AgriFutures Australia Snapshot

Research and innovation for rural prosperity.

Learn more agrifutures.com.au
Vision
To grow the long term prosperity of Australian rural industries

1. People and leadership
   - **Goal**: To support the people driving the future prosperity of Australian rural industries and regional communities by providing them with learning opportunities and experiences.
   - **Priorities**: Attracting capable people into careers in agriculture. Building the capability of future rural leaders.

2. National challenges and opportunities
   - **Goal**: To identify and nurture research and innovation opportunities that are synergistic across rural sectors.
   - **Priorities**: Informing debate on issues of importance to rural industries. Adapting new technologies for use across rural industries. Working collaboratively on issues common across rural sectors.

3. Growing profitability
   - **Goal**: To enhance the profitability and sustainability of our levied rural industries. Regional communities and the broader Australian economy depend on profitable farms.
   - **Priorities**: Engaging industry participants in determining RD&E priorities. Investing in innovation that assists levied industries to be more profitable. Delivering outcomes to maximise industry uptake and adoption.

4. Emerging industries
   - **Goal**: To support new and emerging rural industries.
   - **Priorities**: Supporting the early stage establishment of high potential rural industries.

**Outcome**
- Challenges and opportunities that are common across rural sectors are identified and addressed.
- Industry participants are confident that their levy investment is delivering value.
- High-potential emerging rural industries established.

**Approach**
1. Listening & influencing
2. Delivering results
3. Partnerships & collaborations
4. Performance culture
5. Efficient business practices

**Values**
Connected / Positive / Real / Future-thinking
Innovative / Quality / Approachable / Networked / Confident Professional / Commercially savvy

**Purpose**
Through research and development increase knowledge and understanding that fosters innovation, adaptive and valuable rural industries.
The AgriFutures™ Rural Women’s Award is Australia’s leading award acknowledging and supporting the essential role women play in rural industries, businesses and communities.

Fast facts

- The Award has been running for more than 20 years and provides a platform to inspire and support Australian women to use and develop their skills to benefit their industries and communities.

- The Award is recognised as a program of influence among parliamentarians, industry, media and Award Alumni.

- Each state and territory winner receives a $10,000 Westpac bursary, access to professional development opportunities and the Alumni network. The National Winner and Runner Up receive an additional $10,000 and $5,000 respectively.

- Award Coordinators provide individuals with guidance and feedback throughout the application process.

- Free webinars are held for interested applicants.

- Previous winners and finalists have the opportunity to join the AgriFutures™ Rural Women’s Award Alumni.

Partners

Westpac, ABC Rural, Fairfax, RM Williams OUTBACK Magazine, Agriculture Victoria, NSW Department of Primary Industries, NT Department of Primary Industry and Resources, Primary Industries and Regions SA, QLD Department of Agriculture & Fisheries, TAS Department of Primary Industries, Parks, Water and Environment and WA Department of Primary Industries and Regional Development.
Key dates

**February/March/April**
Finalists participate in face-to-face interviews with the selection panel. State/territory winners announced

**July**
State/territory winners participate in a three-day workshop and national selection panel interviews

**September**
Gala Dinner & National Announcement in Canberra at Parliament House

**September/October**
Applications open

**Late November**
Applications close

Who can apply

The Award is open to all women involved in rural industries, rural and regional businesses and rural and regional communities. Women must be over the age of 18, and must be Australian citizens or permanent residents. No formal qualifications are required.

Get involved

agrifutures.com.au/rural-womens-award
The AgriFutures™ Horizon Scholarship is awarded to students studying an agriculture-related undergraduate degree or a Science, Technology, Engineering, Maths/Finance (STEM) degree with relevant majors which align to agriculture.

- In partnership with industry sponsors, the initiative supports Horizon Scholars by providing a bursary of $5,000 per year for the final two years of the degree, professional development workshops, annual industry work placements and a range of networking opportunities.
- Research shows that Horizon Scholars are typically two to three years ahead of other university graduates in terms of their career readiness and industry networks.
- The Scholarship is offered to students in their last years of study, to best connect them with industry networks and give a continued advantage when entering the workforce.

Partners
### Key dates

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### Who can apply

To be eligible for the Horizon Scholarship, students must be an Australian citizen or permanent resident enrolled full-time in their last two years of an agriculture-related or relevant STEM undergraduate degree at an Australian university with a maximum two-year gap between high school and tertiary study.

### Get involved

The AgriFutures™ Ignite Network is a program for passionate rural leaders, innovators and entrepreneurs. Its members influence, make changes, innovate and are interested in exploring agribusiness trends. Their ideas and knowledge will shape the future of agriculture and its long-term prosperity.

Fast facts

- The AgriFutures™ Ignite Network is a program to connect passionate rural leaders.
- Participants in the Network have a strong interest in shaping the future of Australian rural industries and are responsible for igniting the passion, revitalising the industry and introducing and encouraging the changes to make it happen.
- Members have access to events, an environment to share information and knowledge, peer support, networking and an opportunity to unlock professional development and leadership skills and uncover emerging initiatives.
- Capacity building opportunities are unveiled to members throughout the year.
- The AgriFutures™ Ignite Network Facebook group currently has more than 1,400 members from across Australia.
- In addition to the Facebook group, there is an AgriFutures™ Ignite Advisory Panel. Panel members meet three times per year and report directly to the AgriFutures Australia Managing Director. Members provide innovative ideas, feedback on topics, challenges and issues.
Current Advisory Panel members include Guy Coleman, Andrew Duver, Jessica Fealy, Joshua Gilbert, Susan Hall, Lucinda Hawkins, Simone Kain, Sally Leigo, Nicolas Lyons and Oli Madgett.

Get involved

Join the AgriFutures™ Ignite Facebook group to become part of our Ignite Network and to connect with passionate rural leaders

agrifutures.com.au/ignite
*evoke AG.* is the Asia Pacific’s largest agrifood tech event attracting the entire ecosystem to one location, including farmers, startups, innovators, accelerators, researchers, universities, businesses, corporates, government and investors. The aim of *evoke AG.* is to:

- Showcase Australian, New Zealand and Asian agrifood tech ecosystems
- Inspire our audience by learning from world-leading, thought provoking agrifood tech organisations, individuals and researchers
- Connect entrepreneurs, startups, consumers, producers, researchers, business and technology
- Foster one collaborative conversation to grow the region’s ecosystem and create business and economic opportunities.

**2019 highlights**

- Two days
- 1,191 delegates from 30 countries
- 115 speakers
- 7 international delegations
- 20 sponsors
- 37 sessions – plenary, breakouts, masterclasses and insight sessions
- 3,231 networking messages sent between delegates on the event app
- Pitch Tent - 13 high quality pitches across three streams - Investment Ready, Seed Funding and Producer Problem
- Future Young Leaders Program
- Startup Alley
- Exhibition Hub
- Festival of Food
Sponsorship opportunities are available at evokeag.com/partners

Tickets (including primary producer, student and partner tickets) available at evokeag.com/#tickets

18-19 February 2020
Royal Exhibition Building
Melbourne, Australia
The Rural Safety and Health Alliance

AgriFutures Australia is leading a renewed partnership of Research and Development Corporations (RDCs)* to improve primary production’s health and safety record. The new partnership aims to increase cross-sector collaboration, reduce duplication and bring new, creative and unique solutions to current safety and health challenges.

*The Rural Safety and Health Alliance (RSHA) is jointly supported by AgriFutures Australia, Australian Eggs, Australian Pork, Australian Wool Innovation, Cotton Research and Development Corporation, Dairy Australia, Fisheries Research & Development Corporation, Grains Research & Development Corporation and Meat & Livestock Australia.

**Fast facts**

- The Alliance invests in innovative research, development and extension (RD&E) to reduce death, injury and illness and enhance health and wellbeing across all rural industries.
- The RD&E investment is designed on an ‘opt-in’ basis, where Partners commit funding on the basis of the interest, relevance and importance of the project to each partner sector.
- Research priorities include risk management RD&E, adoption and behaviour change, and investment in capacity building.
We are keen to hear and act on workplace health and safety issues identified through our industries. We welcome any input, ideas or expressions to trial new technologies.

Sign up to learn more about the Alliance and to be kept updated as the Alliance develops

rsha.com.au/#more-info

Alliance
• Patrick Murphy, RSHA Chair
• Andrew Barrett, RSHA Executive Officer
• Representatives from RDC funding partners

Get involved

We are keen to hear and act on workplace health and safety issues identified through our industries. We welcome any input, ideas or expressions to trial new technologies.

Sign up to learn more about the Alliance and to be kept updated as the Alliance develops

rsha.com.au/#more-info
Australia’s rural industries operate in a complex and dynamic environment, often facing a common set of evolving challenges and opportunities. AgriFutures Australia is uniquely placed to lead cross-sectoral research into rural issues of national and global significance.

A core component of this work is investing in research that informs and improves policy debate.

**Fast facts**

- The agricultural sector contributed more than $63 billion to Australia’s gross domestic product (GDP) in 2016-17, and is now working to achieve a $100 billion contribution by 2030. There are many challenges and opportunities that need to be managed if the sector is to reach that target.

- Through our National Rural Issues Program, AgriFutures Australia seeks to directly address barriers to growth and help industry and governments respond to opportunities.

- By generating research, information and tools that support an innovative, adaptive and valuable agricultural sector, we develop research programs that span rural issues such as:
  - Trade policy
  - Markets and consumers
  - Technology and agricultural innovation
  - Animal welfare
  - Skills and people (capacity building and leadership)
  - Workplace health and safety
  - Regulation and tax
  - Resource competition
  - The image of agriculture.
Knowing that problems are better answered working together than alone, collaboration is core to our approach. AgriFutures Australia runs an annual Emerging National Rural Issues Forum, attended by representatives from Research and Development Corporations, National Farmers’ Federation and the Department of Agriculture, to put forward ideas for cross-sectoral projects and co-investment.

The National Rural Issues Program aims to:

- Scan for new issues: spot emerging opportunities and challenges early that have the potential to positively or negatively impact rural industries in Australia
- Support and prepare: support agricultural accelerators, governments and industry to take advantage of opportunities that grow the sector
- Identify inhibitors: detect barriers to sector growth early, and deliver information that underpins these challenges
- Support and connect people and issues: facilitate opportunities to promote collaboration on cross-sectoral issues.

Key collaborators

Knowing that problems are better answered working together than alone, collaboration is core to our approach. AgriFutures Australia runs an annual Emerging National Rural Issues Forum, attended by representatives from Research and Development Corporations, National Farmers’ Federation and the Department of Agriculture, to put forward ideas for cross-sectoral projects and co-investment.

More information

agrifutures.com.au/national-rural-issues
Australia’s chicken meat industry is one of the most efficient in the world. Through targeted high-impact investment the AgriFutures™ Chicken Meat Program aims to stimulate and promote research, development and extension (RD&E) that will deliver a productive and sustainable chicken meat industry that provides quality wholesome food to the nation.

The industry has many opportunities to capitalise on chicken meat’s modest environmental footprint and to further reduce its environmental impacts, and emissions.

About the industry

- The Australian chicken meat industry is worth $2.7 billion (gross value of production 2015-16), with a retail value of around $6.6 billion.

- Growth in production and demand for free range chicken meat has been particularly strong over the past five years (approximately 15% of the total market) and this trend is expected to continue.

- Chicken meat production in Australia is dominated by a small number of large, vertically integrated, privately owned businesses. Approximately 800 contract growers rear about 80% of Australia’s meat chickens.

- The industry has a strong presence in rural and regional communities, directly employing about 40,000 people with a further 100,000 jobs dependent on chicken meat production. The chicken meat industry purchases around 5% of all grain grown in Australia.
The AgriFutures™ Chicken Meat Program RD&E Plan guides investment and is focused on five objectives to deliver research outcomes to benefit the industry:

1. Increase the productivity and efficiency of chicken meat production
2. Deliver safe food and good animal welfare outcomes
3. Manage the environment for sustainable development
4. Create foundations for the future, including capacity and market insight
5. Ensure research adoption via extension and communication.

The meat chickens levy was first introduced 1 July 1969 and is calculated at 0.2644c/chicken sold. AgriFutures Australia receives the RD&E component of the levy (0.195c/chicken) to invest in line with the industry objectives outlined in the RD&E Plan. Up to half of program expenditure, including R&D expenditure, is matched by the Australian Government at up to 0.5% of industry GVP.

Current Advisory Panel members include Guy Hebblewhite (Chair), Dr Sheridan Alfirevich, Katherine Balding, Peter Chrystal, Dr Anthony Keyburn, Susan Klein and Greg Underwood.

Sign up for Beak to Beak, AgriFutures™ Chicken Meat Program’s quarterly news

agrifutures.com.au/chicken-meat
The AgriFutures™ Export Fodder Program aims to invest in research, development and extension (RD&E) that harnesses leading edge technologies to develop competitive advantage in export fodder markets.

Key components of this program include further developing the Oaten Hay Breeding program, continuing to grow hay production, and ensuring that export fodder meets importing country requirements with regards to chemical residue.

**About the industry**

- Australian exports of hay, chaff and straw (excluding Lucerne Hay), was valued at just under $450 million in 2017, bringing hay into the top 20 Australian agricultural exports.

- The majority of Australia’s export fodder is produced in Western Australia and South Australia, and Victoria. The largest export markets are China, Japan and South Korea.

- Export fodder includes a wide range of crop and pasture species that are grown, harvested and lightly processed for both on-farm use and export. Export fodder production includes hay and silage of all types, chaff (coarsely chopped dried whole plants), vetch and pelletised feed.

- Swinging production volume trends and volatility in weather during curing and storage from season to season places an emphasis on RD&E to address the risks and provide mitigation measures for farmers. The industry has focused strongly on addressing market requirements, establishing new markets and developing a high quality product.
Research, development & extension plan

AgriFutures™ Export Fodder Program’s RD&E investment is guided by the objectives outlined in the five year RD&E plan.

The RD&E objectives were developed by the Australian Fodder Industry Association (AFIA) in consultation with fodder exporters. As the entire fodder industry derives a benefit from industry RD&E, the domestic industry is a valuable end-user of the program.

The Export Fodder RD&E objectives for 2016-2021 include:

1. Oaten Hay Breeding Program
2. Hay agronomy
3. Chemical usage integrity
4. Fodder analysis
5. Animal nutrition research
6. Biosecurity research
7. Work health and safety.

About the levy

In 2016, the Australian government approved an Export Fodder Levy of $0.50/tonne on all exported fodder to support ongoing RD&E. AgriFutures™ Export Fodder Program is funded by statutory levies paid by industry participants. Up to half of program expenditure, including RD&E expenditure, is matched by the Australian Government at up to 0.5% of industry GVP.

Advisory Panel

Current Advisory Panel members include Peter Baker (Chair), Sean Blechynden, Pat Guerin, Andrew Hayward, Munro Patchett and Steve Woods

More information

Sign up to receive AgriFutures™ Export Fodder Program news

agrifutures.com.au/export-fodder
The AgriFutures™ Ginger Program supports research, development and extension (RD&E) to ensure a sustainable, growing and prosperous industry supplying a high-quality product strongly sought after in Australia and around the world.

Key components of the AgriFutures™ Ginger Program include development of a best practice pest and disease management manual, benchmarking, website development and a 50% increase in production volume from 32 million to 48 million.

About the industry

• The ginger industry has approximately 50 growers and is located in Queensland.

• Ginger production is both labour and capital intensive, and the industry faces challenges around biosecurity, pest and disease management (particularly Fusarium and Pythium), securing inputs such as irrigation, labour and seed, and an ageing grower base.

• Farm-gate gross volume of product (GVP) is presently estimated at $32 million with 20% of ginger grown in Australia sold to the processing sector and 80% sold to the domestic fresh market.

• Australia accounts for less than 1% of world ginger production, with China and India dominating world output.
Research, development & extension plan

The AgriFutures™ Ginger Program RD&E Plan 2017-2022 guides investment and is focused on three critical objectives:

1. Drive on-farm productivity – improve industry pest and disease management, harness innovative technology and facilitate adoption of clean certified seed

2. Lift the demand for Australian ginger – invest in brand and market research to improve farm business returns

3. Encourage industry engagement – communicate research outputs, assist industry with research adoption, build industry capacity and develop investment and implementation partnerships.

About the levy

The AgriFutures™ Ginger Program is responsible for coordinating the RD&E investment of the ginger levy. The ginger levy was first introduced 1 April 2011 and is calculated at 0.5% of the sale price at first point of sale. Half of AgriFutures™ Ginger Program expenditure, minus levy collection costs, is matched by the Australian Government at up to 0.5% the industry GVP.

The ginger industry is classified as an established industry, with a statutory levy and a GVP of approximately $41 million in 2017-18.

Advisory Panel

Current Advisory Panel members include Nicole Christodoulou (Chair), Jason Keating, Ethan Graham, Scott Kirkwood, Dr Mike Smith and Henricus Stevens.

More information

Sign up to receive AgriFutures™ Ginger Program news

agrifutures.com.au/ginger
The AgriFutures™ Honey Bee & Pollination Program aims to support research, development and extension (RD&E) that will ensure a productive, sustainable and more profitable Australian beekeeping industry and secure the pollination of Australia’s horticultural and agricultural crops.

The industry faces a number of risks, including the entry and spread of exotic pests and diseases, economic pressures on the honey producing industry and reduced access by beekeepers to areas of native flora.

About the industry

- The Australian honey bee industry produces between 20,000 and 30,000 tonnes of honey annually, with approximately 5,000 tonnes exported. Seventy percent of Australian honey is produced from native flora.
- While honey is the major commercial output of the industry, there are a number of other products that add to the income, including paid pollination services, beeswax production, queen bee and packaged bee sales.
- In 2016, gross value of production (GVP) of the beekeeping industry was valued as $98 million. This relatively small GVP understates the industry’s value to agriculture and the economy in general through pollination services and, potentially, the value of honey and honey products in medical uses.
- There are approximately 12,400 registered beekeepers in Australia with around 528,000 hives. More than 70% of hives are operated by commercial beekeepers.
The Honey Bee & Pollination Program RD&E Plan guides investment and is focused on five objectives to deliver research outcomes to benefit the industry:

1. Reduce the incidence and impacts of pests and diseases
2. Increase the productivity and profitability of beekeepers
3. Increase understanding of the role of flora in honey bee management
4. Understand the role of pollination in delivering more productive systems
5. Promote extension, communication and capacity building.

AgriFutures Australia receives the RD&E component (1.5c/kg) of the honey levy (4.6c/kg) to invest in line with the objectives of the RD&E Plan. Up to half of program expenditure is matched by the Australian Government at up to 0.5% of industry GVP.

Current Advisory Panel members include Dr Doug Somerville (Chair), Danny Le Feuvre (Deputy Chair), Tiffane Bates, Prof. Saul Cunningham, James Kershaw, Dr Diana Leemon, Sam Malfroy and Ashley Zamek.

Sign up to receive AgriFutures™ Honey Bee & Pollination Program news

agrifutures.com.au/honey-bee-pollination
The AgriFutures™ Pasture Seeds Program invests in research, development and extension (RD&E) that maximises opportunities and minimises risks for a profitable and sustainable pasture seeds industry with a reputation for reliable supply of quality pasture species.

The Program is focused on improving seed production and processing efficiencies, and investing in pasture seed market development.

**About the industry**

- The importance of this industry lies in its contribution to the productivity of other agricultural sectors. Certified temperate pasture seed contributes to the productivity of pasture based livestock industries including beef, sheep and dairy. Sown pastures provide break crop benefits to the grains industry and temperate pastures provide cut fodder for the dairy and equine industries.

- There are approximately 500 growers of temperate pasture seed in Australia with annual production estimated at 20,600 tonnes excluding farmer-to-farmer seed sales. The annual production of certified temperate pasture seed has been estimated at 8,500 tonnes.

- The total pasture seeds industry gross value of production (GVP) was estimated at $107 million in 2013 with leviable crops valued at $36 million. More than 70% of total industry GVP was generated in export markets. Pasture seed exports were dominated by sales of certified Lucerne seed to Saudi Arabia. Other important export markets include Argentina, the US, China and Italy.
The AgriFutures™ Pasture Seeds Program is supported by a statutory levy on certified seed sales in both domestic and export markets. The levy varies depending on the category of seed being certified:

- $10/tonne – Medic (Burr, Disc, Gama, Murex, Snail, Sphere, Strand) and Yellow Serradella
- $11/tonne - Subterranean clover
- $15/tonne – Clover (Arrowleaf, Balansa, Berseem, Kenya White, Persian, Strawberry, Red, and White) and Lucerne.

Half of Program expenditure, including RD&E expenditure, is matched by the Australian Government at a level up to 0.5% of industry GVP.

Research, development & extension plan

AgriFutures Australia receives the pasture seeds levy to invest in line with the industry objectives of the five year RD&E plan. The Pasture Seeds Program RD&E Plan 2019-2023 has four main objectives:

1. Production and processing efficiency and profitability
2. Sustainable certified temperate pasture seed production
3. Connectivity and communication

Key components of this program include improving seed production and processing efficiencies and investing in pasture seed market development.

About the levy

The AgriFutures™ Pasture Seeds Program is supported by a statutory levy on certified seed sales in both domestic and export markets. The levy varies depending on the category of seed being certified:

- $10/tonne – Medic (Burr, Disc, Gama, Murex, Snail, Sphere, Strand) and Yellow Serradella
- $11/tonne - Subterranean clover
- $15/tonne – Clover (Arrowleaf, Balansa, Berseem, Kenya White, Persian, Strawberry, Red, and White) and Lucerne.

About the levy

Half of Program expenditure, including RD&E expenditure, is matched by the Australian Government at a level up to 0.5% of industry GVP.

Advisory Panel

Current Advisory Panel members include Lisa Anderson (Chair), David Brown, Joe Cook, Brian Field and Dr Mary-Jane Rogers.

More information

Sign up to receive AgriFutures™ Pasture Seeds Program news

agrifutures.com.au/pasture-seeds
The AgriFutures™ Rice Program aims to improve the profitability and sustainability of the Australian rice industry with a key focus on water use efficiency and varieties that deliver increased yield and improved eating quality.

A key component of this program is rice variety breeding to further reduce demand for irrigation water and adapt to a climate that is hotter, drier and more variable.

About the industry

- The Australian rice industry is a world leader in production efficiency, water use efficiency and environmental management.
- Australia’s climate makes it ideal for the production of high quality medium grain rice and Australian growers produce more rice per hectare than anywhere else in the world. Australian rice achieves premium prices in world markets thanks to our research outcomes.
- From paddock to plate, Australian grown rice uses 50% less water than the global average. Water use per hectare continues to decline because of the industry’s commitment to developing high yielding rice varieties that use less water, and the use of world’s best management practices.
- With the capacity to produce more than 1 million tonnes of rice per year, Australian growers play an important role in food security as rice sustains two-thirds of the world’s population.
The Rice Industry RD&E Plan 2016/17-2021/22 builds on previous five-year investment programs. A significant share of the RD&E that underpins the rice industry success has been managed by AgriFutures Australia since 1991. The plan identifies four key objectives:

1. Cross-sectorial research required to achieve the Dry Rice 1.5 t/ML water use efficiency target by 2030
2. Rice breeding – varieties and quality improvement
3. Farm productivity – crop inputs, crop protection and the farming system
4. Extension, sustainability and human capital.

The Australian rice industry is strongly supportive of the RD&E program and its management by AgriFutures Australia.

### About the levy

The rice levy was first introduced 14 November 1991 and was set at $3/tonne. AgriFutures Australia receives the RD&E levy allocation ($2.94/tonne) to invest in line with the industry objectives of the AgriFutures™ Rice Program RD&E Plan. Up to half of program expenditure, including RD&E expenditure, is matched by the Australian Government at up to 0.5% of industry GVP.

### Advisory Panel

The Rice Advisory Panel includes Drew Braithwaite (Chair), Michele Groat (Deputy Chair), Dr Vito Butardo, Brian Dunn, Russell Ford, Laura Kaylock, Dr Laurence (Laurie) Lewin, Ben Övenden and Antony Vagg.

### More information

Sign up for the AgriFutures™ Rice Program news

agrifutures.com.au/rural-industries/rice
The Australian tea tree oil industry has a farm-gate value in excess of $36 million, with 90% of oil exported. The oil has an expanding range of uses, particularly in personal care products that benefit from having antiseptic, antifungal and antiviral properties such as face and hand washes.

The AgriFutures™ Tea Tree Oil Program aims to conduct research, development and extension (RD&E) that contributes to the profitability, sustainability and productivity of this levied industry.

### About the industry

- **Tea tree oil** is extracted from Melaleuca alternifolia grown in plantations and distilled via steam injection. Tea tree oil has a range of uses, can be found in cosmetics, personal health care and animal care products, and is recognised by consumers and manufacturers for its effectiveness.

- Tea tree is tolerant of coastal acid sulphate soils and can be grown on inland cropping country. Most plantations are located in the coastal region of northern NSW and the Atherton Tablelands QLD.

- Investment in the Tea Tree Oil Breeding Program over the past 25 years has resulted in the near doubling of plantation yield. These investments have also delivered efficiencies in harvesting, distillation, storage and marketable oil benefits.

- A key challenge for the Australian tea tree oil industry is to continue to improve profitability and increase demand. Reducing costs of production is also important to maintain Australia’s competitive advantage. As price increases and demand continue to grow, new plantings in China have potential to impact on commercial competitiveness of Australian-grown oil.
The AgriFutures™ Tea Tree Oil Program invests in RD&E to develop the industry in growing tea tree, processing and overcoming post farm gate market access barriers in accordance with the Five Year RD&E Plan. In consultation with industry, AgriFutures Australia has developed a tea tree oil five-year plan for the program which commenced on 1 July 2017.

The program focuses on three objectives:

1. Improving supply
2. Increasing demand
3. Extension, sustainability and human capital.

An R&D levy of 25c/kg of Tea Tree Oil was introduced on 1 July 2017, providing industry with reliable and secure research funding. AgriFutures Australia receives the levy allocation to invest in line with the industry objectives of the Five Year RD&E Plan. Up to half of program expenditure, including RD&E expenditure, is matched by the Australian Government at up to 0.5% of industry GVP.

Current Advisory Panel members include Michael Flanagan (Chair), Phillip Butlin, Digby Growns, Dee-Ann Seccombe Prather and Jerome (Jerry) Vanclay.

Sign up to receive AgriFutures™ Tea Tree Oil Program news
agrifutures.com.au/rural-industries/tea-tree-oil
AgriFutures Australia has undertaken research, development and extension (RD&E) for the broader horse industry since 1995, and delivered valuable outcomes such as improvements in equine neonatal care. In 2017-18 (financial year) a new levy was introduced to support priority RD&E to address thoroughbred industry challenges and opportunities.

This levy provides greater certainty about future RD&E funding for investment in longer term projects.

About the industry

- Along with breeding productivity and research into reducing horse diseases and parasites, the AgriFutures™ Thoroughbred Horses Program explores research to reduce injury and breakdown of horses in work and training, improve the safety of industry participants, and enhance the environmental sustainability of the industry.

- Australia has the second largest thoroughbred breeding industry in the world, after the United States, with 660 stud farms across the country, predominantly in NSW, Victoria and Queensland.

- These stud farms supply thoroughbred horses to both the domestic and overseas markets. In the 2014–15 season, 19,368 mares were covered to produce 12,871 live foals.

- Australia stages more races with more runners than most of Western Europe combined, with Australian-bred mare Winx the top-rated racehorse on turf in the world in 2017.

- The thoroughbred racing industry is worth approximately $5 billion per annum to the Australian economy, and employs more than 65,000 people, particularly in rural and regional areas.
The Thoroughbred Horses RD&E levy is set at a rate of $20 for each mare covered ($10 paid by the mare owner and $10 paid by the stallion owner). Up to half of program expenditure is matched by the Australian Government at up to 0.5% of industry GVP.

Current advisory panel members include Professor Nigel Perkins (Chair), Dr Catherine Chicken (Deputy Chair), Derek Field, Thomas (Tas) Rielley and Jacqueline Stewart.

Sign up to receive AgriFutures™ Thoroughbred Horses Program news at agrifutures.com.au/thoroughbred-horses
Buffalo are farmed in every Australian state, with milk and meat the principal products. The AgriFutures™ Buffalo Program aims to direct research, development and extension (RD&E) that contributes to the profitability, sustainability and productivity of this industry.

About the industry

- There were approximately 65 buffalo farms across Australia in 2012 with an estimated total of 12,000 buffalo. Most of the Riverine buffalo (milking) in Australia are located in five buffalo dairy enterprises in VIC, QLD and the NT.

- The industry was significantly affected by the 2011 ban on live exports to Indonesia and its inability to comply with the new requirements of the Exporter Supply Chain Assurance Scheme (ESCAS) when trade re-opened.

- As a result, the gross value of the meat production component of the Australian buffalo industry in 2011–12 was down to only $841,000 (from around $5 million annually), comprising of a small number of live exports and a few hundred animals slaughtered.

- Most RD&E undertaken in the industry to date has focused on improving the genetic base via cross-breeding, artificial insemination and semen importation. There has also been a research into a branded meat product, and gaining a better understanding of buffalo milk composition and processing characteristics.
The AgriFutures™ Buffalo Program assesses potential RD&E projects, for investment, based on five broad areas of priority:

1. Reinvigoration of the live export program, especially stunning procedures, to allow compliance with ESCAS and Halal
2. Examination of opportunities for local processing facilities (including Halal)
3. Compilation of specific information for buffalo management (meat and milk)
4. Distribution of milk composition information to industry and general public
5. Monitoring genetic improvement in buffalo dairying and providing support as possible e.g. encouraging producer input of data into Breedplan to identify superior dairy genetics in Riverines.

About the levy
The AgriFutures™ Buffalo Program is responsible for the RD&E investment of the buffalo slaughter levy (set at $9.60/head with $4.60/head allocated to RD&E). The Australian Government contributes half of program expenditure as program funds are expended (capped at 0.5% of the Gross Value of Production).

More information
agrifutures.com.au/rural-industries/buffalo
Deer produce a lean meat and valuable antler velvet, and perform well in a range of Australian temperate environments. The AgriFutures™ Deer Program aims to direct research, development and extension (RD&E) that contributes to the profitability, sustainability and productivity of this industry.

**About the industry**

- Over three decades, the AgriFutures™ Deer Program has generated more than 50 reports on deer production, processing, marketing and the industry.
- Deer were introduced during the 19th century and six species form the basis of the Australian deer industry.
- Deer farms in Australia are often integrated as agritourism enterprises.
- In addition to venison (meat), other deer products include velvet antler, skins and co-products such as tails and blood which are used in traditional Eastern medicine. Approximately 85% of venison and more than 95% of velvet antler is exported.
- Following a period of drought, in 2010-2011 deer numbers on Australian farms dropped to 45,000 (on 1,436 farms) and the gross value of the industry was around $1.7 million.
While the AgriFutures™ Deer Program RD&E investment is guided by the objectives of the Animal Industries RD&E Plan, the Program’s areas of priority are:

1. Improved handling and restraint facilities
2. Improved genetics
3. Research to identify impediments to deer processing
4. Research on opportunities for multi-species processing
5. Extension/training for producers on working with processors to facilitate deer handling and slaughter.

The statutory levy on deer has ceased, however there is a small residual fund available for investment by the AgriFutures™ Deer Program in strategic projects.

The Australian goat fibre industry is comprised of the cashmere and mohair producers, delivering fine fibre for use in luxury products and high-end fashion throughout the world.

The AgriFutures™ Goat Fibre program aims to direct targeted RD&E that contributes to the profitability, sustainability and productivity of this industry.

About the industry

- Cashmere is the fine soft downy winter undercoat found on many goats. A goat which grows this fine undercoat of the correct quality and in sufficient quantities to be commercial is called an Australian Cashmere Goat.

- The Australian cashmere industry was established in the 1970s and after years of selective breeding, the Australian Cashmere Goat has evolved into a distinctive breed of goat, far removed from its bush goat origins.

- In 2012, there were about 10,000 cashmere goats in Australia. Total production of fibre was 3 tonne (hair in) and 1 tonne (dehaired) for a gross value of $88,000.

- Mohair is produced from Angora goats.

- In 2006, there was estimated to be 59,000 Angora goats in Australia. Australian mohair production was estimated to be 137 tonne in 2011-12, with a gross value of $1.45 million.

- Most mohair is classed and sold through the industry-controlled broker the Australian Mohair Marketing Organisation based in Narrandera, NSW.
The Australian goat fibre industry levy was established on 23 November 1989. The AgriFutures™ Goat Fibre Program manages the investment of the goat fibre levy (set at 1.5% of the sale value). This levy revenue is matched by AgriFutures Australia and allocated to relevant projects as sufficient funds accumulate.

Research, development and extension investment

The AgriFutures™ Goat Fibre Program aims to enhance industry success through targeted industry specific RD&E investment based on four broad priority areas:

1. Genetic evaluation and improvement: building upon previous work, with a focus on increasing fibre yield and quality
2. Goat-specific husbandry advancements, such as label extensions of animal health products, disease management more broadly and nutrition
3. Market research into on-shore fibre processing (in collaboration with other rare natural fibre industries)
4. Extension of outcomes from previous projects, especially through the consolidation of online resources.

About the levy

The Australian goat fibre industry levy was established on 23 November 1989. The AgriFutures™ Goat Fibre Program manages the investment of the goat fibre levy (set at 1.5% of the sale value). This levy revenue is matched by AgriFutures Australia and allocated to relevant projects as sufficient funds accumulate.

More information

agrifutures.com.au/goat-fibre
Australia’s commercial kangaroo harvest industry is one of the most sustainable wild harvest operations in the world.

AgriFutures™ Kangaroo Program focuses on high-impact research, development and extension (RD&E) addressing animal welfare, sustainability, nutritional value, trade barriers and food safety, and product value.

About the industry

- The Australian kangaroo industry currently harvests four species for commercial export: Red Kangaroo, Eastern Grey Kangaroo, Western Grey and Common Wallaroo or Euro. All four species are common and none are listed as threatened species. All ‘harvesters’ must be accredited and licensed by state agencies and must operate under strict hygiene and animal welfare Codes of Practice.

- The industry is highly regulated and operates under a quota system administered by state and federal governments that sets sustainable harvesting limits independent of industry demand.

- Quotas represent the maximum number of kangaroos that can be harvested. The commercial harvest is generally significantly less than the approved quota, as the harvest is linked to market demand and the capacity of the industry to harvest the quota level. The percentage of the quota that is used varies between years. Since 2001, it has been averaging less than 65%.

- Products derived from kangaroos include meat for human consumption and skins for leather products. Some skin and meat is used domestically, with the remainder exported to more than 55 countries.
The macropod levy is collected per animal and is payable by processors. AgriFutures Australia is responsible for the investment of the RD&E component (4c/kangaroo for human consumption and 3c/macropod for animal consumption) of the levy. The Australian Government contributes half of program expenditure as program funds are expended. Australian Government contribution is capped at 0.5% of the Gross Value of Production.

The AgriFutures™ Kangaroo Program’s RD&E investment focuses on five strategic areas:

1. Animal welfare – gathering scientific evidence to a standard sufficient to gain third-party endorsement for the industry’s animal welfare practices
2. Sustainability – compiling and sharing scientific evidence
3. Nutritional value – identifying benefits of kangaroo meat
4. Trade barriers and food safety – generating scientific data to satisfy regulators that gamma irradiation is a safe treatment for kangaroo meat, and demonstrate whole-of-chain safety of kangaroo meat
5. Product value – ensuring standards/specifications are made available to support eating quality assurance claims to consumers.

With global environmental and market trends impacting food consumption, AgriFutures Australia is identifying opportunities for emerging food and fibre industries and connecting with new and expanding markets.

AgriFutures Australia is dedicated to identifying and supporting the development of new and emerging rural industries that can meet changing demand and make a valuable economic, social and environmental contribution to Australia.

**Fast facts**

- AgriFutures Australia has set an ambitious goal of identifying and supporting the emergence of agricultural industries that can reach or exceed a $10 million GVP per annum threshold by 2022.

- Emerging industries are new industries with high growth potential. Emerging industries play an important part in the Australian agricultural landscape, they contribute to the national economy and they will be key to meeting changing global food demands.

- AgriFutures Australia aims to build partnerships with key stakeholders, including partners in the private sector, to support the development of these high-potential emerging rural industries.

- Research funding for the AgriFutures™ Emerging Industries Program is provided by AgriFutures Australia and industry voluntary contributions.

- We work in partnership with the emerging industries advisory panel to decide on research priorities and to make investment decisions each year.
Advisory Panel

Current panel members include Brian Ruddle (Chair), Susan Wilson (Deputy Chair), Ann Ross, Angeline Achariya, Chris McLoghlin, Ian Smith, John Lever, Mila Bristow and Will Taing.

More information

agrifutures.com.au/emerging-industries