A summary of Western Australian Arable Crops Industry - Overview for Potential Investors and Other Stakeholders available at agric.wa.gov.au/WAagrifood-industryguides
The largest farmer, the largest farmland owner, the largest investor, the largest employer and the largest agrifood research funder in Western Australia (WA) is the government.

The second largest investor in the WA agrifood system is the **11,177 farmers**, including the **4,543 farmers growing arable crops**.

The third largest investor in the WA agrifood system are the private enterprises that use, process, package, sell, export, and retail its raw material ingredients.

Aside from the primary audience for this research being investors and government, other key stakeholders include scientists and research institutes, journalists, industry bodies and many others.
GROWING DEMAND FROM ASIA AND THE MIDDLE EAST

These include; Asia, Middle East and Sub Saharan Africa

IMPORTS AS A % OF TOTAL WHEAT SUPPLY

CHINA 4%
JAPAN 88%
TAIWAN 99%
SOUTH KOREA 100%

TOTAL ARABLE CROPS IMPORT VOLUME (T; M)

These include; Asia, Middle East and Sub Saharan Africa
WESTERN AUSTRALIA CAN PRODUCE MORE

Western Australia can demonstrate it is free from certain exotic pests and has nil tolerance of live insects in export, enabling strong market access for grains. Grain is produced in one of the cleanest environments in the world making us the leader in delivering a clean, bright, dry and food-safe product.

RESOURCES
Huge land area (the size of Western Europe)
Only 3% of land area currently farmed in crops
Small local population to feed (2.6m people)
Readily available farming inputs (e.g. fertiliser)

SKILLS AND SYSTEMS
Educated population
Modern farming systems
High productivity
Deep pool of capacity
Well organised industry

REPUTATION
“Brand Australia” recognised across key markets
Lack of many key plant diseases
Strong biosecurity
High levels of food safety
Modern handling & processing facilities

Efficient supply chains with quality control and assurance systems at all stages
- Wheat Variety Master List
- Barley Australia accreditation process
- Grower stewardship program
- Grain Trade Australia trading standards and Codes of Practice
- Bulk handling companies’ quality control programmes

Source: AEGIC
GLOBAL TRADERS
NEED A POSITION
IN WESTERN AUSTRALIA
TO HELP MANAGE RISK AND SECURE SUPPLY

DIVERSITY
"We are actively seeking to diversify our footprint and looking at new places to originate our grain. That’s why we are in Western Australia."
DIRECTOR, GRAIN MARKETER, LARGE

CONSISTENT QUALITY
"Western Australia is a reliable supplier when compared with the rest of Australia. We can produce more consistent volume from year to year and focus more on exports."
EXECUTIVE, INDUSTRY BODY

INNOVATION
"Our growers are efficient and better innovators. For instance: we use low inputs, we are large scale, we have efficient use of moisture and we display tactical decision making."
PROFESSOR, RESEARCH INSTITUTION
WHY WESTERN AUSTRALIA?
ASIA ARABLE CROP MARKET GROWTH

Asia now accounts for almost two thirds of the global arable crop products trade, with **many markets growing at double digit rates**; growth of US $123B in global imports in the last decade.

Regional arable crop products import value (US $B; 2005 - 2015)

- **EAST ASIA**
  - 12% 10Y CAGR

- **SOUTH ASIA**
  - 15% 10Y CAGR

- **SOUTH EAST ASIA**
  - 12% 10Y CAGR

Source: United Nations; Comtrade; Coriolis Analysis
Western Australia is the closest, most accessible broad-acre, rangelands and Mediterranean climate zone to Asia; it is in the same time zone as Beijing, Manila, Hong Kong and Kuala Lumpur.

You see investors looking to invest in Western Australia, and across East; companies want a global footprint.

GENERAL MANAGER, GRAIN EXPORTER, MEDIUM

Shipping times and time zones from Perth

Western Australia is the closest, most accessible broad-acre, rangelands and Mediterranean climate zone to Asia; it is in the same time zone as Beijing, Manila, Hong Kong and Kuala Lumpur.
“Biggest opportunity for oats in the next few years is the reduction of tariffs in particular in China and India. Raw has no tariffs but processed oats does. China tariffs are starting to reduce.”

MANAGING DIRECTOR, GRAIN PROCESSOR, MEDIUM
Western Australia is the largest barley producer in the Southern Hemisphere. Macro drivers for the WA barley industry present a solid growth environment going forward, with area, yields and production all growing long term. Western Australia exported A$2.4b in wheat (YE Mar-17), representing 45% of total Australian wheat exports.

Western Australia is the second largest wheat producing region in the Southern Hemisphere. Macro drivers for the WA wheat industry present a solid growth environment going forward, with area, yields and production all growing long term. Western Australia exported A$2.4b in wheat (YE Mar-17), representing 45% of total Australian wheat exports.

Western Australia is the largest canola producer in the Southern Hemisphere. Macro drivers for the WA canola industry support a robust growth environment going forward, with growing area, growing yields and growing production. Western Australia exported A$1.3b worth of canola (YE Mar-17), representing more than two-thirds of the Australian total, and exports are growing strongly. Due to their high quality, canola exports go predominantly to Europe.

Western Australia has growing production and exports of hay and prepared animal feeds. Western Australia exported A$220m worth of animal feeds (YE Mar-17), representing 20% of the Australian total, and exports are growing. Western Australian animal feeds exports go predominantly to Japan (40%), South Korea (18%), China (15%) and other Asian countries. Some large, but unmeasurable, amount of its grains and oilseeds flow into animal feed.

Western Australia is the second largest oats producer in the Southern Hemisphere for both animal feed and foodstuffs. Macro drivers for WA oats industry present a solid, though relatively low growth, environment going forward, with flat area, growing yields and growing production.

Western Australia is the largest canola producer in the Southern Hemisphere. Macro drivers for the WA canola industry support a robust growth environment going forward, with growing area, growing yields and growing production. Western Australia exported A$1.3b worth of canola (YE Mar-17), representing more than two-thirds of the Australian total, and exports are growing strongly. Due to their high quality, canola exports go predominantly to Europe.

Western Australia has growing production and exports of hay and prepared animal feeds. Western Australia exported A$220m worth of animal feeds (YE Mar-17), representing 20% of the Australian total, and exports are growing. Western Australian animal feeds exports go predominantly to Japan (40%), South Korea (18%), China (15%) and other Asian countries. Some large, but unmeasurable, amount of its grains and oilseeds flow into animal feed.
WA PRODUCTION WILL CONTINUE TO GROW

5.0% 45Y CAGR
REALTIVELY CONSISTENT GROWTH
1955 – 2000
Arable crop production

1.0% 15Y CAGR
REALTIVELY CONSISTENT GROWTH
2000 – 2015
Arable crop production

WA PRODUCTIVITY IS INCREASING

3.9% 59Y CAGR
AVERAGE HECTARES OF WHEAT PER GROWER
1956 – 2015

4.5% 59Y CAGR
AVERAGE TONNES OF WHEAT PRODUCED PER GROWER
1956 – 2015

Source: ABS (various); Coriolis analysis
WA HAS LARGER FARMS THAN COMPETITORS

Western Australia has larger production units that produce more per unit than competitors.

* or most recent available; Note: caution should be used due to differing data sets and definitions; treat as directional; Source: ABS; Statistics Canada; USDA; Coriolis analysis.
WA EXPORTS ARE GROWING

Western Australian grains, arable crops and products export value
(A$; m; YE June: 1996-2016; YE April 2017)

Source: DAFF; ABS; Coriolis analysis and estimates
ALL THE GLOBAL PLAYERS ARE INVESTING HERE

<table>
<thead>
<tr>
<th>GLOBAL FIRMS</th>
<th>Associated British Foods plc</th>
<th>BÜNGE</th>
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<tr>
<td>ADM</td>
<td>aldahra holding</td>
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<td>Cargill</td>
<td>COFCO</td>
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<td>Hassao Food</td>
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<td>KUALA LUMPUR KEPONG BERHAD</td>
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<td>Quaker</td>
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<td>SAWAI GROUP CO.</td>
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<td>SEABOARD CORPORATION</td>
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<td>Sumitomo Corporation</td>
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<td>Company</td>
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<tr>
<td><strong>GILMAC HAY</strong></td>
<td>2017</td>
<td>$3.5m</td>
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<td><strong>CBH</strong></td>
<td>2016</td>
<td>$810m</td>
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<td><strong>QUAKER</strong></td>
<td>2015</td>
<td>$20-30m</td>
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<td><strong>GRAINCORP</strong></td>
<td>2015</td>
<td>$10m</td>
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<td><strong>BUNGE AGRIBUSINESS</strong></td>
<td>September 2014</td>
<td>$40m</td>
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Western Australia’s arable crops sector has a strong group of thriving companies along the entire supply chain.

**Farming Operations**
- Lawson Grains
- Warakirri Cropping

**Collection, Storage and Logistics**
- Bunge
- CBH Group

**Trading and Exporting**
- Cargill
- GrainCorp
- Glencore
- Bunge

**Value Added Processing**
- Quaker
- CBH Group
- Free Farmers
- GrainCorp

Note: Some firms across multiple stages of supply chain. Source: various company websites. Coriolis analysis.
REVENUE GROWTH OF MAJOR AUSTRALIAN GRAIN OPERATORS MIXED

Five year revenue: select firms with significant WA grain activities (A$; m; 2012-2016)

CBH (AU)

GRAINCORP (AU)

CARGILL (AU)

GLENCORE GRAIN (AU)

Note: all are wide ranging businesses with WA and non-WA activities; many have completed acquisitions; Source: ASIC filings; firm annual reports; IBISWorld; Coriolis research and estimates
Four broad investment themes exist for creating growth in the Western Australian arable crops industry.

**INVESTING IN REAL-WORLD YIELDS**
Opportunity exists to continue to yield growth and maximize the crops genetic potential.

**INVESTING IN IMPROVING INFRASTRUCTURE**
Opportunities exist for investment in rail, mobile coverage and ports (in particular containerised facilities).

**INVESTING IN NEW PROCESSES AND SYSTEMS**
"There are some innovative on-farm storage technologies being developed that will be a game changer."

**INDUSTRY EXPERT**

**INVESTING IN FURTHER PROCESSING OF INGREDIENTS**
"We saw a great demand for a WA grown product, and in a category that wasn’t a commodity."

**EXECUTIVE GRAIN PROCESSOR, MEDIUM**
RETURNS ACROSS THE SUPPLY CHAIN

Western Australian high performing farms are showing strong returns.

**WA LAND**
- 2.0% GROWTH

**WA FARM OPERATORS**
- 6.3% RETURN ON CAPITAL
- 10.3% RETURN ON CAPITAL

**WA ANIMAL FEED PROCESSORS**
- 10% RETURN - 15% RETURN

**POST FARM GATE**
- 2% RETURN - 10% RETURN

- 5 YR AVERAGE INDUSTRY
- 10.4% RETURN

3. Interviews - “returns”
4. Annual reports, IBIS - Average 5 yr returns, based on Australian financials: EBITDA/Total Assets (2012-2016)
5. CBH Annual reports; Average 5 yr returns WA based operations: EBITDA/Total Assets (2012-2016)

Source: Coriolis analysis
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