairy industry therefore recognises the importance of remaining competitive in a global market. Regulatory burdens and high costs in areas such as labour, energy and infrastructure all affect the competitiveness of the industry.

In addition to responses to questions below, human capability and a skilled workforce are among the most important issues that will affect the dairy industry's future. The adoption of new technologies and added complexity will place increased demands on the people in dairy in the future. Priorities include leadership development; assisting the development of skills on farm, in the service sector, and in processing; and, further development of formal training and education and career pathways in the industry.

Farm workforce development

Dairy farms have become increasingly complex to manage. As farms grow, reporting and compliance requirements grow more complex, and technology plays an expanding role in milk production, the skills of the people required to successfully run a dairy farm are changing.

The 2012 National Dairy Farm Survey paints the changing picture of farm management and labour structures. The proportion of dairy farms operated by a single person, or with a partner, was 29% in 2012 compared to 43% in 2007.Nationally, some 68% of farms operate with paid employees, up from 64% in 2011. An estimated 32% of paid staff are employed on larger farms (comprising 301 to 500 cows), which represent 24% of all dairy farms across the industry.

Thus people management skills, as well as animal and technology management, are becoming more critical.

Food processing workforce development

People issues are not just confined to the farming sector. The analysis in the green paper is focused on issues in the primary production sector, but the labour supply issues also facing the food processing sector should not be ignored

Reforms to agricultural education alone will not address issues facing food processing – such as shortages of skills in food science and technology, microbiological risk, and process optimisation. The food industry requires people with skills to enable multidisciplinary approaches to allow companies access to appropriately trained problem solvers and innovators.

Industry and government actions

Dairy's future depends on recruiting, training and retaining the next generation of farmers, food scientists, processing workers, and industry service providers.

The dairy industry has been actively developing and implementing strategies to attract, retain and develop a skilled workforce (for example Cows Create Careers, National Centre for Dairy Education Australia, Dairy Innovation Australia, postgraduate scholarships).

However, government policy and funding decisions are undermining industry programs to attract and retain more people in dairy.

Specific issues include:

- Lack of funding priority for Vocational Education and Training (VET) courses targeted at industries with acknowledged skill shortages, such as dairy. Specific issues (mostly state-based) include the need to recognise 'Agriculture dairy farmer workers and managers' on skills shortage lists for eligibility to state and federal programs, and the ineligibility for funding of people with existing qualifications, even in areas of skills shortage.
- Red tape in the 457 Visa approval system leading to delays in recruiting skilled employees from overseas to fill skills shortage gaps.
- The Fair Work Australia Modern Award Review (Pastoral Award [MA000035]) minimum engagement provisions, where no minimum engagement provisions or a minimum engagement of two hours instead of the current three hours would better reflect the working practices on dairy farms and facilitate employment and productivity.
- Structural impediments to teaching of food science and technology by universities, including cost of appropriate teaching models.

The industry welcomes the National Food Plan proposal to establish a working group to prepare a workforce development strategy focusing on ways to better use existing labour and skills initiatives. While industry has an important contribution to make, the dairy industry's experience has shown the importance of government involvement, at both state and federal levels, to ensure that policy and funding decisions support industry programs.

A workforce development strategy should extend beyond the agriculture sector, and explicitly acknowledge and address people issues across the whole food sector.

The strategy should consider how to address areas of skills shortage, such as food science and technology, food safety and microbiology and agriculture, for example through targeted scholarships.

The strategy should also consider the importance of making living and working in regional areas attractive to the next generation. Dairy employs more than 40,000 people directly on farms, in factories and in associated transport roles across regional Australia. Strategies for upskilling this regionally based workforce are critical, and would be facilitated by infrastructure such as high speed internet in regional areas through the National Broadband Network.

6.2 The government is seeking to increase the value of Australia's food exports from across the supply chain, including the value-added component.

a) Do you think that a target of doubling the value of our food exports by 2030 is achievable? If not, what target would be?

b) How could this be achieved in a market-driven economy like Australia? What would government and business need to do?

c) What would be the costs and benefits of these actions?

See response to Chapter 8: Food Trade and Market Access

6.3 The use of new technology in food products is likely to be increasingly important in Australia and around the world, helping to meet evolving desires and needs of sophisticated consumers and ensuring an adequate global supply of food for a growing population. However, some people are concerned about new technology despite substantial regulatory arrangements to manage any potential risks.

What should governments, businesses, peak associations and consumers be doing in response to this trend?

New technologies

Innovation and the use of new technologies will be essential to improve productivity, differentiate and improve existing products and expand export opportunities.

Support for research and infrastructure to translate basic science to practical applications will be essential to enable Australia to be truly innovative and reap the benefits of investment through the application of new technologies in the food sector. With a perishable product, the dairy sector is particularly reliant on processing to open opportunities to increase returns. Government support for sector change through the introduction of new technologies should be considered.

Regulation of new technologies

The dairy industry supports the need for a robust regulatory approach to assure consumer confidence and safety with regard to new technologies.

At the same time, regulation must be evidence-based and proportionate to risk, and should encourage rather than stifle innovation that benefits both consumers and industry.

The dairy industry recommends that policies be developed that allow the integration of innovative new products and processes into the regulatory framework without impeding competition or trade (both domestically and internationally) and that apply equally to imported and domestic products.

This includes a role for government agencies such as Food Standards Australia New Zealand (FSANZ) in managing consumer perceptions so that a requirement for a pre-market assessment is not misinterpreted as indicating an unsafe product. If a new technology is deemed safe, it is a responsibility of regulatory authorities to communicate effectively to all stakeholders, including consumers, to help allay unwarranted concerns and anxieties.

Biotechnology

The dairy industry considers that biotechnologies offer significant potential benefits to producers, processors and consumers, and to Australia.

Through the Dairy Futures Cooperative Research Centre, the industry invests in research into pasture and animal biotechnology applications.

A clear and transparent regulatory system is required for the confidence of all stakeholders. The current regulatory arrangements through the Office of the Gene Technology Regulator (OGTR) and FSANZ are appropriate. The dairy industry supports current requirements for labelling, but would be concerned if the standard's provisions were extended to foods that may be produced using gene technology but do not in themselves contain any novel DNA or protein.

As well as ensuring these rigorous safety requirements, government also has an important role to play in supporting new technologies such as biotechnology and addressing barriers that constrain development and adoption.

The dairy industry fully supports a national strategy on the consistent application of modern biotechnology (including genetically modified crops) in agriculture, including considering constraints to adoption and the path to market. This should also look at the potential advantages offered by biotechnology developments, review consumer expectations and consider communications to allay consumer concerns.

6.4 One option to increase agricultural productivity to help the sector meet future export growth opportunities and challenges, such as increasing productivity growth in a changing climate, is to increase rural R&D investments over a number of years. This would be in addition to continually seeking better ways to increase the overall benefits of this investment.

a) Is this the best way to help the agricultural sector meet the challenges and opportunities of the coming decades? Why/why not?

b) What would be the costs and benefits of this approach?

c) How could any additional investment be targeted to achieve the greatest overall benefit to Australia?

Substantial ongoing investment in agricultural and food innovation, including research, development and extension (RD&E), will be required to keep boosting productivity along the supply chain.

Research, development and extension model

Increased funding is critical, and well-supported by the evidence of significant benefits to industry and the Australian community through productivity growth, higher living standards and a wide range of social and environmental spillovers from investment in rural RD&E. These include a safe and stable food supply, improved human health and nutrition, an enhanced national knowledge and skills base and improved environmental conditions arising from sustainable on-farm management practices.[4]

Investment program design is also important, particularly in translating research findings into new technologies and farming systems to generate whole-of-chain productivity gains.

Declining state financial and policy support for development and extension services is shifting responsibility for leading, funding, and managing development and extension. Continued government investment in these areas, driven by industry needs, is required to keep boosting farm productivity.

Any review of research funding or investment models also needs to consider models for development and extension.

Rural Research and Development Corporation network

As recognised in the Australian Government's Rural Research and Development Policy Statement, the current rural Research and Development Corporation (RDC) model (particularly as it applies to dairy) remains fundamentally sound and effective.

Strong, industry-based RDCs have a key role to play in delivering desired outcomes because of their unique positioning and capacity to translate broad, high-level knowledge into effective industry-based innovation and solutions.

Challenges such as climate change will require increased cross-sectoral collaboration in research, development and extension. The existing rural RDC network provides a funding framework for addressing these cross-sectoral priorities based on strategies agreed between government and the RDCs. Dairy Australia is actively engaged in this work through the RDC network.

Pursuit of these cross-sectoral strategies should not be at the expense of industry productivity growth, and additional government funding should be directed to these areas of cross-sectoral investment.

Cooperative Research Centres

Cooperative Research Centres (CRC) play an important role in developing new science and R&D capacity within the industry. Their close association with industry enables industry-relevant commercial outcomes.

The Dairy Futures CRC has taken extremely positive steps towards developing technologies that will potentially double the rate of genetic gain of the Australian dairy herd. Similarly, the development and use of CRC technologies to boost pasture productivity are also yet to realise their full potential but may deliver transformational improvements to Australian dairy industry productivity.

While the Australian dairy industry is hopeful that the technologies being developed within the Dairy Futures CRC will be available for industry use by the end of the CRC funding period, it is vital that government closely monitors programs such as these to ensure that funding streams are secured so that research programs can fully reach their potential.

[4] Mullen, J.D. (2007) 'Productivity growth and the returns from public investment in R&D in Australian broadacre agriculture', *Australian Journal of Agricultural Economics*, vol. 51, pp. 359–84.

Food processing innovation

The green paper focuses on rural R&D and in doing so fails to acknowledge that much of the value in the food industry is generated post-farm gate; significant innovation occurs here, too.

The dairy industry adds value through processing to produce drinking milk, cheese, butter, milk powders, cream, yoghurts and a range of specialty products. The estimated value of farm production is $4 billion annually and total value-added production (ex-factory) is $12 billion.

Increasing productivity for food therefore relies on research, development and extension/ commercialisation all the way along the supply chain. Milk, unlike many other raw materials, must be processed to preserve its integrity; this strengthens the focus on a supply chain approach to value-adding in this industry. With comparatively low domestic dairy prices and a competitive international market, innovation to drive improvements in dairy manufacturing and processing is imperative.

Research and development-led innovation includes improvements in all parts of the processing chain – improved equipment and processes that create production efficiencies as well as new product development.

Accordingly, Dairy Australia invests in innovation across the supply chain. In particular Dairy Innovation Australia Limited (DIAL), established in 2007 and led and funded by the dairy processing industry in conjunction with Dairy Australia, responds to this need for innovation. Working as a single entity with multiple Australian dairy companies, DIAL provides a precompetitive research capability much greater than could be achieved through an equivalent level of individual company R&D activity.

Sector-specific, industry-led innovation hubs such as DIAL have proved successful in generating and directing R&D investment in areas of market failure, and translating this collectively funded research to commercial outcomes.

An increase in government investment is needed if the food industry is to overcome the many challenges of globalisation and realise the growth opportunities in meeting the consumer drivers of health, convenience and premium foods. Government funding for ventures like DIAL should be considered as an opportunity to capitalise on existing industry investments .

The National Food and Nutrition Research and Development and Technology Transfer Strategy considers the entire food supply chain from farm gate to the consumer. It has focused primarily on post-farm while ensuring a close alignment with the sectoral commodity plans that cover on-farm production. This strategy aligns with the goals and objectives of the National Food Plan and will link closely to the sectoral strategies to ensure impact across the entire value chain.

Government also has a role in ensuring that taxation and regulatory settings support innovation, including continued commitment to the research and development tax credit.

6.5 The Australian Government is interested in identifying and evaluating future regulatory reform opportunities. How could food industry stakeholders best help to achieve this? What do you believe are the merits (costs and benefits) of the possible options in section 6.7.4?

Regulatory stocktakes

The dairy industry welcomes ongoing mechanisms to identify regulatory reform opportunities. This should include regular stocktakes that look at the burden of the sum of regulations – individual Regulatory Impact Statements miss the cumulative increase in regulatory burden.

The Productivity Commission's series of annual reviews of the burdens on business have been useful, but need to be continually renewed. The dairy industry supports the option put forward in the green paper of the Australian Government working with the states and territories through the Standing Council on Primary Industries (SCoPI), to undertake a qualitative analysis of regulatory changes since the 2007 Productivity Commission report on the regulatory burden on primary industries, and identify and scope potential further improvements. This should be extended to also consider regulatory changes since the 2008 report on the manufacturing sector. As stated elsewhere in this response, proposed actions need to consider the rest of the supply chain, service sectors and people issues, and not just concentrate on the primary

production sector. As discussed below, a stocktake of regulations also needs to consider other requirements, including commercial and importing country requirements.

Existing mechanisms for best practice regulation

While the green paper and numerous other government statements talk about reducing the regulatory burden, and the importance of evidence-based regulation, a gap remains between the agreed best practice principles, and what actually happens[5]. For example in 2010-11 only 75% (decision-making stage) and 71% (transparency stage) of Australian Government regulatory proposals complied with government's own best practice regulation requirements[6]. This demonstrates a lack of commitment to best practice regulation processes which is at odds with the rhetoric around reducing the regulatory burden.

Government should reaffirm its commitment across all government sectors to the Best Practice Regulation principles and approaches.

Private sector standards, self, and coregulation

Regulatory issues faced by the dairy industry go beyond formal regulation, and in many cases commercial imposts have far greater impact.

The green paper states that the government will 'continue to limit its involvement' in private sector standards. While government does not have a role in developing these, they can't be ignored when considering regulatory burden and impacts.

The dairy industry generally supports self-regulatory and co-regulatory approaches, where appropriate. However, these can also have a regulatory burden (including reporting burdens) and still need to be evidence-based, well-designed, practical, consistent with good regulatory principles and respond to actual market failure.

Government mandating of industry-developed voluntary systems can lead to significant burdens – for example, duplication between related industries with different systems – and should also be subject to proper regulatory impact assessment.

6.6 One way for food businesses to add value is through increased quality, such as high product standards, new traits or nutritional attributes. Governments in Australia generally adopt little or no role in regulating quality, except where required for public health reasons.

a) What opportunities are there for businesses to add value through quality attributes?

b) Is there a role for government to encourage this or remove barriers such as regulation? (please explain/elaborate).

New process and product technologies

The key to achieving additional value from consumer driven demands lies in research and support for developing and implementing new technologies to identify, capture and preserve value-added traits and quality through processing, for delivery to markets. Government support for processing innovation needs to recognise the value of these quality attributes, as well as product safety.

Health claims

As the green paper discusses, one way to add value through innovation that offers significant potential for the dairy industry is through nutritional attributes.

Developing these attributes relies on effective research and development to support innovation. To make this investment worthwhile, communication of innovation is also critical. Current and proposed regulations regarding health claims make it difficult to communicate to consumers

[5] Productivity Commission (2012) *Regulatory Impact Analysis: Benchmarking*, Draft Research Report, Canberra
[6] Office of Best Practice Regulation (2011) *Best Practice Regulation Report 2010-11*, Department of Finance and Deregulation, Canberra

both the inherent benefits of dairy and improved nutritional attributes gained through innovation. This risks disadvantaging Australian manufacturers and processers competing in global markets. It can also put foods at a disadvantage compared to supplements with the same health benefits.

This reinforces the need for integrated policy development in the food space, so that positive actions in one area are not inadvertently impeded by actions in another.

6.7 The Australian Government welcomes further specific feedback about particular regulations that significantly affect food businesses, by imposing direct and/or indirect costs and by limiting commercial opportunities.

a) Where possible, information would be appreciated about: the specific regulations of concern; the nature and size of the impost (time, cost and lost business opportunities); possible ways to improve the regulation and the likely benefits and beneficiaries; and the most important benefits of those regulations.

b) Are there any areas in which stakeholders feel improved regulation is needed to help the market function properly?

Increasing regulation

The range of regulations and regulatory issues affecting the dairy industry is expanding each year.

There are opportunities to streamline current regulations, and reduce their burden through: harmonisation across commodities, nationally and internationally; reducing reporting requirements; reducing overlapping or duplicative regulations; and improving poor or inconsistent enforcement resulting in patchy compliance and a playing field that is not level.

The overview of 'Government interactions with the food industry in food safety regulation' on page 162 of the green paper is useful and shows the complexity and breadth of regulation in this area. However, the pressure to increase the food industry's regulatory burden is mainly coming from interests outside traditional areas of food regulation, such as environment and public health. For example:

- A trend to regulated programs requiring actions to 'save' energy, water or waste instead of using market place mechanisms (for example, Container Deposit Schemes being considered by COAG's Standing Committee on Environment and Water).
- An apparent disconnect between the drive to achieve public health objectives through food regulation, and the efforts to reduce the regulatory burden and pursue evidence-based policy (for example, health claims; front of pack labelling).

The potential for regulatory burden also comes from the combined impact of many small regulatory changes that, when considered by themselves, are not overly burdensome, but in the context of the range of existing regulations and other requirements add unnecessary complexity and cost. All proposed regulations should look at the context and existing regulations first.

One recent example is the Attorney General's proposed approach to *Chemical Security: Precursors to homemade explosives*. The dairy industry has argued that a comprehensive set of controls and processes already exist to protect national security in relation to nitric acid and hydrogen peroxide directly and incidentally. Therefore no further intervention in dairy business operations is supported. The burden of demonstrating this has so far fallen on the industry. Rather, the onus needs to be on government to demonstrate something new is needed.

Current reforms

The dairy industry notes that the proposed way forward includes implementing, as a matter of priority, reforms to regulation of agvet chemicals, food labelling and biosecurity. These examples illustrate the tension in any review of regulation between reducing regulatory burdens, and meeting ever increasing societal expectations. None of these reviews can be

said to reduce regulation. In each case increased requirements or government powers have the potential to increase regulatory burden. The dairy industry recognises that 'better regulation' is not always less regulation; however, these kinds of reviews should not be considered to reduce regulatory burden, or counted by government as such.

The processes underpinning current biosecurity amendments, and the reforms to agvet chemicals regulation have been particularly problematic. In both cases documents were released piecemeal, and a coherent overview of reforms was lacking. There was also a lack of systematic analysis of costs and benefits of reforms.

Agvet chemicals

The last few years have seen a significant amount of work on reforming regulation of agricultural and veterinary chemicals. As it stands it is unclear whether these reforms will actually be an advance on current agvet regulation, for example by facilitating access to useful chemicals and reducing usage costs.

It is disappointing that these processes have achieved so little, and have not been better integrated.

Issues with improving access to useful chemicals, especially for minor uses, so that responsible usage is on-label and legal, have not been addressed. The green paper raises the potential for a reform to 'examine options to improve the regulation of minor use chemicals'. The dairy industry supports this examination, but notes how unsatisfactory it is that these issues have not been addressed in the existing reforms.

It is also an example where a more integrated approach to address problems may have led to better solutions. Issues with permissions to use chemicals in ways not detailed on approved labels ('off-label' use) at state levels are partly due to registration processes at the national level that do not support sensible and responsible access to chemicals for some uses. Without due consideration of all the issues in an integrated way, progress in one area may constrain opportunity to find solutions to existing problems in other areas, such as registration. There is also potential for unintended consequences and/or large total costs in relation to benefits, once all the reforms are considered together.

6.8 Competition issues are canvassed in the green paper. Generally speaking there is evidence that competition can benefit consumers in various ways, including placing downward pressure on prices and encouraging innovation and greater choice.

a) What are considered to be some of the regulatory or structural barriers to competition in the food industry?

b) How could the operation of the industry's voluntary Produce and Grocery Industry Code of Conduct be improved?

c) What would a regulatory approach such as a mandatory code and/or supermarket ombudsman achieve over and above current arrangements (bearing in mind that any investigation would need to be based on a complaint)?

d) How might the projected growth of private label products affect competition within the food industry, either positively or negatively? Who do you consider will be affected and in what way?

Private labels

The expanded use of private label lines in supermarkets is a key component of retailer strategies. Deep-discounting on private label milk lines since January 2011 has had the following effects:

- A lift in sales of cheaper private label products, weakening the overall wholesale returns to processors with consequent flow-on impacts to dairy farmers. This has

occurred within the supermarket, and at the expense of convenience and food service outlets.

- Market share loss from branded milk to private labels in supermarket sales, with some categories, such as modified milks, losing 10%.
- Sharply lower sales of branded modified milk products that target a health-related proposition for consumers.
- Downward pressure on farm gate prices for producers supplying white milk processers in NSW, Queensland and WA. Where new supply contracts are being negotiated with farmers, prices are lower to reflect the pressure on processor margins and the changing requirements for milk supply.

As already stated in response to Question 4.1, regional differences continue to characterise the Australian dairy industry. The impact on average retail sales and, ultimately on wholesale returns has varied state-to-state, due to the differences in retail prices, brand and sales channel mix between states.

Options for managing supply chain relationships

The ADF is keen to participate in a forum to examine options for better managing supplier/supermarket chain relationships.

It is vital that farmer representatives from peak bodies such as the National Farmers Federation and ADF are involved in this forum.

In particular, the ADF supports:

- A code of conduct for supermarket companies in their dealings with processors and farmers; and,
- Establishing an ombudsman to enforce compliance, investigate complaints from a whole-of-value chain perspective, administer a cost-effective dispute resolution process with appropriate penalties, and publicly report.

6.9 The government is seeking feedback on the possibility of building the evidence base on food industry trends and market changes. This could aim to inform private and public sector decision making, including for infrastructure planning and future food industry needs. This could help ensure Australia has adequate resources in place to support food sector growth.

Are you aware of any critical information gaps, particularly about growth opportunities such as in Asia? How could these gaps be addressed, and if they were, how might this help planning?

Infrastructure

Growth in the dairy industry relies on improved road, rail and port infrastructure, infrastructure to support efficient water use, a reliable and expanding power supply, infrastructure to support research, development and training, and infrastructure for supporting industries (for example, feedmills).

Road infrastructure examples relevant to the dairy industry include: stock underpasses to assist in managing biosecurity risks; maintenance of bridges identified as crucial for access to farms in an emergency; rural road capacity to enable more efficient milk collection, transport, and expanded operation of B-triples to reduce truck traffic and improve efficiencies.

The dairy industry supports efforts to build the evidence base on food industry trends and market changes to inform infrastructure planning.

Chapter 7 – A strong natural resource base

7.1 Pressure to increase food production in coming years, in response to increased demand from a growing global population, could place additional stress on Australia's natural resource base. What further initiatives could the government consider to encourage sustainable farming and fishing practices that balance economic, social and environmental benefits?

Cross-sectoral approaches

Achieving the productivity growth required, while not increasing environmental risk, requires funding for research, development and extension. New skills, new technologies and new ways of doing business are required to balance increasing competition for resources, while remaining profitable. The dairy industry therefore supports further research into soil and water, and other natural resource base issues. One avenue for this research is the existing rural RDC network, which is already developing cross-sectoral strategies in areas including water, soils and climate change. Dairy Australia is actively engaged in these strategies and is leading strategy development in water.

Water

The dairy industry is a major water user for irrigation and in the dairy. Across Australia, water availability, security and efficient use are critical drivers for agricultural productivity and food security.

However, policies and research to improve agricultural water management and efficiency are undermined by competing policies to recover water for the environment using market-based mechanisms that undermine the commercial viability of shared irrigation districts. The reliance on buybacks to recover environmental water in the Murray Darling Basin is a case in point. A partnership approach is more appropriate, where the government invests in on-farm water efficiency measures in return for a share of the savings for the environment. This supports increased dairy productivity and regional development, as well as improving environmental health.

Low carbon economy

Similarly, policies to support a low carbon economy risk leading to a decrease in the intensity of production (e.g. reduced fertiliser use, lower stocking rates, promotion of organic farming) and thereby increasing the amount of land required to produce the same amount of food.

Government policy needs to take into account the tension between the need for both increased sustainability and increased production by providing policy and research funding support for technologies that maximise production intensity. Precision farming technologies, new molecular breeding techniques and more targeted use of inputs could play a role in increasing productivity whilst minimising impact on the environment. Development of these resource efficient technologies will not necessarily be supported by the market due to the potentially long time frames and the risk of government policy favouring ecosystem services rather than production.

Biofuels

Demand for natural resources to support increased food production will also be affected by the increasing use of resources for non-food crops such as biofuels. Policies that mandate and/or subsidise biofuels production will increase feed grain prices, and may decrease the capacity of the Australian dairy industry to adapt to increased climate variability.

Sustainable landscapes

Research into sustainable landscapes rather than just focusing on sustainability at the farm scale is also important. At a landscape scale it may be possible to identify areas that are best suited to providing ecosystem services and other areas suited to high-intensity production. Current policy tends to focus on the farm scale and not the landscape scale.

7.2 Australian society places high expectations on the environmental and social responsibility of Australia's food industry, although this is not always reflected in purchasing behaviour. What is preventing markets from encouraging (via price signals) the food industry's responsible management of the production base?

Sustainability Framework

Sustainability encompasses more than just natural resource management. The Australian dairy industry is currently developing a Sustainability Framework with the vision to enhance livelihoods, improve wellbeing and reduce our impact so that the Australian dairy industry is recognised worldwide as a responsible, responsive and prosperous producer of healthy food.

The dairy industry is focusing on the following areas:

- Enhancing livelihoods:
  - Creating industry prosperity – Goal: *Improve the profitability and competitiveness of the industry*
  - Supporting communities – Goal: *Enhance the resilience and prosperity of communities*
  - Investing in dairy people – Goal: *Enhance the expertise of and prospects for our people*
- Improving wellbeing:
  - Ensuring health and safety – Goal: *Produce safe dairy foods and ingredients*
  - Maximising nutrition – Goal: *Provide valued nutritional products that contribute to food community health outcomes*
  - Caring for our animals – Goal: *Deliver best care for our animals*
- Reducing impact:
  - Minimising our environmental footprint – Goal: *Maximise resource use efficiency* and *Minimise waste*

The industry's sustainability work is well aligned with the objectives articulated in the green paper.

Returns for environmental and social responsibility

Dairy farmers and processors have a strong track record, working to be economically viable while improving the health of the environment, workforce and the broader community. They understand the interdependencies between sustainability and industry prosperity.

Requirements to meet environmental and social responsibility do not translate into direct dollar returns. Most businesses wanting to demonstrate their credentials place the burden to do this on their suppliers – and it ripples along the chain.

Consumers expect environment and social issues to be looked after, but are generally unwilling to pay any premium.

Government needs to look at this wider context of drivers and actions for environmental and social responsibility when considering any regulations in these areas.

7.3 This green paper outlines a number of initiatives aimed at reducing food waste across the food supply chain in Australia. What specific further waste management measures could the government consider that would meet the multiple objectives of increasing food security, providing healthier diets, improving environmental performance and addressing climate effects?

Reducing waste

The dairy industry is actively investing in projects to benchmark and reduce inefficiencies in milk processing, particularly in water and energy use. This work has multiple benefits in reducing waste, while also reducing costs and improving efficiency.

This is an example where rural RDCs are actively working to achieve environmental outcomes. Support for the RDCs is an effective way for government to facilitate this kind of work.

Regulatory burden

Profitable supply chains enable actions to be taken to deliver environmental stewardship as well as economic, community and animal care outcomes.

As already stated, measures and regulations with environmental objectives need to be consistent with good policy making and regulatory principles.

A recent example is the Container Deposit Scheme being considered by COAG's Standing Committee on Environment and Water (SCEW). The dairy industry participates actively in food and beverage container recycling programs with the specific aim of demonstrating responsible food packaging stewardship and practices, and ultimately reducing the volume of packaging entering landfill and contributing to litter in the streets and Australian environment generally.

The SCEW is currently looking at policy options with potential to increase packaging recovery rates and decrease public littering. Versions of a Mandatory Container Deposit Scheme have been aggressively promoted, above alternative stewardship options that offer more cost-effective ways to reduce beverage container waste problems, with comparable performance in litter reduction.

Carbon tax

Environmentally driven policies like the carbon tax mean dairy farmers and processors will pay more for energy. The interaction of these new policy initiatives with commercial markets and existing trade policies is complex and multi-layered.

Inadvertent imposts of government strategies on export exposed industries, which do not have the opportunity to recover costs, could significantly affect the international performance and competitiveness of Australian food industries. These impacts must be acknowledged and considered in policy development.

Chapter 8 – Food trade and market access

8.1 The Australian Government is seeking to expand its food trade relationships in Asia over the medium to long term. This will require access to markets and a reduction in trade barriers for food exports. This objective could be pursued in a number of ways, including through further free trade agreements, strengthening Australia's agricultural counsellor network, as well as pursuing improvements to the multilateral rules-based trading system.

a) What could government and business do to expand food trade opportunities with Asia?

b) What kind of benchmark should Australia aim for? For example, should we seek to double our food exports to Asia by 2050?

c) How could this be achieved, and what would be the costs and benefits of doing so?

d) Which further countries in the Asian region should Australia seek to pursue trade agreements with?

Trade opportunities

The Australian dairy industry's long-term growth and profitability is linked closely to its status as a world competitive producer that can develop and retain global market positions.

Demand for dairy products will continue to grow with the expanding middle class in emerging markets such as China, changes in diet and increasing urbanisation together with a rising global population.

Given the right environment, the Australian dairy industry is well positioned to capitalise on this growth. While the opportunities offered by growing international dairy demand are well understood, a key question in the medium term is whether the Australian dairy industry's growth rate is sufficient to maintain relevance in an expanding global market for dairy products. A large proportion of dairy farmers are signalling little appetite for growth as the pressures on management, cash flows and profitability increase.

Therefore much of what government can do to facilitate exports has been discussed in response to Chapter 6: A competitive and productive food industry.

Within this context a goal such as doubling exports is meaningless. Concentrating on increasing profitability along the supply chain through exports is a more useful goal than continuing to increase the volume of low-value commodity goods.

Government should focus trade development programs on increasing the value of what is exported, rather than just increasing volumes. This is linked to the importance of innovation in process and product technologies to achieve additional value, and government's role in supporting this innovation, including through a food regulatory framework that encourages innovation.

Trade strategies should also focus on helping existing exporters increase exports, rather than simply seeking to expand the number of exporters.

Trade agreements

Internationally, with no multilateral agreement on trade reform in sight, Australia's ability to negotiate significant free trade agreements will be critical to maximising returns for the industry. The bilateral agreements negotiated by competitor countries will also have an important bearing on trade flows and access to – and profitability in – markets of choice.

Government should pursue comprehensive trade agreements with all relevant countries and regions (within Asia: Japan, China, Korea, Indonesia, and India). This is critical to building long-term business partnerships and defending existing commercial positions. Korea has already completed bilateral trade agreements with two of our biggest competitors: the United States and the European Union. Those deals have left Australia's dairy exporters at a significant competitive disadvantage in that market. Similarly, the NZ-China FTA has given New

Zealand, one of Australia's largest competitors in dairy products trade, preferential market access in China.

In negotiating these agreements, streamlining requirements and technical barriers is also important. For example when Tariff Rate Quotas are used, the administration of these quotas in Australia or in the importing country can be so costly and burdensome as to undermine any competitive gains from having access to the quotas.

Beyond Asia

As well as opportunities in Asia, the dairy industry sees significant opportunities in the Middle East. A comprehensive trade agreement with the Gulf Cooperation Council (GCC) should also be pursued. This is critical not only to open up new opportunities, but to defend existing share given that the NZ-GCC FTA, once ratified, will give New Zealand preferential market access in the GCC countries.

From a competitive perspective, EU and US policy reforms will also play a role in shaping future dairy trade flows as the removal of EU production quotas and the likely development of a new US Farm Bill signal a new type of engagement with the international market. This in turn may change the markets in which Australia competes.

8.2 The Australian Government proposes to continue to improve coordination of market intelligence across government and food export businesses to improve market access, address technical trade barriers and strategically position the Australian food industry to exploit potential trade opportunities.

a) What specific mechanisms should the government consider to achieve this outcome?

b) How would you foster greater cooperation and coordination between industry and government to improve Australian market access for foods?

Increased use of non-tariff barriers in priority markets is affecting trade in agricultural goods – including dairy products.

The Australian Government should increase its capacity to work (in collaboration with industry) to identify and react to existing and new non-tariff barriers in order to minimise impact on trade.

Agricultural Counsellors

The DAFF Agricultural Counsellor program needs to increase regional coverage in South East Asia and the Middle East. In addition to existing posts, the program should be expanded into the following three key emerging markets: Vietnam, the Philippines, and Saudi Arabia. These countries are high potential growth markets whose needs can't be adequately met through existing posts (for example, the Thailand post's coverage of key growth areas in South East Asia).

Agricultural Counsellor posts play a major role in Australia's efforts to: remove or lower market access barriers for agricultural products; facilitate trade; monitor emerging international issues; help resolve quarantine issues; and, provide briefings and assist with visiting delegations.

Where DAFF Agricultural Counsellors are located in markets, they can more effectively engage directly with local officials/government representatives to address access issues as they arise, and work proactively to identify and prevent non-tariff barriers affecting dairy imports.

As well as representation in key markets, representation in key competitor countries is also of benefit. Given the role of the EU and the US as agricultural policy setters, on-the-ground representation for Australia means issues can be addressed before they develop. Moreover, in the case of the EU, the Commission is reluctant to engage directly with industry so government representatives are needed as facilitators. A case in point is consultations on Geographic Indicators. Expansion of Agricultural Counsellor positions in emerging markets should not be at the cost of existing posts.

Support structures

The structures that protect Australian exporters' ability to defend against technical and regulatory barriers also rely on a capability to operate effectively in:

- World Trade Organisation (WTO) dispute settlement processes;
- International standard setting forums (Codex, OIE, WCO);
- Monitoring and responding to WTO Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) notifications
- FTA and bilateral review committees.

The effectiveness of Agricultural Counsellors also relies on being able to draw quickly on expertise back home, in DAFF, as well as agencies like FSANZ and APVMA. These resources are also critical to responding to technical barriers and need to be maintained as a priority.

As an export-oriented industry, international regulatory frameworks are important to Australian dairy. The dairy industry invests significant resources in monitoring and contributing to international standard setting, but much of this can only happen at a government-to-government level. It is a critical role for the Australian Government to continue to actively contribute to and take a lead in these international processes to support exports.

Government also needs to continue close collaboration with industry to ensure its efforts are focused on priority issues and achieve practical outcomes that can be implemented by industry.

Consistency of approach

Like other food industries in Australia, the dairy industry needs protection from exotic diseases. A strong, science-based biosecurity and quarantine system is non-negotiable. However, another element of maintaining our livelihood is access to overseas markets. To maintain this access we need to ensure Australia does not leave itself open to criticism, complaint, challenge and ultimately trade sanctions because of an unnecessarily harsh quarantine regime.

Australia's leadership in international forums also means maintaining a commitment to both the spirit and the letter of WTO agreements in biosecurity and quarantine systems, and to international standards such as Codex Alimentarius.

The dairy industry has consistently argued for regulatory harmonisation at national and international levels, whenever possible. To facilitate exports, Australia regularly asks other countries to adopt Codex standards as a matter of course, and to adopt standards that allow for good agricultural or veterinary practice in Australia, where this is not already covered in Codex. In the interest of facilitating trade, the internationally accepted standards (Codex) should be adopted as a matter of principle wherever possible. Australia's credibility in negotiating access relies on a consistent and science-based approach.

Cooperation and coordination between industry and government

The dairy industry welcomes better cooperation and coordination between industry and government on technical market access issues.

Where this already occurs, it has allowed market access issues to be resolved that may have otherwise resulted in refused shipments. However, while positive when it does occur, this sort of cooperation is not always the case.

One barrier may be the potential conflict between the role of DAFF as both a regulator, and the coordinator to respond to market access issues. Often issues arise with shipments sitting at a port, for example, so a clear avenue to address issues quickly that is somewhat separate to regulatory structures would be useful.

Dairy Australia is keen to be actively consulted in any developments in this area.

8.3 The government is developing a white paper on *Australia in the Asian Century*. It is anticipated increased productivity and wealth in Asia will result in increased demand for high value foods.

What specific initiatives should the government consider to ensure Australian food exporters participate fully in these emerging opportunities?

Promoting the Australian food safety system

Government should more actively and consistently promote the Australian food safety system, seeking greater acceptance of our system as meeting importing country requirements, and reducing costly additional requirements (for example audits, port of entry testing).

DAFF also needs to actively promote the Australian food safety system and seek acceptance by importing countries. The Codex framework offers opportunities to support these principles with importing country governments and seek to streamline overseas requirements. This would reduce the regulatory impost on food exports from Australia.

Equally as important, the Australian dairy industry has sought to have a streamlined approval to domestic and international food safety regulations. DAFF, as the competent authority for approving dairy exports, has accepted the national dairy food safety system where national food safety standards are implemented by state food authorities and DAFF recognises the state systems. Dairy businesses, while still having multiple commercial audits, are now subject to a single food safety audit for domestic and export requirements. This is a good model that needs to be actively promoted.

Electronic certification

The dairy industry also seeks to increase the use of electronic certification to streamline import requirements. This was a priority identified during the Dairy Export Ministerial Task Force and is actively being pursued by the dairy industry. The export documentation infrastructure within DAFF needs substantial upgrades to meet developing e-commerce needs.

The Australian Government also needs to prioritise promotion and advocacy for this approach in discussions and negotiations with trading partners. Electronic certification was identified in the Beale review, but resources have not been provided by government to implement the recommendation.

Regulatory reform

In addition to the regulatory issues already discussed, government should more consistently consider and prioritise potential impact of regulatory requirements on trade. This includes considering the impacts of policies like the carbon tax on the competitiveness of Australian exports.

It also includes considering international implications when setting domestic food regulations.

The Australian dairy industry has maintained a world competitive position in relation to low cost, high quality milk production and has earned a reputation for reliable supply of safe, high functional dairy ingredients on world markets.

Although many importing countries have their own food standards, they look to Australia for information on best practice regulation, and some countries require products to meet the exporting country (Australia's) requirements.

While the market for some high value functional ingredients within Australia may not support their development, the potential for these in some Asian markets may make the investment in innovation worthwhile – provided they can be marketed.

8. Additional points

Review of the Imported Food Control Act 1992

The dairy industry supports a review of the Imported Food Control Act 1992. The review should clarify the arrangements made to ensure imported foods meet Australian standards. This should include review and verification of systems and controls throughout production and processing, rather than just end point inspection of a percentage of imports. This would be consistent with the arguments Australia presents internationally for acceptance of our

production and processing systems to produce food to meet market requirements, over port of entry testing.

The review should also consider the need to develop an Imported Feed Control Act to manage risks from imported animal feed.

Review of the Export Control Act 1982

Government and industry accepted all recommendations from the Beale Review. It is important that these be implemented to streamline exports. Again, government needs to promote the consistent food safety outcomes provided by the Australian food safety system and harmonise domestic and international requirements. Importing requirements should be outcome-focused and proportionate to risk. There appears to be a move by some countries to more prescriptive end point testing requirements. The Australian Government should resist this and promote the Australian system.

Chapter 9 – Global food security

9.1 It is in Australia's national interest to promote global food security. The Australian Government considers Australia can make the most effective contribution to global food security by focusing on: technology and expertise transfers to developing countries; trade-related development assistance; advocacy and support for appropriate policies at the global, regional and national level; and short-term emergency food assistance. Do you support the Australian Government's analysis? If not, what are the key gaps? Please be specific and provide evidence to justify your response.

Global food security

The dairy industry supports the analysis of global food security in the green paper.

In particular we note the green paper's statement that foreign government policies that distort world trade in food commodities adversely affect food security. The Australian Government should work internationally to ensure the food security debate does not become a vehicle for hidden protectionism or a means of imposing arbitrary barriers on access to export markets.

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The interim report will be available from the Commission's website upon release at http://www.pc.gov.au/projects/study/business-costs/dairy-manufacturing.