

Deloitte Access Economics

Market opportunities for
Queensland agribusiness
from FTAs with China, Japan
and South Korea

South Korea

Deloitte.



Scope

Australia recently signed Free Trade Agreements (FTAs) with China (June 2015), Japan (July 2014) and South Korea (April 2014). These agreements substantially reduce or remove tariffs on a range of Australian food and agribusiness export products including beef, grains, horticulture, seafood and processed foods, which together represent a large share of Queensland's total agricultural production and exports.

This document provides an overview of Stage 1 of a two stage project. The overarching objective of the whole project is to identify where there are the strongest opportunities arising from the FTAs and what barriers exist to realising these opportunities. Principally, the focus of identifying opportunities has been on the four broad agribusiness sectors of beef, grains, horticulture and seafood/aquaculture, including both unprocessed and processed products.

The purpose of Stage 1 is to take a 'data view' on opportunities from the three FTAs and undertake consultations with Queensland agribusiness stakeholders on opportunities and barriers. Stage 2 will investigate, in more detail, the specific opportunities identified and focus on in-market consultations in China, Japan and South Korea which are expected to lead to the generation of trade and investment leads.

Contents

This document presents opportunities and challenges for Queensland agriculture arising from the Korea-Australia Free Trade Agreement (KAFTA). The opportunities are derived after a detailed analysis of Queensland's relative competitiveness in the market, review of tariff reductions for key commodities and assessment of key production and consumption trends affecting demand for agriculture products.

Overview	4
• Food consumption	5
• Queensland's agricultural exports	6
• Key Queensland exports	7
Competition in South Korean markets	9
• Market share	10
• Competitiveness	12
Food demand and supply in South Korea	14
• Beef consumption	15
• Beef food balance	16
• Grain consumption	17
• Grain food balance	18
• Horticulture consumption	19
• Horticulture food balance	20
• Seafood/aquaculture consumption	21
• Seafood/aquaculture food balance	22
Changes from KAFTA	23
• Tariff rates	24
Opportunity map	25
Non-tariff considerations	27
Implications	28
Appendix	29
• Schedule of tariff reductions	30

Overview

South Korea faces a range of challenges, from its aging population to its lagging productivity in the service sector and its position in a geopolitically unstable region. On the back of this, economic growth is expected to remain subdued in 2016 as South Korean exports remain weak, household debt levels are high and consumers face hurdles such as youth unemployment and the impacts of an aging population with high healthcare expenditure (and therefore limited discretionary spending).¹

Overall, as the population continues to age, South Korea's projected growth in food consumption is expected to be limited. This limitation is also due to already high incomes and per person food consumption, and modest future income growth. As part of the demographic shift, demand for healthy, easy-to-cook and semi-processed food is anticipated to grow.

South Korea experienced a rapid shift in diets beginning in the 1970s, as the proportion of calories consumed from grains dropped. Due to continued economic, political and demographic shifts, food products most sought after by 2050 are expected to be vegetables, fruit, meat, dairy products, cereals and fish commodity groups.²

In line with these demographic shifts, South Koreans have revived a consumer preference for all things foreign. This preference is associated with a shift away from previously 'patriotic shopping' and historically high tariffs, towards online shopping and the increased ease of importing inexpensive products.³

Despite South Korea's food consumption growth being projected to be limited, as South Korea has smaller land endowments per person and agricultural output growth has slowed in recent decades, continued large net imports are likely. This is good news for Australian agricultural exporters.

¹ Euromonitor International, 2015, Consumer Lifestyles in South Korea

² ABARES, 2013, What Asia wants: Long-term food consumption trends in Asia

³ The Economist, 2015, South Korean Consumers Won Over

Food consumption

Table 1.1 outlines the detail of South Korea's daily food consumption per person. A typical South Korean's protein consumption consists mainly of seafood and pork while a typical Australian's protein consumption is predominantly comprised of poultry, beef and seafood.

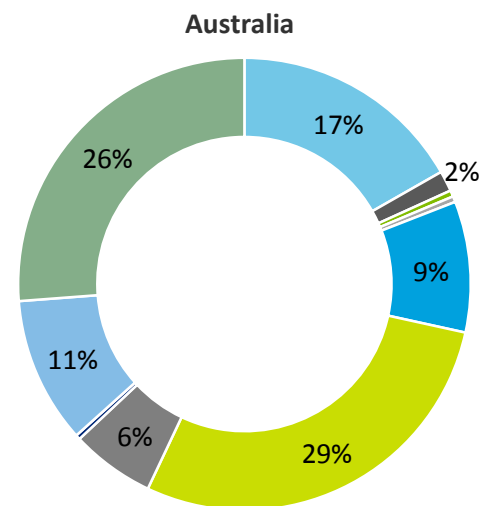
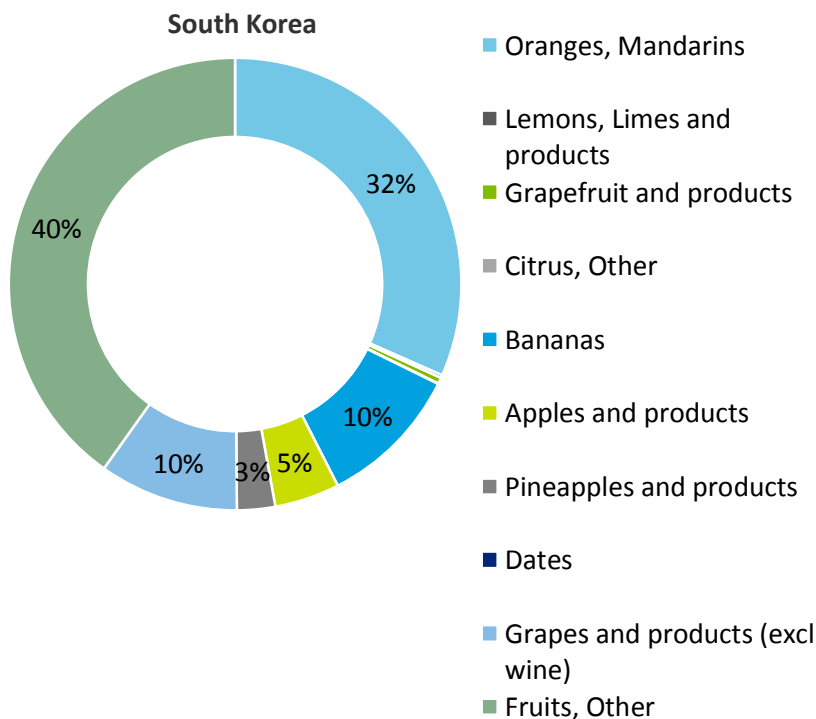
Table 1.1: Top 10 categories of food consumption – South Korea

	South Korea (grams per person per day)	Australia (grams per person per day)
Vegetables	607 [1]	262 [3]
Rice	235 [2]	30 [15]
Alcoholic beverages	205 [3]	289 [2]
Fruits	184 [4]	258 [4]
Seafood	159 [5]	70 [10]
Wheat	142 [6]	191 [5]
Sugar and sweeteners	99 [7]	127 [7]
Pork	85 [8]	63 [12]
Milk	72 [9]	630 [1]
Miscellaneous	69 [10]	50 [14]
<i>Beef</i>	<i>40 [14]</i>	<i>111 [9]</i>

Source: National Geographic, *What the world eats*, 2011

Note: rank in square brackets (out of 22).

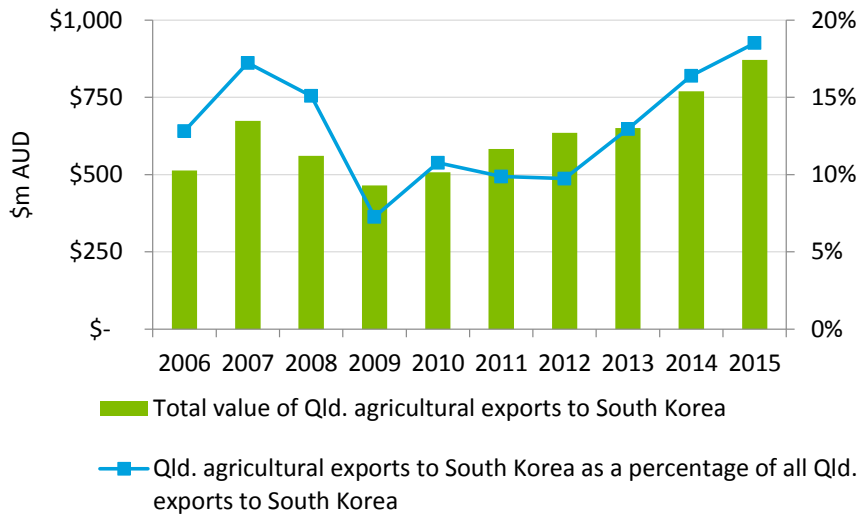
Chart 1.1: Fruit consumption – South Korea



Queensland's agricultural exports

Chart 1.2 shows the total value of agricultural exports to South Korea for the last 10 years (2006-2015). Agricultural product represented around 18% of all exports to South Korea in 2015. The chart shows that the value of Queensland agricultural exports to South Korea has grown steadily since 2009 (following two years of decline).

Chart 1.2: Queensland's exports to South Korea



Source: ABS 5368.0, International merchandise exports, Australia, Information consultancy subscription service, unpublished data.

Note: Commodities defined as agricultural are based on the Harmonised Export Commodity Classification (HECC)

Key Queensland exports

Table 1.2 provides more detail of Queensland exports to South Korea for the last three years. The table shows that **beef** products are by far the largest commodities by export value, together representing 79% of all Queensland agricultural exports to South Korea. Queensland beef exports also represent the majority (62%) of all Australia's beef exports to South Korea, showing Queensland to be the dominant exporter of beef amongst Australian states.

Grains and related products, in particular malt, cotton seed, and corn products represent 6% of all agricultural exports.

Horticulture and **seafood/aquaculture** are small by comparison. Macadamia, potatoes and mung beans are the only commodities to have exports greater than \$1 million in any given year (for the period of our analysis).

Cotton exports to South Korea also make a significant contribution (8% of all Australian exports to South Korea).

Key Queensland exports

Table 1.2: Key Queensland exports to South Korea

	Qld. exports to South Korea (\$m) – current dollars			% of all Qld. agricultural exports to South Korea – 3 year average	Qld. % of Australian exports of this product to South Korea
	2013	2014	2015		
Beef					
Beef boneless – frozen	264	323	370	42%	64%
Beef boneless – fresh or chilled	123	136	177	19%	61%
Beef bone in – frozen	54	81	90	10%	63%
Beef offal – frozen	34	43	60	6%	57%
Beef bone in – fresh or chilled	11	17	25	2%	54%
Other beef products	2	3	7	1%	63%
Sub-total	488	603	729	79%	62%
Grains					
Malt	10	22	22	2%	21%
Cotton seed	19	13	2	2%	41%
Corn seed	4	3	5	1%	95%
Worked corn	5	5	3	1%	82%
Corn – other	7	5	1	1%	26%
Other	8	6	3	1%	1%
Sub-total	54	54	36	6%	7%
Horticulture					
Macadamia	0	1	2	0%	17%
Potatoes	2	-	-	0%	8%
Mung bean	-	1	1	0%	100%
Mango/guava	-	0	0	0%	67%
Frozen vegetables – other	-	0	0	0%	100%
Other	0	0	0	0%	1%
Sub-total	2	2	3	0%	16%
Seafood/aquaculture					
Scallops	0	0	-	0%	100%
Prawn and shrimp	0	0	0	0%	100%
Eels	0	0	0	0%	92%
Tuna – yellowfin	0	-	-	0%	100%
Other	0	0	0	0%	0%
Sub-total	0	0	0	0%	8%
Other					
Sugar	-	-	-	-	-
Cotton	67	73	45	8%	56%
Wool	-	-	-	-	-
Other	41	39	62	6%	13%
Sub-total	108	112	106	14%	23%
Total	651	771	874	100%	36%

Source: ABS 5368.0, International merchandise exports, Australia, Information consultancy subscription service, unpublished data.
Note: Totals may differ from the sum of individual items due to rounding.

Competition in South Korean markets

This section presents a picture on the competitiveness of Queensland's agricultural products in the South Korean market through an analysis of import market share and the factors that contribute to agricultural competitiveness.

Market share

Market share is one indicator of a country's competitiveness. Table 1.3 shows the market share of major suppliers to South Korea for each of the four key agricultural categories. This is compared to Australia's market share position and also shows Queensland's market share by calculating its share of Australian exports to South Korea.

The table shows that Australia is clearly the market leader in terms of **beef** with a market share of 51% (of which Queensland has 62% of this share). Queensland's main competitors in this market are the USA with 41% market share and New Zealand with 7% market share.

There are four key suppliers for **grain**, of which Australia is one. The other three are USA, Brazil and China, with a combined market share of 70%. Australia has 11% market share and is ranked fourth overall. Queensland, however, has only a relatively small proportion (7%) of this.

For **horticulture**, there are two dominant market players, the USA and China, together representing 70% of all horticultural imports. Australia is a minor player (ranking tenth overall) with Queensland representing only 16% of Australia's exports.

For **seafood/aquaculture**, there are four main players making up 77% of imports. Australia is an extremely small player in this category and Queensland represents a small proportion (8%) of Australia's exports.

Market share

Table 1.3: South Korea's imports of major QLD-South Korea exports

	% of South Korea imports (total 2012 to 2014 by value)	Cumulative percentage
Beef		
USA	41%	41%
New Zealand	7%	48%
Canada	1%	49%
Mexico	0%	49%
Uruguay	0%	49%
Other	0%	49%
Australia	51% - ranks 1 st	100%
Queensland	62% of Australian exports (32% market share)	
Grains		
USA	33%	33%
Brazil	15%	48%
China	11%	59%
Argentina	7%	65%
India	5%	71%
Other	19%	89%
Australia	11% - ranks 4 th	100%
Queensland	7% of Australian exports (0.8% market share)	
Horticulture		
USA	40%	40%
China	30%	70%
Chile	9%	79%
Philippines	8%	87%
Vietnam	4%	91%
Other	8%	99%
Australia	1% - ranks 10 th	100%
Queensland	16% of Australian exports (0.02% market share)	
Seafood/aquaculture		
China	31%	31%
Russia	26%	57%
Vietnam	11%	67%
USA	10%	77%
Norway	3%	80%
Other	20%	100%
Australia	0%	100%
Queensland	8% of Australia's exports (0% market share)	

Source: UN Comtrade Database 2015.

Competitiveness

While market share might indicate relative competitiveness for certain commodities, it does tend to reflect historical factors and, as such, does not always provide the present day picture of competitiveness nor the factors that contribute to future competitiveness.

Table 1.4 compares Australia against its key competitors in the South Korean market (top 20 competitors by value) against 14 key factors that contribute to agricultural competitiveness. The table shows that Australia, in general, compares well in areas of innovation (i.e. access to technology, research and development and education) and in terms of land availability. It also is strong in market access, in particular biosecurity. However Australia does not rank as well in terms of the cost of production metrics, particularly in relation to regulatory burden and labour market efficiency, or in rainfall or soil fertility (noting that in some areas of Australia soil fertility is considerably higher than the average). However, it should be noted that, given Australia's sheer size and diversity, there are pockets of high soil fertility and rainfall meaning that certain regions may score quite highly by comparison.

In terms of Australia's low ranking on regulatory burden, this can be seen from both a positive and negative angle. There is a level of 'good and necessary' regulation to ensure Australia's reputation for high quality and safe food. However, regulation often crosses a line and becomes a 'burden' due to lack of coordination between agencies, inadequate assessment of the costs and benefits and the cumulative effect of regulations.

In terms of Australia's generally lower fertility soils, and its broadacre production systems, this actually presents as an opportunity for intensification of production systems and productivity increases. Australia's opportunity here is probably greater than what is possible in other countries, where even a small increase in carrying capacity (per unit area) gives rise to substantial production gains for the industry.

Queensland's advantage versus competitors is similar to Australia for most of these metrics. In relation to spatial proximity, area of arable land and average rainfall it is likely to rank slightly better than Australia. However, rainfall variability and drought across Australia will continue to disadvantage Australia as it creates additional complications and cost to ensure security of supply and the honouring of any contracts entered into.

Competitiveness

Table 1.4: Factors of competitiveness – Australia rank against top 20 South Korea importers

Theme	Factor of competitiveness	Proxy measure	Australia Rank	Sample size
Cost of production	Regulatory burden	Burden of government regulation ^A	18	20
	Cost of inputs – intermediates (fuel, fertiliser, chemicals)	Pump price for gasoline ^B	10	20
	Barriers to entry/exit	Ease of doing business (starting a business) ^B	5	20
	Labour costs and labour market efficiency	Labour market efficiency ^A	11	20
Innovation	Access to technology	Theme of technological readiness (includes availability, tech absorption, tech transfer, internet usage) ^A	4	20
	Research, development and extension	Theme of innovation which includes (innovation capacity, R&D institution quality, company spending on R&D, R&D collaboration) ^A	8	20
	Education and training	Theme of higher education and training ^A	4	20
	Age of workforce (ageing population)	Age dependency ratio, people older than 64 (% of working-age population) ^B	13	20
Natural resources	Rainfall water availability	Average annual precipitation ^B	18	20
	Soil fertility	Carrying capacity - Livestock total per ha of agricultural area (No/Ha) ^C	20	20
	Area of arable land	Arable land (hectares) ^C	6	20
Market access	Biosecurity	Average no of cattle disease outbreaks per year (1995 - 2004) ^C	4	20
	Spatial proximity to export markets	Distance to Japan ^D	9	20
	Efficient supply chain and logistics	Theme of quality of overall infrastructure (road, rail, port, air, electricity, telephone) ^A	8	20

Sources:

^A World Economic Forum (WEF) 2015, *The Global Competitiveness Report 2015-16*

^B World Bank, *Development Indicators Database 2015*

^C Food and Agriculture Organisation (FAO) Statistics Division, *FAOSTAT database 2015*

^D Google Maps 2015

Note: Shading colour in the 'Australia rank' column groups the factors of competitiveness by rank; dark green (rank 1-5), light green (rank 6-9), light grey (rank 10 to 15) and dark grey (rank 16-20).

Food demand and supply in South Korea

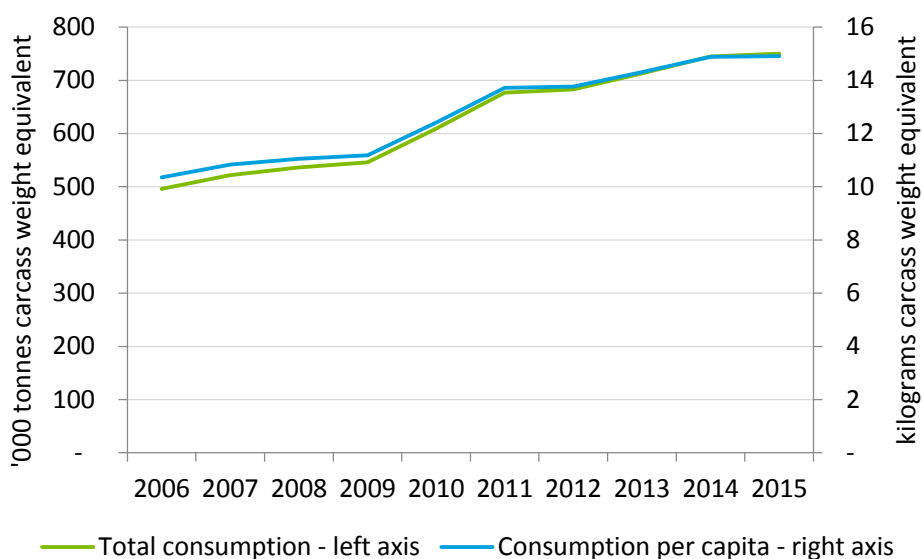
For each of the four key areas of focus (beef, grains, horticulture and seafood/aquaculture) this section presents data on consumption trends (i.e. the current and future demand for food in South Korea) and the local South Korean production, imports and exports for each area (i.e. how this demand is supplied). This analysis gives a sense for how South Korea currently meets its food demand and how it is likely to meet future demand.

Beef consumption

Chart 1.2 shows that there has been strong growth in total and per capita consumption of beef in South Korea over the last decade. Per capita consumption in 2015 was 44% higher than 2006 levels, and total consumption 51% higher (due to population growth of around 5%).

Per capita consumption is now even higher in South Korea than Japan, but is still well below levels in Australia (31 kilograms per capita in 2015)⁴ and other developed western countries. While population growth is likely to slow in South Korea, it is projected to remain positive for much of the next 35 years,⁵ creating reasonable prospects for total consumption growth.

Chart 1.2: South Korea – Beef consumption



Source: *United States Department of Agriculture (USDA) (2015) Production, Supply and Distribution Online*, livestock dataset.

Note: Specifically, the data is for 'Meat, Beef and Veal'

⁴United Nations, 2015, *World Population Prospects 2015*, Total Population – Both Sexes dataset; USDA, 2015, *Production, Supply and Distribution Online*, livestock dataset.

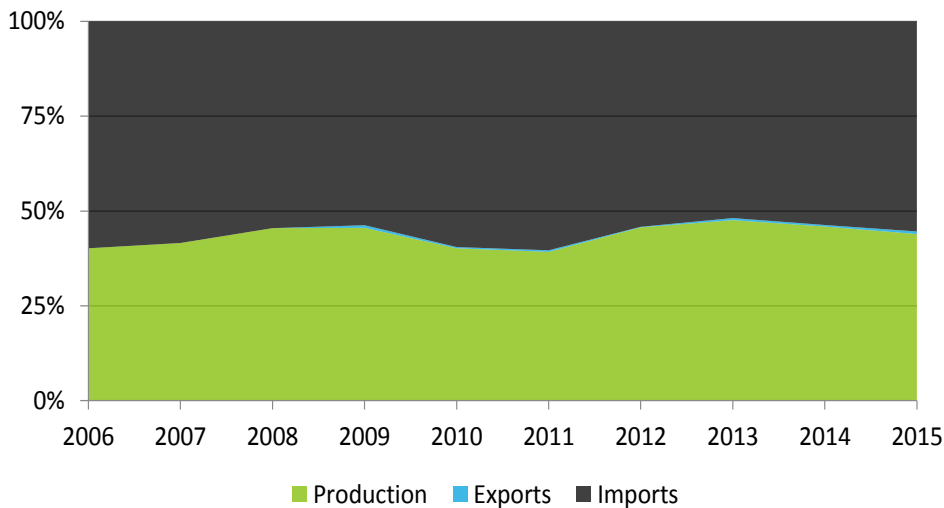
⁵United Nations, 2015, *Probabilistic Population Projections based on the World Population Prospects: The 2015 Revision*.

Beef food balance

Chart 1.4 shows that while imports have consistently been greater than production of beef in South Korea, the relative size of imports and production has varied over the last decade. This is despite the fact that domestic consumption has been consistently growing over the period, suggesting South Korea's capacity, or incentive, to satisfy demand through domestic production is limited, creating opportunities for exporting countries, including Australia.

In 2014, imports of beef into South Korea were worth \$2.1 billion,⁶ over 50% of the value of Queensland production. South Korea's domestic production is estimated to have been worth around \$1.8 billion in the same year.

Chart 1.4: South Korea – beef food balance



Source: United States Department of Agriculture (USDA) (2015) Production, Supply and Distribution Online, livestock dataset.

Note: Specifically, the data is for 'Meat, Beef and Veal'

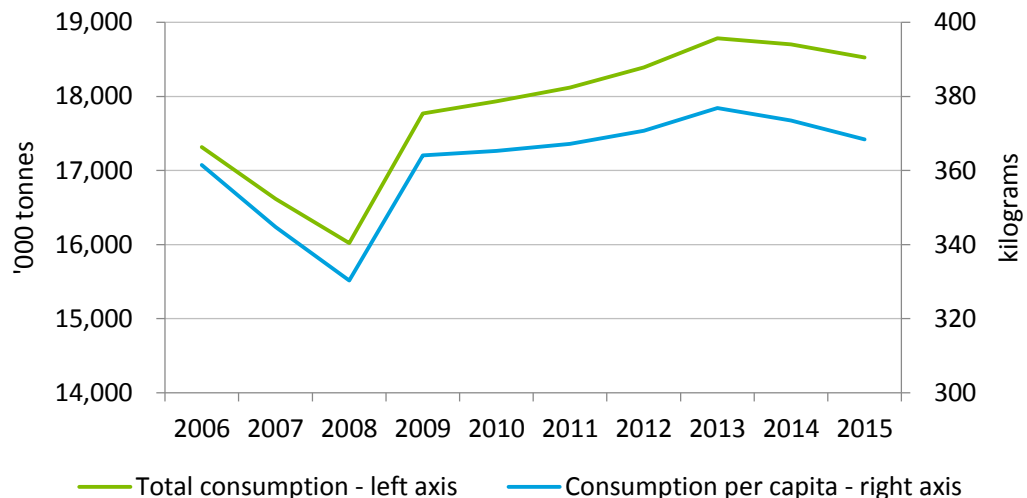
⁶UN Comtrade Database.

Grain consumption

Chart 1.5 shows that while both total and per capita consumption have grown since 2006 levels, they have not increased continuously, and in fact declined in recent years. The fact that total consumption grew faster than per capita consumption from 2008 to 2013 suggests that population growth has played an important role. And while population growth in South Korea has moderated over the last decade, it is still positive, so has partially offset decreases in per capita consumption.

Future growth in the real value of grains product consumption is projected to be marginal,⁷ and the USDA's projections for imports of a range of grains products (e.g. coarse grains, corn and wheat) is expected to remain stable or negative over the next decade.⁸ However discussions with the South Korean Trade Commissioner highlighted an increasing interest in high protein grains (so called 'super foods' that include quinoa and amaranth).

Chart 1.5: South Korea – Grain consumption



Source: USDA Production, Supply and Distribution Online, grains dataset.

Note: The chart reflects data for barley, corn, millet, mixed grain, oats, rice (milled), rye, sorghum and wheat.

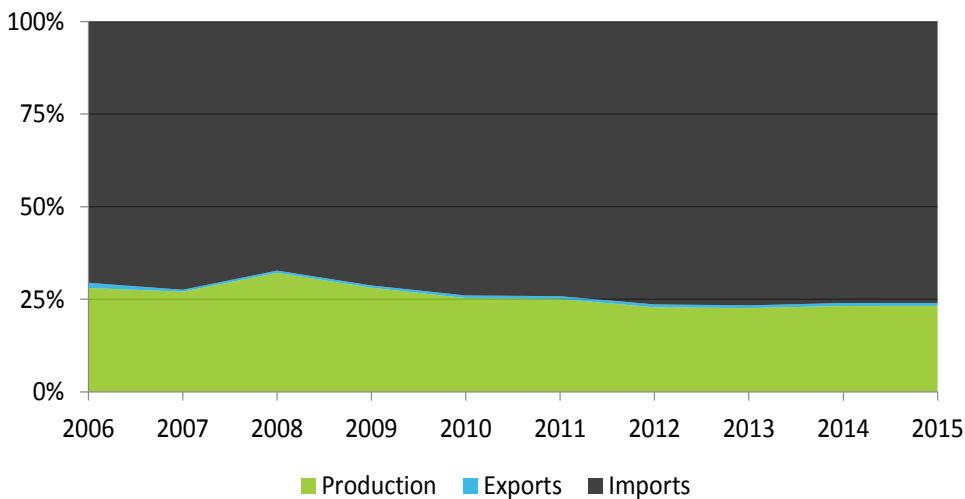
⁷ABARES, 2013, *What Asia wants: Long-term food consumption trends in Asia*.

⁸USDA, 2015, *USDA Agricultural Projections to 2024*.

Grain food balance

Chart 1.6 shows that imports satisfy the bulk of domestic demand for grains products in South Korea. Imports have also become increasingly important over the period. In 2006 imports volumes were 2.5 times domestic production which increased to nearly 3.3 times domestic production in 2015. In 2014 imports of cereals products to South Korea were valued at \$3.7 billion,⁹ over five times the total value of Queensland production, with South Korea itself producing around \$1.1 billion worth of cereals products.¹⁰

Chart 1.6: South Korea – Grain food balance



Source: USDA Production, Supply and Distribution Online, grains dataset.

Note: The chart reflects data for barley, corn, millet, mixed grain, oats, rice (milled), rye, sorghum and wheat.

⁹UN Comtrade Database.

¹⁰This has been calculated by multiplying the volume of South Korean production as per USDA (2015) by the price implied by the value of imports as per the UN Comtrade Database and the volume of imports as per USDA (2015). The same methodology has been applied to the estimates of the value of production for other commodities.

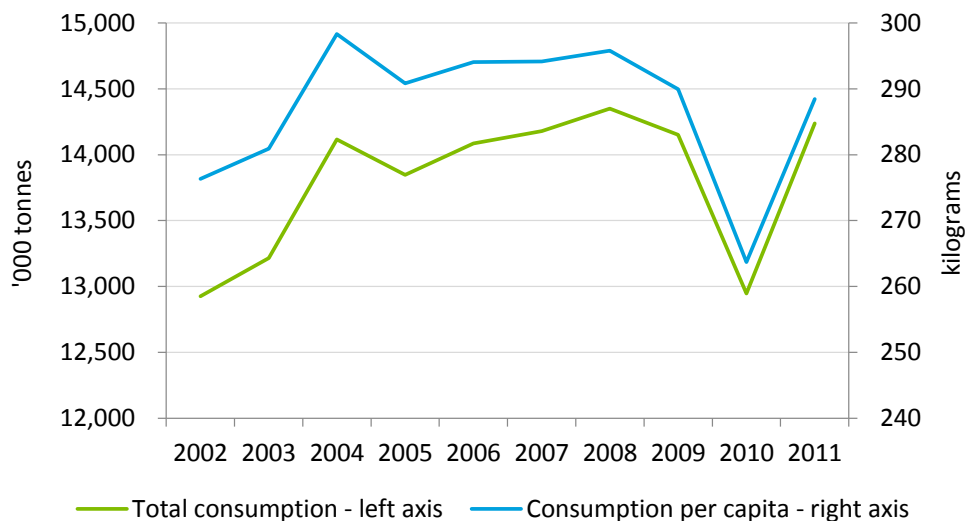
Horticulture consumption

Chart 1.7 shows a slight trend towards increasing total and per capita consumption of horticultural products in South Korea in the period 2002 to 2011 (the latest year of data available), with the exception of 2009 and 2010. No explanation is currently available for the sharp decrease in consumption in 2010.

Over the decade to 2011, total and per capita consumption increased by 10% and 4%, respectively, noting that consumption levels were actually higher in the mid-2000s.

With consumption having shown relatively little growth over recent decades, which was a period of relatively high population and income growth, growth is expected to be relatively flat in coming decades (with slower population and income growth).¹¹

Chart 1.7: South Korea – Horticulture consumption



Source: Food and Agriculture Organisation (2015), FAOSTAT statistics database - Food Balance Sheets

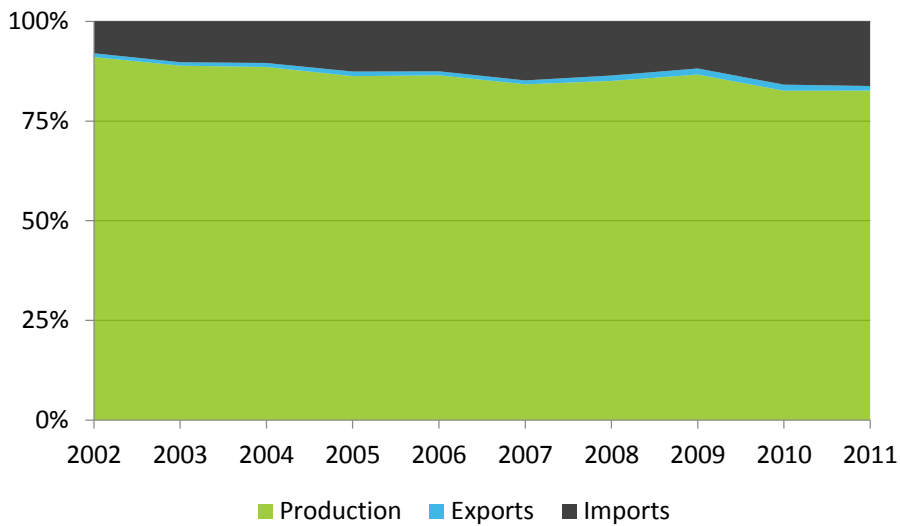
Note: Chart represents data for 'vegetables', 'fruit – excluding wine' and 'nuts and products'.

¹¹ABARES, 2013, *What Asia wants: Long-term food consumption trends in Asia*

Horticulture food balance

Chart 1.8 shows that South Korea relies on its own production to satisfy much of domestic demand for horticultural products, though imports have played an increasingly important role over time. In 2002, import volumes were only 10% of production, but this had increased to 20% by 2011. The value of imports was around \$1.1 billion in 2014,¹² around half of the total value of Queensland production.

Chart 1.8: South Korea – Horticulture food balance



Source: Food and Agriculture Organisation (2015), FAOSTAT statistics database - Food Balance Sheets

Note: Chart represents data for 'vegetables', 'fruit – excluding wine' and 'nuts and products'.

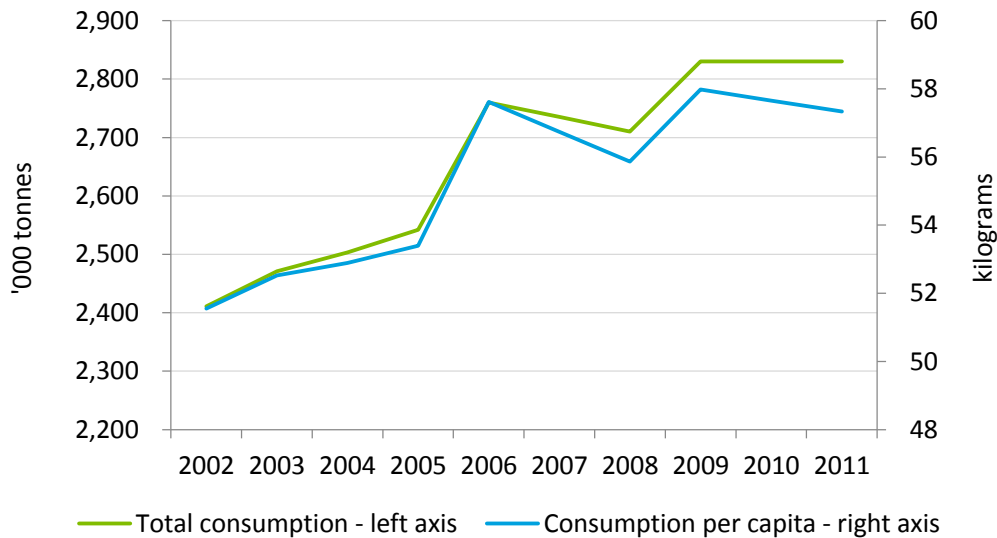
¹²UN Comtrade Database

Seafood/aquaculture consumption

Chart 1.9 shows that total consumption of seafood and aquaculture products in South Korea tracked with changes in per capita consumption between 2002 and 2006. However, the two series have shown divergence in the last half of the decade to 2011, with total consumption drawing away from per capita consumption due to population growth.

South Korea is already among the world's largest consumers of seafood and aquaculture products on a per capita basis, which may limit future market opportunities. However, relatively recent changes in lifestyle have led to increased consumption of pre-cooked, prepared and preserved food, presenting opportunities for satisfying different niches in the South Korean market.¹³

Chart 1.9: South Korea – Seafood/aquaculture product consumption



Source: Food and Agriculture Organisation (2015), FAOSTAT statistics database - Food Balance Sheets

Note: Chart represents data for 'fish, seafood'.

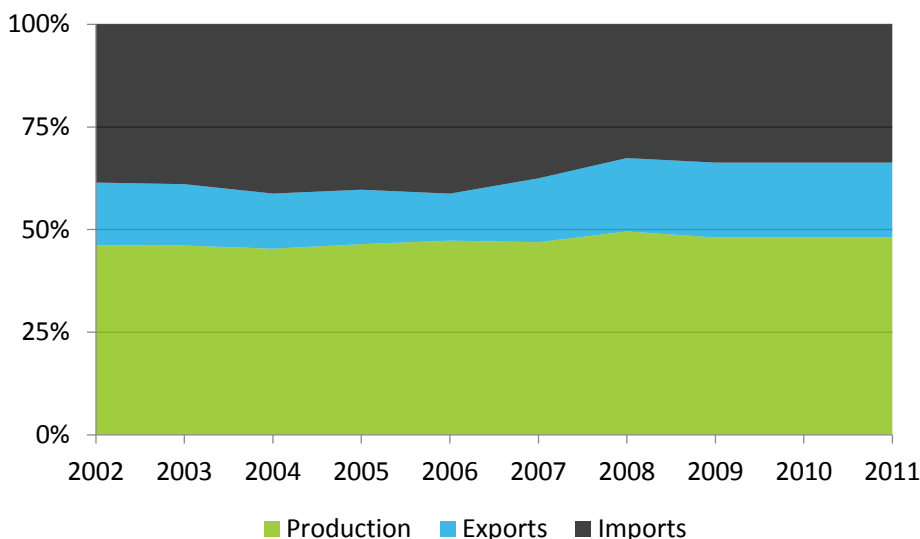
¹³ABARES, 2013, *What Asia wants: Long-term food consumption trends in Asia*

Seafood/aquaculture food balance

Chart 1.10 shows that, while South Korea imports around 80% of the volume of seafood and aquaculture products that it produces, much of that domestic production is still exported. In 2014, imports were worth around \$4.77 billion¹⁴ – over 17 times the total value of Queensland production.

Wild-caught fish and other aquatic animals still account for the majority of South Korean production, but the aquaculture sector has grown significantly in recent years.¹⁵ Much of this growth has been in shellfish production, with South Korea recently becoming the world's second largest producer of farmed oysters (after China).

Chart 1.10: South Korea – Seafood/aquaculture food balance



Source: Food and Agriculture Organisation (2015), FAOSTAT statistics database - Food Balance Sheets.

Note: Chart represents data for 'fish, seafood'.

¹⁴UN Comtrade Database

¹⁵ABARES, 2013, *What Asia wants: Long-term food consumption trends in Asia*

Changes from KAFTA

This section summarises the key changes arising from the KAFTA for the four key categories of interest (beef, grains, horticulture and seafood/aquaculture). For each key commodity export in each category, Table 1.5 (on the following page) shows the current tariff rate, the expected tariff rate 10 years after the FTA has commenced and the tariff rate after the FTA has had its full effect. This is then compared to the current tariffs for the top three competitors in each commodity to show the tariff differentials between competitors. This is a static picture of the present day tariffs and does not represent possible tariff changes for these competitors in the future.

The table shows that tariffs will be eliminated for all **beef** products once the FTA has been given full effect (i.e. over 15 years). Australia's main competitor in this market is the USA, which has a lower tariff of 29.3% (compared to Australia's base rate of 40%) for the beef boneless and bone in products. Tariffs for the two other competitors are roughly equivalent to Australia for all beef products.

With the exception of 'corn – other', **grains** tariffs will be eliminated once the FTA has had full effect. The phasing for this varies with corn seed reducing to zero over 18 years, worked corn (10 years) and malt (12 years). Competitors in grains currently have similar tariffs to Australia, with the exception of corn seed where the USA has a much lower tariff of 65% (compared to Australia's base rate of 328%).

For **horticulture**, tariffs will be eliminated once the FTA has reached its full effect with the exception of mung bean¹⁶ which will only be halved over 10 years. Mango will be phased out over 10 years, macadamias over five years and frozen vegetables over 10 years. Australia currently has lower tariffs than its competitors for mangoes and potatoes, and higher tariffs for macadamia and frozen vegetables.

For **seafood/aquaculture**, tariffs will be eliminated for all top four products over 20 years with the exception of eels. Australian produce currently experiences similar tariff rates to its competitors.

¹⁶According to HECC codes, mung beans are considered under 07 - Edible vegetables and certain roots and tubers

Tariff rates

Table 1.5: South Korea tariff rates – Australia (base rate and under FTA) versus key competitors for each key export commodity

	Australia tariff rate				Top 3 competitors for each commodity by market share – current tariff rates		
	Base rate	Tariff rate from FTA (after 10 years)	Change in % points after 10 years	Tariff rate from FTA (full effect)	Competitor 1	Competitor 2	Competitor 3
Beef							
Beef boneless – frozen	40.0%	13.3%	26.7%	0.0%	29.3%	40.0%	37.3%
Beef boneless – fresh or chilled	40.0%	13.3%	26.7%	0.0%	29.3%	37.3%	40.0%
Beef bone in – frozen	40.0%	13.3%	26.7%	0.0%	29.3%	40.0%	37.3%
Beef offal – frozen	18.0%	6.0%	12.0%	0.0%	13.2%	18.0%	16.3%
Beef bone in – fresh or chilled	40.0%	13.3%	26.7%	0.0%	29.3%	37.3%	40.0%
Grains							
Malt	269.0% ^A	89.6%	161.4%	0.0%	246.6%	269.0%	201.7%
Cotton seed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Corn seed	328.0%	145.7%	182.3%	0.0%	65.6%	328.0%	N/A
Worked corn	167.0%	0.0%	167.0%	0.0%	167.0%	106.2%	167.0%
Corn – other	65.0%	65.0%	0.0%	65.0%	65.0%	65.0%	65.0%
Horticulture							
Macadamia	30.0%	0.0%	30.0%	0.0%	12.8%	N/A	N/A
Potatoes	0.0%	0.0%	0.0%	0.0%	304.0%	N/A	N/A
Mung bean	607.5%	303.7%	303.8%	303.7%	607.5%	607.5%	N/A
Mango/guava	30.0%	0.0%	30.0%	0.0%	304.0%	N/A	N/A
Frozen vegetables – other	27.3%	10.6%	16.7%	0.0%	27.3%	7.4%	11.5%
Seafood/aquaculture							
Scallops	20.0%	0.0%	20.0%	0.0%	20.0%	20.0%	12.0%
Prawn and shrimp	20.0%	0.0%	20.0%	0.0%	10.0%	20.0%	20.0%
Eels	6.25%	6.25%	0.0%	6.25%	6.25%	3.75%	6.25%
Tuna – yellowfin	20.0%	0.0%	20.0%	0.0%	20.0%	20.0%	20.0%
Other							
Sugar	3.0%	0.0%	3.0%	0.0%	2.7%	0.0%	0.0%
Cotton	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wool	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Sources: 'International Trade Centre (ITC) 2015, Market Access Map – tariff comparison' is used for competitor rates; 'Korea-Australia Free Trade Agreement, Schedule of Tariff Commitments: Korea' is used to calculate tariff change in 10 years' time and tariff at full effect

Note: The current tariff rates represent Ad Valorem Equivalent (AVE) tariff according to ITC methodology for each commodity, therefore are an adjustment to account for numerous tariff lines.

^ATariff rate above the quota of 10,000 tonnes in year 1, with the quota increasing to 12,936 tonnes by year 14 (quota increase detailed in Korea-Australia Free Trade Agreement, Appendix 2A-1).

Opportunity map

This 'opportunity map' consolidates the preceding analysis by combining the value of Queensland food and fibre exports, tariff changes in the South Korea FTA, Queensland's market share of South Korea imports, and consumption growth in South Korea for specific commodities.

The sectors which are large, blue and are located towards the top right of the chart are those with the greatest opportunity for growth in the South Korean market. This is because they represent the strongest combination of:

- Being an established export market (ball size);
- Strong competitive advantage represented by market share (horizontal axis);
- Large tariff reductions from the FTA (vertical axis); and
- Strong consumption growth in the South Korean market (ball colour – where blue represents strong recent and expected continued growth, green represents moderate demand growth and grey represents static or declining demand growth).

The opportunity map shows **beef and beef products** as being the largest opportunity for trade and investment growth, given its established market and Queensland's dominant market share. The tariff reductions applied to Australian beef will serve to strengthen this market further. Beef consumption is also relatively strong in South Korea compared to other commodities.

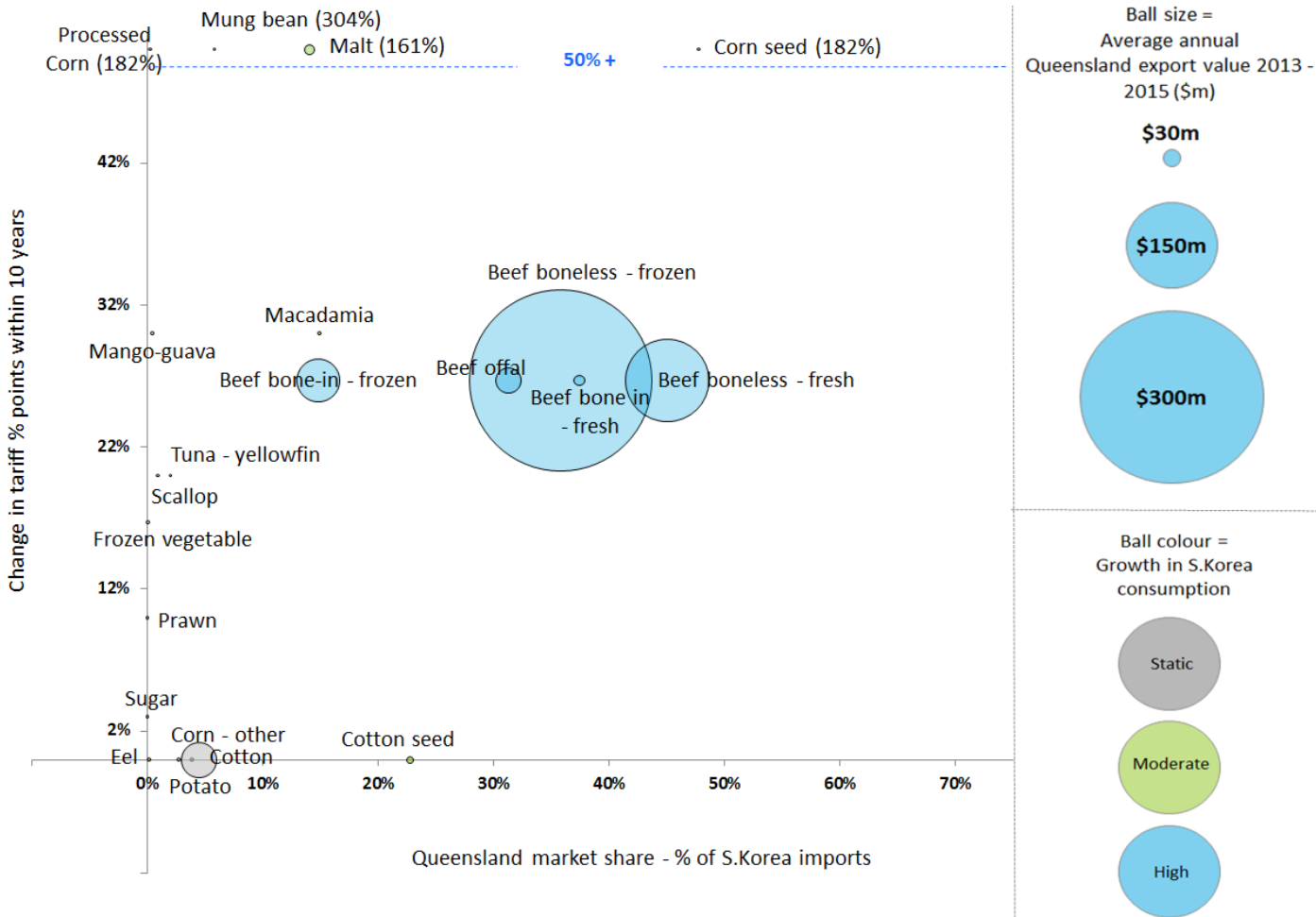
For **grains**, current tariffs are extremely high. Some tariff lines such as worked corn, malt and corn seed are being dramatically phased out over 10-18 years (depending on the tariff line). Malt and corn seed perhaps represent the largest opportunities for grains given there is a market presence for these commodities, as well as moderate demand growth.

For **horticultural products**, mung bean, macadamia, mango and frozen vegetables will all enjoy healthy tariff reductions. However, macadamia has the strongest combination of tariff reduction, demand growth and market share (although the actual value of exports in recent years is relatively low at around \$1m per annum).

For **seafood/aquaculture** products, total demand has been relatively static in the five years to 2011. With the exception of eels, all seafood/aquaculture products will enjoy some tariff reduction. However, without an established market presence for any of the commodities in this category, it would appear that seafood/aquaculture is not an immediate opportunity for significant Queensland trade.

Opportunity map

Chart 1.11: Opportunity map of key Queensland export commodities to South Korea



Non-tariff considerations

Through consultation, stakeholders did not identify any material non-tariff barriers in relation to trade opportunities with South Korea.

This will be explored in greater detail during Stage 2.

Implications

The previous analysis suggests that the major opportunity for Queensland in terms of value is in increasing beef exports to South Korea, given the relatively high tariff reductions and strong market share. However, given beef is already a relatively large export market to South Korea, Stage 2 will also investigate the comparatively smaller (but still significant) emerging opportunities in other categories.

In terms of horticulture, this initial research has highlighted the emerging opportunities in commodities where export channels have been established, with particular opportunities in macadamia and mangoes. With respect to grains, further investigation could be conducted into the opportunities for corn , malt and high protein grains.

However, there may also be other opportunities for Queensland exports to South Korea where exports do not currently occur. Identifying these opportunities would involve analysis to match Queensland's production capability, market access for each commodity, and more detailed consumption analysis for South Korea down to the specific product level.

Appendix

Schedule of tariff reductions

Table A.1 shows the proposed tariff reduction schedule over 20 years for key export commodities.

Table A.1: South Korea – Schedule of tariff reductions

Commodity	Base rate (%)	Tariff rate (%)																			
		Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14	Yr15	Yr16	Yr17	Yr18	Yr19	Yr20
Beef																					
Beef boneless – frozen	40	37	35	32	29	27	24	21	19	16	13	11	8	5	3	0	0	0	0	0	0
Beef bone in – frozen	40	37	35	32	29	27	24	21	19	16	13	11	8	5	3	0	0	0	0	0	0
Beef boneless – fresh or chilled	40	37	35	32	29	27	24	21	19	16	13	11	8	5	3	0	0	0	0	0	0
Offal – frozen	18	17	16	14	13	12	11	10	8	7	6	5	4	2	1	0	0	0	0	0	0
Beef bone in – fresh or chilled	40	37	35	32	29	27	24	21	19	16	13	11	8	5	3	0	0	0	0	0	0
Grains																					
Malt	269 ^A	251	233	215	197	179	161	143	126	108	90	72	54	36	18	0	0	0	0	0	0
Cotton seed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corn seed	328	310	292	273	255	237	219	200	182	164	146	128	109	91	73	55	36	18	0	0	0
Worked corn	167	150	134	117	100	84	67	50	33	17	0	0	0	0	0	0	0	0	0	0	0
Horticulture																					
Macadamia	30	24	18	12	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potatoes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mung bean	608	577	547	516	486	456	425	395	365	334	304	304	304	304	304	304	304	304	304	304	304
Mango/guava	30	27	24	21	18	15	12	9	6	3	0	0	0	0	0	0	0	0	0	0	0
Frozen vegetables – other ^B	27	25	23	22	20	18	16	14	13	11	9	7	5	4	2	0	0	0	0	0	0
Seafood/aquaculture																					
Scallops	20	18	16	14	12	10	8	6	4	2	0	0	0	0	0	0	0	0	0	0	0
Prawn and shrimp	20	16	12	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eels ^C	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Tuna – yellowfin	20	16	12	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other																					
Sugar	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wool	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: 'Korea-Australia Free Trade Agreement, *Schedule of Tariff Commitments: Korea*' is used for calculation of tariff reduction schedules.

^A Tariff rate above the quota of 10,000 tonnes in year 1, with the quota increasing incrementally to 12,936 tonnes by year 14 (quota increase detailed in Korea-Australia Free Trade Agreement, *Appendix 2A-1*).

^B The 27% base rate and 15 year phase out period relates to the tariff lines of potatoes, onions, spinach, bamboo shoots, peas and beans. Carrots, however, phase out after 10 years and garlic after 18 years. Sweet corn has a base rate of 30% and a phase out period of 15 years.

^C Live eels base tariff (for 2015) is sourced from the International Trade Centre (ITC) Market Access Map for HS code 030192, corresponding to four tariff lines.

General use restriction

This report is prepared solely for the Department of Agriculture and Fisheries and Trade and Investment Queensland by Deloitte Access Economics. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purpose of identifying the opportunities for Queensland agribusiness from the Free Trade Agreements with Japan, Japan and South Korea. You should not refer to or use our name or the advice for any other purpose.



General information only

This presentation contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively the "Deloitte Network") is, by means of this presentation, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this presentation.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/au/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

Deloitte provides audit, tax, consulting, and financial advisory services to public and private clients spanning multiple industries. With a globally connected network of member firms in more than 150 countries, Deloitte brings world-class capabilities and high-quality service to clients, delivering the insights they need to address their most complex business challenges. Deloitte has in the region of 225,000 professionals, all committed to becoming the standard of excellence.

About Deloitte Australia

In Australia, the member firm is the Australian partnership of Deloitte Touche Tohmatsu. As one of Australia's leading professional services firms, Deloitte Touche Tohmatsu and its affiliates provide audit, tax, consulting, and financial advisory services through approximately 6,000 people across the country. Focused on the creation of value and growth, and known as an employer of choice for innovative human resources programs, we are dedicated to helping our clients and our people excel. For more information, please visit our web site at www.deloitte.com.au.

Liability limited by a scheme approved under Professional Standards Legislation.

Member of Deloitte Touche Tohmatsu Limited