

# Action plan for transforming agriculture in South West Western Australia



Prepared for:



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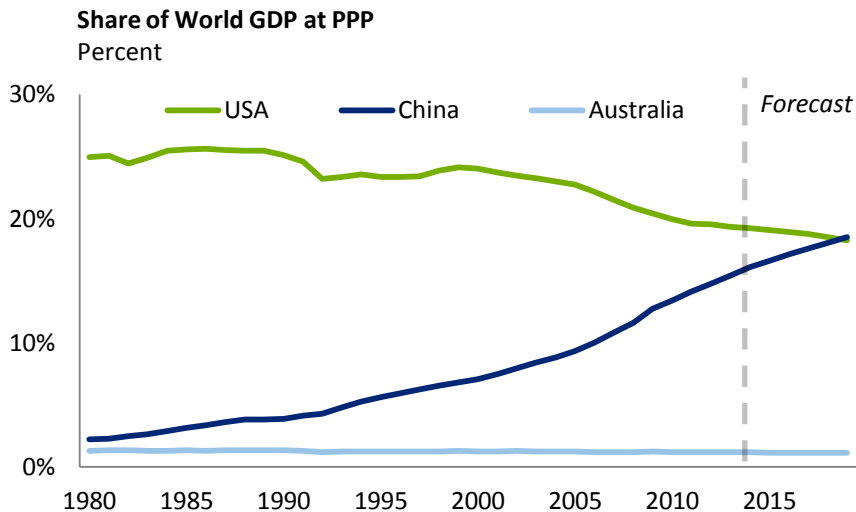
# Executive Summary

- Half the world’s population is undergoing an **industrial revolution**, however the growth drivers of developing Asia are maturing as its economies become more consumption centric; Developing Asia is demanding **higher quality food produce and increased dietary protein**
- In the near term **demand for food** (in China in particular) is forecast to **outstrip supply** as the arable land footprint decreases
- This presents a **huge opportunity** for the agricultural sector in the South West of Western Australia to supply a constrained market
- Recent Deloitte analysis highlights the growth opportunity in the Australian agribusiness sector; agribusiness being one of the five top sectors where **Australia has a comparative advantage relative to our global competitors**
- However Australia, and the South West of Western Australia is **yet to take full advantage of the opportunity**
- In order to help the South West position to capitalise on the emerging opportunity, Deloitte were engaged to undertake a review of the South West agricultural sector (focussed on beef, dairy and horticulture) and develop a transformative action plan.
- Following extensive industry engagement **five areas of transformative action have been identified**; Market Structure, Skills and Technology, Biosecurity, Red Tape and the Water Issues

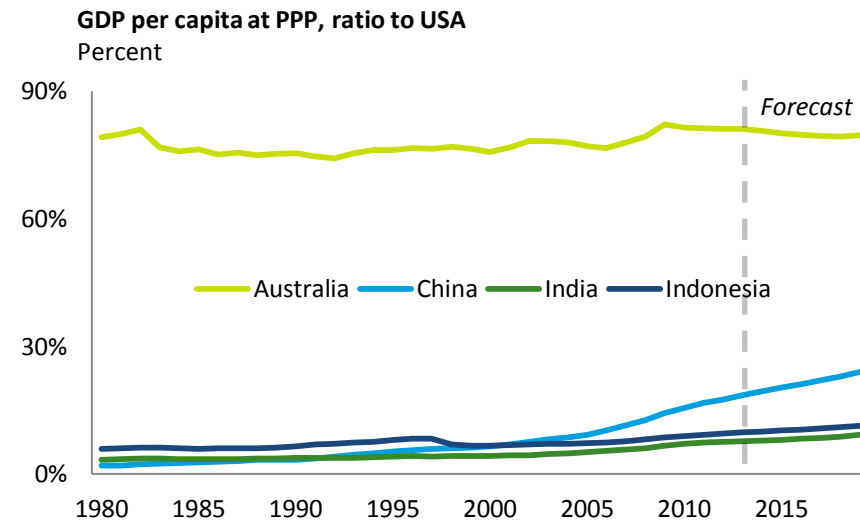
Market Structure	Skills & Technology	Biosecurity	Red Tape	Water Issues
<ul style="list-style-type: none"> <li>• Current market structures impede the ability of the sector to respond to export orientated opportunities</li> <li>• Co-operative business models, reduced information asymmetry, and specialisation are required to transition the sector</li> <li>• <i>Action: Facilitate the introduction of alternative business models (much that exists elsewhere) with State agencies playing an active role to support market intelligence</i></li> </ul>	<ul style="list-style-type: none"> <li>• Lack of capital attraction due to an ageing workforce, declining talent attraction, high debt levels and limited innovation are impeding scale development in the sector</li> <li>• A completely new approach is required to attract new sources of capital and talent to the sector</li> <li>• <i>Action: Develop the WA Agricultural Hub and facilitate the WA Agribusiness Accelerator</i></li> </ul>	<ul style="list-style-type: none"> <li>• Western Australia may not be capturing full value from existing biosecurity controls in their current form</li> <li>• In a competitive market it is crucial to extract maximum value and ensure any protectionism from biosecurity does not impede market development</li> <li>• <i>Action: Cost benefit analysis of biosecurity measures and growth models (e.g. growing the herd) to be undertaken</i></li> </ul>	<ul style="list-style-type: none"> <li>• The red tape burden on the agriculture sector is not as significant, relative to other sectors, however is a hidden cost</li> <li>• The State needs to be prepared for rapid growth in export markets requiring the compliance burden to be appropriate for large scale export growth</li> <li>• <i>Action: Reduce unnecessary red tape and streamline regulatory processes</i></li> </ul>	<ul style="list-style-type: none"> <li>• The South West faces significant groundwater challenges, as reduced rainfall reduces surface water availability and the water recharge to the superficial and confined groundwater aquifers</li> <li>• The present regulatory environment is administratively onerous and inhibits the allocation of water to its most efficient use</li> <li>• <i>Action: Improve the State’s water market framework including review of market mechanisms</i></li> </ul>

Half the world's population is undergoing an industrial revolution - this presents a huge opportunity for the agriculture and food sector in the South West of Western Australia

# Emerging Asia is undergoing an industrial revolution



Source: Quandl



Source: Quandl

## China is emerging as a world super power...

- China is undergoing a rapid transformation with annual GDP growth of 11% over the last two decades
- Despite a recent slowdown in the growth rate to below 8%, China (on a purchasing power parity basis) will be the largest economy in the world by 2020
- Driving the initial phase of China's growth is urbanisation of a largely rural population (China's urbanisation rate has increased from 11% in 1950 to 50% in 2014)
- The corresponding construction activity has driven demand for Western Australia's iron ore

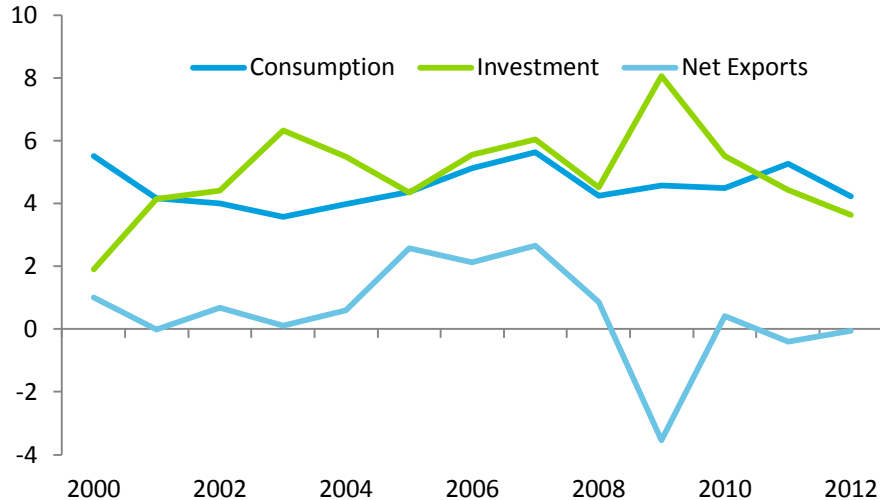
## ...but it still has a long way to go

- Despite China (and Developing Asia's) rapid advancement GDP per capita in China remains at just 19% of the USA's
- Other emerging economies in Asia, including Indonesia and India, also remain far behind. Their GDP per capita as a proportion of the USA are 9.8% and 7.7% respectively
- Urbanisation of Developing Asia will continue for the foreseeable future even if not quite at the rate we have seen in the recent past

# However China's growth drivers are changing

## China GDP by component

Percentage point contribution



Source: China National Bureau of Statistics

## China's recent growth has been primarily investment driven

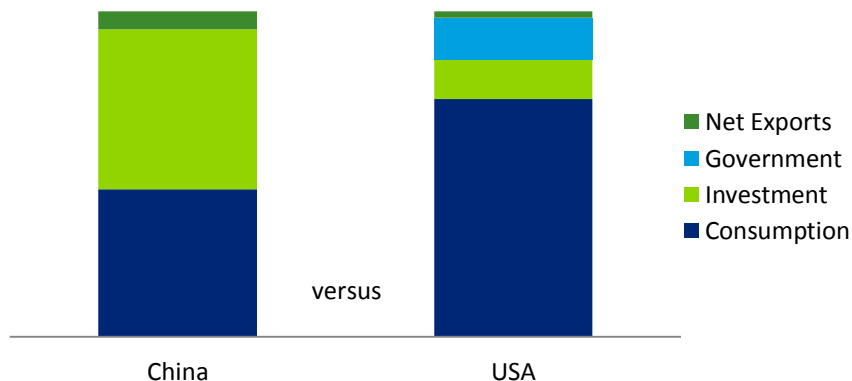
- A large proportion of China's growth has been driven by public and private sector investment supported by:
  - An artificially depressed exchange rate (increasing Chinese export and cost competitiveness but discouraging consumer consumption)
  - Readily available capital including significant support for State Owned Enterprises (SOEs)

## Transitioning to a diversified, developed economy requires a rebalancing of growth drivers

- As China transitions to a more diversified economy, consumption will play a greater role in its growth story
- Over the last ten years, consumption has been responsible for 73% of growth in the USA, but just 45% in China
- Risks to China's transition exist including the overhang of excess investment into industrial capacity, an opaque residential real estate sector built on high levels of leverage, wide spread corruption, a so-called shadow banking system and excessive provincial debt levels
- However expectations are that these issues will be addressed over time and that China will become a much more diversified and modern economy.

## Contribution to GDP by component

Proportion



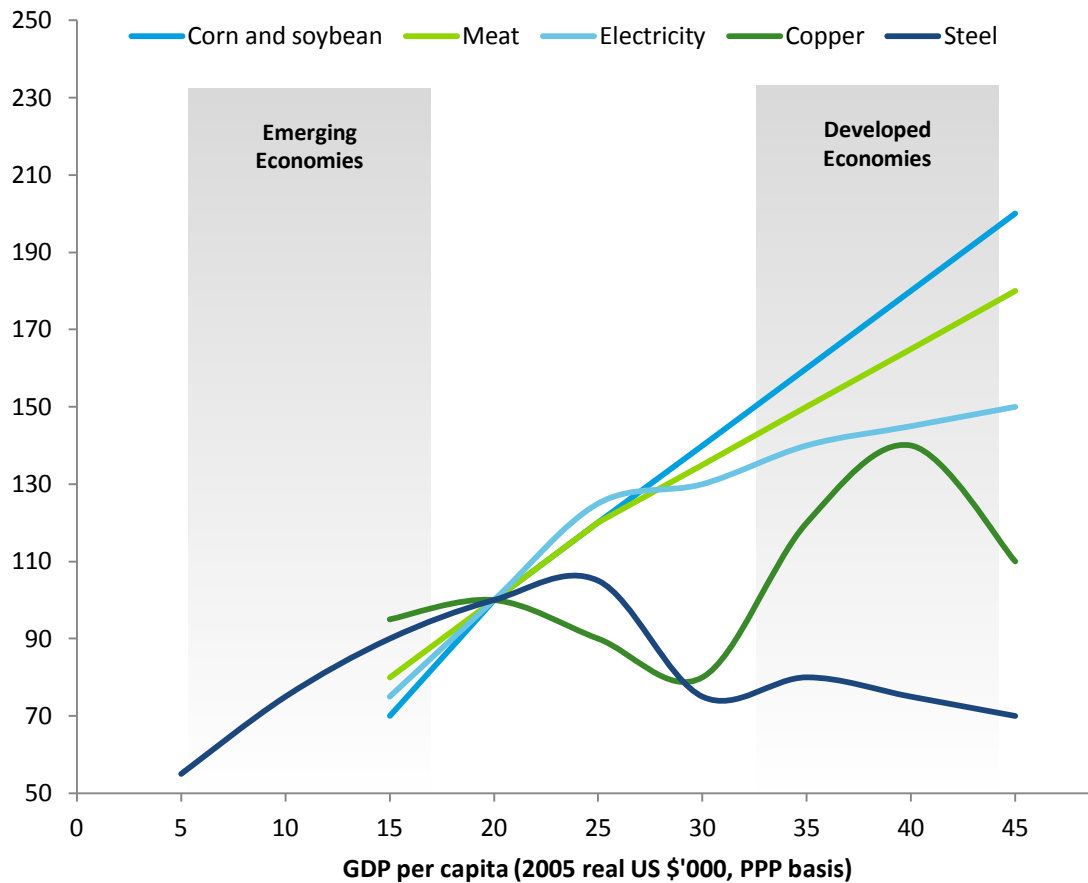
Source: China National Bureau of Statistics. Federal Reserve Bank of St. Louis

Note: China does not disaggregate government spending from other components

# A rebalancing of growth drivers reflects a maturing stage of economic growth

## Demand for alternate commodities

Demand index



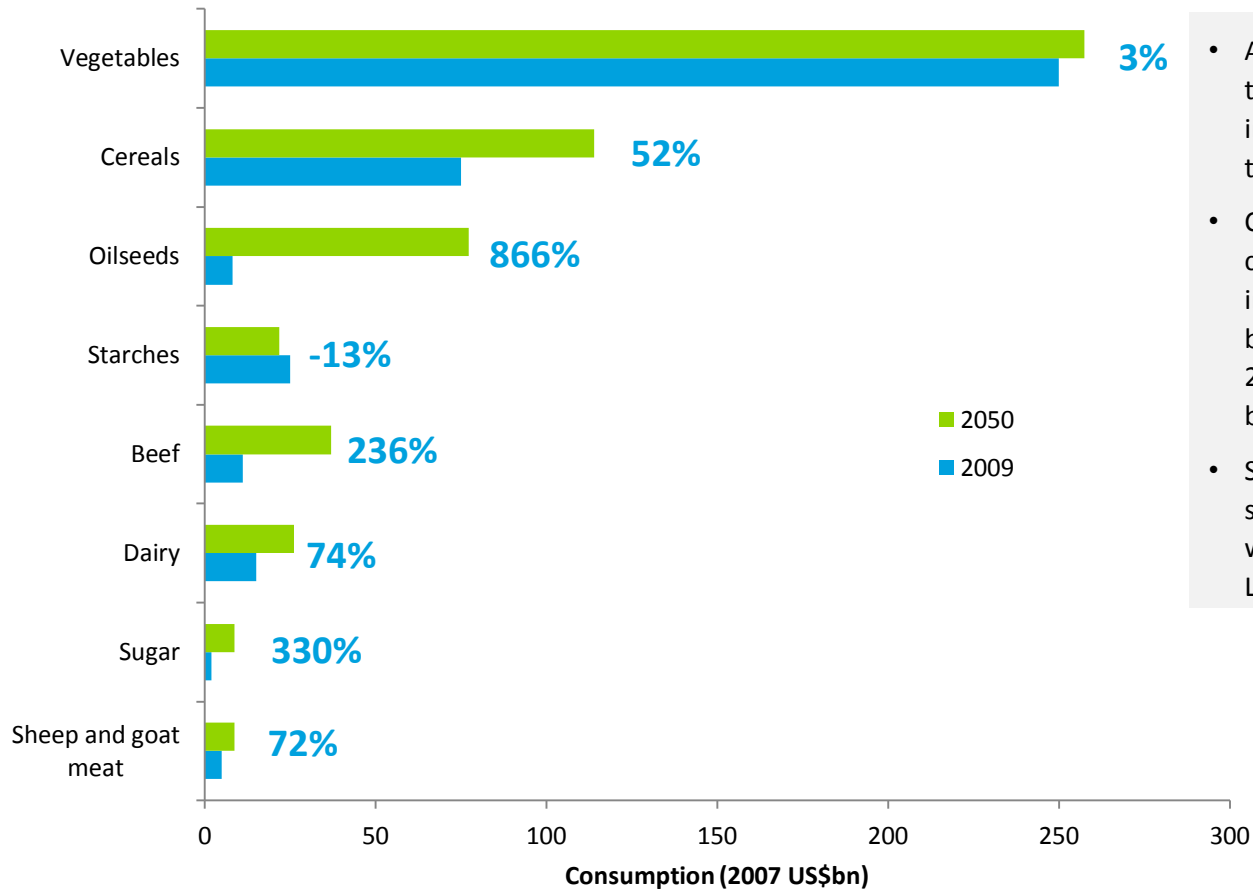
Source: BHP Billiton

## The “Dining Boom” is just commencing...

- As economies transition from the emerging stage to developed stage their GDP per capita increases, and they experience a change in consumption patterns across commodity classes
- The initial stages of economic growth are typically associated with a surge in steel demand, as countries invest in the infrastructure (roads, rail, commercial developments, industrial facilities) required to meet the needs of an urbanising workforce
- However as steel intensity peaks (a phenomenon currently being seen in the Chinese economy), demand tends to focus on a range of other commodities that are needed for the next wave of growth
- This next wave includes other base metals used in electronics and higher end goods (e.g., copper) as well as electricity and higher quality food/agricultural products to meet the needs of an aspiring middle class
- Whilst the mining boom induced by the Chinese economy may be behind us, the ‘Dining Boom’ is only just upon us
- So not only will an increasing population demand more produce but the volume and quality of produce demanded on a per capita basis will be the most significant driver of opportunity

# Population growth and rising incomes are driving food consumption patterns towards higher protein and higher quality produce

**China's agrifood consumption**  
2007 US\$b



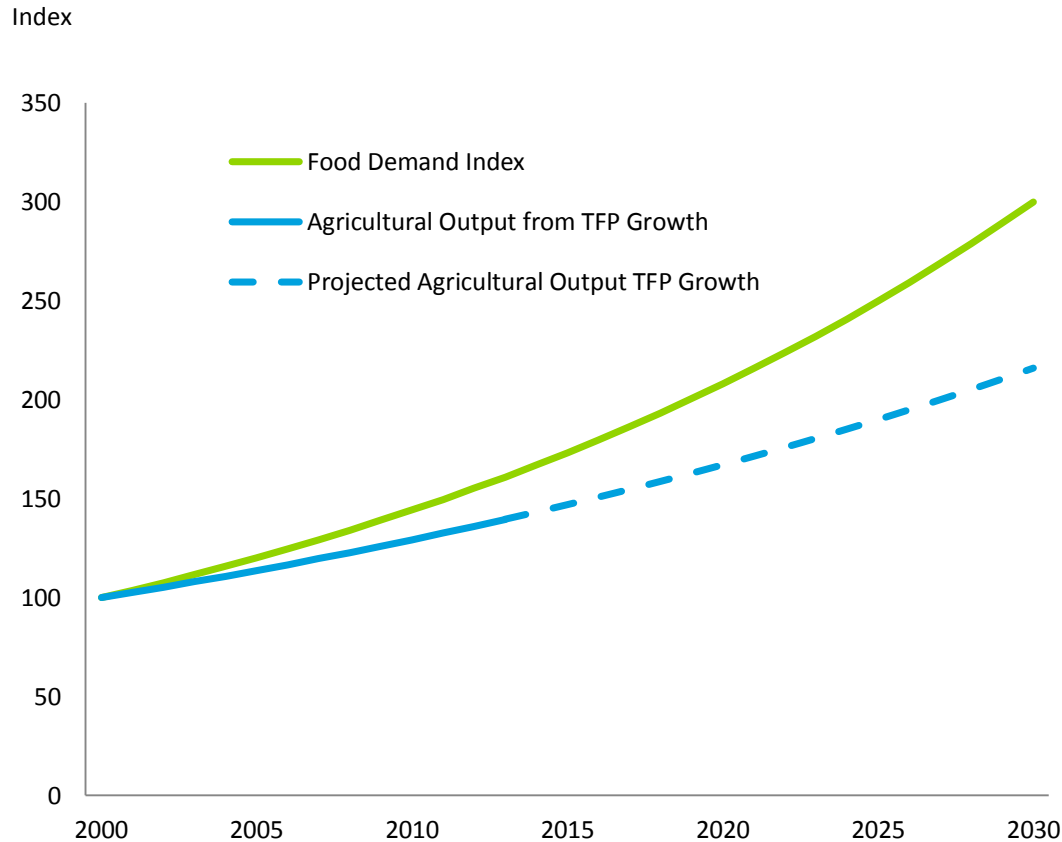
- As incomes rise in emerging economies, so too does kilojoule intake, and more importantly a switch to more dietary protein takes place
- China's demand for key agricultural commodities is expected to significantly increase through to 2050. Consumption of beef products are forecast to increase by 236%, sheep and goat meat by 72% and dairy by 74%
- Similar demand patterns are expected to be seen in other developing countries, both within Asia, but also in parts of Africa and Latin America.

Source: ABARES, *What Asia wants – Long term food consumption trends in Asia, Oct 2013*



# Demand for food in China is forecast to significantly outstrip available supply

Food demand compared to agricultural output from TFP growth in China (2000-2030)



Source: Fuglie (2013), 2013 Gap Report

Note: TFP = Total Factor Productivity

## China faces a shortage of domestic agricultural land

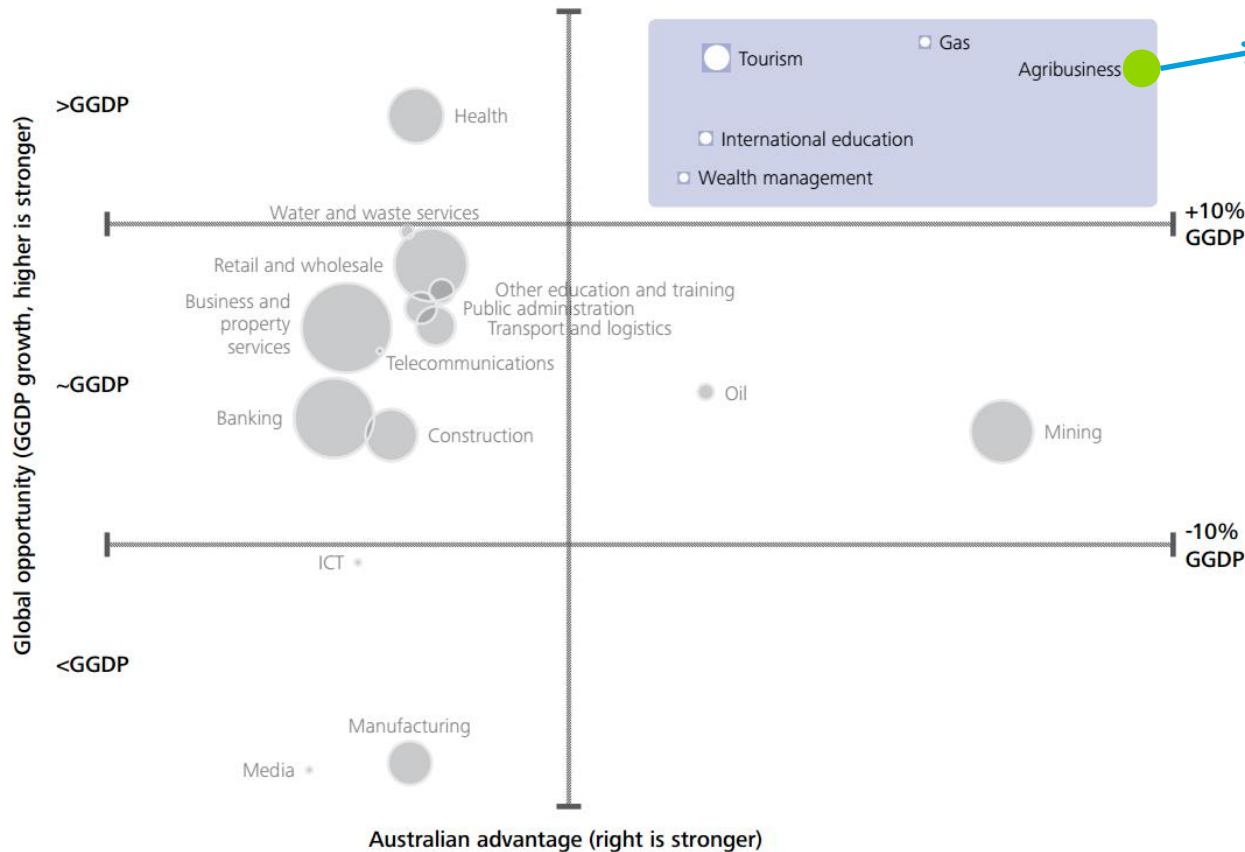
- China increasingly faces a scenario of decreasing domestic food availability
- This has been driven by an increasingly urbanised landscape that has shrunk the nation's arable land from 14% in 1999 to just 12% in 2012
- A recent report (from China's environmental ministry) estimated that one fifth of the country's arable land is contaminated by pollutants, both reducing land available for productive purposes and also creating a preference for clean, safe imported produce

## China faces an agricultural demand / supply gap

- An estimated 72% of Chinese food demand in 2030 can be met by maintaining the current Total Factor Productivity (TFP) growth rate
- As a result imports will be critical for closing the gap between domestic production and demand
- China will increasingly look to reliable and safe suppliers of agricultural produce – this presents a huge opportunity for the Australian agricultural sector

# Recent Deloitte thought leadership highlights the growth opportunity in the Australian agribusiness sector

## Australia's next growth waves



## Building the Lucky Country #3 Positioning for Prosperity

- The Deloitte report identifies a number of sectors in the Australian economy that are poised to provide Australia's future growth as the mining boom transitions
- These are sectors that exhibit strong global growth (the higher up the graph the greater the growth potential), but also sectors that Australian has strong comparative advantage relative to our direct competitors (further to the right the greater the comparative advantage)
- Five super sectors (the "Fantastic Five") have been identified as critical to Australia's future growth fortunes
- These five sectors represent areas in which the Australian economy has the greatest opportunity to seek further prosperity
- Agribusiness has been identified as one of the Fantastic Five

Source: Deloitte Positioning for Prosperity

However the South West is not yet taking full advantage  
of the opportunity presented

# While there are some great discrete examples of success



## Harvey Beef

- Recently acquired by Minderoo Group (Andrew Forrest backed) for \$30m (*Mergermarket*)
- Fully vertically integrated supply chain
- Exports nearly 70% of what it produces
- Exports to about 30 countries, with major destinations including Japan, Korea, Indonesia, Taiwan, the Middle East and the United States



## Wellard

- Standard Chartered Private Equity acquired undisclosed stake in February 2011 for USD\$82m to become significant minority stakeholder (*Mergermarket*)
- Global operations with international herding and logistics
- Concentration on rural exports - Australia's largest livestock exporter



## V&V Walsh

- State's largest red meat processor
- Signed 5-year, \$1bn trade deal in June to export frozen boxed meat to China's Grand Farm
- Part of Grand Farm's ambition to increase share of local supply of red meat from 1% to 3%.

**"There is a lot of investment from China in terms of the mining industry in WA but there's a lot more we can do, particularly in agriculture, cultural exchange, tourism, education"**

*Dr Huang Qinguo, Chinese consul-general in Perth, as Chinese meat importer inks \$1bn deal with WA processor V&V Walsh, August 4th*

## The Avocado Industry

- Over the three years to 2012-13, WA avocado production grew by 153%
- Cooperative business structures have enabled access to Asian markets
- The industry has been able to take advantage of counter-seasonal supply (to supplement eastern states supply when out of season)
- Cooperatives have created innovative methods of marketing their product into Asia via education of end consumers.



# ... and China has shown an initial interest in investing in Australian agriculture...

## Case Study 1: Ord River Project – Stage Two

- The Ord River Irrigation Expansion Project is a State Government initiative to increase the size of the Ord River Irrigation area to approximately 28,000 hectares of world-class agricultural land. The State Government invested \$322.5 million in order to develop the essential infrastructure for stage two expansion by the private sector (14,000 hectares has already been developed under stage one). (*Department of State Development*)
- Kimberley Agricultural Investment (KAI) Pty Ltd was awarded the lease to develop 13,400 hectares into irrigated farmland as part of the 15,200 hectares stage two release. KAI is wholly owned by China's Shanghai Zhong Fu Group. The 13,400 hectares of land are in the Goomig and Knox Plain areas with leases ranging from 10-50 years. Ownership of the land is retained by WA. (*KAI Pty Ltd and Department of State Development*)
- KAI plans to invest \$700 million over a six year period to establish a sugar industry in Kununurra. The investment includes the construction of a \$450 million sugar mill – forecast to produce 4 million tonnes of cane annually and 500,00 tonnes of export sugar crystal. (*Deloitte Access Economics – Investment Monitor*)
- The state government has retained 1,700 hectares in the Ord's West Bank area to sell to other crop producers. KAI is also planning to lease 20% of its irrigated land to local growers. (*Sydney Morning Herald – WA opens the Ord to China*).



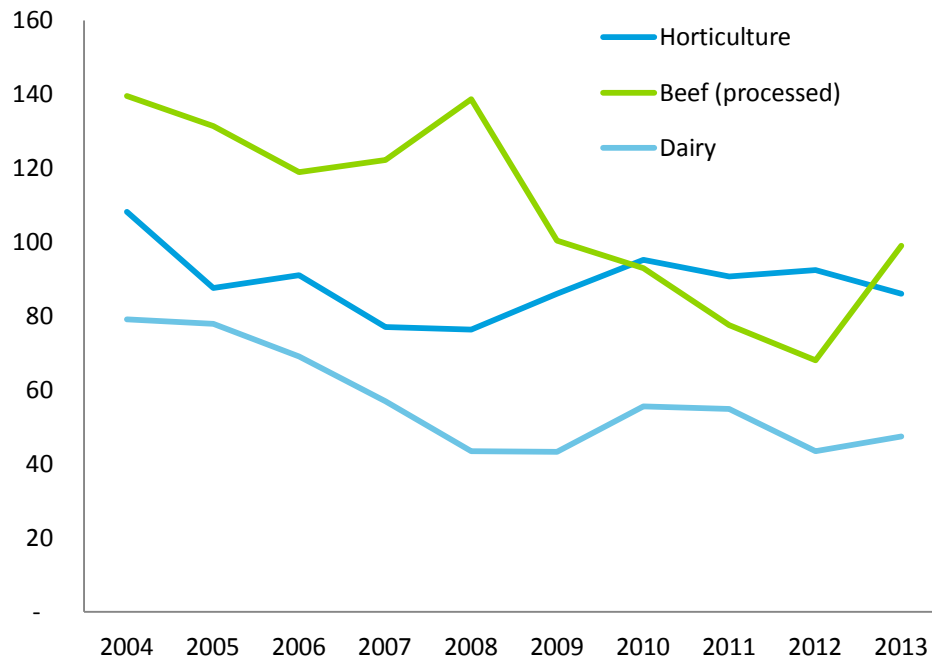
## Case Study 2: Mundella Foods – Bright Food Group acquisition

- Mundella Foods is one of Western Australia's leading dairy companies established in 1974 by local dairy farmers Peter and Anne Hector
- In January 2014 Mundella Foods was acquired by Chinese based Bright Food Group through its Australian subsidiary, Manassen Foods. The acquisition was valued at \$18 million. The Mundella acquisition was around the same time as the takeover battle for Warrnambool Cheese and Butter Factory Co, eventually won by Canadian dairy giant, Saputo. (*Australian Financial Review*)
- The recent investment activity reflects the plans of the major players to capitalise on Australia's reputation for high quality dairy products and further develop their export markets. Over the near term the depreciation of the Australian dollar and the increase in global dairy prices are expected to help international sales of dairy products.



# ...to date Western Australia (and the South West) has not taken full advantage of the opportunity

Value of Western Australia's exports<sup>1</sup>  
\$m



Source: ABS export statistics

In the last decade, exports of Beef, Dairy and Horticulture have all decreased in WA

- Whilst over the last decade Australian exports in these three key sectors have either held steady (dairy) or significantly increased (beef and horticulture) – Western Australian exports have continued to decline
- **Beef** exports from WA have decreased from \$139 million in 2004 to \$99 million in 2013 (-29%). In this time Australian exports have increased by 25%
- **Horticulture** exports have decreased from \$108 million in 2004 to \$86 million in 2013 (-20%). In this time Australian exports have increased by 103%
- **Dairy** exports have decreased from \$79 million in 2004 to \$47 million in 2013 (-40%). In this time Australian exports have increased by 103%.

1. For the purposes of this document, horticulture is defined as all vegetable and fruit production, excluding grapes

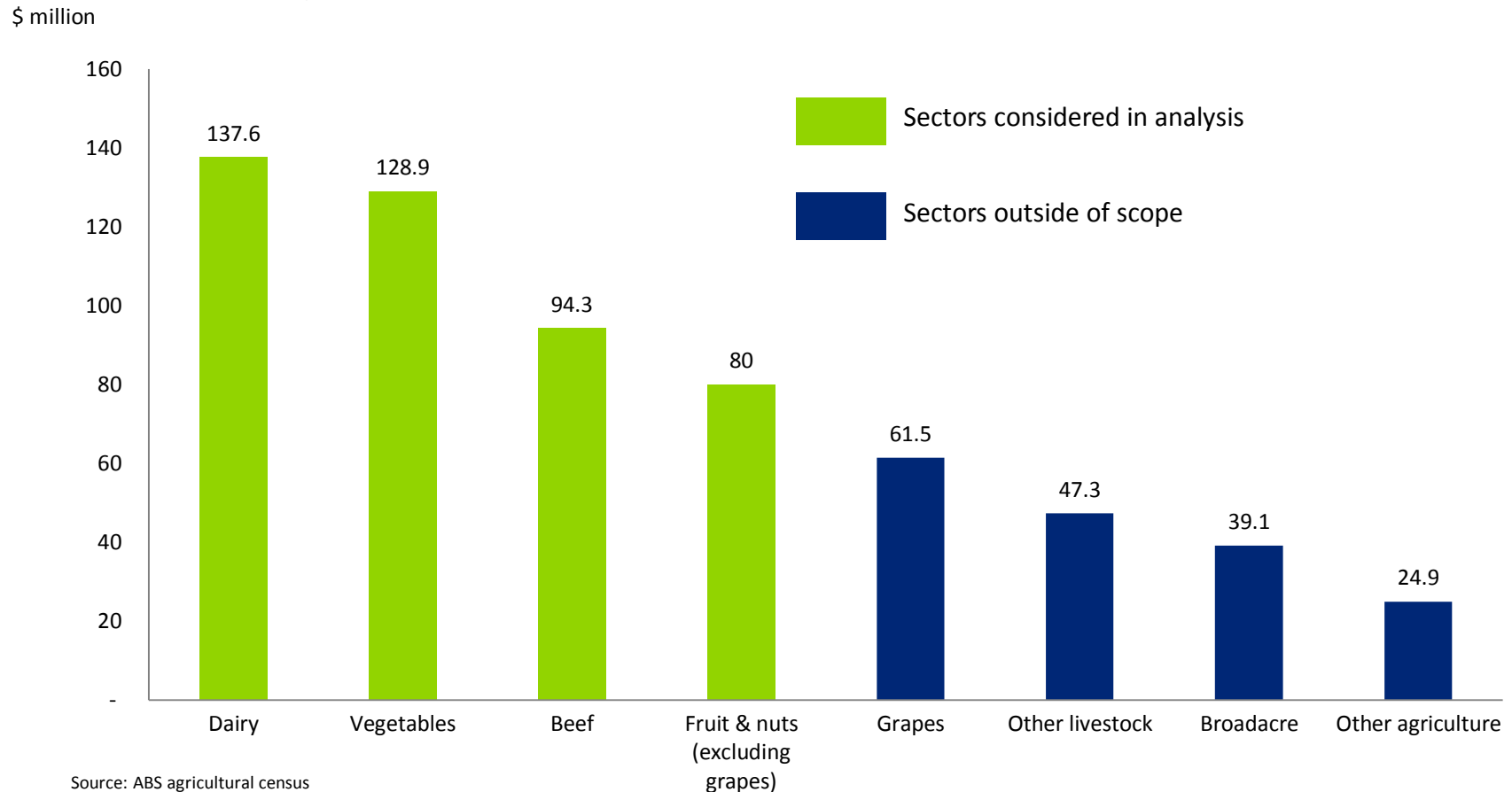
# Deloitte were engaged to undertake a review of the sector and develop a transformative action plan

- **Objective:** The overall objective of the project is to develop an action plan of transformational activities, which lead to increased opportunities and profitability in the South West agribusiness sector. This approach includes:
  - An analysis of global and domestic trends that will shape the agribusiness sector in the South West, including population increases and consumer preferences
  - Consideration of existing policies and strategies influencing the agribusiness sector, their relevance to the South West and implications for the current study
  - Consultation and engagement with key industry stakeholders
  - A short-list of transformative projects that are required to capitalise on the opportunities.
- The underlying rationale is that the diversity of agriculture in the region, as well as encouraging innovation will allow for opportunities to increase profitability, value add and foster economic development
- Actions must focus on the role of government, agencies and associations reflecting that the agribusiness sector operates in a competitive market where ultimate investment and growth decisions are made on the basis of good commercial outcomes.

# The study addressed the opportunity for the South West region, in dairy, beef and horticulture

Combined these three sectors account for **72%** of the agricultural output in the South West of Western Australia. Each in their own right are in demand from developing Asia

**Annual value of commodities produced in the South West (2011)**



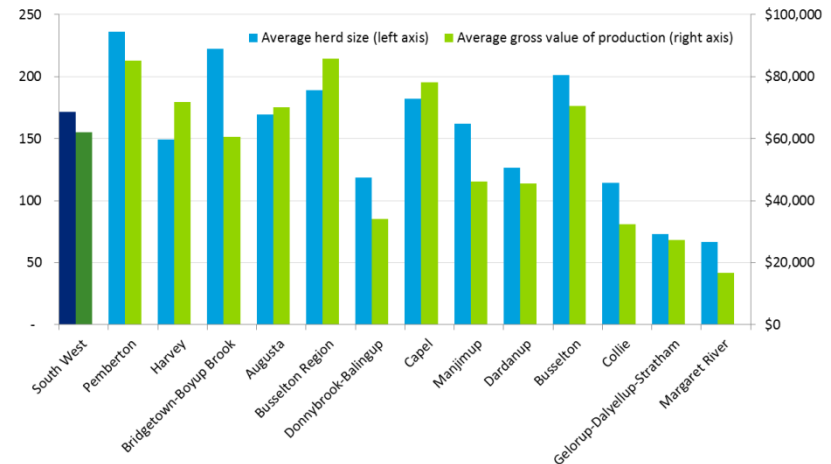


# Beef – Sectorial Analysis

## Industry size and structure

- As of 2011 the beef industry was the third largest agricultural industry in the South West, measured by value of production. Production was worth over \$94 million – 15% of the value of all agricultural production in the region
- However, this level of production was spread over 1,520 businesses, resulting in an average value of production of only \$60,000 per business in 2011
- Compared with most other subsets of the Australian beef industry, the South West is characterised by a large number of relatively small producers. This is evidenced by 29% of all beef cattle in the South West kept on properties with 200 or fewer head of cattle (Only the Perth region had a higher share at 44%). Comparatively, in South Australia only 11% of all beef cattle were kept on properties with 200 or fewer head.

Distribution of herd and value of production across South West, 2011



Source: ABS Value of Agricultural commodities produced, 2010-11

## Supply and demand

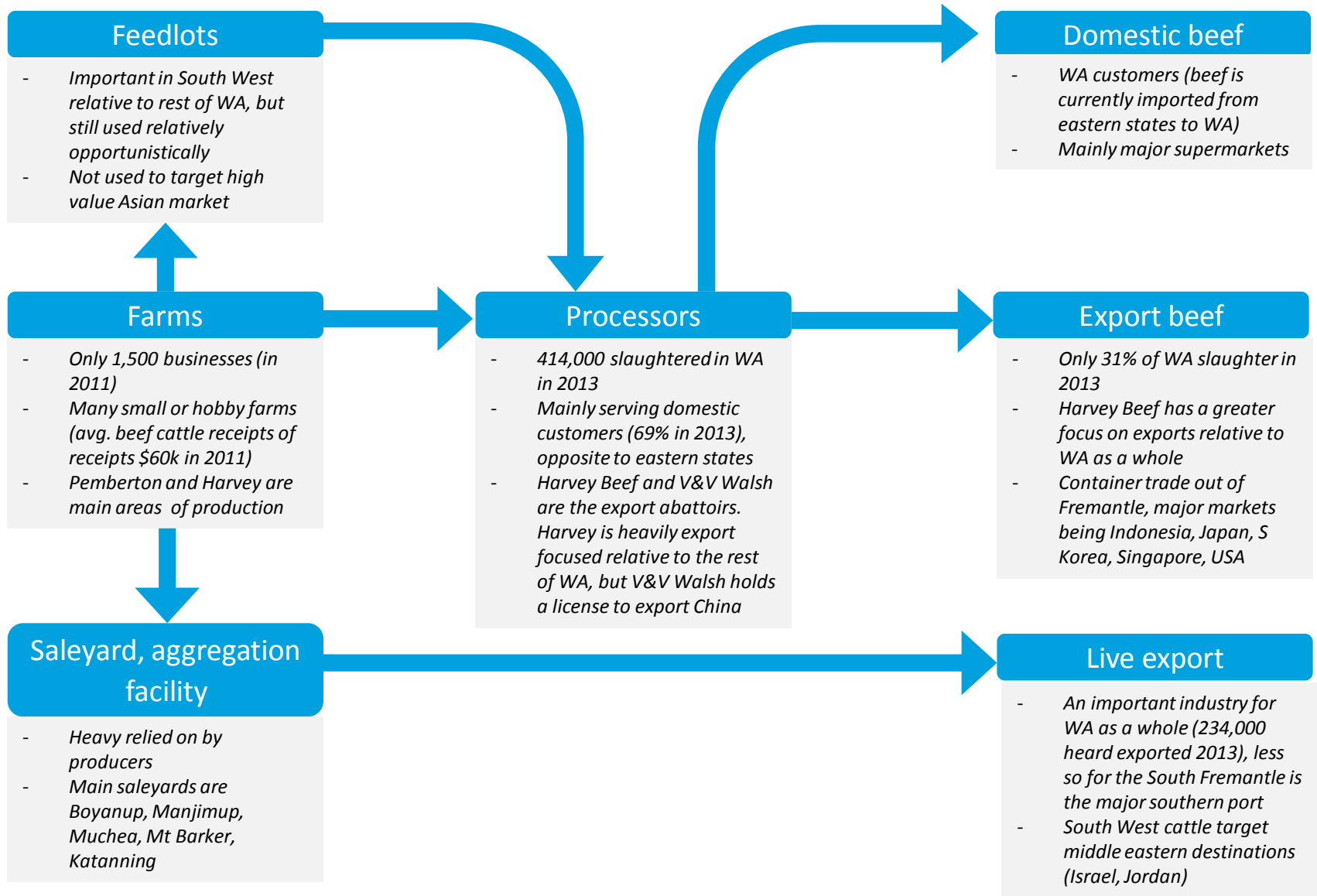
- The domestic beef market is the single most important market for WA producers. For WA as a whole, an estimated 47% of cattle are for the domestic market, 33% are live exports, 18% are non-live exports and 2% are transferred interstate
- The relatively small size of the WA beef cattle herd (2.1 million out of an Australian total of 28.5 million as at June 2012) and the domestic focus of the industry mean that WA beef exports are orders of magnitude lower than other Australia states (particularly Queensland)
- WA's top 5 beef export countries for the five years to 2013 were Indonesia, Japan, Republic of Korea, Singapore and USA
- Over the same period, China ranked only ninth in terms of total value of exports from WA. However, in 2013, WA exported nearly twice as much beef to China as it had in the previous four years combined. Beef exports to China in 2013-14 have almost all been frozen cuts following import restrictions on chilled beef.

Monthly WA beef exports to China, 2009-2013



Source: ABS.stat. 'meat of bovine animals, fresh chilled or frozen'

# Beef



# Dairy – Sectorial Analysis

## Industry size and structure

- The WA dairy industry comprises around 160 dairy farms, that milked 55,000 cows and produced 338 million litres of milk during the 2012 financial year. Around 90% of WA's milk production comes from the South West region.
- The dairy industry is crucial to agricultural production in this region, generating over \$137m of value in 2011
- The average size of farm is 274 ha, much larger than dairy farms in the eastern states (154 ha) or in New Zealand (134 ha). WA producers also milk larger herds than their counterparts in the other states with the average sized herd around 300 cows, ranging between 150 cows, up to 1500 cows, compared to an average herd size in Victoria of around 230 cows. With Australian milk production totalling just over 9 billion litres, WA is the smallest milk producing state
- The dairy supply chain is largely similar to that of other states, with milk being moved off farm by bulk tanker to processors, and then either packaged or sold to other dairy product manufacturers, before entering the domestic or export supply chains. The domestic market is strongly influenced by the major supermarket chains, some of whom have started buying farms and directing their own production to processors for their own product branding
- Given the small scale of production spread over such a wide area of the South West, the supply chain costs of moving milk off-farm to processing plants, and then on to market, be it local or for export are estimated to be as much as three times higher than those of higher producing states like Victoria. Despite Fremantle being closer to the export markets of Asia, shipping costs for refrigerated, containerised cargo is also up to 20% higher than shipments out of eastern state ports. Despite this, WA has a competitive advantage in its proximity to Asia with local sailing times from Fremantle to southern Asian ports at around half that compared to Melbourne and New Zealand ports
- One of the issues for the milk processors is the pricing of the larger supermarkets. Along with increasing supply chain costs, at these prices, there is little remaining margin.

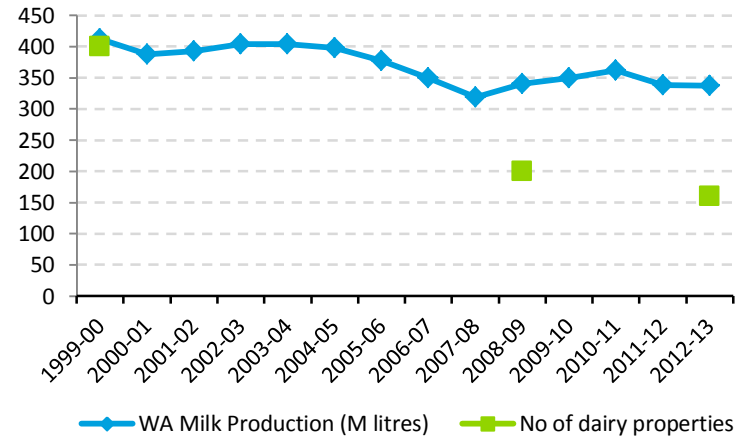
### Cost Structure for liquid milk

Component	Cost (approx.)
Raw Milk	\$0.55 per litre
Bulk Transport	\$0.04-0.08 per litre*
Processing/Packaging	\$0.09 per litre
Other - including transport/marketing/warehousing	Not provided
Total	\$0.68- 0.72 per litre

Source: Industry consultation – major processor

\*Variance on distance

### Change in WA milk production and number of dairy properties since deregulation, M litres, number of properties



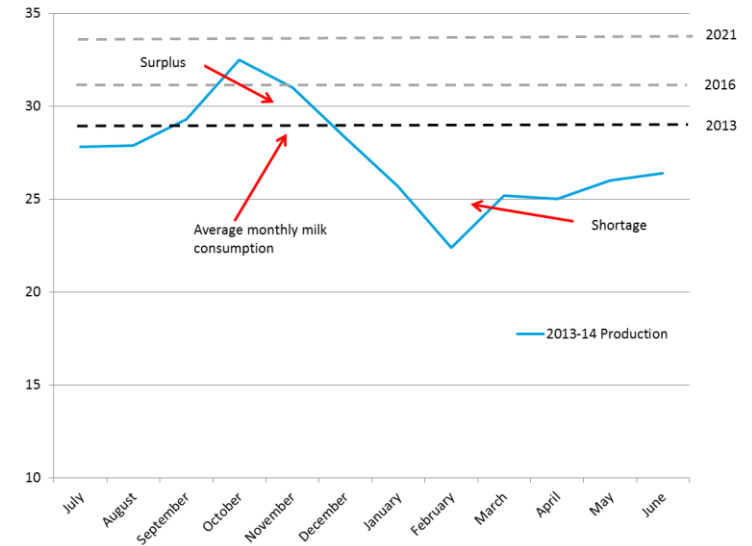
Source: Dairy Australia, 2013

# Dairy – Sectorial Analysis

## Industry size and structure

- Since the industry was deregulated in 2000, WA milk production has been falling, largely due to the reduction in number of farms and the consolidation of properties. Over this period, WA production has fallen by 18%, down from 412 million litres in 1999/00 to just over 300 million litres of milk in 2011/12. (Dairy Australia 2013)
- WA milk production is very seasonal, with a frequent monthly supply-demand imbalance. Supply shortages occur over the summer months, with surplus production becoming available from late winter. Average monthly demand is around 27 million litres
- Domestic fresh milk consumption is expected to grow at 2.8% per year, based on population growth and growth in per capita milk consumption. On these assumptions, it is projected that total domestic fresh milk consumption should reach more than 400 million litres by 2022 (Stratigis Partners 2012)
- The projections suggest that aside from the emerging seasonal imbalance, there is a broader supply issue, which will be further accentuated with population growth.
- Given its proximity to Australia and its growth potential, the Asian market is probably the most important export market for the Australian dairy industry, including the WA industry. South East Asia dairy consumption projections are that there will be a requirement for an additional 3 billion litres by 2020. This equates extra 300 to 400 million litres of milk each year – more than WA's current total milk production (Rabobank International)
- Growth in dairy consumption in Asia is being driven by a range of factors: income growth, urbanisation, westernisation of diets, and population growth. There are also concerns over food security and food safety

## Seasonality of WA milk production and the impact of growing populations

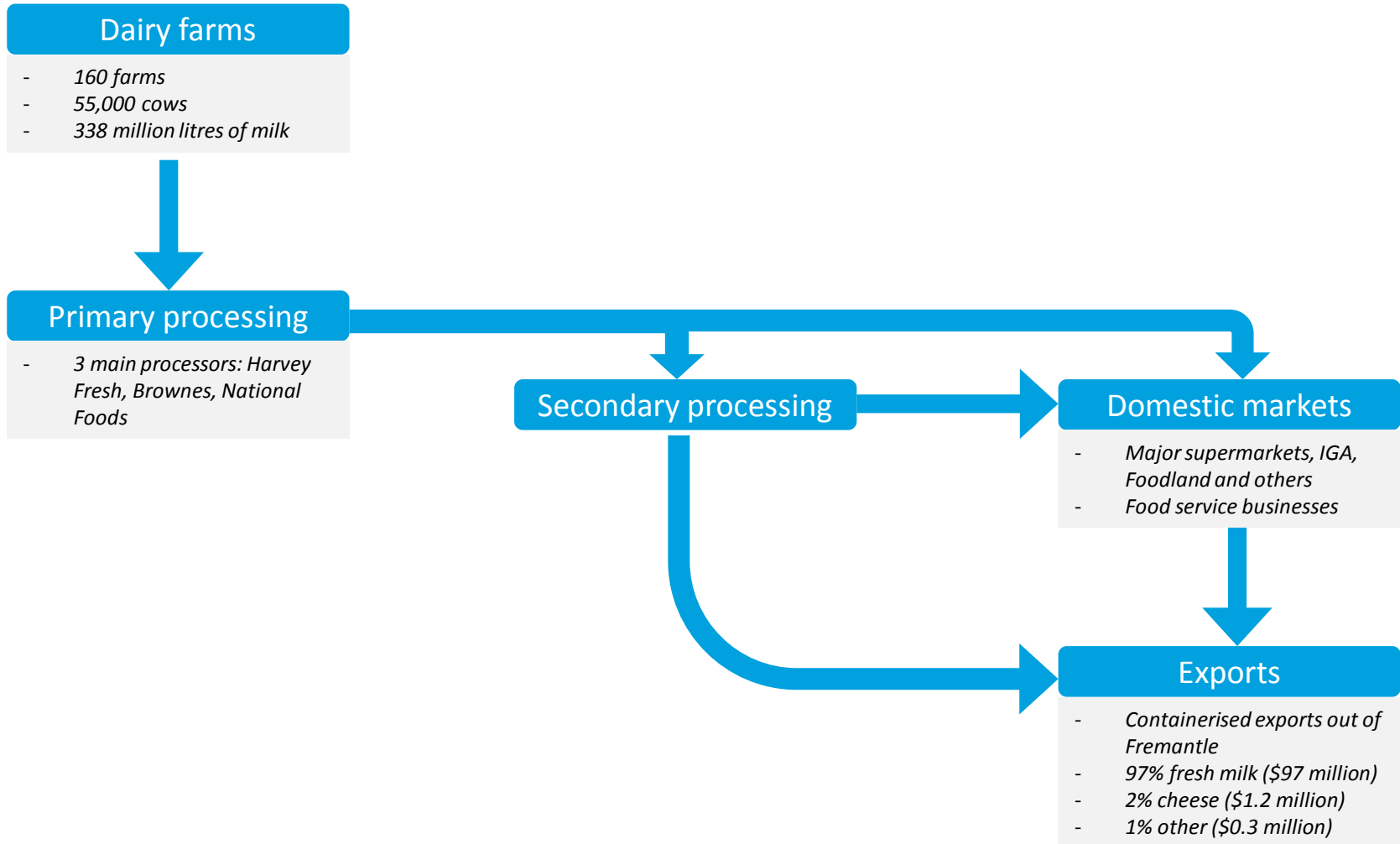


Source: Dairy Australia, 2013

## Regulatory environment

- The Biosecurity and Agriculture Management Act 2007 and the Biosecurity and Agriculture Management Regulations 2013 require the inspection and checking of all livestock movements into the State by Quarantine WA
- While these regulations help protect the industry from exotic pests and diseases and are essential to maintaining the disease free status that assists the industry to market its product, it also places additional burden on farmers wishing to increase stock numbers through sourcing heifers from interstate. This regulatory barrier is seen by some as an additional burden to increasing dairy herd numbers and milk production, in response to growing domestic demand and export market opportunities.

# Dairy

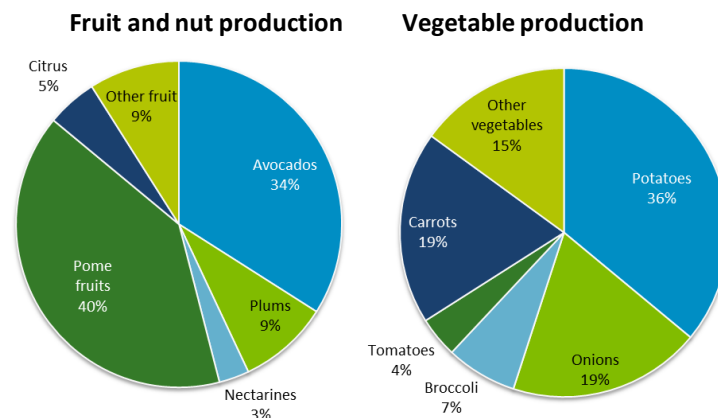


# Horticulture – Sectorial Analysis

## Industry size and structure

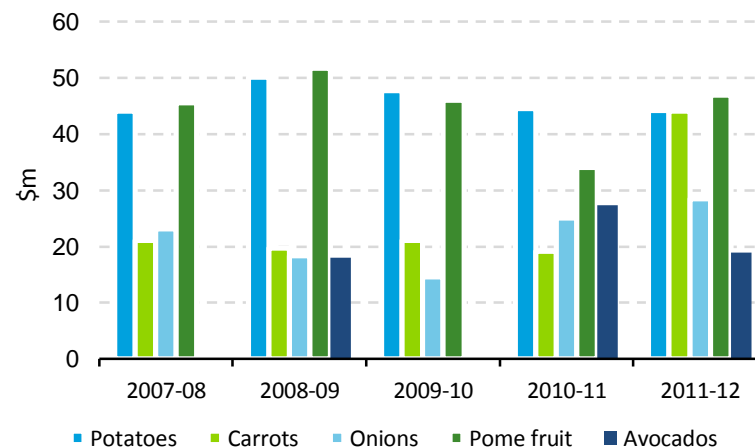
- The South West horticulture industry comprises approximately 347 fruit and nut producers and 200 vegetable producers, with aggregated production values of \$80 million and \$129 million, respectively, in 2011
- In the South West, fruit and vegetable production is largely concentrated on a small group of products. The largest four produce categories account for approximately 88% of fruit production and 89% of vegetable production in 2011. Therefore our analysis has only concentrated on the five highest fruit and vegetable commodities by value, which are pome fruit and avocados (for fruit) and potatoes, carrots and onions (for vegetables)
- **Regulation:** Stakeholder feedback indicated the level of regulatory compliance required to invest in a new horticultural property is significant due to the number of government department and agency touchpoints and a raft of regulatory requirements. Departments include the Department of Water (for water licensing), Department of Environment (to investigate clearing issues and acid sulphate soil testing), Worksafe, Fair Work Australia, Department of Agriculture, Main Roads, and Greater Bunbury Strategy 2013. This can result in long lead times (industry consultations suggested up to four years to get a property ready for production) and set up costs. Importantly, this can make reacting to market trends extremely difficult.
- **Industry water availability:** Water management was also cited as a key constraint on the horticultural industry. There are current restrictions on water usage application rates to properties of around 4,000kL/ha which severely limits the full potential of farm production. It was suggested that there needs to be more flexibility in this system which could make use of water licenses on surrounding farms. In addition, water supply is an issue due to limited water availability and quality within some agricultural areas. Some companies cannot expand due to these constraints.

## Value of fruit (excluding grapes) and vegetable production - by produce type in South West



Source: ABS, Agricultural census 2011

## Value of key horticultural products in South West - from 2007-08 to 2011-12



Source: ABS value of agricultural commodities produced (2012-2013)

# Horticulture – Sectorial Analysis

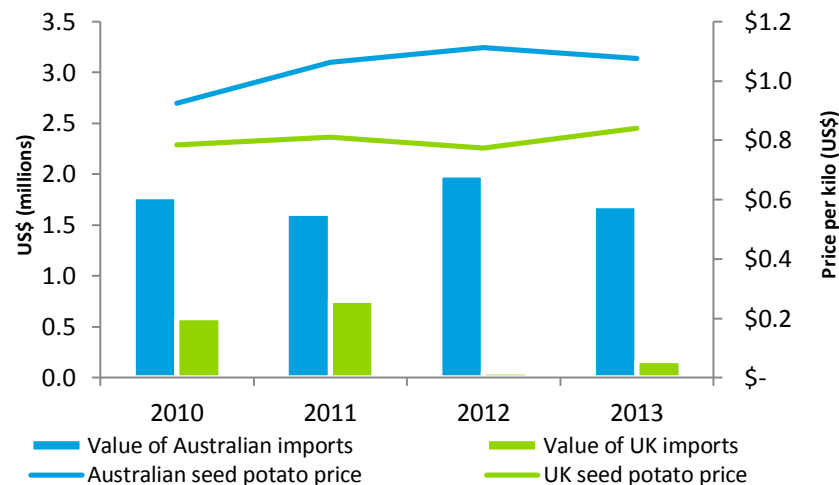
## Supply and demand – export focus

- Vegetables account for 80-90% of the value of all WA horticultural exports. Exports however remained static in WA (ranging from \$60 to \$85m) while rest of Australia exports have grown strongly (from \$400m in 2004 to \$1.2b in 2013).
- The South West has some key niche export horticultural markets which are either well developed and/or have high potential for growth. Our export market analysis therefore focuses on these three commodities being: avocados, carrots, and potatoes. The key markets for these WA exports include South East Asia (Singapore, Indonesia and Malaysia in particular), the UAE and Saudi Arabia.

## Potatoes

- Seed potatoes account for approximately 12,000 tonnes of the 96,000 tonnes of potatoes produced annually in the South West. In 2011, South West accounted for approximately 24% of seed potato production in WA (3% nationally). WA exporters, however, account for approximately 70% of Australian seed potato exports, though most producers are now considered to have reached their production capacity (*DAFWA, 2014*)
- WA seed potatoes have a high reputation for being clean and green in export markets due to the absence of major pests and diseases, the ability to supply at the correct physiological age which European competitors cannot and a highly regarded seed certification scheme. As a result, WA seed potatoes attract a price premium, which can be seen from analysis of each of the largest export markets for Australian seed potatoes which are Indonesia, Mauritius and Thailand. Together these markets account for over 96% of the trade value of Australian seed potato exports
- Building a price premium from biosecurity - In 2013, Australia exported 1,794 tonnes of seed potatoes to Indonesia, generating approximately US\$1.7 million. Australia's key competitor in this market is the UK. In 2013, Australian seed potatoes attracted a 28% higher price premium than the UK.

## Building a price premium - Indonesian seed potato imports



Source: United Nations, Comtrade data 2009-2013

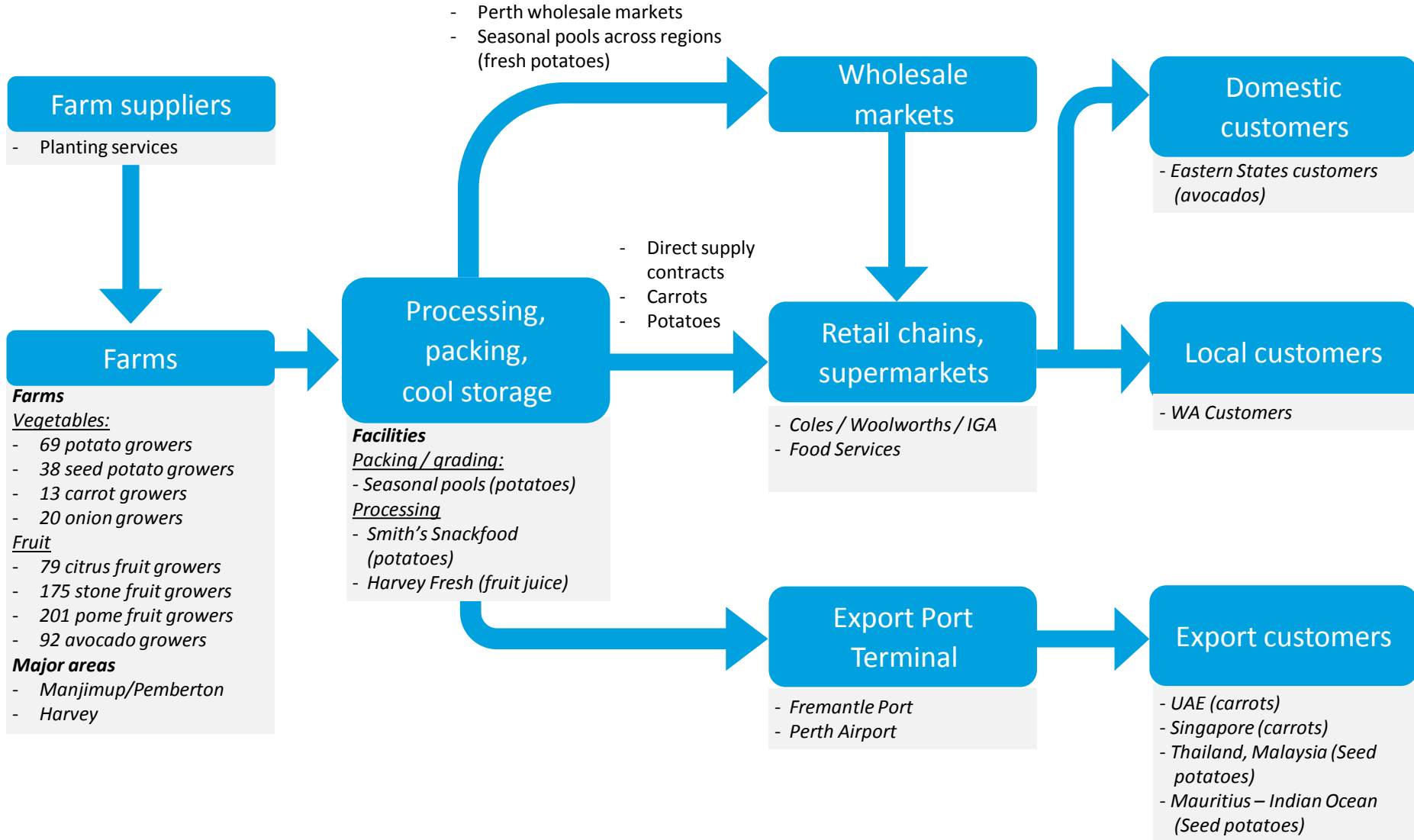
## Carrots

- The carrot industry is characterised by large, vertically integrated companies that grow, pack and direct export carrots (65% of carrots are exported). Carrots are exported through the Port of Fremantle in cooled sea containers. Export carrots take around 18-21 days to reach export markets in the Middle East. The domestic market is supplied through direct supply contracts with supermarket chains. (*Industry consultation*)
- The supplier base for carrots has become increasingly concentrated in the last 5-10 years, with the industry now highly efficient and mechanised (*DAFWA 2013*).

## Avocados

- Over the past three years, national avocado production increased by 110% and WA production grew by 153%, indicating a market with strong growth
- WA producers work in marketing collaboration with other production regions of Australia to ensure year round supply
- Cooperatives have created innovative methods of marketing their product into Asia via education of end consumers.

# Horticulture





Deloitte Access Economics have identified five areas of transformative action to take advantage of the opportunity...

# Opportunities and transformative actions have been identified across five key areas



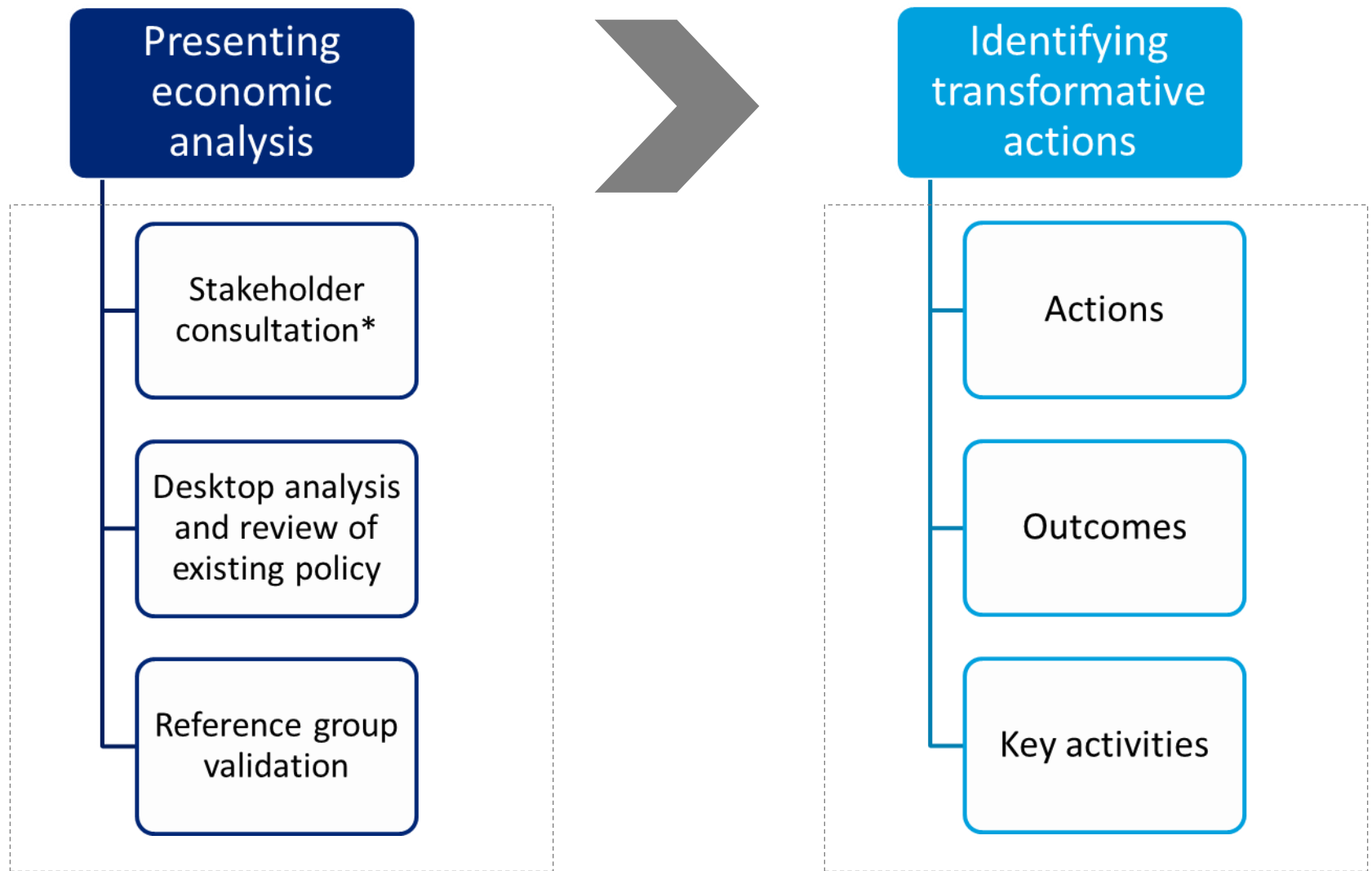
## Five Actions

Each action plan identifies:

- A description of the action to be taken
- The logic behind the action
- Why the action will help the South West region achieve growth in exports (where relevant)
- A set of discrete activities to be undertaken



# The analysis in this report is presented in the manner below



\* Note that observations / themes are based on limited stakeholder consultations and reflect views of a sub-set of the sector

# 1. Market structure



# Current market structures impede the ability of the sector to respond to opportunities



## Disaggregated and small-scale production

- The Western Australian agricultural sector (dairy, beef and horticulture) is characterised by a range of relatively disaggregated and small scale producers (e.g. family-owned farms and hobby farms). Limited industry consolidation has occurred, particularly across beef and dairy where it would be most advantageous. Given the diversity of horticulture smaller scale operations can yield greater profitability.
- Producers across beef and dairy mainly see each other as competitors, restricting the ability to best utilise information and supporting infrastructure to extract operational and financial benefits (resulting in ‘competition at the farmgate’)

## Incentives of agents

- It was identified through industry consultation that agents (cattle) are not incentivised to act with the best interests of other players in the supply chain
- They exhibit a focus on maximising transactions, through the purchase and sale process

## Supermarkets and processors dominance

- Intermediaries such as processors and supermarket retailers have significant market power
- Sector business models that limit farmer options at point of sale due to market concentration resulting in an imbalance of negotiation power between farmers, processors and supermarkets
- While the cost of production has increased over time, farm gate returns have remained stagnant

## Price and specification transparency

- The scale of many Western Australian producers leads to a significant degree of information asymmetry in the market
- Producers currently have a lack of oversight regarding both price and production specification (although some feedback indicated that when provided specifications in the beef sector, producers were not responding to this information)
- The value that the producer can ultimately extract from their assets is reduced due to this inability or lack of interest in responding to the production specifications demanded by the end user
- Resulting price uncertainty creates difficulties in planning and decisions to invest in expansion

## Processors are not export ready

- Facilities are often not ‘world-scale’ facilitating export opportunities
- Producers do not have the scale or leverage to drive or respond to opportunities in new markets



# Increased collaboration between stakeholders (e.g., co-operative business models) can overcome structural issues

## Case Study 1: Allied Beef (collaborative marketing organisation)



- Allied Beef is a for-profit collaborative marketing organisation involved throughout the beef supply chain and currently markets approximately 100,000 cattle per year across Queensland and New South Wales
- It does not own its own processing, lot feeding or saleyard facilities, but instead looks to drive the greatest value for its clients along the beef cattle value chain
- The Allied Beef model addresses problems caused by a market structure that is typically characterised by fragmented production amongst a large number of small producers
- The objective is to use and create mutually beneficial partnerships of scale to overcome industry inefficiencies that often lead to reduced cattle values along the supply chain
- The collective entity's scale is leveraged to generate buying power and ensure supply of cattle consistent with specific supply requirements
- A broad geographic market coverage and strong market relationships provide leverage to smaller producers
- Allied Beef also provide farmers with the tools to monitor and benchmark cattle and property performance

## Case Study 2: Milk 2 Market



- Milk2Market is a newly launched, integrated milk supply management business that operates from farm to factory. Operations are presently across Victoria, New South Wales, Queensland and Western Australia
- The business provides two key services to the dairy industry: a milk exchange and a milk management system. The Milk Exchange is an open, transparent market that links buyers and sellers. After negotiations are completed, Milk2Market co-ordinates all contractual requirements.
- In the Milk management system, Milk 2 Market organises milk collection and independent testing and contracts delivery to the buyers. The buyer then pays into an escrow account, fees are deducted and payment is made into nominated account of the seller.

## How these models work to generate value for agricultural producers

- Provide guidance on prices to enable farmers to understand the fair value of production
- Provide benchmarking tools for farmers to track and improve on farm performance
- Indicate specific customer specifications to producers
- Leverage collective buying to reduce costs along the supply chain
- Shift the point of competition from farm gate so that producers receive a greater return on their production
- Provide access and marketing to domestic and international markets by leveraging scale and relationships



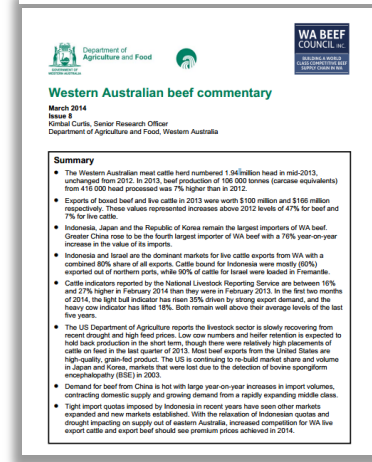
# Government sponsored activities can play a facilitation role in reducing information asymmetry

## The role of market intelligence

Where information asymmetry exists along the agricultural supply chain (particularly in price transparency) due to a genuine market failure, a role may exist for government to facilitate introduction of market intelligence to drive value generation across the sector. This is an avenue considered in the Australian Government's Agricultural Competitiveness green paper which noted:

- A greater level of information transparency could help provide greater leverage and fairer outcomes for producers in negotiating with processors and retailers – particularly with the dominance of the existing supermarket duopoly
- One option indicated by the green paper is the role for a government agency (such as ABARES) to develop and provide weekly reports on price indices for agricultural products and comparable input costs in major competitor countries
- Information could be made freely available to the public and media, allowing information transparency along the supply chain
- Limited restrictions on use to allow the employment of data by government agencies and private sector organisations
- Information could be used to supplement existing (or support the development of) private sector information services. The WA Beef Council and the MLA currently provides such services in the beef sector (see right)
- Private sector involvement would allow the development of innovative solutions to provide information to end customers – for example smart phone applications which collaborate real time information from a number of sources
- One option to further price transparency, is to regulate disclosure of specific transactional activities (such as saleyards or online auction systems)
- Whilst this would act to increase price transparency in the sector, such an option would have to be weighed against the increased regulatory burden, and the cost to businesses of disclosing proprietary information

## WA Beef Council – Beef Commentary



## MLA market information mobile app





# Action: Facilitate introduction of alternative business models and actively support market intelligence

## Situation

- The Western Australian agricultural sector is characterised by a range of disaggregated and small scale producers which can limit both their negotiating ability along the supply chain and their ultimate marketing power for domestic and export markets
- Significant natural consolidation is unlikely to occur in the short term
- This structure limits the flow of symmetrical information along the supply chain, reducing value for producers and ultimately the end customer
- Competition needs to be shifted from the 'farm gate' to the export terminal

## Outcomes

- ✓ Facilitate information transparency throughout supply chains
- ✓ Reduce barriers to establishing preferred business models
- ✓ Increased cooperation along supply chains

## Description of action

The State Government or respective south west agencies should facilitate transparent information flows from producer to consumer & vice versa to overcome existing market structure issues:

### Market Models (1)

- Actively examine and support the introduction of alternative collaborative models (e.g. co-operatives, Allied Beef model) in separate agri-commodity classes
- Importantly the governments role is to facilitate entry of market participants with experience in preferred models through the streamlining of barriers
- Temporary financial and logistical support to be provided to the sector to ensure a robust and sustainable model is implemented. To be clear the State's role is as a facilitator to obtain a sustainable private sector commercial outcome

### Information Flow – Producer to Customer / Customer to Producer (2)

- To supplement the development of these alternative business models the government should also examine its role as the central repository of information and market intelligence (including pricing information) to be made available on a real time basis
- Consideration should be given to a level of reporting enforcement to support this mechanism

## Activities

- |   |  |
|---|--|
| 1a.) Conduct a review of alternative business models  |  |
| 1b.) Arrange & facilitate site visits (for co-operatives and to co-operatives) to understand constraints and interest |  |
| 1c.) Assess role of government to reduce barriers to entry  |  |
| <hr style="border-top: 1px dashed black;"/>   |  |
| 2a.) Review available information and data gaps   |  |
| 2b.) Create central body to identify, collate, analyse & report information   |  |
| 2c.) Assess role for reporting enforcement  |  |

## Alignment with existing policy and strategies

- Agricultural competitiveness green paper – introduce options to increase price transparency through the domestic supply chain
- Agrifood 2025+ - develop appropriate business models
- South West Regional Blueprint – facilitate structural change



## 2. Skills & Technology



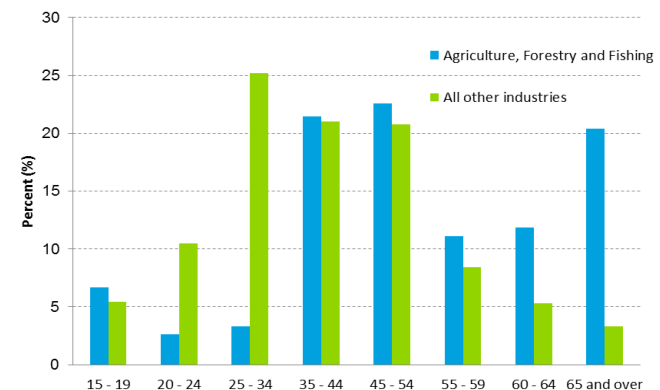
# Demographics – the greatest macro driver of all

## Education and demographics do not favour agri-business impacting the attraction of capital

- Nationally, the average age of an Australian farmers is 52 years - 12 years above the national average for all other occupations.
- Age distributions vary significantly across industry sectors:
  - Across all other industries 25% of the workforce is 25-34 and 3% is 65 and over
  - In agriculture only 3% of the agricultural workforce is 25-34 and 20% are 65 and over
- Although the agricultural sector has 7% of their workforce in the 15-19 bracket, compared to 5% of all other industries, there is a significant gap between the youth and 35-44, with minimal levels of experienced employment aged between 20-34
- Given the current experience gap, farmers nationally are five times more likely than the average person to still be working over the age of 65 (ABS).
- The retirement of many farmers in the coming decade will mean Australia's relatively high dependence on 'family farms' will come under increasing pressure.
- ANZ insight suggests \$400 billion will be required nationally between now and 2050 for farm takeover as 'ageing farmers make way for the next generation'. ANZ also identified Australia will require around \$600 billion in additional investment to generate growth and profitability, which will also require 'innovative ways of attracting domestic and foreign investment' (ANZ, 'Greener Pastures: The Global Soft Commodity for Australia and New Zealand' 2012).

- In the *Rebuilding the Agricultural workforce 2012* report to the Business/Higher Education roundtable, Allen Consulting Group noted, since 2001 there has been a significant decline in the number of enrolments and completions of higher education qualifications in studies directly pertaining to agriculture.
  - Education in agriculture (including environmental studies) has been growing, largely driven by environmental studies
  - National enrolment in agriculture studies (excluding environmental studies) declined from ~4,500 in 2001 to below 2,500 in 2010
  - In WA there has been a year on year decline since 2004
- The agricultural sector in WA needs a new lease of life – a new wave of talent must be attracted to the sector that brings a non-traditional skillset. Talent that does not think traditionally but brings a level of insight, experience and capital that will change the way in which the industry is grown and funded.
- The State has a role to play in fostering this environment

**Western Australian age distribution of agriculture vs all other industries**



Source: ABS, *Labour Force Detailed Quarterly*, August 2014

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# The rise of the Public Private Partnership hub

*Forums that seek to support 'innovators' from the public and private sectors to solve specific problems sponsored by government and match with financiers and consumers*

## Case Study 1: The Innovation Hub Pilot Project

- The Queensland Government is using the Innovation Hub Pilot Project to provide new ways of solving complex problems using expertise from the private and public sector. The pilot project is being run by the Department of Science, Information Technology, Innovation and the Arts (DSITIA)
- The Queensland Government identifies select problems which are then packaged into a problem statement that is released to market for a solution. The government is seeking a 'new innovative solution', not a standardised approach
- The problem statement is released with all available data pertaining to the problem, the constraints around the issue and the desirable outcomes/ benefits being sought
- 'Innovators' from the private, public (including academic) sectors apply to solve the problem with their relevant expertise and existing service, product or idea that may be tailored to solve the identified problem
- The innovators are then shortlisted via select criteria from a judging panel. Shortlisted innovators are then involved in a 2 day event with representatives from the relevant Queensland Government department and pre-appointed subject matter experts
- If the shortlisted innovators can only solve one part of the problem they are encouraged to collaborate with other shortlisted innovators during the event to form a more holistic solution
- The pitch – after the two day event of intense investigation of the problem, solutions are presented to the judging panel in a pitch format. The judging panel will then select one or more innovators to collaborate with, through a 12- week 'incubation period'
- The incubation period is a close working relationship between the innovator(s) and the relevant government department(s) to produce a workable outcome. The incubation period operates with 'appropriate Queensland Government probity requirements so that departments can negotiate procurement contracts directly with the solution provider at the end of the incubation period'. (Queensland Government Innovation Hub Pilot Project, 2014)
- In round one, held in July this year, the Queensland Government released four problems, one from each of the following departments; Department of Agriculture, Fisheries and Forestry, Queensland Health, Department of Transport and Main Roads and the Department of Housing and Public Works
- Beyond Queensland - The Western Sydney Innovation Hub Pilot Project was launched in September this year, with host partners including the New South Wales Government, PWC, Cisco, Google and University of Western Sydney.





# The rise of the Public Private Partnership hub

## Case Study 2: US Energy Innovation Hubs

- In 2010, the US created the first three, of five, Energy Innovation Hubs (EIHs), that incorporate universities, industry and government to overcome current barriers in energy technology. After the funding of two additional hubs this year, the five EIHs include the Modelling and Simulation for Nuclear Reactors Hub, Fuels from Sunlight Hub, Energy Efficient Buildings Hub, Batteries and Energy Storage Hub and the Critical materials Hub. Each hub has their own mandate whether it be building more efficient nuclear reactors, more energy efficient buildings, producing biofuel from the sun, advancing the development of electrochemical energy storage or enhancing the domestic supply of materials critical for the emerging energy technology. The hubs work on a centralised model of a base laboratory that coordinates engineers, scientists and industry experts from a multitude of disciplines to deliver the targeted outcomes. The hubs are working on a five year timescale to achieve established objectives.
- Collectively, the goal is to accelerate the development from laboratory research to commercialisation and simultaneously enhance energy security (US Department of Energy, Science Innovation)



## Case Study 3: The Food Innovation Hub, South Australia

- South Australia's \$4.15 million Food Innovation Hub supports two of seven state-wide strategic priorities – the growing of advanced manufacturing and premium food and wine from our clean environment. The Food Hub will focus on developing high value food manufacturing with the coordination of government funding, university research and the food manufacturing industry.
- Through the 'Advanced Food Manufacturing grants', the intention is to develop coordination between food manufacturing companies and research service providers, assist in the commercialisation of research in new or improved food products and provide accessibility for manufacturers to specialised technical and advisory services for product testing and development. (Government of South Australia, Primary Industries and Regions, The Food Innovation Hub, 2014)
- Overlaying the direct investment in food manufacturers and supporting researchers, the Food Innovation Hub will also invest in industry focussed training and internships for non traditional disciplines (science, technology, engineering and maths) to transition into the food industry, to establish a more robust and diversified sector going forward.

**GROWING  
ADVANCED  
MANUFACTURING  
PREMIUM  
FOOD AND WINE FROM OUR  
CLEAN  
ENVIRONMENT**

# As the ecosystem matures new funding sources are emerging



*An emerging model that provides early seed capital in exchange for equity and an intensive mentoring program (usually 3 months) to prepare for second round investors in a pitch environment*

## Case Study 4: Techstars

- Techstars is a technology focussed accelerator that conducts 13 week programs for selected start ups. Techstars provides participants with seed funding and intensive mentorship for an equity share ranging between 7-10%. Towards the end of the 13 week program, start up businesses are launched to the rest of the market for their second round of funding from external investors. Techstars has a global presence, currently operating in Austin, Berlin, Boston, Boulder, Chicago, London, New York City and Seattle. In addition to their own operations, Techstars engages in 'powered by Techstars' programs
- 'Powered by Techstars' programs, work with existing corporates to drive the accelerator initiative in the respective corporate's field or sector. Techstars can provide a turnkey type operation that incorporates program creation and management, hiring and staffing, physical space, mentor and investor networks, fund formation and management, marketing expertise and the administrative component (legal, accounts etc). An example of a 'powered by Techstars' initiative is the Barclay's Accelerator. The Barclays accelerator is a financial technology focussed accelerator that utilises the model and network created by 'Techstars' and overlays the Barclays network and industry expertise. The Barclays Accelerator mentors 10 businesses in the 13 week programme, providing up to US\$100,000 for 6% equity in the business. Other examples include the Microsoft Accelerator, The Disney Accelerator, Sprint Mobile Health Accelerator and the Nike+ Accelerator program, amongst others



## Case Study 5: Y - Combinator

- Y-Combinator operates out of the Silicon Valley. In a standard arrangement, Y-Combinator will invest US\$120,000 for 7% equity. In their accelerator model, the start up firms will move to Silicon Valley for 3 months and undergo an intensive mentor program with Y-Combinator. The objective is to develop the businesses to a point that will enable them to raise money on a larger scale. The Demo Day follows the 3 month program and allows the businesses to pitch to a selected investor audience. Y-Combinator has operated since 2005 and has funded over 800 start ups. The companies they have invested in have a combined valuation of >US\$30 billion.





# We propose two initiatives to attract talent and capital to overcome the sectors challenges and benefit from opportunities

1

## The SW Agricultural Hub

Government led initiative to solve specific problems facing the sector

2

## SW Agribusiness Accelerator<sup>1</sup>

Industry led initiative to identify commercially viable opportunities attractive to seed capital

1. The Accelerator model would often focus on more than one single regional area, and possibly incorporate agricultural sectors in addition to the sub-sectors of focus in this study



# 1 Government Led - The SW Agricultural Hub

## *Solving complex agricultural problems with innovative solutions*

The purpose of the SW Agricultural Hub is to operate a new collaborative model that tenders for innovative solutions to complex problems that have commercial opportunities for start up enterprises, new entrants and other innovative businesses. The SW Agricultural Hub would emulate the Open Innovation pilot projects in Queensland and Western Sydney, with an agricultural focus. Participants in the Hub would include government agencies, experts from education institutions and industry, innovators, financiers and others relevant to the specific issue being solved for.

The Hub would consist of a three stage approach: 1. Release of Problem Statement and Shortlist, 2. Incubator Period, and 3. Market Development:

### 1. Release of Problem Statement and Shortlist

- Once the relevant government department has identified a discrete range of agriculture based problems, these are then packaged into problem statements that are released to the market via the SW Agricultural Hub. If there are collaborating partners in the project, similar to the Western Sydney model, then the scope of their involvement is also drafted in the problem statement
- In the selection process, potential businesses would submit their ideas / preliminary solutions for the tendered problem to the Hub. The submissions must meet all eligibility criteria and admission requirements. As part of the submission process, rigour must be applied to intellectual property agreements and confidentiality.

### 2. Incubator

- Shortlisted businesses are then involved in a short event ('x' number of days), with representatives from the relevant government departments and pre-appointed subject matter experts, in order to develop their idea further. As suggested in the Queensland and Western Sydney Open Innovation models, if businesses are only able to solve part of the problem, collaboration with other shortlisted businesses/ institutions is encouraged to ensure the delivery of a pitch that has a more holistic solution. Businesses then pitch their solution, and the winners are selected for the engagement and incubation period
- The incubation period is a term of 'x' months, whereby successful engagement winners will work closely with the Department and relevant sponsoring entities to advance the ideas to a workable solution under an intense collaborative engagement. In the Western Sydney Innovation Hub Pilot project, the terminology used is a 12-week acceleration program, that adopts 'lean start up and agile methodology'.

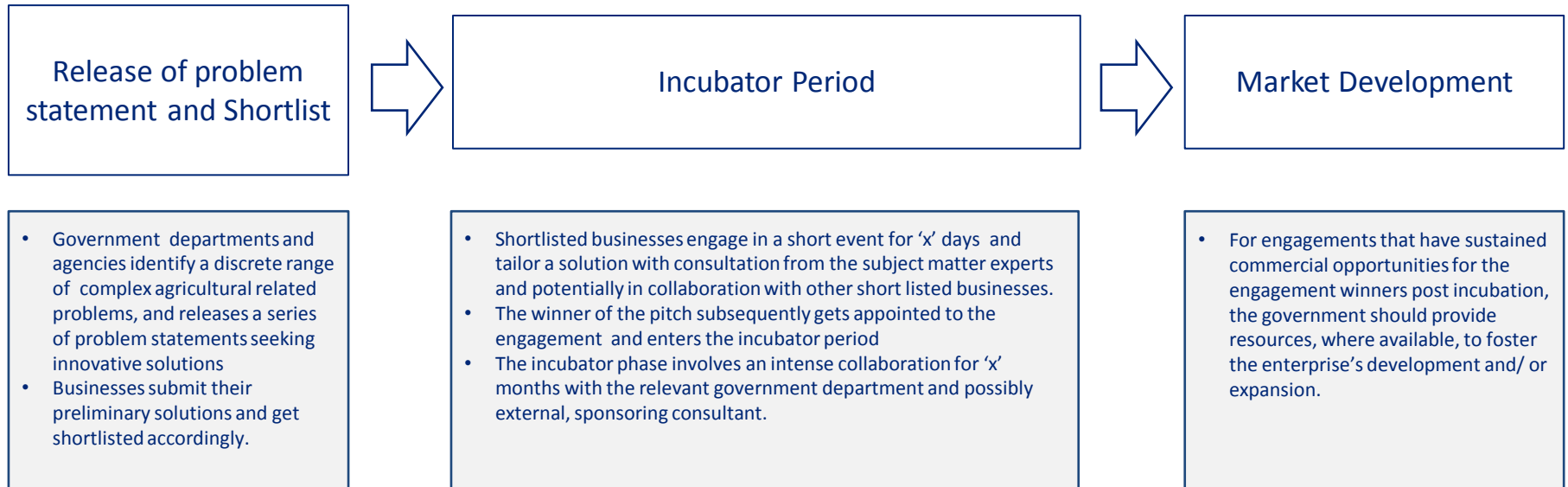
### 3. Market Development

- For engagements that have sustained commercial opportunities post incubation, the government should provide resources, where available, to foster the successful enterprise's development and/ or expansion.



# 1 Visual Overview – The SW Agricultural Hub

*Solving complex agricultural problems with innovative solutions*







## 2 Industry Led - The SW Agribusiness Accelerator

### *Taking agricultural businesses and ideas to market*

The SW Agribusiness Accelerator is a mentorship driven, privately operated fund that accelerates the development of innovative agricultural businesses in Western Australia. The business model should emulate that of the proven accelerator models established across Europe and the Americas, with high intensity mentoring over a 13-15 week time period in preparation for further seed capital and greater market development.

The proponent of the accelerator would determine the equity sharing arrangement, although the 7-10% investment has been the most consistent equity allocation in the accelerator industry.

Role of the government:

The State Government is to play a role in facilitating entrance to the market, potentially introducing the concept to existing venture capital businesses in WA and the broader Australian economy (particularly those with Federal Government Innovation Investment Funds, e.g. Yuuwa Capital) and request participation in the 'Demo Day' phase of the accelerator, in addition to the post accelerator, market development phase.

There is also a role for government to match funding into the incubator, providing access to debt at the government discount rate. This practice is typical of accelerators in other jurisdictions.

These roles are discussed in turn below the respective stages of the ideal SW Agribusiness Accelerator.

#### 1. Pre-Accelerator

- Where possible, the State government should facilitate the early development of the accelerator model, through introductions and administrative assistance

#### 2. The Accelerator

- Generally, the government would not play a role in the accelerator phase of the business model, other than distribution of public resources

#### 3. Demo Day

- In the Demo Day segment of the business model, the proponents of the Accelerator utilise their established network from their mentors, alumni and contacts in venture/ private equity to attract a second round of investment into the businesses
- The State governments' role in this phase is to introduce established overseas and domestic investors in the agricultural space, particularly those with access to large scale capital and international scope and coordinate their involvement in the Demo Days

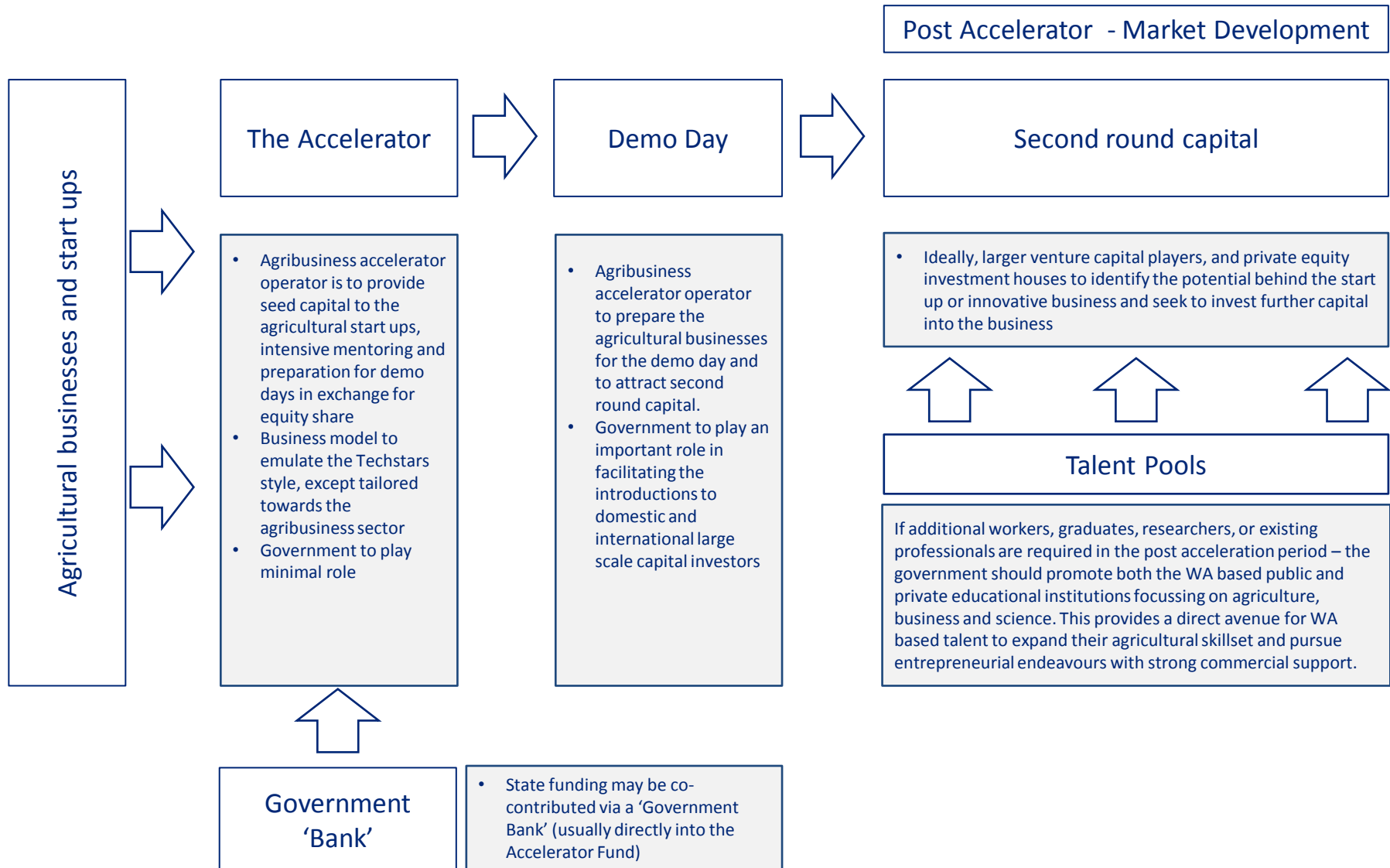
#### 4. Second Round Capital - Market Development

- In the market phase of the SW Agribusiness Accelerator, the government's role is to assist with taking businesses to Asian markets, and promoting the availability of a talent pool from WA based tertiary and non tertiary educational institutions. This would provide a direct avenue for WA based talent to expand their agricultural skillset and pursue entrepreneurial endeavours with strong commercial support.



## 2 Visual Overview - The SW Agribusiness Accelerator

*Taking agricultural businesses and ideas to market*





# Action: Develop the SW Agricultural Hub and facilitate the SW Agribusiness Accelerator

## Situation

- Ageing workforce in agricultural sector with a significant gap in experience between 20-34
- Higher education in the agricultural sector (excluding environmental studies) has declined significantly since 2001
- Opportunities exist to attract graduates and current professionals from a spectrum of disciplines to alleviate the gap in agricultural higher education over the near term
- Large scale domestic and international capital will be required over the next 35 years to takeover the family-run farms across Australia
- Requiring the need to attract a different type of skill to the sector with a focus on the commercial/financial opportunities rather than pure agricultural skills

## Outcomes

- ✓ Attraction of capital and scale investment
- ✓ Innovation

## Description of action

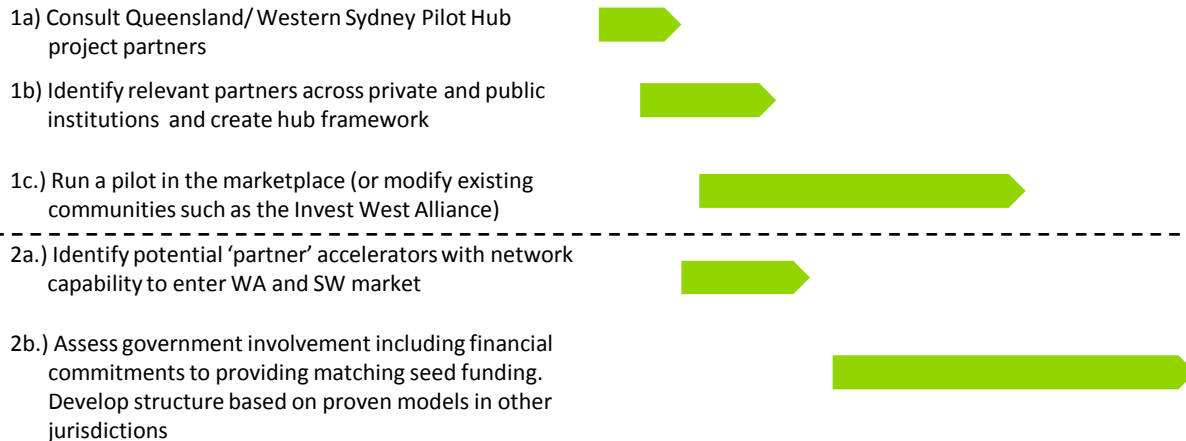
Create a SW Agricultural Hub (1) and facilitate the development of a SW Agribusiness Accelerator (2) to support and develop 'investable' ideas, businesses and skills and management expertise in the agribusiness sector.

The key objectives of the creation of the hub and facilitation of the accelerator are to capture the size of the Asian opportunity, focus on commercial business opportunities rather than traditional farming issues/problems and deliver employment opportunities in WA with pathways to progressing senior roles (career opportunities) and attractive and visible remuneration.

Explanations of the SW Agricultural Hub and SW Agribusiness Accelerator have been provided on the previous pages. These models seek to emulate the proven (and developing) models in the case studies while being aligned to the agricultural sector.

The role of government will be as facilitator of the hub and accelerator. It is imperative that these initiatives are 'led from behind' by the State and that the Accelerator has the ability to invest on a fully commercial basis.

## Activities



## Alignment with existing policy and strategies

- Agricultural competitiveness white paper 2014 – access to finance and debt management and attracting capital
- Australia in the Asian Century White paper 2012 – build partnerships between governments, industry and community and invest in innovation

## 3. Biosecurity



# State specific biosecurity controls may not be providing value to the agricultural sector in current form

## Where are we now?

- Biosecurity is fundamental for safeguarding valuable agricultural resources against the threat and impacts of pests, weeds and diseases
- DAFWA's Livestock Biosecurity Program is part of the national animal health framework:
  - Strict movement restrictions when importing livestock from interstate and/or overseas into Western Australia
  - These requirements exist to protect Western Australia from pests and diseases that are not present in the state
  - When importing into WA -> specific movement requirements for the following diseases must be met for Johnne' Disease, enzootic bovine leucosis, cattle tick, liver fluke and footrot.

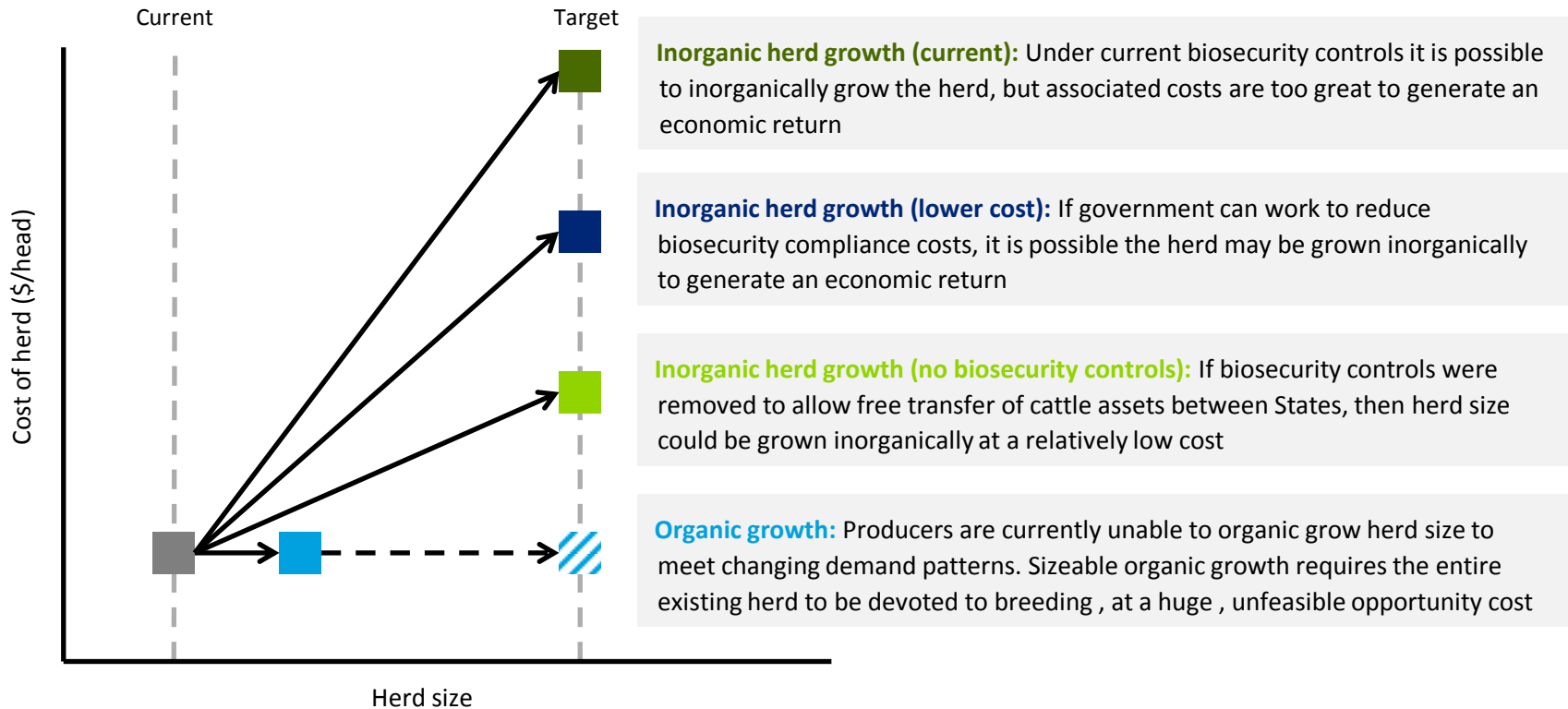
## Does Western Australia derive a fair value?

- Any biosecurity controls should be risk based and not limit agricultural activity disproportionately to the risks incurred
- The economic benefits generated by Australia's biosecurity status are considerable:
  - For example, it is estimated an outbreak of foot-and-mouth disease could cost the Australian livestock industries and government \$50 billion over 10 years (Buetre et al. 2013)
- Good biosecurity also has significant, less tangible and long term benefits by protecting Australia's biosecurity assets
- But the value that Western Australia gains from additional biosecurity control restrictions (compared to other Australian States) is less clear
- Through the consultation process, industry stakeholders revealed a belief that under the current implementation of biosecurity controls, Western Australia does not eliminate biosecurity risks to the extent that would justify costs
- Furthermore it is not clear that Western Australia currently receives any price premium on its product (relative to other Australian States) for some of the biosecurity measures in place (it must be noted that this is not necessarily the reason for having many biosecurity measures)
- For example, milk imported to the State (from other States) to fulfil seasonal shortages is not subject to rigorous quarantine controls.

## What are the costs of the State's biosecurity

- There are significant costs in implementing the State's biosecurity controls in terms of state government resources. But there is also a significant cost to industry:
- Existing restrictions on livestock movements make it infeasible to inorganically grow herd size. The costs associated with interstate importation and quarantine are significant (although not insurmountable)
  - An existing limiting factor on beef and dairy export industries is scale. Demand from China is of a scale not current delivered in Western Australia requiring a significant investment and a very different risk profile to meet market requirements
  - Indirect cost of protectionism - can decrease competitiveness of an industry (e.g. WA Stone fruit industry opened up to eastern states imports after 'brown rot' outbreak in 2010, and industry is currently engaging loyalty campaign to WA consumers to maintain operations in a market with a glut in supply).

# Extracting maximum value from the biosecurity environment



## Models to grow the herd

- Irrespective of the implemented biosecurity controls, consideration must be given to the methods available to grow the herd and allow scale investment (in dairy and beef)
- This could be driven by optimising inorganic growth through government work to reduce the regulatory burden (e.g. Northern Quarantine zone) or investing in R&D to investigate routes to improving organic growth

## Marketing biosecurity differentiation

- If WA's biosecurity model is to remain significantly differentiated from other States, the State must consider how to market this advantage to extract a price premium and deliver commensurate value to the sector
- A quarantine certification and marketing effort (highlighting differentiators such as a BJD free zone) may allow the State to establish its agricultural brand as preferable to other Australian states



# Action: Cost benefit analysis of biosecurity measures and growth models

## Situation

- Western Australian agricultural producers face a set of biosecurity controls that are more rigorous than other Australian States
- It is not clear the extent to which the sector derives value from its biosecurity advantage
- Additional controls restrict beef and dairy players from importing livestock, limiting their ability to respond to investment opportunities

## Outcomes

- ✓ Optimisation of biosecurity controls
- ✓ Economic options for farmers to grow their animal asset base
- ✓ Extract a price premium from biosecurity advantage

## Description of action

The Government should consider a review of Western Australia's biosecurity controls to maximise value in the Agricultural sector:

- Understand and map the market value delivered from WA's existing biosecurity settings to inform government on whether existing settings should be changed. Considerations include:
  - Cost of implementing biosecurity settings (both direct government cost and opportunity cost to the sector)
  - Market value extracted against the counterfactual of removal of biosecurity settings (price premium & risk mitigation of major food sources)
  - Broader considerations on environment and public health
- Irrespective of the optimum suite of biosecurity controls, an analysis of options for growing the herd must be examined
- This includes examining current government agency costs for quarantine, and whether these can be reduced to incentives greater investment in herd growth in the sector
- A formal certification process and its marketing should be considered (under the cost benefit framework) to determine the value that can be extracted from current and future biosecurity controls. Additionally, where appropriate, the certification should ensure a regional/ international fit to guarantee consistency in standards between producers and consumers.

## Activities

- 1.) Cost Benefit analysis of specific biosecurity measures across different commodity classes
- 2.) Work with government to remove unnecessary regulations
- 3.) Identify options for growing the herd (beef and dairy) with biosecurity measures in place
- 4.) Investigate formal certification and marketing of WA agri products where biosecurity constraints add value



## Alignment with existing policy and strategies

- \$20 million under Royalties for Regions 'Seizing the Opportunity' to bolster biosecurity
- South West Regional Plan – Sectoral priority to improve biosecurity systems to protect fruit and cropping industries

## 4. Red Tape

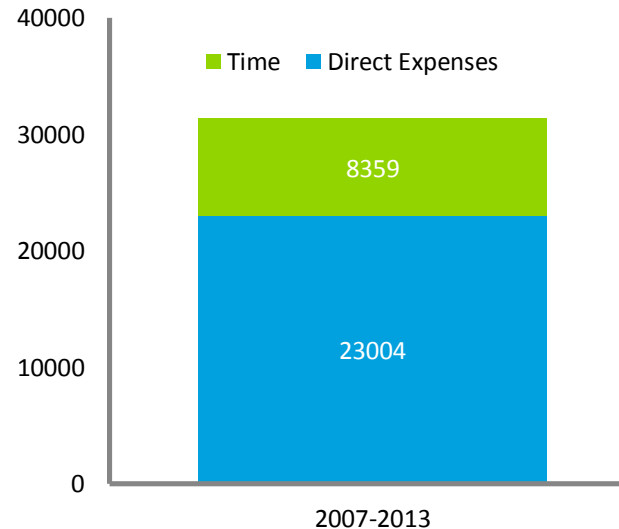


# The red tape burden on the agriculture sector is significant



- Regulations on agriculture are either designed for agriculture or to protect other parts of the economy or society from harmful effects of agriculture
- A report for the National Farmers Federation (NFF) shows a substantial red tape burden in both increased overhead costs and the time cost of compliance
- Anecdotal evidence from consultations reflected frustration over the regulatory burden facing producers in the South West adding to the cost of production or the flexibility of operations
- The Federal Government's Agricultural Competiveness Green paper also raises a number of regulatory issues
- Some regulation is necessary and, indeed, critical to support agricultural production and provide assurance to consumers in domestic and overseas markets
- However, unnecessary regulation adds to the cost of production
- A key recommendation of the NFF was to invest more in a detailed analysis of the cost of red tape to identify where specific regulatory burdens that add more costs and should be removed

**Snapshot of the redtape costs on farms in Australia**  
\$, annual



**\$31,364/farm**

Costs relating to regulatory red tape per annum

**20.6 days**

Time spent consumed in task associated with red tape per annum

Source: Holmes Sackett, 2013

## Issues identified by project consultation

- Fire safety regulations limit construction due to high costs of compliance
- Investment in new property requires dealing with a number of departments – difficult to react to markets
- Lack of coordination between government departments

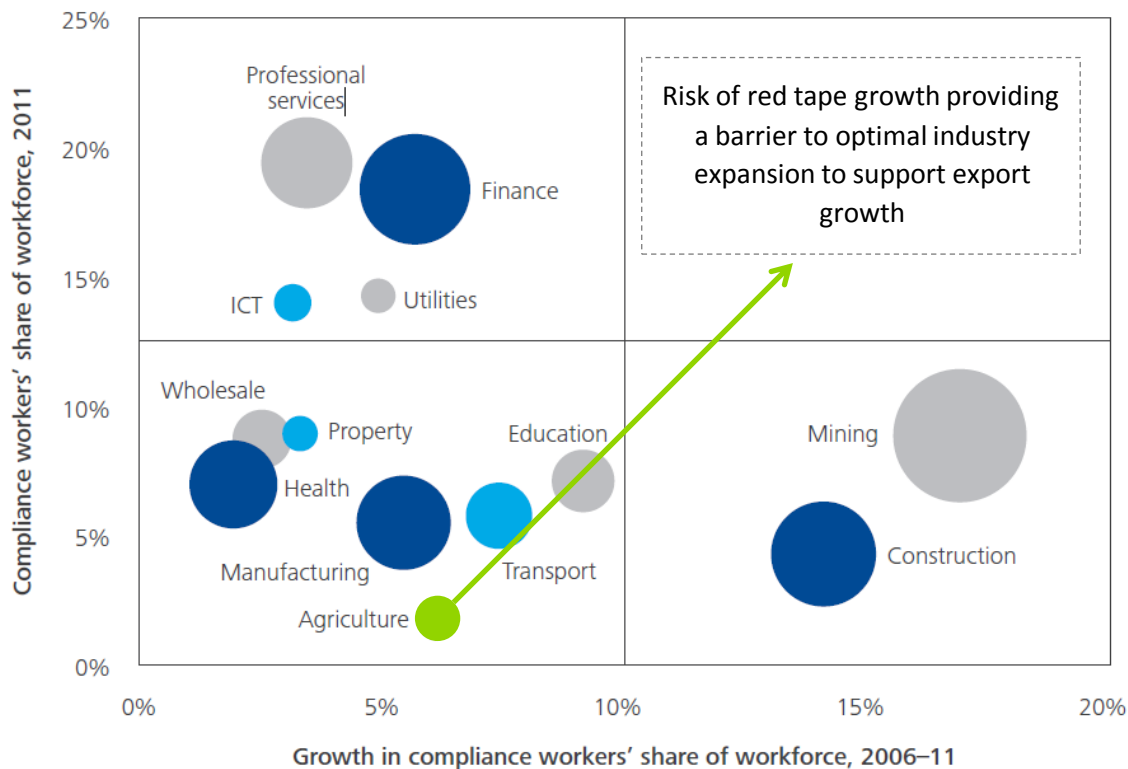
## Issues identified by the Agricultural Competiveness Green Paper

- Excessive work health & safety requirements
- Inconsistency in biosecurity regulations between Australian jurisdictions
- Excessive native vegetation laws
- Complex and long development application processes

# Moving forward optimising the compliance burden will be crucial to export growth



Share of compliance as a proportion of total workforce



Other sectors like the resources sector provide a case study in what not to do...

- Moving forward as the industry looks to grow into export markets the burden of compliance has the potential to explode
- The resources boom demonstrated a lack of preparation in 2005/06 when demand took off for mineral developments, infrastructure development and accommodation construction (land release, approvals, acquisitions, supporting infrastructure)
- The resources sector has been able to withstand increased red tape, because of the extraordinary prices it receives in export markets
- For the agricultural sectors, this could act as a barrier, and limit potential growth and expansion
- Export markets bring higher regulatory costs (certificates, quality assurance, licensing) that need to be addressed to remain competitive.

Source: Deloitte Building the Lucky Country #4 – Redtape Reduction

Note: This chart does not capture ‘hidden compliance’, which represents the extensive compliance task under taken by workers that are not classified under a compliance occupation.

# What can be done to improve the regulatory environment?



While recognising that a level of regulation is vital for the prosperity of the agricultural industry, there are two avenues to ensure that the agricultural industry is not overburdened by regulation...

## 1. Reduce unnecessary red tape and regulation

- Consultation has revealed that there is likely scope for reducing regulatory burden
- The full extent of regulatory processes should be documented, and assessed to determine the value it derives for industry
- Industry should then work with government to ensure that unnecessary red tape and regulation is removed

## 2. Streamline existing regulatory processes

- Even if regulation is necessary, the burden of compliance may be still be reduced
- 'One stop shops' implemented in other industries provide a case study of how the regulatory burden can be reduced by providing a single point of contact and administration for approvals



### Case Study 1: Rangelands Reform

The rangeland reforms program will look to amend the Western Australian Government's Land Administration Act 1997 to provide options for new forms of tenure, and new diversification permit provisions.

The legislative amendments will allow for multiple and varied use of the rangelands. Amending the regulations to remove unnecessary restrictions will provide current and future leaseholders with greater flexibility, security and incentives to invest.

Source: Department of Lands



### Case Study 2: Main Roads

In 2012 the State Government announced a 'new one stop shop' for heavy vehicle matters allowing transport operators to obtain permits for a single shift in one application with Main Roads. The 'one stop shop' provides the heavy vehicle industry with a centralised point of contact to process permit applications.

This bring significant benefits to the industry be ending the need for transport operators in order to obtain an over-size load permit, book a traffic escort and get a referral to the power utilities for power line clearance.

Source: Main Roads



# Action: Reducing unnecessary red tape and streamlining regulatory processes

## Situation

- Anecdotal evidence from consultations reflected frustration over the regulatory burden facing producers in the South West adding to the cost of production, undermining the flexibility of operations, reducing the ability to quickly adapt or respond to changing circumstances, or adding to the cost of establishing new enterprise
- Some regulation is necessary and, indeed, critical to support agricultural production and provide assurance to consumers in domestic and overseas markets
- However, unnecessary regulation adds to the cost of production and can prevent new enterprise due to creation of barriers to entry
- The key is identifying what regulations impose more costs than they provide in benefits, where regulations overlap, and how the overall suite of regulations could be streamlined.

## Outcomes

- ✓ Eliminate unnecessary regulations
- ✓ Streamline remaining regulatory processes

## Description of action

The DAFWA with the support of industry bodies, RDA South West and SWDC should:

- Consult with industry to understand the specific aspects regulatory burden affecting the food sector
- Systematically document the regulations that affect agriculture in the South West, from State or Local Government
- Assess the costs and benefits of identified regulations, and consider the optimum suite of regulations
- Remove, or change, those regulations where their costs outweigh their benefits, or where the benefits of regulation could be delivered in more cost effective way
- Develop a centralised coordination role to facilitate coordinated and appropriate administrative & compliance activities that are tailored for businesses targeting the export market. The office is not meant to replicate existing department accountability, but to streamline communications to remove duplication & unnecessary activities

## Activities

- 1.) Commission a red-tape study to systematically document the state and local regulations affecting agriculture 
- 2.) Assess the costs and benefits of regulations and make recommendations on removal or amendments to regulations 
- 3.) State and Local Government to address recommendations 
- 4.) Establish a centralised coordination role to facilitate new suite of administrative & compliance activities 

## Alignment with existing policy and strategies

- Commitment by the Federal Government to reduce the regulatory burden on business, individuals and community organisations by \$1 billion, including regulation in the agriculture sector
- Blueprint for Australian agriculture (2013-2010) – increasing competitiveness through optimising infrastructure and reducing red tape

# 5. Water Market



# Groundwater challenges – the pathway to scarcity

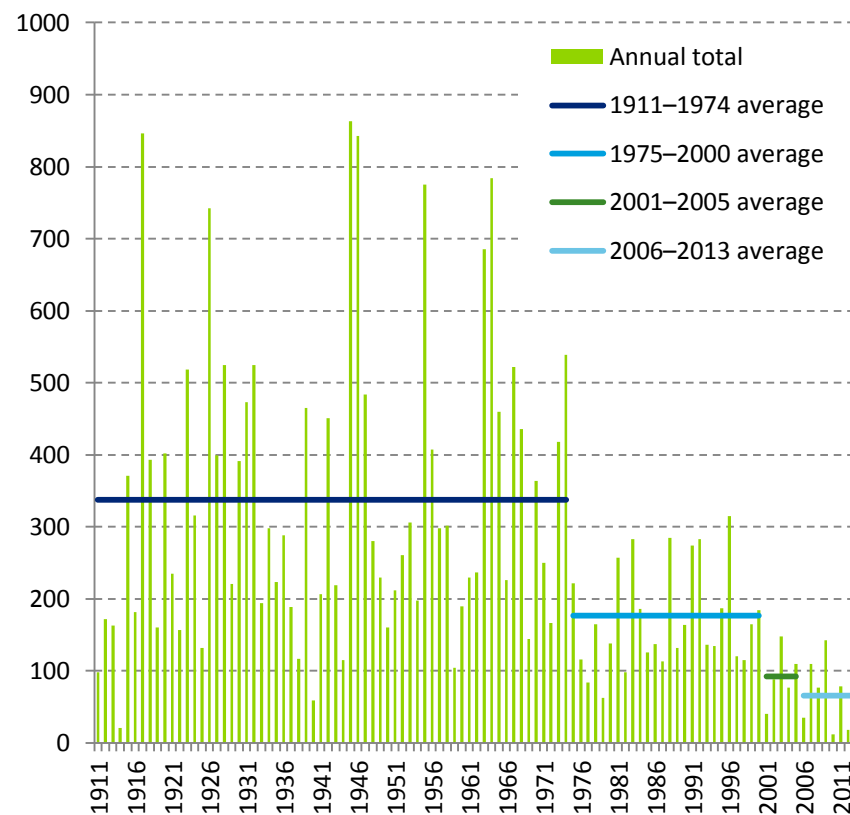
## Climate change has meant reduced rainfall across Western Australia

- There is an increasing reliance on groundwater resources as surface water availability is impacted by reduced rainfall and subsequently lower stream flows to Perth dams. The 2006-2013 average annual stream flow fell from the 2001-2005 average by nearly 30% to 66GL
- The reduced rainfall is also impacting the water recharge to the superficial and confined groundwater aquifers. Declining water recharge and increased abstraction are causing a significant depletion in WA groundwater resources
- Human-induced climate change is suggested to be accounting for approximately 50% of the observed decline in WA rainfall (Gardner 2014).

## This will impact the South West, and specifically the agricultural sector

- There is still some capacity to increase water use in South West WA, albeit increasingly limited. According to the Department of Water, the South West region of WA has already allocated 77% of available groundwater. An allocation level that is only exceeded by Perth and Great Southern with 85% and 97% allocations, respectively
- CSIRO estimate that by 2030, consumptive water demand in the region will increase by 35%, at a time when they expect water supply to fall
- Growth in the agriculture sector will require that the region does more with the water it has, especially for the sectors depending most heavily upon irrigation such as horticulture and dairy.

Stream flow to Perth dams, 1911 to 2013, GL



Source: Water Corporation (2014)



# The Water Market – Regulatory environment

## The current regulatory environment does not provide scope for market mechanisms

- The Rights in Water and Irrigation Act 1914 (RIWI Act) is the principal legislation governing groundwater management in WA
- Water allocation plans set the allocation limits for groundwater abstraction
- Excluding the costs of an applicant preparing its licence application and actually abstracting the water the groundwater is free in WA
- Given the individual nature of the licensing agreements any prospective changes to water volumes and readjusting any over-allocated water resources is administratively onerous
- Western Australian water rights are bundled with land – meaning that water rights cannot be held by those without a legal interest in land with the exception of a third party lease. Trade can only occur between those with a legal interest in land within the water management area. The reason for this is to avoid speculation in the water market.

## However there is an intention to move towards the framework established by the National Water Initiative

- The WA Department of Water released a position paper in September 2013, Securing Western Australia's water future. The position paper addressed reforming water resource management with the purpose of moving the State towards the national water framework
- In addition a commitment was made in 2006 – the Intergovernmental Agreement on a National Initiative - to shift to 'market mechanisms' and 'reduced barriers to trade water entitlements' (Gardner 2014)
- The key element of the proposed approach is to have water access entitlements that constitute a property right in a share of a defined consumptive pool. The consumptive pool is the aggregate amount of water that can be consumed within a particular water resource plan area, under the rules of the statutory water allocation plan.

## The proposed reform would enable water trading through the establishment of a consumptive pool

- The consumptive pool would allow ease in varying the consumable volume of water. The consumptive pool could be adjusted in line with revised sustainable yields and the volume allocation per entitlement changes accordingly
- Trading of entitlements in the consumptive pool would allow efficient allocation of the water resource
- Water rights would be unbundled from land enabling greater trade with third parties in the consumptive pools
- The distribution of unallocated water is another point of debate. Auctioning of water access entitlements is a trading mechanism that should be advocated given the proxy as a signal of water scarcity and promotion of more efficient water utilisation.



# Action: Improve the State's water market framework

## Situation

- Significant state-wide depletions in surface water and groundwater reserves
- Limited recent advances in water reform in WA
- Existing groundwater management framework has limited flexibility in changing the volume of water consumption to match the regional water availability. This would require amendments to every licence agreement in the State
- No current requirement that the final allocation limit be consistent with the sustainable yield
- As a scarce resource water needs to be allocated to the most efficient use

## Outcomes

- ✓ Greater ability to vary consumption between entitlement holders
- ✓ Simultaneously less onerous administration and increased reporting standards
- ✓ Variable conditions on consumption pushing greater efficiency in usage

## Description of action

Consistent with the proposals made in *Securing Western Australia's Water Future 2013*, the State Government should introduce the statutory water allocation plans to enable the development of a more market orientated trading mechanism.

After the development of the allocation plans, the Government needs to coordinate the distribution of tradeable water access entitlements (that constitute a property right in a share of a defined consumptive pool). For groundwater that is unallocated, the Government needs to introduce market-based auctioning mechanisms to ensure the true value of the resource is reflected in its allocation.

To enable greater trade, unbundling water rights from land is supported. Mitigation of heightened speculative activity to be addressed in revised legislation.

## Activities

- 1.) Introduce the statutory water allocation plans
- 2.) Administer the distribution of water access entitlements
- 3.) Introduce auctioning mechanisms for unallocated water



## Alignment with existing policy and strategies

- South West Regional Blueprint – Address water security
- \$40 million to implement a state-wide Water for Food initiative under the Royalties for Regions 'Seizing the Opportunity' initiative
- Securing WA's water future (position paper) – enable an active water market



# Appendix A

## List of relevant policy and strategy

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
<b>National policy and strategy</b>											
1.1	Agricultural competitiveness white paper	2014	Australian Government	Coalition foundational policy to enhance food security, farmer profitability and the economic contribution of the agricultural sector	All	<ul style="list-style-type: none"> <li>- 75% increase in the demand for food in the first half on the century, 3/4's of which will come from Asia</li> <li>- New food technologies</li> <li>- Digital economy</li> </ul>	<ul style="list-style-type: none"> <li>-Increasing competition from overseas suppliers</li> <li>- Consumer attitudes to food technologies</li> <li>- Globalisation of supply chains</li> <li>- Competition for prime agricultural land</li> <li>- Increasing frequency of adverse weather events.</li> </ul>	<ul style="list-style-type: none"> <li>- Efficiency and competitiveness</li> <li>- Effectiveness of regulation and government incentives</li> <li>- Taking advantage of export opportunities and new market access</li> <li>- Food Security</li> <li>- Farm gate returns</li> <li>- Drought management</li> <li>- Access to finance and debt management</li> <li>- Attracting investment</li> </ul>	Foundational policy	White paper to be released towards the end of 2014	High
1.2	National Food Plan White Paper	2013	Australian Government	Previous Labour Government foundational policy. Outlines goals for next 12 years - growing exports, improving productivity, improving food security and sustainability	All	<ul style="list-style-type: none"> <li>- Increased Asian demand</li> </ul>	<ul style="list-style-type: none"> <li>-Climate change</li> <li>- Population growth</li> <li>- Changing economic conditions</li> <li>- Competition for resources</li> <li>- Health issues</li> </ul>	<ul style="list-style-type: none"> <li>- Reduce trade barriers</li> <li>- Investing in innovation</li> <li>- Investment in infrastructure</li> <li>- Investing in VET</li> <li>- Agricultural sustainability</li> <li>- Water for future</li> </ul>	Foundational policy – outcome of the Asian Century White Paper	Implementation mode until 2025	High
1.3	Australia in the Asian Century - White Paper	2012	Australian Government	Roadmap for the whole of Australia in next phase of Asian engagement	All	<ul style="list-style-type: none"> <li>Increased Asian demand</li> <li>- Changing consumer preferences</li> <li>- Increased demand for food (all sectors)</li> </ul>		<ul style="list-style-type: none"> <li>- Reduce trade barriers</li> <li>- Build partnerships between governments, industry and community</li> <li>- Innovation</li> <li>- Develop Asia-relevant capabilities through education and training</li> </ul>	Foundational policy	Implementation mode until 2025.	High

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
1.4	National Infrastructure Plan	2013	Infrastructure Australia	50 year infrastructure plan for Australia	All		<ul style="list-style-type: none"> <li>- Freight demand expected to double over next 20 years</li> <li>- Need for sustainable water supply</li> </ul>	<ul style="list-style-type: none"> <li>- Regional infrastructure plans</li> <li>- Privatised freight, energy and water assets</li> <li>- Increase alternative water sources</li> </ul>	Aligned with Asian Century	Plan details until 2063	Low
1.5	Blueprint for Australian Agriculture 2013-2020	2013	National Farmer's Federation	Sector-wide effort to set a sustainable future path for Australian agriculture and its supply chain - to 2020 and to 2050	All	<ul style="list-style-type: none"> <li>- Co-ordinated R&amp;D</li> <li>- Increased investment</li> <li>- Free trade agreements</li> </ul>	<ul style="list-style-type: none"> <li>- Labour shortages in rural areas</li> <li>- Community perceptions of agriculture (i.e. animal welfare - GM)</li> <li>- Climate change</li> </ul>	<ul style="list-style-type: none"> <li>- Numerous strategies (refer document)</li> <li>- Innovation</li> <li>- R&amp;D</li> <li>- Competitiveness</li> <li>- Trade and market access</li> <li>- People</li> <li>- Agriculture within society</li> <li>- Natural resources</li> </ul>	Aligned with general workforce strategies and positioning Australia to take advantage of coming opportunities	Current	High
1.6	FOODmap: An analysis of the Australian food supply chain. Commonwealth of Australia, Canberra, ACT.	2012	Australian Government	Analysis of the entire food chain to identify scope for improved food industry performance	All	<ul style="list-style-type: none"> <li>- Technological opportunities for retail</li> <li>- Servicing demand for ready to eat meals</li> <li>- capitalising on demand for local products and providers</li> <li>- health food options for the aged</li> </ul>	<ul style="list-style-type: none"> <li>- Australian food market is highly competitive</li> <li>- Retail market concentrated</li> <li>- consumers show more caution post 2008</li> </ul>	Changing consumer tastes and technology are providing new opportunities for food businesses to capitalise on if they tailor their products to meet this demand	This report builds on 2007's FOODmap: A comparative analysis of Australian food distribution channels	Published report	Low/med focuses on local market

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
1.7	Dairy Australia Strategic Plan 2013/14 to 2015/16	2013	Dairy Australia	Outlines the strategy for investment over the three year period	Dairy	<ul style="list-style-type: none"> <li>-Genetic industry</li> <li>-Innovation in processing</li> <li>-Asian export markets (inc. Bilateral trade agreements)</li> <li>-Value added products</li> </ul>	<ul style="list-style-type: none"> <li>-Price and market volatility</li> <li>-Retailer strategies (i.e. Coles &amp; Woolworth duopoly)</li> <li>-Feed base costs</li> <li>-Natural resource management</li> </ul>	<ul style="list-style-type: none"> <li>-Improved farm profitability</li> <li>-Attract and invest in workforce</li> <li>-Exceed community and consumer expectations</li> <li>-Competitive in markets of choice</li> </ul>	<ul style="list-style-type: none"> <li>-Australia in the Asian Century</li> <li>-National Food Plan</li> <li>-Rural research and development policy statement</li> <li>-Dairy Moving Forward</li> </ul>	Current	High
1.8	Horticulture Australia Limited Strategic Plan 2012-2015	2012	Horticulture Australia Limited	3 year strategic plan for HAL (business focussed) to prioritise R&D	Hort	<ul style="list-style-type: none"> <li>- R&amp;D</li> <li>- Increasing demand for food</li> </ul>	<ul style="list-style-type: none"> <li>- Climate change</li> <li>- Water use</li> <li>- Globalisation (reduced trade barriers - less protection)</li> <li>- Biosecurity</li> </ul>	<ul style="list-style-type: none"> <li>- Leverage technologies</li> <li>- Address labour costs</li> <li>- Other strategies to deliver new information</li> <li>- Build consumer demand</li> <li>- Enhance industry skills and capability and deliver operational excellence</li> </ul>	Strategic plan lines up with industry strategic investment plans and the horticulture transformational investment fund	Current	High
1.9	Meat Industry Strategic Plan 2010-2015	2010	Red Meat Advisory Committee (RMAC)	Strategic plan for Red-meat from 2010-2015	Beef		<ul style="list-style-type: none"> <li>- Community perceptions of industry</li> <li>- Climate change</li> </ul>	<ul style="list-style-type: none"> <li>- Promote environmental sustainability</li> <li>- Increase market access</li> <li>- Promote single co-ordinated voice for industry</li> <li>- Develop and retain skilled people</li> <li>- Innovation</li> <li>- Marketing and promotion</li> <li>- Foster economic reform and infrastructure (Specific policies in document i.e. establish baseline data)</li> </ul>	Aligned to Meat and Livestock Strategic plan	Current	High

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
1.10	Meat & Livestock Australia Strategic Plan 2010-2015	2010	Meat and Livestock Australia	Strategic plan for meat and livestock from 2010-2015	Beef	- Emerging markets of China, Russia and the Middle East - Elevating investment in Indonesia for the livestock and boxed beef trades	- Barriers to trade (including non-tariff) - Climate change and pasture supply	Same as above	Aligned to RMAC plan	Current	High
1.11	Vege vision 2020	2006	Australian Vegetable Industry Development Group	A plan to double the 2006 value of fresh, processed and packaged vegetables in real terms by stimulating and meeting consumer preference for Australian products in domestic and global markets	Hort	-Growing demand based on demographic and lifestyle preferences -Consumer demand for innovative food products	-Cost/price pressures on all sectors of supply chain	- Delivering to changing consumer preferences and increasing demand -Market recognition for Australian quality, safety, reliably supply and innovation in products and services -Internationally competitive Australian vegetable supply chains -Advanced industry data and information systems to meet future needs -Visionary leadership and change management	Department of Agriculture, Fisheries & Forestry	Current	High
1.12	Australian Fresh Potato Industry Strategic Plan 2006-2011	2006	HAL & Australian Fresh Potato Industry	Guide the investment of industry levy funds	Hort	-New technologies -International consumption trends -Alignments with global supply chains	-Poor health image of potatoes -Fragmented industry -Workforce demographic - Bio security	-Improve consumer demand for Australian fresh potatoes -Increase industry competitiveness -Improve industry communication and information systems -Improve leadership and management capability		Not Current	Medium - not current

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
1.13	Australian Processed Potato Industry Strategic Plan 2006-2011	2006	HAL & Australian Fresh Potato Industry	Guide the investment of industry levy funds	Hort	-New technologies -International consumption trends -Alignments with global supply chains	-Poor health image of potatoes -Fragmented industry -Workforce demographic - Bio security	-Improve consumer demand for Australian fresh potatoes -Increase industry competitiveness -Improve industry communication and information systems -Improve leadership and management capability		Not Current	Medium - not current
1.14	Australian Onion Industry Strategic Investment Plan 2012-2017	2012	HAL & Onions Australia	Strategic plan to provide direction for the key outcomes required from investment over next 5 years	Hort	-Scope to differentiate varieties and price differentiate -Relationship with retail sector	-Biosecurity protocols -Access to direct freight routes	-Meet consumer expectations (efficiency, supply chain practices, information systems and risk management) - Increase grower profitability (research into marketing strategies and product development, drive growth in target domestic and export markets) -Ensure capability for industry development (appropriate leadership, improved industry communication, resources management)		Current	High (onion industry large in South West)
1.15	ADF Strategic Plan 2012-2017	2012	Australian Dairy Farmers Limited (ADF)	Forward looking strategic plan	Dairy	- Sustainable farming - Investment in dairy - Building human capacity	NA	- Drive sustainable farm profitability - Secure market access and maximise value chain returns - Develop people and build human capacity - Effective communication and engagement - Deliver member value and organisational capacity	Aligned to general government policies	Current	Medium - not overly specific

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
1.16	Beef- 2015 and beyond	2012	Cattle Council of Australia	National Strategies for Australia's Grass-fed Beef Sector  Provides a framework for the priorities of the beef sector	Beef	-Improved export markets -Better market access -Improved public perceptions		-Communication and engagement (mechanisms to allow levy payers to participate in policy development, create communications plan) -Leadership and capacity (build policy capacity and develop advocacy strategy) -Knowledge and innovation (advocacy for government support, framework for R&D priorities, bio-security awareness) -Best management practice (baseline information on industry performance and perception) -Market access and development (advance market share in established markets, stimulate domestic demand, identify new markets)		Current	High
1.17	Avocado Industry Strategic Plan 2011-2015	2011	Horticulture Australia Limited	Strategic plan to guide the investment of industry and government over five years by defining the key outcomes required to advance the industry	Hort	-Brand recognition of health benefits -Productivity improvements	-Fruit quality -Imported processed products -Declining marketing channels	-Build a sustainable and competitive supply (Efficiency of production, quality of fruit, maintain supply/demand balance) -Increase demand (Exploit new market opportunities, increase consumer confidence, market development and promotion) -Organisation, resourcing and management (Industry leadership, improve communication, ensure resourcing / risk management industry wide)	N/A	Current	High (avocado industry large in South West)

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
1.18	Australian vegetable industry strategic investment plan 2012-17	2012	AusVeg / Horticulture Australia Limited	Sets out a realisable 10 year vision for the Australian vegetable industry	Hort		-Increasing input costs -Access to water -Carbon Tax -Workforce issues -Globalisation (threat of imports)	-Consumer alignment (Consumer satisfaction, product development, market intelligence, consumer education) -Market & value chain development (R&D to develop supply chain, competitive analysis, export opportunities, defend against imports) -Farm productivity, resource use & management (Adoption of technologies, mechanisation, post-harvest product management, climate, business management, crop protection, water & soil)	Vegvision2020	Current	High
1.19	LiveCorp Strategic Plan 2013-15	2013	LiveCorp	Strategic plan for Livecorp which is the not-for-profit service provider for Australian livestock exporters	Beef	-Increasing economic growth in key export markets -Increasing demand for protein in key export markets -Continued strength of Aus as world's best practice exporter	-Volatile regulatory environment -Recent disrupted trade to Indonesia -High Australian dollar -Market access issues	-Improving animal health and welfare outcomes across the supply chain -Improving supply chain efficiency and regulatory performance -Enhancing market access conditions -Enhancing communication between industry and government	N/A	Current	Medium - slightly corporate focused



	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
1.20	Apple and Pear Strategic Investment Plan 2010-15	2010	Apple and Pear Australia / Horticulture Australia Limited	R&D Investment Priority Plan for Australia's Apple and Pear industry	Hort		<ul style="list-style-type: none"> <li>-Consumer demand for Australian apple and pears is in decline</li> <li>-Competition has intensified</li> <li>-Imported apple juice limits the local market for lower quality fruit</li> <li>-Rising costs</li> <li>-Climate change and environment issues</li> </ul>	<ul style="list-style-type: none"> <li>-Improve consistency of product</li> <li>-Coordinate industry promotion and marketing</li> <li>-Define overseas export market opportunities, develop collaborative strategy and resolve market access issues</li> <li>-Enhance productivity and facilitate variety transition to match market demand</li> <li>-Invest in inter/intra industry and community relationships</li> <li>-Invest in skills across the supply chain</li> </ul>	Commonwealth Rural R&D, and HAL's Strategic Plan	Current	High (apple industry large in south west)

#### State Policy and Strategy

2.1	Seizing the Opportunity		State Government	The National WA's vision for agriculture, including key areas and commitments in those areas	All	Research and Development, Land and Water, Getting produce to market, investment and trade, skills		Commitments worth over \$300m over four years beginning 2013-14 to assist WA agriculture capture market opportunities in Asia	Budget commitment	Current	High
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	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
2.2	Agrifood 2025+		DAFWA	An initiative which aims to double the real-term value of sales from WA's agrifood sector between 2013 and 2025	All	<ul style="list-style-type: none"> <li>-Increased demand from Asia</li> <li>- Niche market opportunities</li> <li>- Technology improvements and increasing yield</li> <li>- Integrated supply chains</li> </ul>		<ul style="list-style-type: none"> <li>- The 'Farm Tech WAY': drive down costs by automating farms and utilising digital marketing and logistics technology</li> <li>- The 'Gourmet WAY': develop a reputation for high quality niche products and build market through food tourism</li> <li>- The 'Global Supermarket WAY': Focus on providing safe/quality food into Asia where food safety is an issue, develop partnerships with Asian businesses</li> </ul> <p>Workshop held in May 2013 - Need to:</p> <ul style="list-style-type: none"> <li>- increase WA 'brand' awareness</li> <li>- develop appropriate business models</li> <li>- focus on larger and more demanding markets</li> <li>- improve efficiency of supply chains</li> <li>- increase business skills in sector</li> <li>- build strategic links (e.g. with foreign supermarkets needing safe food)</li> <li>- build a targeted innovation system and implement digital technologies</li> </ul>	Closely linked to Seizing the Opportunity Program	Current	High

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
2.3	Royalties for Regions - Water and NRM initiative	2012	Department of Water & DAFWA	<p>Since 2008 25% of the State's mining and petroleum royalties are invested in regional areas</p> <p>In 2012, \$78.205 million of Royalties for Regions funding over four years was allocated to the Regional Development - Water and Natural Resource Management Initiative.</p>	All	<p>Note that only \$2.1 million of South West WA Royalties went to Water and NRM initiatives:</p> <ul style="list-style-type: none"> <li>- Groundwater supply options to support regional development in SW WA \$1.4m</li> <li>- Intensive Horticulture Water and Energy Efficiency Project \$704,000</li> <li>- Supertowns development planning and project funds (\$14.2m)</li> <li>- Collie Water Plan (\$4.5m)</li> </ul>		<p>General:</p> <ul style="list-style-type: none"> <li>- Addressing infrastructure shortfalls</li> <li>- Water and NRM initiative</li> <li>- Regional water availability, planning and investigation</li> <li>- Regional Economic Development – Water Opportunities</li> <li>- Regional Natural Resource Management</li> </ul> <p>(Gascoyne Food Bowl and Flood Mitigation strategy)</p>	Funding program	Current	High
2.4	Fresh Thinking 2013 to 2050	2013	DAFWA	Provides current and forecast production for 9 fresh fruit groups and 14 vegetables, the land and water resources required to meet growing demand and sectoral competitiveness	Hort	<ul style="list-style-type: none"> <li>- Demand for WA fresh fruit and vegetables expected to double as WA population doubles</li> </ul>	<ul style="list-style-type: none"> <li>- Suggests that water availability will be a major constraint to SW horticulture industries before 2025</li> <li>- High Australian dollar</li> <li>- High labour and production costs</li> </ul>	<p>7 key strategies suggested including:</p> <ul style="list-style-type: none"> <li>- Policy to drive innovation in water supply</li> <li>- Technical scientific studies</li> <li>- Identify and prototype transformational technology</li> <li>- Identify industry competitiveness factors</li> <li>- Industry development activities</li> <li>- Develop in-market partnerships with export customers</li> <li>- Build industry capacity</li> </ul>		Current	High

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
2.5	Securing WA's water future – Position Paper	2013	Department of Water	Plan to simplify and update legislation governing allocation planning, licensing, and management of water resources	All	- Agricultural growth enabler	- State-wide water use up almost 400% in the past 30 years - Long term reduction in rainfall has decreased water availability	- 21st century water solutions - clarifying and updating out-dated legislation - Transparency around water management - Enable an active water market - simplify licencing procedures	Council of Australian Governments' National Water Initiative	Position paper, submissions are being assessed before final paper is released	High
2.6	Business case proposal for 'Asian Market Success', under the seizing the opportunity initiative, incorporating: Asia Market Development (\$7m) and Brand WA (\$6m)	2013	DRD	Asian Market Success comprises between \$50m-100m of funding Project has a Business to Business (B2B) focus, working with in-market partners in Asia	All	Economic rise and population growth in China	Need a better knowledge of Asian business  Need to develop competitive advantages	- Start by branding WA agrifood sector businesses to attract Asian market partners - Target audiences for attracting business partners; growth businesses in Asia; Equity capital investors; and Talented people seeking world-class careers  Target is to progress six major business opportunities through to phase 4	Seizing the opportunity Royalties for Regions Brand WA Asian Markets R&D	Current	Very High

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
2.7	Beef Industry Change Program (website summary)	2013	DAFWA in collaboration with WA Beef council and Meat and Livestock Australia	The program aims to support and develop beef industry supply chains for new markets.		<ul style="list-style-type: none"> <li>-Brahman commercial breeding heifer exports to Indonesia</li> <li>-live exports to Association of South-East Asia Nation (ASEAN) countries, such as Vietnam</li> <li>-live exports of feeder and slaughter cattle to China</li> <li>-boxed beef exports to China</li> <li>-off-shore processing of slaughter-ready live exports.</li> </ul>	None listed in the website summary	<ul style="list-style-type: none"> <li>- identifying the capacity, capability and limitations of the WA beef industry</li> <li>- developing innovative solutions to overcome barriers to change and improved business models</li> <li>- building relationships, communication and transparency between all sectors of the supply chain</li> <li>- develop pilot demonstrations and trials</li> <li>- develop market intelligence and consumer insight capability to improve decision-making.</li> </ul>		Current	High
2.8	Fruit West Strategic Plan 2010-2015	2010	Fruit West	Strategic plan to increase profit for WAn fruit growers	Hort			<ul style="list-style-type: none"> <li>- Building consumer demand for WA fruit through market development, promotion and quality control</li> <li>-Grower empowerment through information</li> <li>-Grower competitive in export markets, identifying niche opportunities, and ensure orchard profitability</li> <li>-Unified horticultural representation</li> </ul>			Low- brief and limited document
2.9	Western Dairy Strategic Plan 2014-2017	2014	Western Dairy & Dairy Australia	Strategic Plan for effective research, extension and industry development	Dairy	<ul style="list-style-type: none"> <li>- Growth in export markets</li> <li>- Stable processing sector</li> <li>- Processing capacity is underutilised</li> <li>- Increased importance for quality business and HR management</li> </ul>	<ul style="list-style-type: none"> <li>- Benefits/threats of outside investment</li> <li>- Industry volatility</li> <li>- Limited capacity for product spread</li> <li>- Environmental sustainability</li> </ul>	<ul style="list-style-type: none"> <li>- Business Management</li> <li>- Human Resources</li> <li>- Feed Base</li> <li>- Natural Resource Management</li> <li>- Industry Image</li> <li>- Western Dairy</li> </ul>			High

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
<b>Regional Strategies (South West)</b>											
3.1	South West Regional Blueprint	2014	South West Development Commission	A strategic paper, setting the agenda for economic and social development of the region.		<ul style="list-style-type: none"> <li>- Asian demand (population growth, changing consumption patterns)</li> <li>- Counter seasonal differences</li> <li>- Underutilised abattoir capacity</li> <li>- New regional saleyards</li> <li>- Increasing prices from food distribution chains and growers</li> <li>- Carcass and boxed meat products (as point of origin marketing - can be certified)</li> </ul>	<ul style="list-style-type: none"> <li>- Access to investment capital</li> <li>- Infrastructure</li> <li>- Water security</li> <li>- Affordable housing</li> <li>- Key social indicator deficits (e.g. health)</li> <li>- Lack of FTAs</li> <li>- O/S regulatory requirements (difficulty obtaining licences)</li> </ul>	<ul style="list-style-type: none"> <li>- Asia capability</li> <li>- Address water security (Expand irrigation for food production)</li> <li>- Bunbury port to accommodate food grade cargo</li> <li>- Better supply chain logistics are capable of supporting growth (road, rail, air freight)</li> <li>- Digital (broadband and mobile)</li> <li>- Establish market and brand awareness in Asia (and other pages 73-75)</li> <li>- Facilitate structural change</li> <li>- Encourage value adding (food processing)</li> <li>- Develop new markets</li> </ul>	Aligned with national and state policy agenda	Awaiting final approval for release.	Very High
3.2	South West Regional Plan	2012-13	Regional Development Australia - South West	A snapshot of the SW identifying drivers, opportunities, gaps and needs		Recognised branding, value adding	<ul style="list-style-type: none"> <li>- Water</li> <li>- Land use</li> <li>- Ageing population</li> <li>- Supermarket duopoly</li> </ul>	<ul style="list-style-type: none"> <li>- Water resource management</li> <li>- Land use planning</li> <li>- Biosecurity</li> <li>- Introduction of more R&amp;D programs</li> </ul>			Very High
3.3	South West Regional water plan 2010-2030 - strategic directions and action	2010	Department of Water	This South West regional water plan (the Plan) provides a strategic vision and approach to guide the sustainable management of the region's water resources.	All		Variety of stakeholders. Need to protect the environment and drinking water quality whilst allowing water for industrial uses	7 key strategic themes including: <ul style="list-style-type: none"> <li>- understand water resources</li> <li>- enhance water security for both consumptive and environment</li> <li>- manage health and values</li> <li>- water sensitive development</li> <li>- integrated water services</li> <li>- water efficiency</li> <li>- Community engagement</li> </ul>			

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
3.4	Roads to Export - Greater Bunbury Infrastructure Plan	2010	South West Development Commission	Offers a case for investment to improve SW transport infrastructure	All	<ul style="list-style-type: none"> <li>-Resource sector strength</li> <li>- Large expansion of goods moving out of SW WA as part of the strategies to take advantage of the Asian food boom</li> </ul>	<ul style="list-style-type: none"> <li>-Growing labour force</li> <li>-Transport infrastructure currently operating near capacity</li> <li>-Underfunded components</li> <li>- The different elements of the required upgrades are interlinked meaning that one cannot be left out without detracting from the others</li> <li>- Long-time lags in infrastructure investment</li> </ul>	<ul style="list-style-type: none"> <li>-Bunbury Port transport linkages (including berth development, river diversion and new road and rail connections)</li> <li>- Rail Network (port access, upgrade congested rail, facilitate strategic industrial areas)</li> <li>-Road network (port access, facilitate strategic industrial areas, improve travel time and improve safety)</li> <li>-Land for industry</li> <li>- Develop container handling facility at Bunbury port</li> </ul>		Current	High

	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
3.5	South West workforce development plan 2013-2016	2012	Department of Training and Workforce Development	A development plan to build, attract and retain a skilled workforce to meet the economic needs of the South West region.	All	<ul style="list-style-type: none"> <li>-Major new investment projects offer employment growth</li> <li>-Utilise older workforce effectively</li> <li>-Increased international integration of South West industry sectors can lead to adoption of global practices</li> <li>- SW WA as an alternative base to Perth for FIFO workers in the mining sector in Northern WA</li> <li>- There is lots of regional development taking place which can be leveraged off in attracting workforce participants</li> <li>- Ability to partner with training organisations to provide skills to match opportunities in the SW</li> <li>- Availability of WA govt regional development and food strategy funding</li> </ul>	<ul style="list-style-type: none"> <li>-Risk of decrease in global demand for resources</li> <li>-Ageing workforce</li> <li>-Lack of mentoring and formal career development</li> <li>- Labour demand is affected by fluctuations in regional economic activity, accessibility of training, technological changes, market access, government incentives</li> <li>- Labour supply is affected by working population demographics, participation rates, wages, non-wage benefits and flexibility</li> </ul>	<ul style="list-style-type: none"> <li>-Provide leadership in increasing workforce participation</li> <li>-Provide incentives for workforce participation</li> <li>-Facilitate remove of barriers to workforce participation</li> <li>-Implement skilled migration strategy</li> <li>-Flexible and inclusive work practices</li> <li>-Build diverse and vibrant communities</li> <li>-Increased participation in education and training</li> <li>-Increased skills development in workplace</li> <li>-Enhance flexibility, and capability of education and training system</li> <li>-Development an information framework</li> <li>- Develop a workforce development planning and accountability framework for WA</li> </ul>		Current	High



	Document	Year	Author	Description	Sector	Opportunities	Challenges	Key strategic themes	Alignment to policy	Status	Relevance
3.6	South West Fresh Food Study	2010	Department of Agriculture and Food	Study highlighting population growth as key demand driver and discusses resource constraints especially water and planning issues	All	- Population boom (doubling by 2050) increasing demand	- Food production needs higher profile in planning policy - Regulatory environment needs to improve - Water efficiency and new sources - Better understanding of current and future drivers for competitiveness - Better matching of land and water resource data - Productive land lost to subdivision	- Demand projections - Resource requirements - Water is main resource issue - Declining small farms / Increased large farms	Study	n/a	High

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**Play to win-think globally** – winning is our stated objective. It is also our state of mind.

**Talk straight** – when we talk, it’s open, regular, honest, constructive two-way communication between our people and our clients.

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- Gartner named Deloitte a global leader in Oracle Applications Implementation Services in their Magic Quadrant for Oracle Applications Implementation Services, Worldwide, 2013.
- Deloitte was named the global leader in HR Transformation Consulting in the Kennedy’s HR Transformation Consulting Market report.
- Deloitte named once again the leader in CRM Service Providers worldwide by Gartner in their report titled Magic Quadrant for CRM Service Providers, Worldwide 2013.
- Kennedy named Deloitte a global leader in Leadership Development Consulting services.
- Kennedy Consulting named Deloitte the global leader in cards and payments consulting in the Banking sector in its recently published report: “Consulting to the Banking Sector: Cards & Payments 2013”.
- Deloitte ranked #1 globally in forensics and dispute advisory based on revenue in the 2013 Kennedy Forensics and Dispute Advisory Services report.
- Kennedy Consulting Research & Advisory named Deloitte a global leader in Cyber Security Consulting in their report entitled, Cyber Security Consulting 2013.

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