

AUSTRALIAN BEEF INDUSTRY

SEPTEMBER 2015

PRODUCTION – AN OVERVIEW

Global beef production reached ~60 million MT (CWE) in 2014 and has grown at an average of 1.7% CAGR since 1960. Beef production is highly concentrated, with ten countries producing over 80% of global output, with the United States and Brazil representing 35% of global production. Amidst rising population and increasing strain on food supplies, beef plays an important role in addressing the issues related to food security. Rising demand from developing economies, driven by increasing per capita income led lifestyle changes towards consumption of high protein foods, has been matched with a ramping up of production.

While the US is the largest producer and consumer of beef, its dominance of the industry is now threatened by Brazil, whose production is now nearly 90% that of USA.

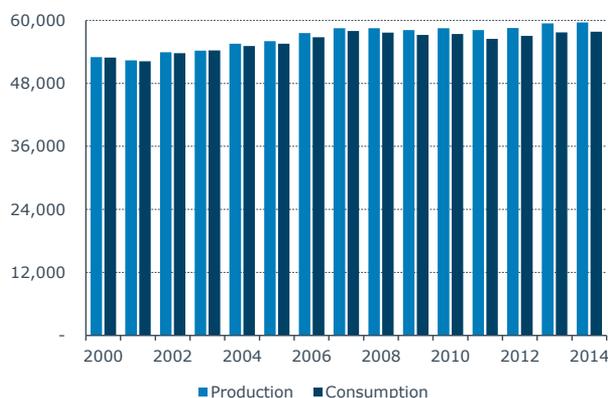
In 2014, the USA’s production is estimated to have reached ~11.8million MT (CWE), though is expected to decline on the back drop of tight slaughtering, as beef breeding herds continue to rebuild from the low herd cycle point. In 2015, the USDA has estimated production to be close to ~10.8million MT (CWE), which would represent the lowest beef production since 1993. According to the USDA, cow and heifer slaughtering have reduced by ~18% and ~8% respectively. Furthermore, recent high beef prices have led to ranchers retaining cows for herd expansion. On the contrary, beef production in Brazil has continued to increase and is estimated to have reached ~10m MT in 2014. Strong global demand is expected to increase the feedlot capacity over the next ten years in Brazil. Feedlot production, which is 9.4% of Brazilian total production in 2013, is expected to reach 19.1% in 2023, with the transformation of the industry is backed by abundance of feed grain available for cattle.

Within Brazil there is increasing competition from grain crops for arable land, which had previously been used for cattle production, with much of this increase in grain production expected in the interior regions. This will create logistical issues as the infrastructure for moving produce from farms to ports remains underdeveloped. With less available grazing land and increased grain production; cattle are being fed on grains and oilseeds, such as corn and soybean, as it is more cost effective to export meat than grains.

According to USDA GAIN report, EU beef production in first eleven months of 2014 had increased marginally. Increase in beef production is well supported by availability of fodders and low priced compound feed. Further, with the abolishment of milk quotas in April 2015, dairy farmers are retaining younger heifers while sending older cows to slaughter. This is expected to increase beef production in 2015

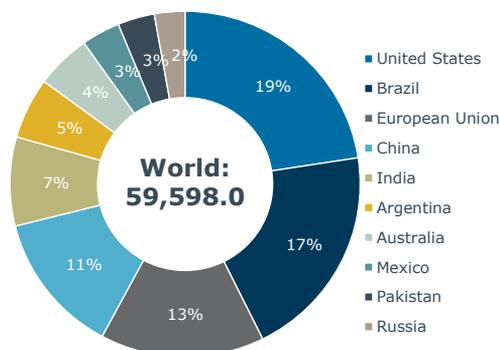
According to FAO OECD outlook, global beef production is estimated to reach 75million MT (CWE) in 2023, growing at CAGR 1.3% over 2014-23 period. US and Brazil continue to dominate the global production, together they account for ~28.6% on average through 2014-23 period. Among the major (top 10) producers, India is likely to post strong CAGR of 2.1% and absolute increase in production of 20.7% in 2023 when compared to 2014. China, which is currently fourth largest producer is expected to the third largest by 2023 by producing an estimated 7.8million MT (CWE).

GLOBAL BEEF PRODUCTION & CONSUMPTION
In '000 MT CWE



Source: USDA PSD

MAJOR BEEF PRODUCERS - 2014
In '000 MT CWE

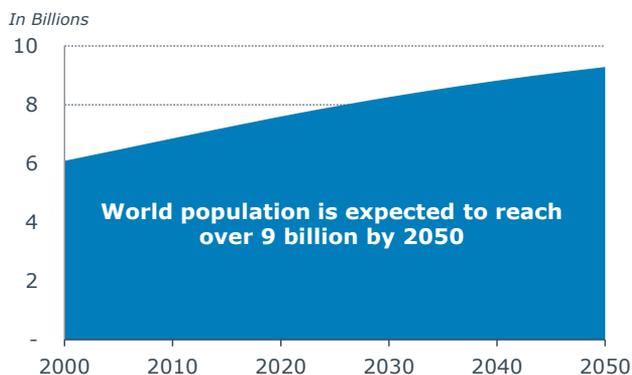


Source : USDA PSD

DEMAND DRIVERS



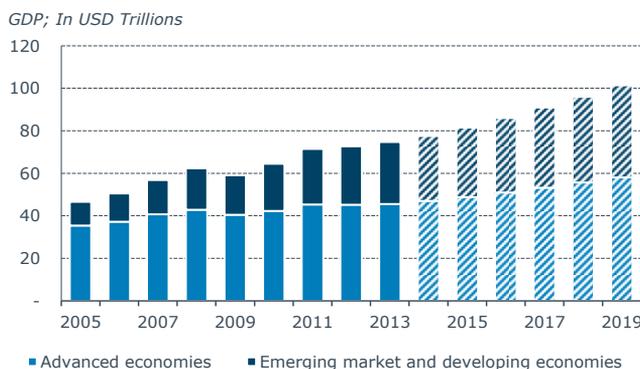
World Population



Source: US Census Bureau International Database

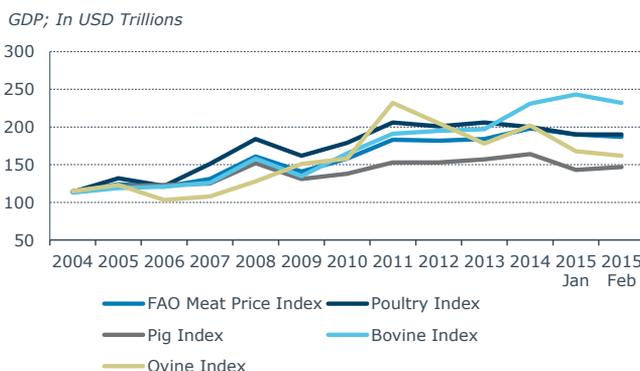
Increasing population along with rising income levels will increase the pressure on global food supplies. Rising urbanisation, especially across developing nations influences the dietary preference and increases meat consumption. Further, beef meat price is also a key driver for demand. Recent surge in beef prices on the back drop of tight global supplies may influence the consumers to shift away from beef to alternative meats like poultry. Retailers like McDonald's, Burger King, and Chipotle are pushing chicken products as beef prices increase.

World Economic Growth



Source: IMF

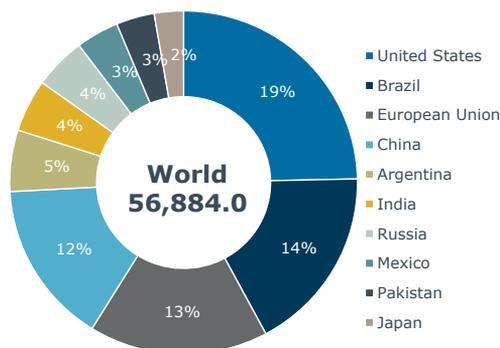
INTERNATIONAL MEAT PRICE INDEX



Source: FAO

MAJOR BEEF CONSUMERS - 2014

In '000 MT CWE



Source: USDA

Over 2004-2014 period, in terms of CAGR, Hong Kong experienced a growth rate of ~21.6%, followed by Israel (15.5%) and Vietnam (8.4%). While both Hong Kong and Israel are high meat consuming countries, rising urbanization in Vietnam has led to an increase in beef demand on the backdrop of the rising family dining restaurant sector.

OUTLOOK

According to FAO OECD Outlook, United States will continue to be the largest consumer of beef in the world accounting for an average 15.6% of global consumption over 2014-2023 period. Beef consumption will continue to shift from developed nations to developing countries and it is estimated that the share of developed nations will reduce to 39.3% in 2023, from 42.5% in 2014. This shift in consumption dynamics is underpinned by high rates of urbanisation and economic growth which is expected to increase affordability of beef in these regions. Among the major consumers (top 10), China is leading in terms of CAGR (2.3%) and absolute change in demand (23.2% increase in beef demand in 2023 over 2014). Overall demand in Asia is estimated to reach ~20.1million MT (CWE), growing at a CAGR of 2.2% through 2014 to 2023 period. China is estimated to account for ~42.1% of the Asian demand, while Vietnam and Thailand will expect high absolute growth. Also, in South America, Brazil account for nearly half of the regional demand, while Peru, Paraguay and Colombia are likely to experience significant growth in demand.

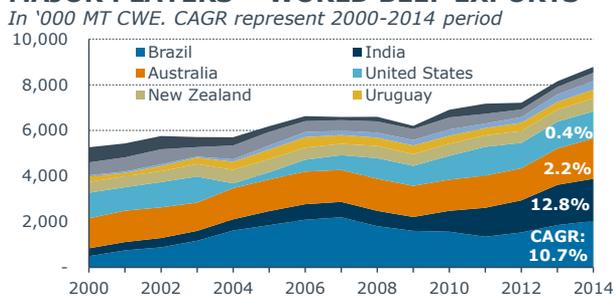
RISING GLOBAL BEEF TRADE

The changing structure of global beef consuming regions, will continue to shape the beef trade in the future. Beef exports as a percentage of global production had increased from ~11.2% in 2000 to ~16.4% in 2014, reflecting this trend. Among the major exporters, Brazil is the largest by volume, representing about 21% of global beef exports in 2014. India is the second largest exporter, shipping over 1.8million MT (CWE). India has also experienced the highest annual growth rate of 24.9% since 2009. A major component of Indian beef exports is made up of buffalo meat. Australia is the world’s third largest exporter, having experienced ~11.4% growth over 2013 total exports.

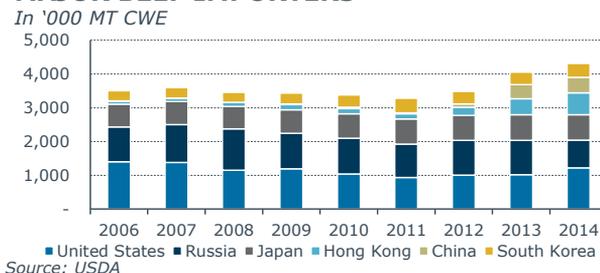
Globally, the US is the largest beef importer, and is the only country to have imported over one million MT in 2014. It is closely followed by Russia and Japan, which each represent ~10% of global imports. On the backdrop of the falling cattle herd, USA is anticipated to increase its market access to other countries like Brazil and Ireland - at present, Australia, New Zealand and Canada are the largest suppliers to USA. As a retaliation measure against recent sanctions placed on it, Russia has stopped imports from Western countries – reducing imports by 19% in 2014.

In terms of trade flows, the major recent shift has been China’s increasing role in beef imports, which is now estimated to be 6% of global imports, up from less than 1% in 2011. This has been partly driven by the Government’s crackdown on the ‘grey trade’ channels into the country amidst rising food safety concerns. However, demand for beef in China is driven by long term factors including favourable demographics, rising urbanisation and per capita incomes, improving cold chain infrastructure that increased the market access. In addition, domestic industry is characterised by a large number of small farmers whose lack of scale in production has been unable to match the domestic demand. This is expected to further increase the dependence on imports to meet the domestic demand.

MAJOR PLAYERS – WORLD BEEF EXPORTS

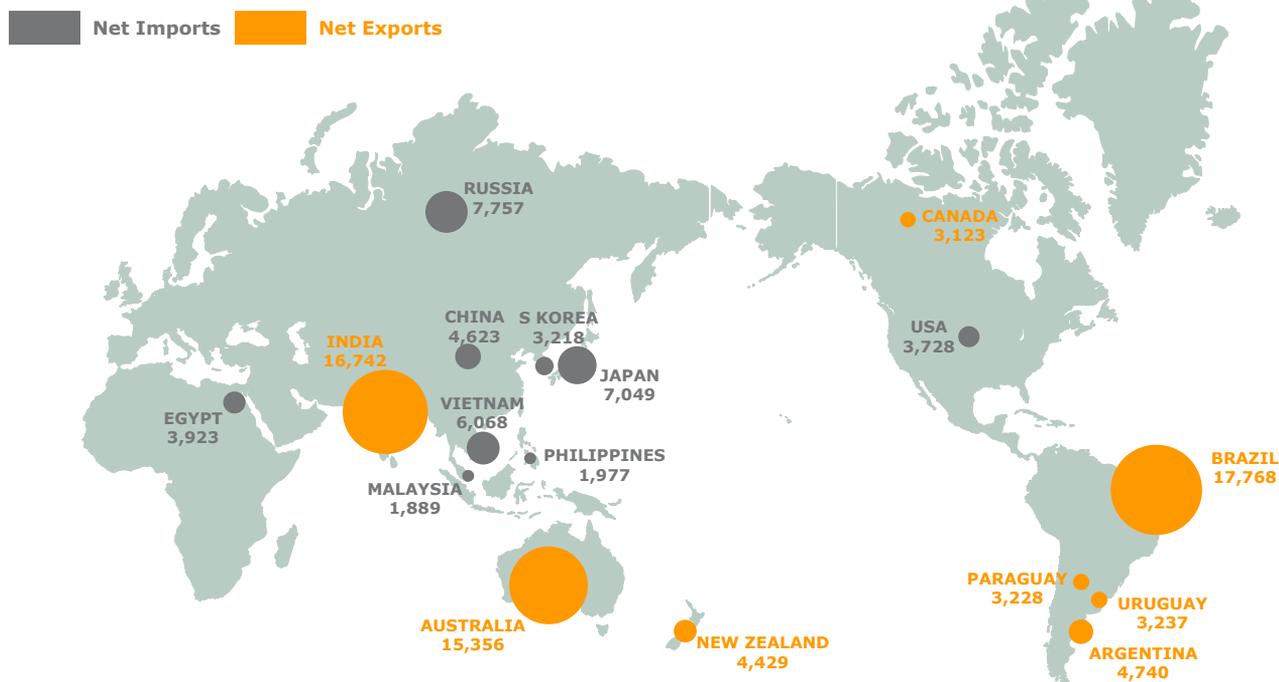


MAJOR BEEF IMPORTERS



MAJOR BEEF EXPORTERS AND IMPORTERS (2015-2023)

In '000 MT CWE; Values shown below the country names represents cumulative net imports/exports between 2015 to 2023 period



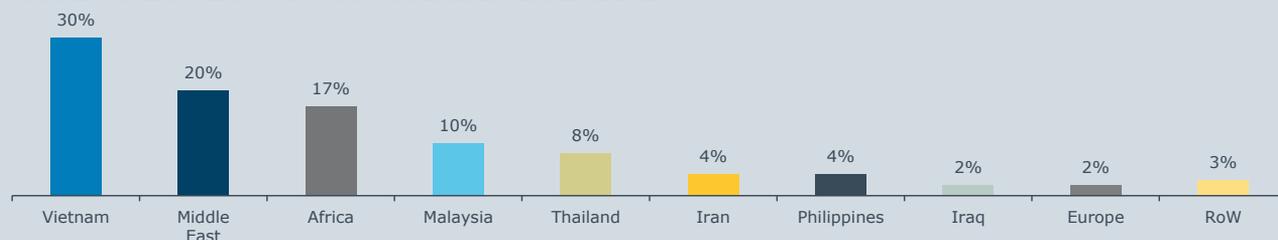
Source: FAO OECD Database

Looking forward, the Asia Pacific region will continue to dominate the world in terms of beef imports. Among the importers, setting aside the traditional markets of Japan and South Korea, other countries in the region will see strong imports, including China, Vietnam, Philippines and Malaysia. While this demand is likely to be met by regional producers including Australia, India and New Zealand, increasing competition will be from South American players, led by Brazil.

RISE OF INDIA IN WORLD BEEF INDUSTRY

The recent emergence of the Indian beef industry can be largely attributed to initiatives of the Planning Commission responsible for the 11th Five Year Plan. Beef exports from India largely consists of buffalo meat, otherwise known as carabeef. Industry provided financial support for setting up of large number of integrated abattoirs, slaughterhouses and processing plants - to slaughter male and unproductive female buffaloes that helped increased the domestic production. Given, the majority of the population is vegetarian, India is expected to have significant surplus meat to export. This low cost product is now largely being exported to Vietnam, Middle East and Africa. In addition, as beef produced in India is halal certified, it can therefore be exported to highly Muslim populated regions.

BUFFALO MEAT EXPORTS FROM INDIA IN 2012-13



Source: FAO OECD

DOMESTIC INDUSTRY – AN OVERVIEW

While Australia is a small producer of beef on a global scale, producing only 4% of global beef production, low domestic consumption, due to the relatively small population, allows it to export about 65% of domestic production, making up about 18% of global beef exports in 2014.

Recent drought conditions have seen a decline in cattle numbers, down by 2.9% in 2014 to 28.5 million head. After three years of herd build up from 2011 to 2013, the past couple of years had seen much high slaughter rates. This is expected to decrease the cattle herd into 2015 and 2016. Nevertheless, beyond 2016, herd is forecast to rebuild and by 2020 is estimated to reach 27.9 million head, but still below 2014 levels.

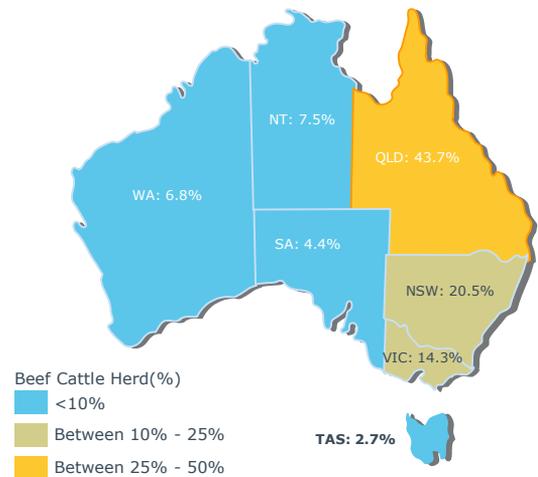
Domestic beef **production** had significantly increased in the past two years, due to high cattle turnover, and is estimated to have reached 2.6million MT CWE in 2014, at 8.0% yoy – which is slightly below the near ten percent yoy growth in 2013. However, this is expected to reduce in 2015 due to dramatic reduction in slaughter levels. Production is expected to be stagnant through 2018, creating tight supplies in the market and thus driving prices upwards.

Domestic **consumption**, is likely to fall, partly due to upward price pressure. Increased prices will be driven by increased demand from export markets, caused by lower AUD and improved access to international markets through new FTAs. Australian beef consumption is likely to fall by 1.1% to 640,000 MT (CWE) due to tight supplies and high beef prices. Interestingly, by 2020, annual consumption growth is forecast to lag behind that of production at 0.7% over 2015 to 2020 period. Other factors contributing to subdued demand in the domestic market include the fall in beef utilisation in Australian foodservice channels, with reduced number of consumers opting for dining out.

As ever, Australia’s domestic industry will be largely export oriented with available surplus expected to be continue in the medium term.

AUSTRALIAN CATTLE HERD

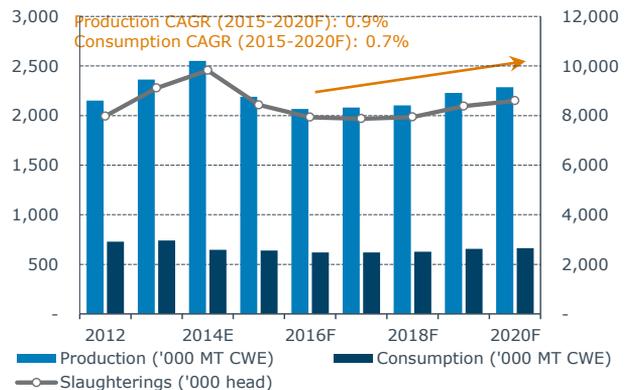
As of June 2013



Source: MLA Fast Facts 2014

BEEF PRODUCTION & CATTLE SLAUGHTER

Production is in '000 MT CWE, Slaughtering is in Thousand heads



Source: MLA Cattle Projections

AUSTRALIA FTAs

FTAs provide improved market access and increase the domestic product competitiveness in the international market. Given its international reputation for high quality beef product, Australia has a greater advantage by signing FTAs with importing countries. It had already signed agreements with US, Japan, South Korea, Malaysia, Singapore, Thailand and New Zealand etc., Recently, it has signed a FTA with China (ChAfta) which will eliminate the tariffs on its products in a phased manner. This provides a levelling field for Australia with US in Korea and NZ in China. As an example of the benefits that flow through to the domestic industry, Meat & Livestock Australia had analysed ChAfta and highlighted the benefits as below-

Boost gross value of Australian beef production by

270mpa by 2024

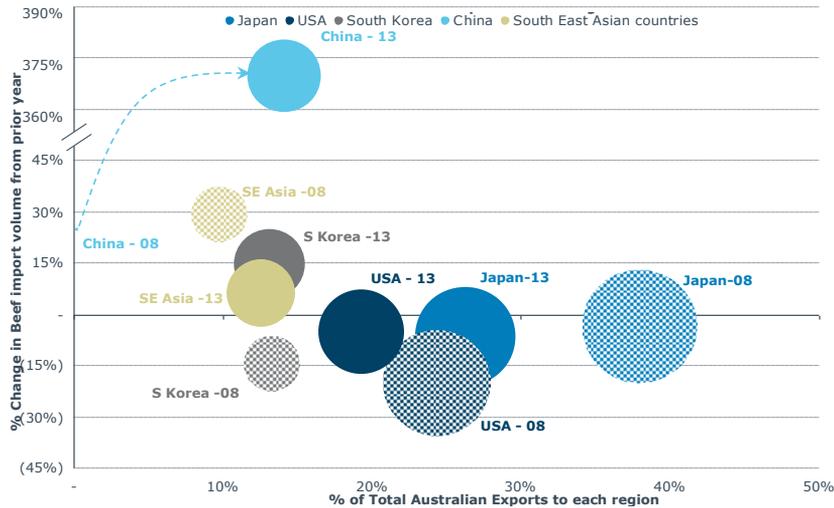
Total benefits for beef sector will reach

3.3bn by 2030

Traditionally three major export destinations – Japan, USA and South Korea - have accounted for more than 80% of Australia’s beef exports. Moving forward, competition from the main global beef exporters in Australia’s traditional export markets as well as the growing demand for beef in the emerging Asian counties is leading to the diversification of Australia’s beef export markets.

AUSTRALIAN BEEF EXPORTS MARKETS, 2008 & 2013

Bubble size represents volume

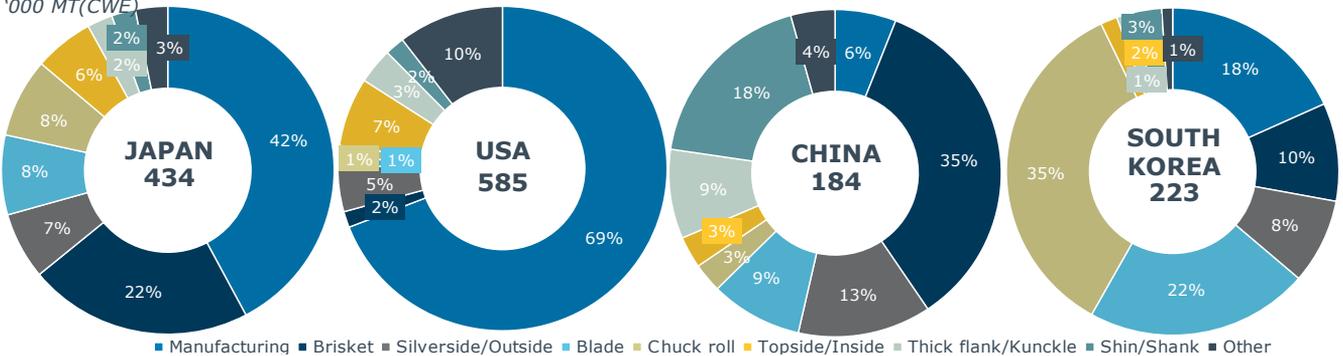


Australian exports to these emerging Asian countries doubled between 2009 and 2014 to about 400,000 MT (CWE), driven by growth in China, Thailand, Philippines and Malaysian markets, as the urbanisation and rising incomes of the growing population led to a growing demand for Western beef dishes. In 2012 and 2013, export growth was driven by China, with exports to China going from next to nothing in 2011 to more than 220,000 MT (CWE) in 2013, displacing Korea as Australia’s third largest market for beef exports. However, exports to China fell to 184,012 MT (CWE) in 2014, reflecting higher prices for Australian beef, as well as increased competition from South America.

Throughout the emerging Asian region, demand has been strong for Australia’s lean manufacturing beef (or hamburger beef)¹ and other frozen cuts, with about 90% of the growth for frozen beef in the China market. This has caused a supply issue for Australia’s largest traditional market for manufacturing beef, the US, where the leaner Australian beef is mixed with the predominantly grain finished and fatter beef, to create the desirable hamburger consistency. Partly due to the higher competition for the Australian manufacturing beef, the USDA is considering opening the market to Brazilian raw beef, with the US reportedly planning to alter it’s stipulation from insisting that all of Brazil be FMD (foot and mouth disease) free, to only requiring it of specific regions. Rising disposable incomes throughout the emerging Asian region has also increased the demand for higher quality cuts, increasing competition and placing pressure on traditional high quality beef markets like Japan and Taiwan.

KEY AUSTRALIA EXPORT MARKETS PROFILE - 2014

'000 MT(CWE)



Source: Australian Cattle Industry projections 2015, MLA

Note 1: Lean Manufacturing beef is used to produce ground beef, sausages and other highly processed items (Source: The Economic Effects of Significant U.S. Import Restraints, 2007)

Australia is the third largest exporter of beef, exporting on average 65% of annual production over the past decade. Official projections to 2020 indicate that exports could average more than 70% of total beef production.

Investment in productivity improvements including genetics, pastures and marketing, has positioned the Australian cattle industry as a global leader in cattle production, animal husbandry and beef processing standards.

EXPORTS AS % OF PRODUCTION

In '000 MT (CWE)



Program	Summary
Meat Standards Australia (MSA)	• Beef eating quality program designed to provide endorsement of quality for graded cuts of red meat
National Livestock Identification System (NLIS)	• System allows individual animals to be identified and traced electronically over its life for food safety, product integrity and market access purposes
Livestock Production Assurance (LPA)	• Focuses on 5 key elements ¹ of compliance ensuring meat from livestock is fit for human consumption.
National Residue Survey (NRS)	• Monitors residues of agricultural and veterinary chemicals and environmental contaminants in Australian Food Commodities.
National Feedlot Accreditation Scheme (NFAS)	• Provides independent audits of feedlots each year to ensure compliance with animal welfare, environment, food safety and product integrity legislation

Note 1: Key elements include property risk assessment, safe animal treatments, preparation for dispatch of livestock, livestock transactions and movements, and stock foods, fodder crops, grain and pasture treatments

Growing concerns over quality has increased the focus on traceability, especially for the meat products. Major producers are leveraging their reputation for traceability as a key competitive differentiator. Strict regulations controlling the Australian beef sector has led to it being regarded as the “global leader” (the table below highlights the stringent regulations of the Australian industry, which assures quality products to consumers amidst rising consumer concerns about food safety) from a quality and safety perspective. The importance of Australian beef exports will continue to increase as beef production in the US continues to flat line as a result of drought induced slaughter levels over the recent years, reduced profitability relative to other commodities, and increased production of biofuels. Greater competition is expected from Brazil and other South American producers and also Indian buffalo. However these countries are not without their own issues, mainly around disease, food safety and quality, but also rising domestic demands, rising production costs and poor infrastructure.

COMPARISON OF TRACEABILITY FOR BEEF

	Farm to Slaughter Plant					Slaughter Plant to Retailer				
	Location ID	Producer ID	Animal ID	Movement ID	Data Monitoring & Linking	Specific Product ID	Producing Party ID	Production Party ID	Movement ID	Data Monitoring & Linking
Australia	M	M	M	M	M	V	V	V	M	V
USA	V	V	V	V	V	M	V	V	M	V
Brazil	M	M	M	M	V	V	V	V	M	V
Argentina	M	M	M	M	V	M	M	M	M	V
Uruguay	M	M	M	M	V	M	M	M	M	V
Mexico	V	V	V	M	M	V	V	V	M	V
Canada	M	M	M	M	M	M	V	V	M	V
NZ	M	M	M	M	M	V	V	V	M	V

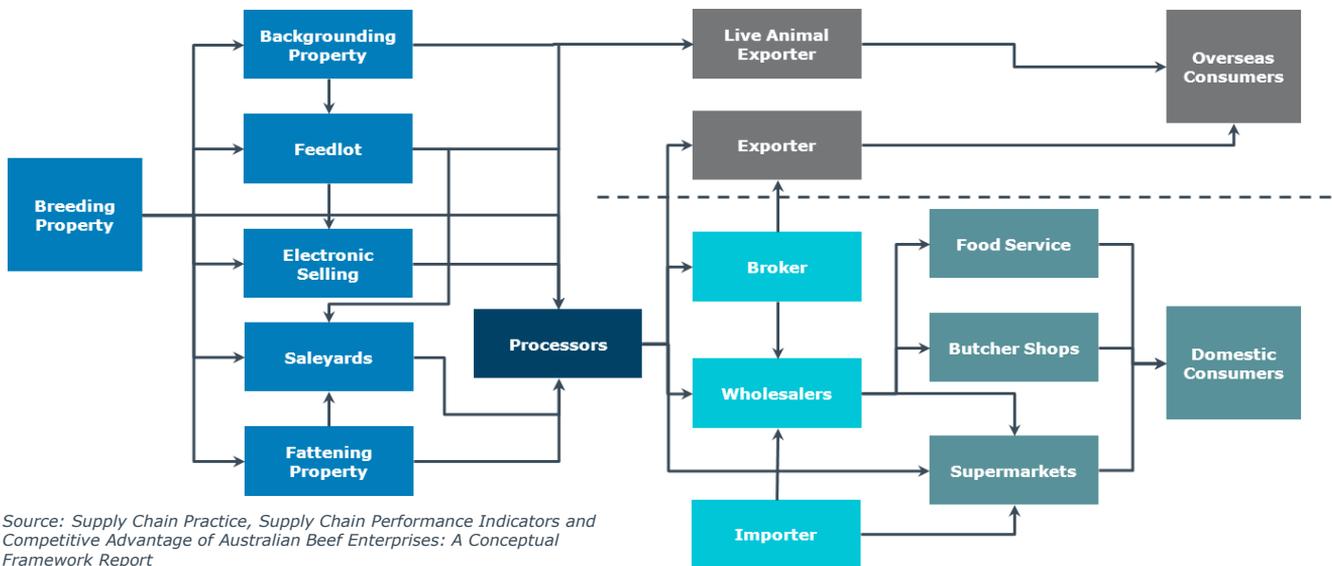
M - Mandatory V - Voluntary

SWOT ANALYSIS OF SELECTED MAJOR BEEF EXPORTERS AND IMPORTERS

COUNTRY	STRENGTHS	WEAKNESS	OPPORTUNITIES	THREATS
AUSTRALIA 	<ul style="list-style-type: none"> - Economic conditions expected to improve and GDP growth rate is estimated to be 2.7% (2015-19) - Beef is the major protein source in demand accounting for ~37% of the total meat demand 	<ul style="list-style-type: none"> - Fall in mining related investment led to low consumer confidence - Beef utilisation in food service sector had declined, with reduced number of people opting for dining out 	<ul style="list-style-type: none"> - Change in composition of Australian population led to adopting more Mediterranean diet, which is largely dependent on pork, chicken and vegetables as protein source 	<ul style="list-style-type: none"> - High retail beef prices, which averaged 3.6% in the first three quarters of 2014 may affect the demand, with increasing competition from low priced meats like poultry
UNITED STATES OF AMERICA 	<ul style="list-style-type: none"> - Despite high prices across the beef categories, demand remains strong across US - Recent appreciation of USD makes Australian beef more affordable 	<ul style="list-style-type: none"> - Heavily reliant on grinding beef trade, especially 90CL and 95CL manufacturing beef - Expected improvement in Australia's climatic conditions will reduce the manufacturing beef supplies to US 	<ul style="list-style-type: none"> - Rise in demand for chilled grass fed beef, with exports increased by ~89% yoy in 2014 - Niche markets offer growth opportunities to Australia include grass-fed, natural and organic beef demand 	<ul style="list-style-type: none"> - Beef continue to face huge competition, with Quick Service Restaurant's encouraging consumption of poultry products - Negotiations with other countries like Ireland and Brazil may likely to increase the competition for Australia
JAPAN 	<ul style="list-style-type: none"> - Historically, Japan is the top export destination for Australian beef and it is largest market for chilled, grain fed beef products - Average export value had improved significantly in the recent times in line with rising beef prices 	<ul style="list-style-type: none"> - Weakening currency and rising inflation led to increased pressure on food expenditure - Sluggish performance of Western style fast food sector remains a concern as it is a major importer of manufacturing beef 	<ul style="list-style-type: none"> - JAEPA will reduce the tariff on beef imports from Australia - Demand for offal products is expected to remain stable due to cultural preferences - Nutritional benefits of beef appeal to the 'Silver' generation (aged 65+) 	<ul style="list-style-type: none"> - Increase in demand for aussie beef from other markets may reduce the available surplus to Japan, amidst tight global supplies - Further depreciation of Yen may limit consumers ability to purchase imported products
SOUTH KOREA 	<ul style="list-style-type: none"> - Recent FTA is expected to reduce the tariff and increase the quantities imported - Domestic production is likely to be low due to decline in Hanwoo and beef cattle and fall in number of cattle producers 	<ul style="list-style-type: none"> - Korean economy remained flat and the finance ministry has revised down the growth target in July 2014 - Slow recovery in consumer spending, despite government stimulus and interest rate cuts 	<ul style="list-style-type: none"> - Low beef production in other major suppliers like US is expected to benefit Australian exporters - Increased demand for Wagyu products, with major retailers trying to stock Wagyu beef 	<ul style="list-style-type: none"> - Tight Australian beef supplies projected through 2015, likely to increase export prices - With the Korea US FTA in 2012, US beef has a 5.3% tariff advantage over aussie beef
CHINA 	<ul style="list-style-type: none"> - World's largest populated country and rising urbanisation led to change in dietary preferences - Concerns over domestic food quality and recent FTA will improve the market access to Australian industry 	<ul style="list-style-type: none"> - Food safety issues resulted in consumer being sceptical about food offerings - Beef from animals treated with Hormonal growth promotants is not permitted 	<ul style="list-style-type: none"> - Wide disparity in terms of meat consumption among Chinese regions and income class - Improving cold chain and logistics infrastructure will increase the product availability 	<ul style="list-style-type: none"> - Competition from other exporters like Uruguay, NZ and possible entry of US and Brazil - In the long term, focus would be on promoting Chinese domestic industry and thus may lead to reduced imports
HONG KONG 	<ul style="list-style-type: none"> - Proportion of households with USD 50k and above wage bracket is likely to be 44% by 2019 - Best operating environment attracting international retail groups 	<ul style="list-style-type: none"> - Recent protests in HK had a short-term negative impact on the economy and majorly high-end dining sector was affected 	<ul style="list-style-type: none"> - Food service industry is likely to benefit from tourists from Mainland China 	<ul style="list-style-type: none"> - Government relaxed market access restrictions on US beef, which will be competition for Australian exports
TAIWAN 	<ul style="list-style-type: none"> - One of the highest per capita food spends in the region, with a strong preference for healthy and hygienic food 	<ul style="list-style-type: none"> - With increasing demand from other regional countries, exportable surplus available in Australia will be tight and thus may affect the exports in near term 	<ul style="list-style-type: none"> - Retailers continue to expand in the market, providing more opportunity for Australian beef to increase its presence - Value added and innovative products are increasingly attractive to young consumers with busy lifestyles 	<ul style="list-style-type: none"> - Beef imported from, both, US and Australia, will face tough competition from other low cost suppliers and substitute meat products
INDONESIA 	<ul style="list-style-type: none"> - World's fourth most populated country with an expanding middle class - Beef based dishes are very popular in food service sector - Australia's market share is over 70% of Indonesia beef imports 	<ul style="list-style-type: none"> - Majority of beef purchased is through wet markets, which are now being replaced by Supermarkets and Hypermarkets, but at a slow pace 	<ul style="list-style-type: none"> - Increasingly restaurants are offering barbecue steaks due to rising popularity among consumers - Rise in use of smartphones, tablets has opened opportunities for internet retailing 	<ul style="list-style-type: none"> - Most significant challenge is market access, with recent ban on boxed beef imports to only include prime cuts and manufacturing beef. Also, only tongues and tails are allowed under offal category

Source: Meat and Livestock Australia Cattle projections 2015 report

AUSTRALIA BEEF INDUSTRY SUPPLY CHAIN

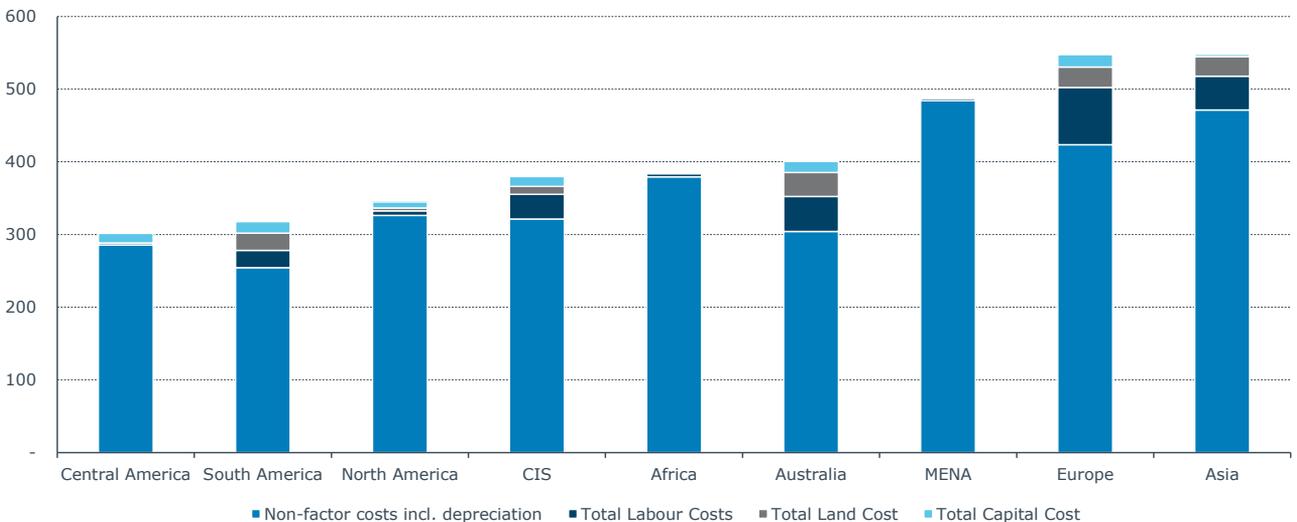


Source: Supply Chain Practice, Supply Chain Performance Indicators and Competitive Advantage of Australian Beef Enterprises: A Conceptual Framework Report

The Australian beef industry supply chain is considered to be one of the most efficient in the world, with an ability to trace beef back to the farms. However, there remains significant scope for further integration among producers, processors and retailers which could help respond to the market trends quickly and also ensure the farm gate level profitability, which is considered to be key for ensuring sustainable production.

COST COMPARISON OF BEEF FINISHING FARMS – 2010

In USD per 100 kg CWE



Source: Adopted from Agribenchmark "Beef and Sheep Network" report

When compared with European and Asian farms, Australia has lower cost of producing beef, but it is significantly above than that of the Americas. Comparatively, labour costs in Australia make up to 12% of the total cash costs, which is nearly double when compared to global average of 6.2%. European farms have higher cost levels when compared to other regions, though the cost differential between Europe and other regions have reportedly narrowed over the past few years. The presence of direct payments in certain regions, such as Europe, has led to a huge difference in terms of determining the profitability of beef farms. According to the Agribenchmark survey report, long term profitability is rarely achieved without these direct payments.

References:

1. USDA PSD
2. Meat & Live Stock Australia
3. Australia Bureau of Statistics
4. IBIS Research
5. ABARES
6. OECD FAO