



Department of
Primary Industries and
Regional Development

*We're working for
Western Australia.*

Western Australian apple innovation

Business opportunity outline



Western Australia is a respected and recognised leader in **apple innovation.**

Western Australian (WA) fruit breeders have delivered multiple successful new apple varieties, that have become world renowned brands, including Pink Lady®, Joya® and Bravo™.

WA has a large and modern apple industry with a strong group of professional growers and packing facilities servicing domestic and export markets. With more than 120 years experience supplying Asia with apples, WA is well-positioned for further growth.

Clear opportunity for **growth**

WA's mild Mediterranean climate, a wide range of excellent fruit including apples, vast farmlands, modern production systems and efficient supply chains provide the perfect environment to support apple production for the high-value domestic market and select export opportunities. We have a large, long-established and well-developed apple growing industry with real opportunities for investment in orchards and in packing and value-added processing.

42%

National apple crop using WA developed genetics

#1

Fastest growing state for apple production (2015-2020)

Solid drivers

Apples are a solid, everyday fruit for most consumers.

In Australia 90% of households regularly put apples in their shopping cart, with an average Australian consuming more than eight kilograms of apples per year. Similar buying patterns occur in most developed markets.

Consumers globally expect year-round availability of a wide range of apples. Demand for apples as a dietary staple is almost immune to the fluctuations of economic cycles.

Global consumer acceptance of apples comes from solid drivers, particularly their rich taste, convenient “lunchbox” form, reasonable price, year-round availability and healthy attributes.

The well-known health-giving properties of apples - most clearly captured in the saying ‘an apple a day keeps the doctor away’ – have given apples solid growth in demand and a large and growing body of scientific research continues to support apple consumption, reinforcing consumers’ beliefs.

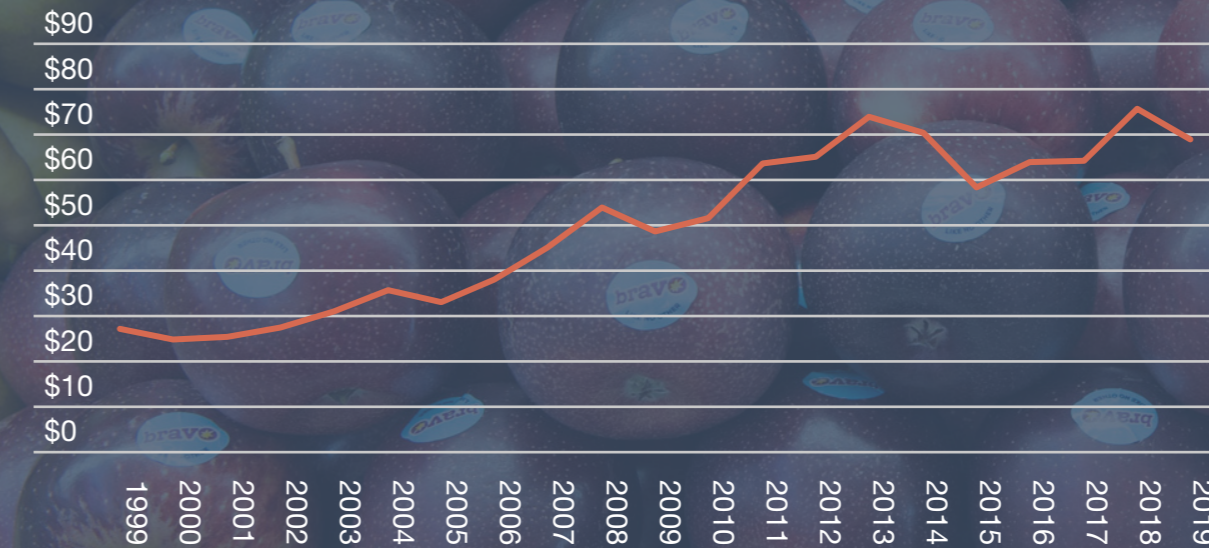
Rapidly growing demand

The global apple market is large at an estimated US\$72 billion in 2019 and growing at 5% per annum between 1999 and 2019. Around 11% of apples by value cross borders in any given year, with the global apple trade growing at 5% per annum for the last two decades. Major apple importers typically grow apples themselves and seek additional supplies to cover local production shortfalls and secure counter-seasonal supply.

Shifting to controlled genetics

The global apple industry is undergoing a fundamental transition from being an uncontrolled commodity to being a controlled and highly branded consumer good, similar to soft drinks and cosmetics. This change has been driven by the acceptance of controlled Plant Breeders Rights (PBR) by countries globally. PBR has directly led to the explosion in flavour and colour innovation of the past 20 years with WA at the forefront of the PBR revolution, creating a constant stream of new varieties that have proven highly successful with consumers worldwide.

Global apple market value
(US\$; billion; 1999 to 2019).



5% ↑
per annum

Growth in global apple trade
(1999 to 2019)

us \$72 ↑
billion

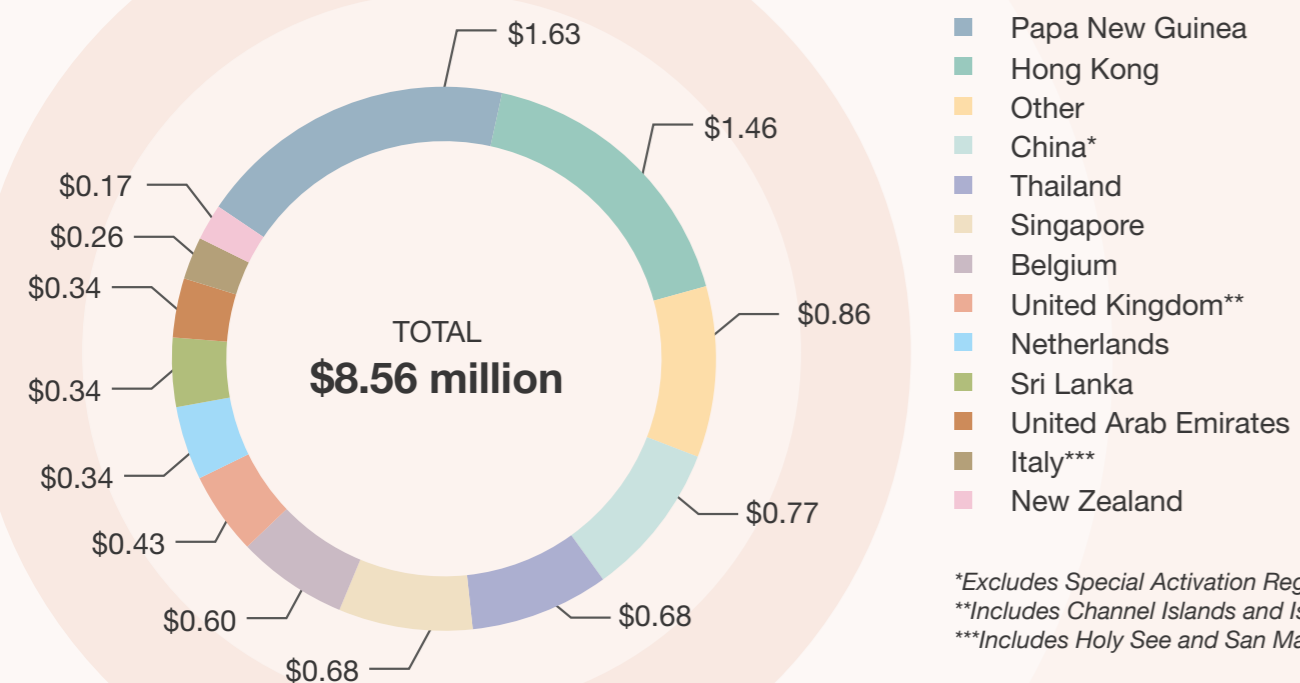
Value of global apple market (2019)

Key markets

Australia's domestic apple market is large and highly attractive, with fresh volumes in excess of 210,000 tonnes annually worth more than \$650 million and growing at 7% per annum between 2013 and 2020. Australia has a robust apples market, with more than 3,200 fruit and vegetable specialists and 6,400 supermarkets and grocers all selling apples. Significant volumes of apples are also sold through food service channels, accounting for 11% of total fresh volumes.

Beyond the attractive domestic market, Australia exports fresh apples (HS080810) to more than 25 countries in an average year. Key markets include Papua New Guinea, Hong Kong, China, Thailand, Singapore, Belgium, the United Kingdom and the Netherlands. In the 2020 financial year WA exported 5.45% of National apples (by value), presenting a clear opportunity for growth.

Australian apple export share by destination
(AU\$; million; 2020 financial year)

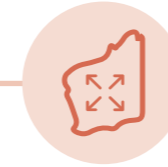


- Papa New Guinea
- Hong Kong
- Other
- China*
- Thailand
- Singapore
- Belgium
- United Kingdom**
- Netherlands
- Sri Lanka
- United Arab Emirates
- Italy***
- New Zealand

*Excludes Special Activation Regions (SARs) and Taiwan.
**Includes Channel Islands and Isle of Man.
***Includes Holy See and San Marino.

WA has a strong reputation across key markets – built over more than 100 years – as a supplier of premium, counter-seasonal apples. We also have a basket of innovative locally developed new varieties, that have become world renowned brands, including Pink Lady®, Joya® (previously Sundowner®) and Bravo™. We have a clear export supply window that is counter-seasonal to Northern Hemisphere suppliers, which when combined with controlled varieties creates a strong market position. With growing income and increasing demand, further growth is possible with the industry working toward accessing the attractive premium markets of the UK, Japan and China.





High quality raw materials

WA's agri-food products have a global reputation as high-quality, trusted products. Our apples are produced in one of the world's cleanest environments, making us a world leader in delivering clean, brightly coloured and food-safe produce.

WA apples are grown using sustainable farming systems that meet Australian standards. Our apple pack-houses can provide a wide range of sizes in numerous modern varieties. Our pack-houses are either Fresh Care certified or positioned to be Global Good Agricultural Practices certified and supply high standards to retailers across numerous markets. Key licensed pack-houses for Bravo™ apples include Blue Moon Packing, Newton Orchards and WA Farm Packing.

Safe and secure

WA is part of an island continent with desert separating it from other states and our isolated Mediterranean climate is relatively free of pests and diseases. We are free from certain exotic pests and have zero tolerance of live insects in export, enabling strong market access for our apples and other fruit. Nationally, Australia has strong biosecurity protocols and systems ensuring our production environment remains healthy and safe.

Being placed on Asia's doorstep WA is ideally positioned to build on its trusted trade relationships with the fast-growing Association of Southeast Asian Nations (ASEAN) members. Our firms can meet the markets' increasing focus on product quality and safety.

Available capacity

Being the size of western Europe with a population equalling Jamaica, WA has a very large land mass with a relatively small population. We have a wide range of climatic regions and growing conditions, ranging from a tropical climate in the north to a temperate Mediterranean climate in the south.

The temperate climate of our southwest and Perth Hills is well-suited to high-quality apple orchards. Apple production is currently located around Donnybrook, Manjimup and the Perth Hills, all of which are areas with reliable water supply. The largest orchards are currently in Manjimup and Pemberton.

Large, efficient, sustainable farms

WA has large, productive and efficient apple orchards with high production per farming unit. We have large and growing economies of scale in apple production and the industry continues to consolidate. We produce 31,000 tonnes of apples annually worth approximately \$60 million and there are ample opportunities for investors to participate in and drive further consolidation.

WA has a pool of experienced orchard operators using modern, high-yield production systems. Our apples, like our other agricultural products, are competitive globally and grown with limited agricultural subsidies.



Focused on selected products

WA's apple production system focuses on a handful of modern varieties in which it has clear comparative advantage. All major varieties were developed in WA or other parts of Australia and thrive in Southern Hemisphere conditions.

Pink Lady®

The globally renowned Pink Lady® branded apple was bred in WA by the Department of Primary Industries and Regional Development (DPIRD). Pink Lady® is a sweet-tart apple, with high sugars and high acids, a crisp bite and refreshing finish. It has bright white flesh that is slow to brown, making it excellent for pre-packaged slices, for entertaining and for food service. The conditions required to grow Pink Lady® apples are limited to some of the most beautiful places around the world, including WA.

Bravo™

Bravo™ is the brand for the incredible ANABP01 apple variety. Bravo™ is an exciting and unique fruit that has distinct sweetness, moderate to high crisp and crunch, and a striking burgundy colour unlike any other apple. Bravo™ apples also take a long time to brown, making them ideal for lunchboxes. This promising new variety delivers benefits to consumers through a new eating experience and to producers by providing them with an apple with high-value, very different to currently grown varieties and therefore unique in the marketplace. The apple industry hopes to produce 50,000 tonnes of Bravo™ apples annually by 2035. The crop was 4,000 to 4,500 tonnes in 2021 with 15% of the crop exported.

Joya®

Joya® (previously known as Sundowner®) is the brand for another WA cultivar of apples, Cripps Red. Joya® apples have a classic appearance, round and medium in size with a greenish background overlaid with crimson. The flesh is firm and crisp, though not hard. The flavour is fairly robust, unlike the delicate flavour of its sibling, Pink Lady®.



Granny Smith

Granny Smith apples are another Australian-developed variety grown in WA. Granny Smith is an iconic apple variety famous for their sour green apple flavour. WA Granny Smith apples are incredibly crisp, firm and juicy. While an older variety, they are still in demand.

Royal Gala

Royal Gala is a crisp, firm, bright red/orange apple that is sweet and succulent. Royal Gala is a favourite around the world and account for around one in eight apples grown globally. Royal Gala apples have been grown in WA for 30 years.

Other varieties

WA has an incredible range of other, newer varieties of apples being planted or under production. Other popular branded varieties include Fuji, Red Delicious and Golden Delicious. Newer varieties emerging in WA include Jazz™, Kalei®, Eve™, Modi™, Envy™, Rokit™, Kanzi® and Yello™.

Use of processing grade

Processing grade fruit typically accounts for around 25 to 30% of overall production. Processing grade apples have a wide range of uses including cider, spirits, juice, snacks (fresh, air-dried and freeze-dried) and as a food ingredient. Further processing into high-value uses, such as health focused nutraceutical extracts, is a potential investment opportunity. Pink Lady® and Bravo™ contain 25% more flavonoids than other Australian apples.



Efficient infrastructure

WA is one of the world's most advanced and productive regions with efficient supply chains and world-class quality control and quality assurance systems.

We have large and modern apple pack-houses concentrated around apple growing areas. Most of our apples are funnelled through a small number of relatively large pack-house and cool store operators, namely Casotti Group (across multiple locations – Karragullen, Kirup and Mullalyup) and Newton Orchards.

Our pack-house and post-harvest sector is regarded as well-organised and highly efficient by industry participants and there are opportunities for additional investment in this area. The sector is also well-regulated and audited, with high supply chain integrity. This competitiveness is endorsed by exports to high standards retailers across Europe and Asia.

Growth ready environment



Skilled orchardists



Modern high yield varieties



Efficient packhouse operators



World class distribution



Skilled workforce



Strong research and development capabilities



Supportive business environment

#9

Forbes
'Best Countries for
Business 2019'
(Australia)

#3

Heritage Foundation
'Index of Economic
Freedom 2021'
(Australia)

Close to key markets

WA is close to Asia, particularly East Asia and South East Asia, both of which are large and growing markets. We are the natural and logical supplier of temperate climate foods to the tropical climate countries of South East Asia and well-positioned to supply East Asia and the Middle East.

The WA fruit industry has been exporting for more than 100 years and has been the leading supplier to many Asian countries for that time. Asia's rapid economic and population growth has increased demand for year-round fresh fruit, including apples.

Ease of doing business

Australia is politically and economically stable and a safe country in which to do business. Our businesses have sound governance and represent low sovereign risk to investors and customers.

Fast time to market with free trade agreements

WA is geographically and strategically well placed to supply Asia's rapidly expanding export markets. We are in the same time zone as much of South Asia and within five days can ship to Indonesia, six days to Singapore and eight days to Southern China. Australia has Free Trade Agreements in place or under negotiation with more than 25 countries and regions and our combination of location and access means we are uniquely positioned as the horticulture supply breadbasket of the Asia region.



Attracting investment

Growing and packing apples in WA is an attractive proposition. Multiple firms have already invested in significant orchards and post-harvest facilities and further expansion is underway.

With three strong locally developed apples – Pink Lady®, Joya® (previously Sundowner™) and Bravo™ – all in high demand globally there are significant opportunities for investment in high productivity orchards.

WA can facilitate further apple orchards and consolidated pack-houses and cool stores at significant scale. We can also progress market development and access for apples into the United Kingdom, Japan and China.

WA can also assist in root stock research. Growers are able to achieve up to 20% production increases using targeted root stock.

WA can also facilitate value-added food and beverage products leveraging off these unique varieties.

Investment in WA's efficient apple orchards and best practice pack-houses focused on export markets while leveraging world-class, locally-developed genetics would suit a wide range of investors, including start-ups, private investors, investor consortiums, large domestic companies and global multinationals focused on IP-controlled fresh fruit.

Potential investment to develop a high density 40 hectare orchard (includes netting; excludes land, water/irrigation, sheds, equipment)



40 hectares
at 5,700 trees
per hectare

\$260,000 per hectare
(orchard development
including netting)

= \$10.4
million

Potential investment for packhouse and coolstore

\$10-20
million

- Fully automated centralised packhouse facility: clean, sort, IR control, robotics, pack, lab testing, humidity and temperature control
- Multi-species capabilities
- Cool storage (controlled atmosphere)



Supporting investment

The WA government is committed to working closely with investors to develop our apple industry. DPIRD's Investment Services team offers a range of investment concierge services to de-risk and support investment.

The team is made up of experienced industry professionals, who operate with a commercial focus, bringing together businesses, government departments and agencies to support industry investment initiatives.



How we can help

Information to support investment decisions

As a central point of contact for information and advice on investing in WA's agriculture, fisheries, and food and beverage sectors, we provide:

- Information on conducting business in WA.
- Various data and market intelligence.
- Background on relevant regulatory requirements and approval processes.

Investment facilitation

Drawing on in-depth knowledge of the agribusiness, food and beverage industry, and extensive business networks in Australia and overseas, our team can provide guidance and introductions to help secure the investment or opportunity you are looking for. We can:

- Provide introductions to agribusiness, food and beverage businesses in WA.
- Identify investment and research partnership opportunities.
- Help plan and conduct site visits to assess opportunities.
- Identify access to available natural resources and infrastructure.
- Identify suitable investor and investment opportunities.

Regulatory approval support

Understanding and securing the required regulatory approvals for your project can be a roadblock to investment. We can provide assistance to streamline processes and simplify your dealings with relevant government departments and agencies by:

- Providing information and guidance on WA's regulatory environment.
- Helping obtain regulatory approvals.
- Coordinating with other government departments and agencies.

Investment-ready project support

Our team is available to provide support to identify and develop your project or business' potential, including guidance on raising capital and getting your project investment-ready.

We can also work with you to provide information on the different types of investment available and investment partners.

By understanding your goals and requirements, we can assist you to identify and develop your project's potential.

Support available

A wide range of national and state-based agencies, industry bodies and research institutions are available to support research and development, commercialisation and investment.



We understand your project and investment requirements are unique.

To get started or expand on your Western Australian investment journey, contact us today.

Speak to our Investment Services team for support and guidance:

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Disclaimer

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Sources: DPIRD, Heritage Foundation, Forbes, UN FAO, UN Comtrade, Australian Bureau of Statistics, Horticulture Innovation Australia AHSH, DPIRD, industry interviews, articles, Coriolis and DPIRD analysis and estimates.

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