



Alpaca

A compact
business case

by GHD Pty Ltd



AgriFutures[®]
Emerging
Industries

Compact business case: Alpaca

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Foreword

The Australian alpaca industry supplies commercial markets with fibre, meat and stud genetics together with the supply of livestock as pets and guard animals. Estimates suggest there are more than 350,000 head of alpaca in Australia. Alpacas are farmed in temperate and cooler regions. Alpaca production is considered to have environmental advantages, causing little damage to fragile soils, requiring less chemical input and producing less methane than sheep and cattle.

New and emerging industries in their infancy often lack the public awareness and resources to assist with industry growth. This compact business case provides a concise overview of the alpaca industry. It provides a resource that can be used to drive awareness and engage with potential investors regarding opportunities to assist industry growth.

The compact business case is the result of stakeholder consultation across the Australian alpaca industry and pulls together the industry's status, market opportunities, challenges, competition, governance and economics in one resource for the industry.

This publication has been produced as part of AgriFutures Australia's Emerging Industries Program. Emerging animal and plant industries play an important part in the Australian agricultural landscape. They contribute to the national economy and are key to meeting changing global agricultural product demands. Most of AgriFutures Australia's publications are available for viewing, free download or purchase online at www.agrifutures.com.au.

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Project background

The AgriFutures Emerging Industries Program helps grow up-and-coming rural industries for which there is a clear interest in their products but whose pathway for growth is uncharted. This is achieved through research that explores opportunities for growth and through skills development for industry leaders, with an overarching goal to sustainably grow developing rural industries and help them reach new markets.

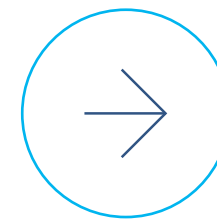
GHD was engaged by AgriFutures Australia to develop compact business cases for six identified emerging rural industries. The compact business cases summarise the industry characteristics and future opportunities, and strategies for overcoming development challenges. They have been developed in consultation with the respective industry and have been informed by analysis of available information and data.

Each compact business case is designed to provide the industry with a resource it can use to drive awareness of the industry and help secure future investment to assist industry growth. The compact business case provides a concise overview of the industry. It does not provide the depth of detail found in a full-length business case.

Purpose of this document

The purpose of this document is to provide a compact business case for the alpaca industry. This document has been prepared based on a desktop review of available information as well as information and data provided by the Australian Alpaca Association and obtained via an online workshop with a sample of industry participants held on 14 February 2021. This document follows the structure of the AgriFutures Australia compact business case template.

The Australian alpaca industry supplies commercial markets for fibre, meat and stud genetics together with supplying livestock for pets and guard animals.



Market opportunity

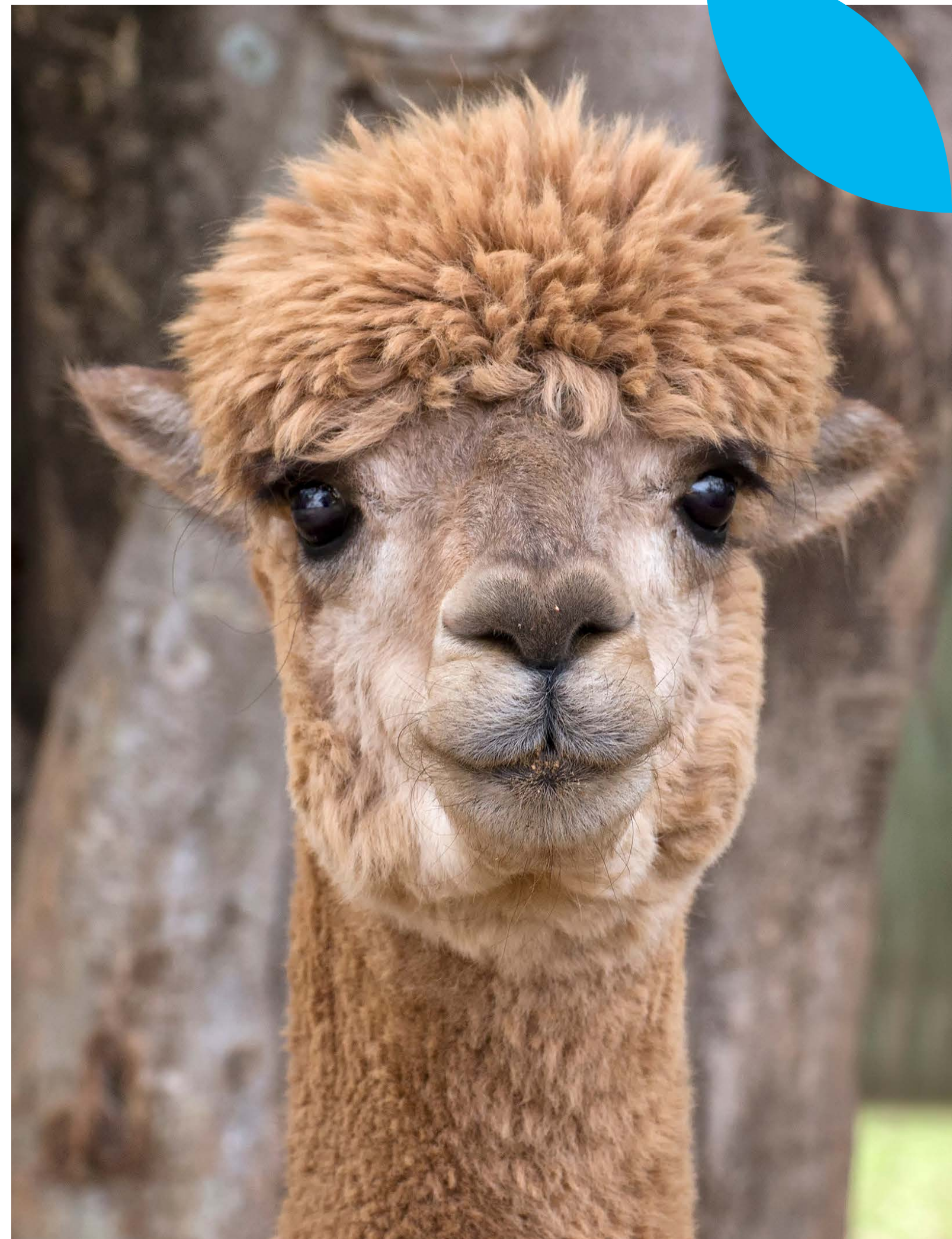
The Australian alpaca industry supplies commercial markets for fibre, meat and stud genetics together with supplying livestock for pets and guard animals. In many cases, there is unmet market demand, however further development is necessary to improve the quality and consistency of supply to ensure sustainable growth of the Australian alpaca industry. Market opportunities for the Australian alpaca industry include:

- 1 **Fibre:** The industry is transitioning to being a commercial fleece industry. Distributors are currently unable to fill the demand of Australian fibre in both domestic and international markets. Market growth will be achieved by increasing the overall supply of consistent, quality fleece that meets processors' requirements.
- 2 **Meat:** Alpaca provides unique high-quality, lean meat. Market growth will be achieved through more consistent marketing of alpaca as a dual purpose (fleece and meat) enterprise and encouraging producers to consider the potential benefits of having a dual purpose focus.
- 3 **Genetics:** The Australian alpaca industry has superior genetics, combined with high traceability and compliance with best management practices. As a result, Australia's stud stock is in high demand internationally, particularly from European and Chinese buyers.

Development challenges

Challenges to growing the Australian alpaca industry include:

- **Lack of available information:** Like many emerging industries, there is limited information about commercialisation opportunities and production data to support on-farm profitability.
- **Inconsistency of supply:** Many producers are not selecting and managing livestock to meet specific market requirements. The industry is dominated by small herd sizes and there is a wide range of fleece attributes (colour, micron), leading to inconsistencies in quality and quantity. The supply of animals for meat processing is also inconsistent.
- **Public and grower perceptions:** The typical association of alpacas as pets presents challenges for the developing commodity markets for meat and fibre. Many growers are reluctant to select and manage their livestock for the supply of fibre and/or meat.
- **Export restrictions:** The technology for artificial insemination (AI) or export of frozen embryos in alpacas is yet to be established, therefore genetic export requires live export of stud stock. There is currently no protocol in place for the export of alpacas direct from Australia to the European Union (EU). The main access pathway for Australian genetics into the EU was previously via New Zealand (NZ), involving a short quarantine period. Negotiations to re-establish this pathway have been drawn out and are likely to result in less-favourable terms.
- **Lack of supply chain infrastructure:** Supply chains for fleece and meat products are often fragmented and localised, making it difficult for producers to navigate and often requiring large transportation costs. Many producers are unaware of the value of their goods.



Overcoming challenges

Education and communication are key to overcoming the alpaca industry's development challenges. This includes the facilitation of industry succession programs aimed at attracting and retaining new knowledge and skills, and developing industry leaders.

Production-related data and information is needed at both the producer and industry scales. Producers need access to best practice production information and strategies for profit maximisation. This includes increased communication of global market parameters for fibre and meat to inform breeding and management decisions. This will shift perception from alpacas as a hobby/pet sector to alpacas as a commercial industry, helping the industry attract and retain new growers.

Information and data are needed to understand and support the development of different market segments. This will help the industry work with relevant state and federal government agencies to prioritise future research, development and extension (RD&E) needs and establish appropriate trade arrangements with key markets to achieve industry growth, particularly the removal of export barriers to the EU and United Kingdom (UK).

Industry status

Alpacas are farmed in temperate and cooler regions of Australia under similar climate and conditions to merino sheep. While the exact size of the national herd is unknown, it is estimated there are more than 350,000 head of alpaca in Australia. Most alpaca operations are small (<500 head), however larger farms (500-5,000 head) account for approximately 25 per cent of registered stock.¹ Alpaca production is considered to have environmental advantages, causing little damage to fragile soils, requiring less chemical input and producing less methane than sheep and cattle.

Alpacas in Australia are predominantly farmed for fibre. The fleece on alpacas is classified as luxury fibre and is processed into a variety of garments and homewares. The industry is transitioning into a commercial fleece industry; however, the transition and viability has been challenged by the difficulty of achieving sufficient volume of uniform, high-quality fibre and a lack of fibre processing facilities across Australia.

A small number of alpacas are supplied as high-quality lean meat directly to restaurants and specialist outlets. While there are few abattoirs in Australia that process alpaca meat, the establishment of two dedicated alpaca abattoirs (in New South Wales and South Australia) has greatly benefited the meat supply chain in developing a domestic market.

Stud enterprises are also run successfully in Australia. Typically, this has included the export of premium breeding livestock predominately to the EU, UK and NZ markets. However, current trade impacts have limited the sale of stud livestock mostly to the domestic market. Domestic trade of alpaca for pets and guard purposes is usually limited to fewer than five animals at a time.

Competition

Alpaca fibre competes with alternative natural fibres, including wool, mohair and cashmere. In international export markets, Australian alpaca fibre competes with high-volume product from Peru, which has a lower cost of production but generally lacks the quality and consistency of Australian product.

Alpaca meat competes with other niche or unique proteins, including venison and chevron, and is often marketed based on its leanness, low environmental impact and uniqueness.

Australian alpaca genetics compete against the United States (US), NZ and other countries with organised and developed breeding programs. Australian genetics are highly regarded in international markets based on quantified breeding data and value for money. However, trade cannot happen due to closed trade pathways resulting in lost market share to international competitors.

Alpacas also compete with other livestock and agricultural industries for land use and capital investment.

Industry organisation and governance

The Australian Alpaca Association (AAA) is the peak body for the alpaca industry and represents more than 1,000 breeders across Australia (Australian Alpaca Association, n.d.). AAA provides information and tools to alpaca farmers to support the industry in its vision for a successful and sustainable alpaca industry in Australia. AAA invests in research and development (R&D) activities, herd health and genetic advancement programs, and supply chain and marketing initiatives to drive the industry to become productive, resilient and competitive.

In addition to progressing the *Australian Alpaca Association Strategic Plan 2019-2024* (Australian Alpaca Association, 2019), AAA is currently facilitating the development of an *Alpaca Sustainability Framework* to demonstrate to its domestic and global consumers and manufacturers that Australian alpaca is farmed and processed in an ethical,

environmental, socially and financially responsible way. The *Alpaca Sustainability Framework* will also assist producers with identifying and meeting their obligations, including implementing codes of practice and standard operating procedures.

Industry economics

There is limited production and sales data available within the Australian alpaca industry, however based on information obtained through industry consultation, the current and potential farmgate value has been estimated (Table 1). Potential gains in value reflect the identified market opportunities, i.e. to increase fleece production volumes and quality, encourage more animals to be processed for meat, and remove restrictions on the export of live animals.

Table 1: Current and potential annual farmgate value

Market opportunity	Current farmgate value	Potential farmgate value
Fibre	Approximately 250,000 production animals, yielding approximately 5 kg of fleece per annum at an average farmgate value of \$10.80/kg, suggests an annual farmgate value of at least \$13.5 million .	Improved grower education and awareness of fibre market needs and opportunities leading to an increase in animals shorn (350,000 head), and increased quality of clip (5 kg/head) producing a better price (\$15/kg), could increase the farmgate value to \$26.25 million .
Meat	Estimated 3,000 head slaughtered per annum at an estimated average price of \$150/head suggests an annual farmgate value of \$0.45 million .	Increased number of growers seeking to maximise profits by supplying both fibre and meat markets could lift slaughter to 10,000 head and increase the farmgate value to \$1.5 million .
Supply of domestic animals (pets and guard animals)²	Estimated 10,000 animals supplied each year at an average price of \$500 per head suggests an annual farmgate value of \$5 million .	While growth in the number of animals supplied each year is likely to be limited, there is scope for a price increase to an estimated \$850/head due to supply constraints, lifting the annual farmgate value to \$8.5 million .
Export of genetics	Estimated 250 head exported per annum, mainly to Asia, at an estimated value of \$2,000/head suggests an annual farmgate value of \$0.5 million .	Australia gaining 'third country' livestock status would increase exports to higher-value EU markets to 600 head/annum. At approximately \$25,000 per head, and combined with continuing Asian trade, this suggests a farm gate value of \$15.5 million .
Total	~\$19.5 million	~\$51.75 million

Source: Industry stakeholder estimates.

¹ Estimate based on consultation with the Australian Alpaca Association.

² This analysis excludes the restocking of production animals as this represents a transfer within the industry (revenue for sellers and a cost for buyers).

Industry funding

Industry funding to date has largely been reliant on AAA, with the organisation investing in RD&E, herd health and genetic advancement programs, supply chain and marketing initiatives, and advocacy. The organisation's funding is largely dependent on annual membership fees and animal registrations, and is run by a voluntary board and staff. AAA has been successful in obtaining grant funding for various projects, such as training initiatives (Binks, 2016), and has worked successfully with AgriFutures Australia.

Some within the industry have expressed a desire for an industry levy to further fund marketing and R&D activities, but this would need to be balanced and cost-effective for both large and small-scale producers. Currently, most industry research has come from individual operators and the showing sector through AAA.

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