

Populated with Workshop findings – National Wool RDE Strategy  
**KATANNING 11 AUGUST 2010**

Vision: the challenge for 2030	Themes: milestones to achieve vision	Strategy: plan to achieve milestones	Action: actions implementing plan	Priority	Time frame
		<i>Data to support total investment</i>	<i>Analysis to determine tipping point beyond which industry investment to support production volumes in declining demand scenario is unviable</i>		
Increased on farm profitability	Increased productivity and reduced input costs	Refined animal husbandry	Fly centric research into causes of attraction and biological control Define unexplained variation in fly strike risk factors Facilitate dialogue with investors in live export research Investigate biological control of lice, including sulphur and volatile oils Alternative delivery system for lice treatments Biosecurity: not explored	High  High Medium	Short  Short
		Labour efficiency improvements	<p><i>Wool shearing:</i> Literature review alternative fibre cutting mechanisms in light of current technologies Demographic profiling of shearers to guide shearing alternative requirements Portable/ mobile shearing infrastructure: revisit previous R&amp;D in light of current technologies for practical application Review robotic shearing in light of new technologies and animal behaviour</p> <p><i>Wool harvesting:</i> Current chemical shearing approach upgraded commercial interest</p> <p><i>Animal husbandry:</i> Find lice and fly control chemical treatments suitable for use in automatic jetting races and investigate delivery vehicles (wetting agents) ** cross reference with genetic tool development and uptake strategy</p>	High  Commercial interest  Medium	Short  Commercial interest  Short
		Genetic tool development and uptake	Development of snp chip codes research, validation and commercialisation Research and development of Merino reproductive efficiency traits Research and development of Merino lamb mortality Research and development of lice resistance traits including rubbing resistance Research and development of sheep resistance to flies: bare breech, worm resistance, scouring (hypersensitivity) Identify odours attractive to flies and sheep genetic traits responsible for these odours (smell) Research and development survivability traits for 3-12 month old weaners Identify genetic component of methane production **cross reference with feed efficiency strategy Literature review into genetic options for anti shrinkage of wool fibre Research and development into genetic options for anti shrinkage of wool fibre	High Medium High High High  High Medium  High Low	Short Long Short Short Short  Short Long  Short Med-Long

		<p>Develop standardised index for faecal egg counts Research and development of traits that enable Merinos to compete with meat breeds: reproduction, production and eating quality</p> <p>Merino Select: Ongoing support for Merino Select including Elites Maintain wether trial linkages Include all new Merino types Evaluate sire effect and ewe effect</p>	<p>High High</p> <p>High High High High</p>	<p>Short Short</p> <p>Short Short Short Short</p>
	Feed efficiency	<p>Research and develop genetic component of methane Research effect of feed types and additive on feed efficiency</p>	Medium	Long
	Reproductive efficiency	<p>Extension and adoption on farm of reproductive efficiency traits and best practice animal husbandry to improve reproductive efficiency</p> <p>**Cross reference with genetics and mortality strategies</p>	High	Short
	Reduced on farm mortality	<p>** cross reference with genetics strategy Define risk management strategies for accelerated lambing systems to reduce lamb and ewe losses Predation control: not explored</p>	Medium	Short
	Adaptable pasture systems	<p>Identify regional requirements for mineral additives Pasture genomics research to improve species and adaptability addressing climate adaptation and complementarity with farming systems, capitalising on summer storms NPKS use efficiency (soil/ supplement) though through pasture genomics and investigating interaction with soil microfauna and flora, other minerals and additives <b>**cross check with agronomist</b> Benefit cost analysis for accurately measuring dry matter/ protein/ mineral components of pastures on farm adapting existing tests (rapid on farm) or technology advancements in infra red spectroscopy Investigate ways to recycle phosphorus Pasture genomics research to adapt pastures to low phosphorus Investigate decontaminating Australian phosphorus supplies from heavy metals Reliable establishment and maintenance of pastures in cropping systems within 1 year Identify regional requirements for pasture mineral additives Set stocking of perennial pastures: not explored Rabbit control: not explored Grazable crops: not explored</p>	<p>Low</p> <p>High</p> <p>High High High High High High</p> <p>Low</p>	<p>Medium</p> <p>Short</p> <p>Short Short Short Short Short Short</p> <p>Medium</p>

		Whole farm measurement and monitoring	** cross reference with assess and address credence characteristics strategy		
Sharing in the value chain at low risk	Effective, efficient and open communication supply chains <b>** check terminology vertical integration?</b>	Accurate supply chain intelligence	Ongoing supply of market intelligence on fibre price relationships Establish and facilitate dialogue both up and down the supply line, between the growers and retailers/ consumers/ processors by distance or in person, to encourage through sector understanding of constraints, opportunities and early identification of credence and verifiable characteristics to enable rapid response Review Wool Production forecasting	High	Short
		Managing risk of sharing in value chain	Communication of alternative wool selling systems and their risks, including long term forward contracts	Commercial interest	Commercial interest
		Reduce steps of wool handling in supply chain	Cost benefit analysis of time spent differentiating low value fleece components and value to different parts of the supply chain Review existing research (scour baths, graziers investment company ANDAR) and investigate opportunities for decreasing processing costs	High High	Short Short
Consumer confidence in wool products	Meet market demands for product integrity and quality	Develop objective in shed measurements	Assess alternatives or improvements to AWEX classing requirements Certification of in shed bale identification (DNA)  ** cross reference with Reduce steps of wool handling in supply chain strategy		
		Assess and address credence characteristics	Identify benefits associated with delivering and verifying credence characteristics on farm Establish and facilitate supply chain dialogue over verifying credence characteristics on farm without traceability post farm gate (such as wool blending) Establish economic impact of blending across the supply chain, concentrating on manufacturing end Economic analysis of benefits of traceability post farm gate Audit and enforce Woolmark brand standards Develop whole flock level mulesing declaration process Develop standardised single declaration form Profile selected operations and regions demonstrating switch to best practice addressing credence characteristics, as alternative to individual property audits for credence characteristics Chemical residues: not explored	Low Low High  High	Long Long Short  Short
Consumer confidence in the wool farming system	Recognised environmental and farming system credentials	Addressing climate variability	Increased accuracy of modelling over seasonal month predictions ** cross reference to pastures strategy and on farm mortality strategy Decision support for seasonal management of pasture through modelling Extension of use of Midas modelling to other regions and outputs by region		

		Identify carbon baseline	Quantify Australian carbon footprint of segments (in wool enterprise, in fleece, in product) Research to support industries position on policy issues, including right to farm Literature review of research into plant tannins and breed interactions Research into plant tannins and breed interactions Investigate additive and nutrition to mitigate methane Literature review of existing information to inform future research Define impact of carbon on productivity and economics of farming	Medium High High	Short Medium Med-Long Short Short
Awareness and adoption of wool industry messages	Effective communications with industry and the wider community	Information distribution through targeted communication topics, timing and content	Targeted industry extension focusing on risk management and decision making in mixed farming systems, incorporating tools into farm management and early warning systems Targeted industry extension focusing on lamb mortality Targeted industry extension focusing on use of ASBVs in easy usable form Targeted industry extension focusing on current lice resistance Delivery of wool prices via text messaging Standardised information delivery of profitability per hectare Demonstrate economic advantages of Merino in production system Ongoing support for multipliers to deliver messages (private consultants, Sheeps Back) Promote and further develop online centralised information hub for access to sheep/ wool related information	High High High	Short Short Short
		Information adaptation	Develop incentive and promotion system within shearing process to reward quality of work – shearing masterclass Maintain investment in research flocks securing genetic diversity for future research	High	Short
		Skills development	Wool classing training and certification on farm, including prior learning recognition	High	Short