

RESEARCH ENVIRONMENT

As part of the development of the AWI 2016/17 to 2018/19 Strategic Plan, we considered feedback from woolgrowers and industry stakeholders as well as our own assessment of investment opportunities to identify the top issues where AWI investment should be focussed. These issues are summarised below and detailed in the following sections.

SHEEP PRODUCTION

TOP PRIORITIES

1. Reproduction
2. Pests & diseases
3. Nutrition
4. Accessing better technology

PRODUCTIVITY

- Increase number of lambs weaned per ewe joined
- Reduce impact of wild dogs and other vertebrate pests
- Promote adoption of best practice management
- Contribute to genetic and phenotypic improvement in lifetime economic performance of ewes

1. Competing enterprises
2. Harvesting
3. Wool prices

PROFITABILITY

- Develop labour saving technologies
- Provide appropriate market intelligence
- Continue to support enhanced procedures for sheep welfare
- Mitigate impact of climate change on wool production

1. Market trends

EXTERNAL FORCES

- Ensure industry is recognised as leaders in sustainable farming

WOOLGROWER SERVICES

TOP PRIORITIES

1. Skilled labour force
2. Access independent information to support technology adoption

WOOLGROWER SKILLS

- Develop and deliver effective shearer and woolhandler training
- Support and strengthen wool production extension infrastructure
- Provide appropriate market intelligence

1. Support of regional events
2. Support of representative bodies
3. Continued market access for Australian wool
4. Facilitate interaction with the government and other stakeholder groups

CONSULTATION

- Facilitate effective interaction with woolgrowers
- Maintain effective interaction with key stakeholders, including the Federal Government

PROCESSING INNOVATION & EDUCATION EXTENSION

TOP PRIORITIES

1. Environmental issues
2. Improved quality, efficiency, and cost reductions in processing

IMPROVED TEXTILE PROCESSING

- Develop "fit for purpose" products
- Transfer wool processing skills and knowledge to emerging and existing wool processors
- Facilitate the effective transfer of knowledge on wool benefits across all supply chain participants

1. Create innovative design features
2. Enhancement of wool's functionality

IMPROVED MANUFACTURING TECHNIQUES

- Develop and make commercially available new manufacturing processes

AWI STRATEGIC RESEARCH PRIORITIES

SHEEP PRODUCTION

STRATEGIES

PROGRAMS

AWI PROGRAM MANAGER

HEALTHY PRODUCTIVE SHEEP	1. Sheep Health & Welfare	Bridget Peachey
HEALTHY PRODUCTIVE SHEEP	2. Vertebrate Pests	Ian Evans
HEALTHY PRODUCTIVE SHEEP	3. Reproduction	Carolina Diaz
HEALTHY PRODUCTIVE SHEEP	4. Genetic Improvement	Geoff Lindon
FARM AUTOMATION & SOFTWARE DEVELOPMENT	Farm Automation & Software Development	Carolina Diaz
FEEDBASE & FIBRE ADVOCACY	1. Feedbase & Eco Credentials	Angus Ireland
FEEDBASE & FIBRE ADVOCACY	2. Fibre Advocacy	Angus Ireland

WOOL GROWER SERVICES

STRATEGIC TARGETS FY18/19

INVESTMENT FOCUS FY18/19

TRAINING & TECHNOLOGY UPDATE

1. Sheep & Wool Management Skills

1. Over 10 practical sheep skills training events held across the country each year, reaching over 100 people and at an average cost not exceeding \$150 per effective participant.
2. Delivery of the National Merino Challenge on a fixed annual budget in real terms.
3. Average annual cost saving to woolgrowers participating in AWI supported networks exceeds \$700, net of AWI and grower costs.
4. Achievement of a minimum of 8,000 page views for practical sheep management resources on AWI websites at a maximum cost per hit of \$1.50.

- National Merino Challenge
 - AWI will continue to support the NMC.
- Extension Networks
 - Enhanced delivery of AWI priorities through increased utilisation of AWI's state grower networks.
- Practical Management Information
 - AWI will continue to develop and make available key industry resources on best management practices and existing technologies across all facets of sheep production.
- Capacity Building & Technologies
 - Address short-falls in practical hands-on training initiatives specific for wool and sheep. Re-establish the facilities at FFS for training and engagement purposes

Stephen Feighan & Emily King

TRAINING & TECHNOLOGY UPDATE

2. Wool Harvesting & Quality Preparation

1. Increase shed productivity by, on average, four sheep per day by 2019 across the whole industry.
2. Cost per person trained remains constant in real terms.
3. Commercial availability of at least one technology, by 2019, to increase the efficiency of wool harvesting

- In-Shed training:
 - AWI will continue to support in-shed training.
- Workshops
 - AWI will continue to develop and deliver workshops that are designed to complement commercial training opportunities.
- Innovative In-shed Technologies
 - AWI will invest in research and development to commercialisation of in-shed technologies and methods to improve the efficiency and quality of wool harvesting.
 - AWI will continue to develop appropriate resources on shed operations, shearing and wool handling and ensure these are made available to industry enable the ultimate on a cost effective basis.

Stephen Feighan & Jim Murray

PROCESSING INNOVATION & EDUCATION EXTENSION

STRATEGIC TARGETS FY18/19		INVESTMENT FOCUS FY18/19	
PRODUCT & PROCESSING INNOVATION	Product & Processing Innovation	<div>1. Develop and commercialise 6 new processes and transfer to 15 manufacturers, yielding an average mill profit increase exceeding \$20,000 by 2019.</div> <div>2. Develop 4 innovations and transfer to 33 manufacturers, yielding an average mill profit increase exceeding \$20,000 by 2019.</div>	
		<div><div>• Fashion Development of new product marketing tools for each Autumn/Winter retail selling season with the focus on separates, and functional finishes.</div><div>– Identify a group of retailers and brands best placed to understand and adopt new innovations.</div><div>• Novel Technologies</div><div>– Develop and commercialise new manufacturing processes, either machinery or chemical based, which lead to new novel products in wool and opens opportunities in new market segments for wool.</div><div>– Working in partnership along the supply chain, innovations will focus on a combination of wools natural inherent properties, and engineering the wool fibre, yarns, fabrics and garments to enhance these properties or adding new ones.</div><div>• Sportswear</div><div>– Develop new product ‘fit for purpose’ ranges aimed at outdoor (focus on protection), running (focus on moisture management and temperature control) and athleisure (focus on odour, moisture management, stretch & recovery for comfort).</div></div> <div>Julie Davies</div>	

NATIONAL WOOL RD&E STRATEGY 2018-2022

Proposals on lamb survival will be considered under this strategy provided they are multidisciplinary and systems based and address the targets listed in the program below.

PROGRAM 1: INCREASE PRODUCTIVITY

ACTIVITIES:

Priorities for R&D investment over the life of this plan are:

- Reproductive performance, especially of the Merino;
- Survival rates, especially in ewes, lambs and weaners;
- Reduced predation of sheep;
- Running the right sheep for the enterprise, achieved largely through breeding decisions;
- New options for sheep in the cereal zone; and
- Greater understanding of breed demographic shifts and the impacts on wool production and productivity.

KEY PERFORMANCE INDICATORS:

Over the life of this plan and to 2030:

1. Average marking rates will increase by 0.5% per annum
2. Average Merino hogget survival rate will increase by 0.13% per annum
3. Average Merino lamb survival rate will increase by 0.2% per annum
4. Average adult sheep survival will increase by 0.1% per annum
5. The proportion of hogget ewes mated will increase by 0.5% per annum (from 10% to 17.5% in 2029-30)
6. The average wool cut per head will be maintained at 4.5 kg (2014-15 base) or will increase
7. These targets will collectively result in a 0.7% p.a. increase in sheep numbers"

