Draft Beef Industry Action Plan
2014-2016


**Background**

This draft Beef Industry Action Plan (draft Plan) has been developed by the Department of Agriculture, Fisheries and Forestry (DAFF) as a supporting document under Queensland’s Agriculture Strategy.

The draft Plan outlines the actions that DAFF will undertake to support the beef industry. These actions focus on the areas where the Queensland Government can assist the industry to grow:

- Providing public infrastructure and resources – such as road and rail networks, stock routes, state leasehold land and water allocations
- Investing in beef industry research, development and extension services that build capacity in the industry
- Creating a business and regulatory environment that reduces costs and facilitates industry development by encouraging investment.

The draft Plan recognises that the beef industry is a mature industry with well developed industry priorities around increasing productivity, profitability and export market growth. The draft Plan identifies how the Queensland Government will support these industry priorities.

The draft Plan addresses key industry issues that have been raised via existing industry and government strategic plans and the Queensland Beef Roundtable, an industry forum that meets bi-annually with the Minister for Agriculture, Fisheries and Forestry.

The draft Plan also incorporates and supports the Queensland Government’s work under the Committee of Northern Agriculture Ministers and the priorities identified by the Northern Australia Beef Roundtable.

**Have your say**

The Department of Agriculture, Fisheries and Forestry invites submissions as it finalises the Plan in mid-2014. Comments are invited on all areas of the draft Plan, including feedback on practical ways the Queensland Government can support the beef industry.

Submissions must be received by 5pm, Wednesday 21 May 2014.

Make your submission via:

Post –

Beef Industry Action Plan
Regions and Industry Development
Department of Agriculture, Fisheries and Forestry
Level 6 PO Box 46
Brisbane QLD 4001

Email –

animal.industries@daff.qld.gov.au
## Contents

Summary ................................................................. iii
Overview of the Queensland Beef Industry ............... 1
Growth target – two million tonnes of beef by 2040 .......... 3
Factors influencing growth ...................................... 6
The 2040 vision and Pathways to growth .................... 9
Growth Pathway 1 – Resource availability .................. 10
Growth Pathway 2 – Productivity ............................. 12
Growth Pathway 3 – Market access ........................... 15
Growth Pathway 4 – Reducing costs ......................... 17
References ............................................................... 20
Summary

Queensland’s agriculture strategy has set a target to double agricultural production by 2040. Meeting this target will require strong growth in Queensland’s largest agricultural export earner, the beef industry. This draft Beef Industry Action Plan sets a corresponding growth target for Queensland beef production to double - reaching two million tonnes by 2040.

Productivity has plateaued across the agricultural sector over the last decade and a business as usual approach is unlikely to deliver a doubling of production. Graziers are currently facing profitability challenges due to increasing costs and debt and consequently reduced ability to invest in productivity gains. The beef industry has exhibited sustained growth over a long period and this brought large investments in processing in the 1990’s, as well as the expansion of corporate grazing enterprises and the feedlot sector. The strength of the industry has also resulted in an appreciation of land values across northern Australia.

For growth to continue in a globally competitive environment, maintaining and attracting new investment will be necessary. Greater resilience is needed to minimise disruptions to production caused by Queensland’s highly variable climate, and a diversity of markets are required to minimise the impacts of international market fluctuations.

Queensland’s agriculture strategy was released in June 2013 and aims to double agricultural production through four pathways of resource availability, productivity, market access and reducing costs.

The draft Beef Industry Action Plan outlines where DAFF will focus its efforts within the four pathways to build on current Queensland Government work and support industry growth.

<table>
<thead>
<tr>
<th>1. Resource availability</th>
<th>2. Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attract investment into grazing land</td>
<td>Invest in new research</td>
</tr>
<tr>
<td>promote new opportunities in the regulatory framework for investment to increase production from current grazing areas</td>
<td>invest in RD&amp;E to improve cattle production</td>
</tr>
<tr>
<td>Support producers to prepare for drought</td>
<td>Promote best practice to producers</td>
</tr>
<tr>
<td>support beef producers to manage climate risks</td>
<td>support increased adoption of existing innovations across the beef supply chain</td>
</tr>
<tr>
<td>Support intensification of production</td>
<td>Support intensification of production</td>
</tr>
<tr>
<td>support feedlot development, use of forage crops and improved pastures to intensify production</td>
<td>support feedlot development, use of forage crops and improved pastures to intensify production</td>
</tr>
<tr>
<td>Support processing expansion</td>
<td>Support processing expansion</td>
</tr>
<tr>
<td>support long term investments by meat processors</td>
<td>support long term investments by meat processors</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Build relationships</td>
<td>Reduce red tape</td>
</tr>
<tr>
<td>support building international relationships between Queensland and key beef markets</td>
<td>Identify and promote opportunities to reduce regulation compliance costs in the beef supply chain, across portfolios and jurisdictions</td>
</tr>
<tr>
<td>Advocate for market access</td>
<td>Improve transport efficiency</td>
</tr>
<tr>
<td>support industry to realise market opportunities by advocating for market access for beef</td>
<td>work with industry to identify and promote opportunities to reduce cattle transport costs</td>
</tr>
<tr>
<td>Promote Queensland’s standards</td>
<td></td>
</tr>
<tr>
<td>promote Queensland’s excellent food safety and cattle biosecurity standards</td>
<td></td>
</tr>
</tbody>
</table>
Overview of the Queensland Beef Industry

The beef industry is Queensland’s largest agricultural industry. Queensland currently produces over one million tonnes of beef per year, with a farm gate gross value of production worth $3.25 billion per annum (DAFF 2013).

Queensland exported over 635,000 tonnes of beef in 2012/13 to 78 countries which accounts for over 60 per cent of Australia’s beef exports. Queensland’s export beef market has a value of around $3 billion per annum. Important markets for Queensland are Japan, the United States, Russia, Taiwan and South Korea. However, demand from the Middle East and Asia, in particular Indonesia, China, Saudi Arabia and the United Arab Emirates is currently influencing export growth.

Grazing occurs on 85 per cent of Queensland’s land area and is the State’s largest land use. The scale of cattle enterprises varies across the industry. In Queensland, the grazing of 12.2 million beef cattle occurs on over 18,000 properties (ABS 2013), with over 16,000 Queenslanders employed in specialised beef cattle farming (ABS 2011). Grazing is undertaken on family owned grazing properties, as well as large corporate operators owning hundreds of thousands of cattle. The diversity of cattle businesses supports a variety of production systems with graziers able to specialise in breeding or fattening and trading cattle accordingly. Around 4.5 million cattle transactions are undertaken in Queensland each year.

Feedlots are able to finish large numbers of cattle to meet market specifications on a consistent basis. The average period cattle spend in a feedlot is between 50-120 days or around 10-15 per cent of their lifespan (ALFA 2013). The feedlot sector in Queensland has experienced significant growth over the past two decades. In 2012, Queensland feedlots had capacity for over 600,000 cattle to be fed at a time. Utilisation rates have been between 73 per cent and 86 per cent over 2012/13. Queensland feedlots turned off over 1.5 million cattle during 2012 (ALFA/MLA 2013).

In 2012/13, Queensland meat processors slaughtered 3.81 million head of cattle, producing 1.11 million tonnes of beef (ABS 2013a). Processors employ almost 10,000 Queensland workers (ABS 2011). These facilities are accredited to world’s best standards and supply beef to meet a range of international and domestic market specifications. Processing cattle is highly labour intensive and processors are exposed to business risk due to high levels of invested capital and exposure to global market forces. Processors maximise the yield from each carcass by producing a range of prime cuts, secondary cuts, manufacturing beef, offal and by products. Processors market beef internationally and domestically, where it is ultimately purchased by the consumer via retail or food service outlets. Hides and by products are used in the manufacturing of leather, bone meal and other products.

Live exports of Queensland cattle occur through Darwin, Karumba, Townsville, Brisbane and other regional and interstate ports. Total Australian live cattle exports in 2013 are estimated at 820,000 head (MLA 2014). Queensland live cattle exports vary from year to year – over the period from 2001/02 to 2011/12 live exports ranged from 32,000 cattle worth $23.4 million (2011/12) to a high of 253,000 cattle worth $142 million (2002/03). For comparison with the value of Queensland’s cattle and calf slaughter, the value of live exports was equal to 4.9 per cent of the value of cattle slaughtered in Queensland in 2002/03, and 0.6 per cent in 2011/12.
The beef supply chain is very competitive and subject to market forces in both live cattle markets and beef markets (domestic and international). There are only a very small number of vertically integrated companies that manage breeding, finishing, processing and retailing/product branding, maintaining control of the product through the value chain.
Growth target – two million tonnes of beef by 2040

Global beef consumption – long term forecasts

Global beef consumption is currently around 56 million tonnes per annum, with over 11 million tonnes consumed in the US, 7-8 million tonnes each in Brazil and the European Union, and 5 million tonnes being consumed in China per annum (USDA 2013). Of the 56 million tonnes consumed per annum, between 6-7 million tonnes is imported, with Russia and the US being the biggest importers of beef, importing around 1 million tonnes each (USDA 2013).

Global projections indicate that world food demand may increase by 70 per cent by 2050, driven by growing population and higher incomes (ABARES 2012). World beef imports are projected to be about 300 per cent higher in 2050 than 2007, with China’s increased import demand accounting for 66 per cent of this rise (ABARES 2012).

Beef consumption growth for Japan and the Republic of Korea is projected to be relatively flat, increasing by just 2 per cent in 2050. A projected decline in population, combined with low per person income growth, is largely responsible for this trend (ABARES 2013c).

As a beef producer, Queensland’s total production of 1 million tonnes is only 2 per cent of global consumption. However Queensland is significant as an exporter, supplying over 600,000 tonnes into the export market, which represents 10 per cent of world imports. With the forecast for large increases in beef imports, Queensland is already positioned as a major supplier that could continue to supply this growing market.

ABARES has produced a number of reports about how Australia can take advantage of this opportunity. While competitors in supplying this market are likely to be the European Union, Brazil and the United States (ABARES 2012), Australia will have a comparative advantage in its proximity to Asia. This places Australia in a good position to meet the opportunities that higher demand will provide, provided it can remain competitive and target consumer needs in the growth areas of the world—particularly Asia (ABARES 2013b).

ABARES suggests greater targeting of products to more diversified markets and targeting different qualities of products to market segments, such as safe, low pest, environmentally sound, animal friendly products; products with a low carbon footprint or any combination thereof (ABARES 2013b).

If domestic beef consumption per capita remains the same, the domestic market would see at best a modest increase to 600,000 tonnes per annum by 2040 based on Australia’s forecast population growth.

Historic and current export growth trends

Over the last 20 years Queensland exports have steadily increased by an average 1.9 per cent per annum. Volumes have increased from 452,000 tonnes in 1992/93 to 635,000 tonnes in 2012/13 (net weights, ABS 2013b). If export growth continues in line with trend growth over the last 20 years, 1 million tonnes would be exported by 2040.
In 2012/13 Queensland exported beef to 79 countries compared with 55 countries in 1991/92. The three biggest markets are Japan (over $1 billion), the US ($0.5 billion) and the Republic of Korea ($0.4 billion) accounting for a combined total of $2 billion in 2012/13. Processors target key grain fed and grass fed beef markets in Japan and Korea, with beef cuttings destined for the US market.

The export of manufactured beef (or hamburger meat) to the US contributes significantly to the volume of meat exported while the value of the Japanese market alone contributes to half the value of the top five export markets combined.

Current emerging markets in China, Indonesia, Russia, United Arab Emirates (UAE) and Saudi Arabia are influencing growth. Exports to China are booming with $257.2 million in 2012/13 compared with $37.7 million in 2011/12 (ABS 2013b). In 2014, China is expected to emerge as Australia's third largest export beef market (MLA 2014).

Australian live exports are forecast to reach 900,000 in 2014, with continued growth to 960,000 by 2018 (MLA 2014). Indonesia accounted for 49 per cent of live exports in 2013 and is forecast to increase by 36 per cent in 2014 (MLA 2014), with emerging markets in Vietnam, Malaysia and China.
A target of two million tonnes?

The Queensland Government’s growth target for the agricultural sector is to double production by 2040. Success will mean an increase in value of production, an increase in the export value and an increase in the sector’s contribution to Queensland’s overall gross state product. The beef industry will need to contribute to all of these areas.

Actual growth over the next 30 years is likely to include a combination of growth in value, growth in price and growth in production in response to market demands. However, there are strong indications that there will be market opportunities for significant growth in volume.

The draft Beef Industry Action Plan therefore proposes a target based on a real doubling of production – measured in tonnes of beef – to explore the challenges for the industry and Government in lifting real production and identifying blockages to growth.

Trends to 2040 - based on growth trends over the last 20 years continuing

<table>
<thead>
<tr>
<th></th>
<th>1992/93</th>
<th>2002/03</th>
<th>2012/13</th>
<th>Trend 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>434,652 tonnes</td>
<td>584,607</td>
<td>635,477</td>
<td>1 million</td>
<td>exported¹</td>
</tr>
<tr>
<td>exported</td>
<td>exported</td>
<td>exported</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.8 million</td>
<td>1 million</td>
<td>1.1 million</td>
<td>1.8 million</td>
<td>tonnes produced²</td>
</tr>
<tr>
<td>tonnes produced</td>
<td>tonnes produced</td>
<td>tonnes produced</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Carcass Weight</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>210kg average</td>
<td>231kg</td>
<td>270kg</td>
<td>354kg</td>
<td></td>
</tr>
<tr>
<td>carcass weight</td>
<td>carcass weight</td>
<td>carcass weight</td>
<td>carcass weight³</td>
<td></td>
</tr>
<tr>
<td><strong>Slaughter</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 million</td>
<td>3.6 million</td>
<td>3.8 million</td>
<td>5.2 million</td>
<td>slaughtered⁴</td>
</tr>
<tr>
<td>slaughtered</td>
<td>slaughtered</td>
<td>slaughtered</td>
<td>slaughtered</td>
<td></td>
</tr>
<tr>
<td><strong>Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.6 million</td>
<td>10.5 million</td>
<td>12.2 million</td>
<td>16.8 million</td>
<td>herd⁵</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Projection based on Queensland export figures (meat of bovine animals, fresh, chilled or frozen – net weight, ABS foreign trade data provided by Queensland Government Statistician (unpublished)

² Projection based on Queensland production figures – red meat produced beef and veal (ABS Livestock products Cat.7215)

³ Projection based on Australian average carcass weights (ABARES Australian commodity statistics 2013 table 137)

⁴ Projection based on Queensland slaughter figures – cattle and calves (ABS Livestock products Cat.7215)

⁵ Projection based on Queensland meat cattle numbers (ABS Agricultural Commodities Cat. 7121) note: 2012/13 herd size based on projected figures
Factors influencing growth

ABARES has predicted that Queensland’s beef production will more than double in volume to reach 2.3 million tonnes per annum by 2050 (ABARES 2013a). To reach that amount, national production would need to increase by an average annual rate of 2.1 per cent, significantly more than the average annual rate of 1.1 per cent realised in the decade ending 2011/12 (ABARES 2013a).

This level of growth is not unprecedented - continuation of the growth trends over the last 20 years in production (between 1992/93 and 2012/13) would see 1.8 million tonnes produced by 2040, very nearly achieving the target.

Growth over the last 20 year period saw large investments in processing in the 1990’s, as well as the expansion of corporate grazing enterprises and the feedlot sector. The strength of the industry over this period has also resulted in an appreciation of land values across northern Australia.

However, growth trends of the 10 years between 2002/3 and 2012/13 show a slowing in growth. Graziers are currently facing profitability challenges due to increasing costs and debt and consequently reduced ability to invest in productivity gains to achieve production growth. This suggests a disconnect between the current financial state of the northern beef industry and its historic, and projected, rates of growth and development.

For the northern beef industry to achieve the forecast growth estimates, considerable change would need to occur within the industry. Improved productivity could be achieved by individual producers significantly improving their business management skills, increased investment in intensification including feedlots, improvements in supply chain efficiencies, or less productive producers leaving the industry and making way for expansion or new entrants.

McCosker et al (2010) examined financial performance of the northern beef industry for the decade up to 2009, finding that average financial performance of producers was at its lowest since the 1970’s. Key factors identified were:

- Increasing costs of production - from $0.70/kg to $1.20/kg for average producers
- Scale of operations – the number of stock needed to maintain overheads at $80/head rose from 1,100 to 2,400 over the period
- Return on assets was very low – an average producer was returning less than 1 per cent in 2008.

ABARES 2013 review of farm financial performance of northern beef producers found return on owners’ equity (farm business profit, as a percentage of the equity owners have in the farm business) in both 2010/11 and 2011/12 was less than the return on total capital used. Between 2009 and 2011 debt increases of 17.2 per cent were seen in the beef industry (QRAA 2011).
Lifting profitability of producers – what is achievable?

McCosker et al (2010) found that the top 20 per cent of beef enterprises achieved:

- Return on asset of 8.53 per cent and earnings before interest and tax of $14.19 per hectare
- Cost of production of $0.79 per kg
- Overhead costs of $0.39 per kg ($22 less than the average producer per $100 gross product)
- Slightly more productivity on a per animal basis (6.8 per cent more kg produced per Large Stock Unit)
- Generally slightly lower stocking rates and greater likelihood of matching stocking rate to carrying capacity.

Scale was found to be a major contributor to the difference in profitability between the top 20 per cent and the average. The top 20 per cent were larger in both land area (+19,760ha) and livestock scale (+2300 Large Stock Units). Across all years and regions, they did not receive higher prices.

Returns achieved by the top 20 per cent of enterprises indicate much better financial performance, and these provide a basis for benchmarking the best performers in the industry. If more producers are able to achieve these targets, industry will be better placed to realise opportunities for production growth through areas such as:

- Increased and ongoing adoption of better land, livestock and business practices to maximise production potential of existing grazing land
- Increasing improved pastures to increase capacity of existing grazing land (where appropriate)
- Continued expansion of the lot feeding industry to support larger numbers of cattle and higher carcass weights
- Maintaining and increasing competitiveness and efficiency of processing facilities.

Improvements will need to be made across the supply chain to achieve increased beef production. Based on historical data, Queensland's herd grows at 1.2 per cent per year. This means that the herd would reach 16.8 million head by 2040. Queensland's carrying capacity is currently estimated at around 12 million head and so significant intensification would need to be made to sustainably support higher cattle numbers.

Herd composition may also need to change. Based on current trends, doubling beef production would require 41 per cent female turn off to slaughter ratio. This would be unsustainable in Queensland’s current herd structure where the herd would start to decline once female turn off exceeds 30 per cent. This may mean that weaning rates need to be improved and cow mortalities need to be reduced to enable a larger proportion of heifers to be culled. Consequently, improving breeder and overall herd performance is critical for increasing beef production.
Increases in carcass weights (to increase kilograms produced per animal) are also likely to be required to achieve the target of doubling production. Over the last 20 years, Australian average carcass weights have increased from 210kg to over 270kg (on average, using ABARES data). This represents an increase of 3kg per year, and if this continued until 2040 average carcass weight would be 354kg. As a comparison, the US 2013 carcass weight was 361 kg/head (MLA 2014). Queensland currently produces a mix of lighter grass fed and live export cattle, as well as heavier grain fed cattle. While increases in average carcass size may be possible through increased numbers and weights of cattle in feedlots, markets for larger carcasses would be needed to support this. It is likely that a mixture of lighter cattle and grain fed cattle will continue to be required to meet different market specifications.

**Slaughter trends and processing capacity**

Analysis of current and historic slaughter throughput in Queensland’s processing facilities suggests there is latent capacity in the industry evidenced by its ability to accommodate higher cattle numbers during peak periods. This could allow an additional 12.5 per cent of throughput to be available. Should slaughter rates continue as per historic trends, this latent capacity will be exhausted around 2020.

This suggests further investment prior to 2020 would be required to increase processing capacity. New facilities are likely to require very significant investment to achieve higher volume, lower unit cost processing establishments in order to stay competitive in the global marketplace. This will be in addition to the ongoing investment into existing facilities that supports continual improvements and efficiency gains.
The 2040 vision and Pathways to growth

The Queensland Government’s vision for 2040 as set out in the Agriculture Strategy is an agriculture sector that:

- Achieves maximum productivity with optimised inputs and minimised waste
- Embraces solutions that value-add and meet new requirements and market demands
- Withstands and recovers quickly from difficult conditions
- Yields profits and financial rewards for its producers and the economy.

Success in achieving the target to double production will be reflected in an:

- Increase in the value of production for Queensland produce
- Increase in the export value of Queensland agricultural commodities
- Increase in the sector’s contribution to Queensland’s overall gross state product.

The Queensland Government will work with industry, researchers and stakeholders to focus efforts and resources through four key pathways:

1. Securing and increasing resource availability
2. Driving productivity growth across the supply chain
3. Securing and increasing market access
4. Minimising the costs of production.

These pathways are underpinned by a commitment from the Minister for Agriculture, Fisheries and Forestry to be the enabling point of leadership, working across government and with industry to drive initiatives and help the sector grow.
Growth Pathway 1 - Resource availability

Attract investment into grazing land

Queensland has large areas of grazing land which are well utilised for cattle production - grazing of cattle already occurs over 85 per cent of total land available for agriculture in Queensland. To sustainably increase production, continued improvements in the management of existing grazing land is likely to be required. This may require new investment into property infrastructure and improvements to management systems to increase efficiency and productivity.

Native and sown pastures are the dominant feed supply for Queensland’s cattle herd. This large pasture resource allows producers to breed and grow out cattle with low feed costs. The Queensland land audit identifies 16 million hectares of sown pastures, with a further 15.6 million hectares having potential for sown pastures (DAFF 2013a). Sown pastures require significant investment but can provide benefits in cattle nutrition and weight gain.

A large portion of Queensland’s grazing land is leasehold land. Land tenure can present barriers to investment such as deficiencies in accessibility of information to investors, and tenure conditions that limit land owners ability to leverage their land assets for capital and development purposes (JCU/CSIRO 2013).

Water resources present significant opportunities for developing irrigated pastures and fodder crops, but require investment in infrastructure. CSIRO (2013) found that wider use of irrigated pastures and crops for cattle feed may enhance the industry’s productivity, by mitigating dry season shortages and intensifying production by growing a new source of high quality feed. This opportunity has the potential to allow producers to broaden their enterprise, respond more flexibly to market opportunities, and improve efficiency and long term economic viability. Irrigation can also offer a way to diversify risk and provide varying income sources (Gleeson et al 2012). Mosaic irrigation based on the extraction of available groundwater in northern Australia could add as much as ten per cent ($200M) to the value of beef production from pastoral lands (CSIRO 2013a).

The Queensland Government is working to improve access to land and water resources. This will support investment and sustainable development of these resources for cattle production. Current actions include:

- Changing vegetation management regulations – to allow for the management of vegetation to allow for high value agriculture development such as irrigated pasture development and fodder crops
- Reforming land tenure legislation – to provide greater security of land tenure and reduce red tape and costs to business to help drive growth
- Releasing water – that may create opportunities for irrigated pastures and fodder crop development. Water has been released in the Flinders and Gilbert catchments, and water allocations in the Gulf will be reviewed by the end of 2014 with an onus on releasing more water to support agricultural developments
- Providing information - the land audit provides a region by region assessment of Queensland’s land types and suitability for agriculture including current and potential pasture production, sown pasture and intensive livestock potential for each region.
To attract investment into grazing land, DAFF will focus on promoting to producers and investors where new opportunities exist to intensify production from current grazing areas. This may include promoting where existing graziers have new opportunities due to changes in the regulatory framework, or new investment opportunities from research and development projects such as the North Queensland Irrigated Agriculture Strategy.

Support producers to prepare for drought

Climate variability presents significant challenges in managing year round pasture availability. Grazing enterprises generally have sole ownership of their cattle and therefore carry significant business risk as they manage fluctuating seasons and varying levels of pasture. Seasons also have a heavy influence on cattle prices which can exacerbate the risks to graziers during droughts.

The Queensland Government has announced more than $31 million for drought support measures. These include:

- Subsidies for freight and emergency water infrastructure ($20,000 per property per annum)
- Freezing of rural land rents in 2013/14 in drought declared areas
- Concessions for a range of transport and vehicle fees and permits
- Community and mental health support
- Climate information including rainfall and pasture growth via the long paddock website.
Growth Pathway 2 - Productivity

Invest in new research

Research, Development and Extension (RD&E) leads to improvements in productivity through lowering the costs of production, increasing yields, improving sustainability, encouraging efficient resource allocation and providing opportunities to enter new markets (DAFF 2013b).

RD&E is also critical in preventing and responding to emergent pest and disease incursions that have the potential to harm agricultural production in Queensland. It is crucial that innovation occurs along supply chains as a key enabler of productivity growth (DAFF 2013b).

The Queensland Government has strong investment in beef RD&E:

- In 2013/14, DAFF will invest $12.4 million across its portfolio of beef RD&E programs. This will be boosted by $3.46 million in external funding from Research and Development Corporations and other funding.
- The Spyglass Beef Research Facility is owned by DAFF and is a purpose-designed facility for tropical and subtropical beef production and ecosystem management. It will showcase the benefits of adopting existing digital farming techniques and demonstrate the best practice management grazing program in action
- Supporting development of a new Northern Agriculture CRC.

DAFF invests across a range of beef RD&E projects to improve cattle production:

- Sustainability - Minimise nutrient, pesticide and sediment transfer from grazing lands into waterways and reef systems, reduce the impact of environmental and greenhouse gas issues and derive carbon offsets from use of waste materials as high-value fertilisers to decrease greenhouse gas emissions
- Reproduction - Improve the reproductive performance of cattle through improved genetics, genetic tools, nutrition and management of reproductive diseases
- Nutrition - Improve sustainable growth pathways through optimised nutritional inputs
- Pests and diseases - Reduce the impact of pest and disease through epidemiology and the development of diagnostic and integrated systems for the control of endemic and exotic diseases and pests in intensive and extensive beef production systems. This work will be undertaken in collaboration with experts from Biosecurity Queensland and elsewhere
- Pastures - Improve the feed base through new and improved forages and forage systems, and improve grazing land management
- Technologies - Develop technologies to support improved welfare and husbandry practices
- Management systems - Improve systems for integrating new technologies, focusing on people, enterprises, logistics and business management.
Promote best practice to producers

Productivity on farm could be improved by adoption of best practice in areas such as farm record keeping and business management, pasture and grazing management and genetic improvement. Ash et al (2013) found even modest improvements in line with best practice management in animal husbandry, land management and financial management can greatly improve enterprise productivity. While individual technology and improved practices offer genuine scope for productivity gain, the analysis revealed that the largest gains in productivity and profitability lie in their effective integration within grazing and property management systems. Productivity gains of 40 – 50 per cent were possible if producers simultaneously aim to improve animal reproductive performance, forage quality and nutrition.

Extension staff play an important role in providing information about these strategies however adoption by any given producer is dependent on a range of factors including financial (lack of capital, lack of profitability) and personal (lack of capacity, lack of incentive to change).

The Queensland Government supports uptake of best practice by integrating and distilling complex research and development into manageable and practical components. The Queensland Government actively promotes uptake of best management practice in the beef industry:

- The FutureBeef program focuses on helping producers to make better business decisions in beef breeding and reproduction; grazing land management; nutrition and growth; and business management
- The Fitzroy Basin Association, DAFF, North Queensland Dry Tropics and AgForce have developed a best management practice program for grazing. Currently there are 15 frontline DAFF Beef Extension Officers delivering the five modules of the program
- QRAA Sustainability Loans program provides finance up to $650,000 to cover capital costs to achieve a more productive and sustainable primary production enterprise.

Support intensification of production

To increase average carcass weights in Queensland would require a significant rise in grain feeding. Growing levels of intensification and grain feeding to finish cattle before slaughter are supported by forecasts from ABARES (2013a). However market demand may not require larger, grain fed cuts and a mixture of intensification opportunities including forage crops and improved pastures are also likely to be required to supply grass fed markets.

Feedlots allow for the finishing of cattle without relying on available pasture and have improved the industry’s ability to supply cattle to a consistent standard all year round. Feedlots require reliable sources of economically priced feed grain, and given Queensland has strong grain production areas in the Darling Downs and Central Queensland, it is likely that these will continue to be the most likely sites for future feedlot expansion.

Forage crops and improved pastures may require irrigation. New releases of irrigation water may offer opportunities to increase this in the North.
To support intensification, the Queensland Government will support feedlot development, use of forage crops and improved pastures to intensify production.

**Support processing expansion**

Over the longer term, Queensland is likely to require further processing capacity. To support this, the Queensland Government will continue to promote the work it has done to develop a pre-feasibility study into the viability of a north Queensland meat processing facility and an investment prospectus.
Growth Pathway 3 - Market access

Build relationships

Building relationships with emerging and new export markets will help the beef industry to diversify its export portfolio and be more resilient to changes in global trade. Emerging markets in China, Indonesia, Russia, United Arab Emirates, Saudi Arabia and Vietnam are key markets where Government can aim to build strong and lasting intergovernmental relationships.

Queensland collaborates with the Northern Territory, Western Australia and federal governments and industry stakeholders on actions that support market development and diversification. This work aims to harmonise international marketing strategies and instigate new market initiatives through coordinated trade missions.

The Queensland Government will partner with industry and the Federal Government to proactively build relationships with key international markets at the State Government level to promote the Queensland beef industry. This will include Ministerial trade and investment missions and identifying areas where DAFF, in partnership with Trade and Investment Queensland, can provide support and expertise for projects with key markets. The Queensland Government will also support and participate in key industry events to build relationships through promoting and connecting the Queensland beef sector to international buyers and investors.

The Queensland Government will focus on:

- Building international relationships in China, Indonesia, Russia, United Arab Emirates and Saudi Arabia
- Supporting industry to realise opportunities in these markets
- Working with industry to promote the Beef Australia 2015 expo and connect international buyers and investors to the Queensland Beef industry.

Advocate for market access

Beef exports are one of Australia’s largest trade exposed manufacturing industries. Changes to importing countries protocols can reduce Australia’s competitive advantage or increase tariff barriers (Gleeson et al, 2012).

Free Trade Agreements are of significant benefit to the industry and are a key area where the Federal Government can support export growth through creating a positive trading environment with key beef export markets.

The Queensland Government will advocate for beef industry market access needs at the national level.
Promote Queensland’s standards

Queensland has excellent biosecurity standards which give industry a solid base for promoting healthy and safe beef to export markets. The Federal Government also has strict food safety export standards that needs to be met by Queensland exporters.

There is an opportunity for the Queensland Government to promote these standards to our export markets and increase their confidence in these systems. This could result in more countries understanding and accepting Australian export standards and fewer countries requiring customised import standards to be met. Existing high standards in traceability, animal welfare and sustainable production could also be promoted to support the Queensland beef industry’s clean and green credentials.

Biosecurity Queensland provides services to maintain the disease free status of Queensland beef and has a reputation for acting promptly to contain and eradicate biosecurity incursions.

Recent Queensland Government investments in biosecurity that support beef industry market access include:

- $4 million to improve Queensland’s preparedness for foot-and-mouth disease
- $5 million in seed funding has been provided to establish the Queensland Cattle Industry Biosecurity Fund and provide assistance for bovine Johne’s disease.
Growth Pathway 4 - Reducing costs

Improve transport efficiency

Transport of live cattle is a significant cost in the beef supply chain. Queensland’s cattle are typically moved large distances and transported multiple times throughout their life as they are traded between properties, saleyards, feedlots and abattoirs. Most movement occurs on trucks with about 3 per cent of cattle moved on rail. Animal welfare requirements apply to cattle transport (such as rest periods) and meat quality can also be affected by travel periods (for example the limit for cattle to grade MSA is up to 48 hours travel prior to slaughter).

Road infrastructure and transport safety regulations can increase costs of transport, for example where road restrictions do not allow for Type 1 and 2 road trains to travel direct to abattoirs. This requires road trains to unload cattle and reload them onto smaller vehicles to comply with road restrictions.

Road regulations differ across State borders, with different requirements meaning that transport operators must accommodate multiple requirements if crossing a state border.

The Department of Transport and Main Roads is actively working with the agricultural industry to identify opportunities for improved transport efficiencies and access, including the continuous improvements in increasing high productivity vehicle access to the road system.

The feedlot sector completely relies on road freight for cattle and grain as do the majority of small to medium beef enterprises. The incentive to reduce costs of transport along the supply chain is fragmented, as individual cattle producers are liable to pay the transport costs (not the processors) unless the cattle are bought at saleyards.

Efficiencies in Queensland’s freight infrastructure will reduce costs of transport and support future economic growth of the beef industry. The Queensland Government provides large investments in transport infrastructure and upgrades:

- In the 2012/13 State Budget, the Government committed an extra $1 billion over ten years towards upgrading the Bruce Highway
- $28 million a year to provide Cattle Train services across the state.

Queensland's Moving Freight strategy

Queensland's freight task is rising rapidly, and is forecast to increase by 89 per cent by 2026. Transport and Main Roads is planning for this growing challenge with Moving Freight, a 10-year strategy which identifies 38 actions to improve freight movement in Queensland. The strategy’s actions are broad ranging to support diverse sector needs and include:

- Ensuring rail access for agriculture
- Developing investment strategies for key freight corridors
- Improving freight network resistance to floods and natural disasters
- Better collection and analysis of freight data and information
- Continuing to reduce red tape for heavy freight vehicle permits.
To identify specific opportunities to reduce costs on cattle transport routes, DAFF will work with companies along the beef supply chain to develop case studies using the CSIRO Transport Logistics Tool. These case studies will provide quantitative data about specific infrastructure issues to help companies and Government understand where real transport cost savings can be achieved and prioritise transport infrastructure investments.

**Reduce red tape**

The Queensland Government is committed to reducing red tape in the agricultural sector to ensure a regulatory environment that is both client focused and conducive to business growth.

Reducing production costs is an immediate priority for industry. A high proportion of the costs of northern beef producers are fixed costs; that is, they are not able to vary with the level of output of the farm (McCosker et al, 2010).

Processors also have high capital costs, large work forces and operate on low margins. In Australia it is three times the cost to process an animal than in Brazil, twice that of the United States and one and half times that of New Zealand. Labour costs are a significant portion of this, as although semi-automatic or fully automatic machinery has replaced some processing tasks, many tasks including the boning out of carcasses continues to be done by hand, requiring a skilled workforce. Staff retention is a major challenge for processors due to the nature of the work and competition in the labour market.

Government can help reduce the burden of regulation on industry by reviewing and simplifying existing regulatory frameworks, providing more flexible options for compliance and identifying where non-regulatory alternatives may be appropriate.

The Queensland Government is working to reduce red tape to provide time and cost savings for businesses at various stages in the beef supply chain. Cost savings can increase the international competitiveness of the industry and increase profitability. Current reforms being implemented include:

- Recent implementation of co-regulation allowing feedlot operators accredited under the National Feedlot Accreditation Scheme to undertake industry self-auditing in order to maintain compliance with the *Environmental Protection Act 1994*
- Reduce and simplify biosecurity regulation, including providing alternative ways in which beef producers can meet tick line compliance requirements
- Amending the Workers’ Compensation and Rehabilitation framework to reduce premiums for employers by reducing the number of common law actions by up to 50 per cent
- Amending transport regulations to remove requirements for provisional licensed drivers to apply for permits to drive Landcruisers for work purposes
- It is anticipated that other biosecurity related legislation relevant to the beef industry will be reviewed in the future, for example there may be opportunities to review the *Animal Care and Protection Act 2001* and the *Brands Act 1915*. 
In addition, DAFF is leading a project across Government jurisdictions to identify where best practice regulatory outcomes are being achieved for the beef industry and where red tape that adds to costs of beef production can be reduced.

Within the DAFF portfolio, we will consider if there are opportunities to simplify food safety accreditation requirements, mandatory branding requirements for interstate cattle in Queensland feedlots and opportunities to reduce costs of tick line compliance under the new biosecurity legislation.
References:

Queensland’s agriculture strategy: A 2040 vision to double agricultural production (2013)  
State of Queensland


ABARES (2013a) Infrastructure and Australia’s food industry: Preliminary economic assessment, Department of Agriculture Canberra

ABARES (2013b) Global food production and prices to 2050: scenario analysis under policy assumptions Verity Linehan, Sally Thorpe, Caroline Gunning-Trant, Edwina Heyhoe, Kate Harle, Mary Hormis and Keely Harris-Adams. Paper presented at the 43rd ABARES Outlook conference 5–6 March 2013, Canberra, ACT


ABS (2011) 2011 Census data, INDP (ANZSIC 06), Australia 2011

ABS (2013) 7121.0 - Agricultural Commodities, Australia, 2011-12

ABS (2013a) 7215.0 - Livestock Products, Australia, Dec 2013

ABS (2013b) Foreign Trade – unpublished data provided by Queensland Government Statistician Office

ALFA (2013) Responses to Feedlot Industry FAQs  

ALFA/ MLA (2013) Feedlot Survey September 2013  

Ash, A., Hunt, L., McDonald, C., Scanlan, J., Bell, L., Cowley, R., Watson, I., McIvor, J., and N. MacLeod (2013) Innovation and Investment to boost productivity and profitability for northern beef industry – what are the opportunities. Paper presented at the Northern Australian Beef Research Council conference NABRC August 2013


DAFF (2013) Queensland AgTrends 2013-14


DAFF (2013b) Department of Agriculture, Fisheries and Forestry agricultural research, development and extension plan

Gleeson, T., Martin, P., and C. Mifsud (2012). Northern Australian beef industry Assessment of risks and opportunities ABARESS Department of Agriculture, Fisheries and Forestry, Canberra


Call: 13 25 23 or +61 7 3404 6999

Visit: www.daff.qld.gov.au

This QR code links to: www.daff.qld.gov.au

QR codes can be obtained via the intranet under ‘Communications > Communication tools > QR codes’.