

Populated with Workshop findings
YOUNG 6 SEPTEMBER 2010

Vision: the challenge for 2030	Themes: milestones to achieve vision	Strategy: plan to achieve milestones	Action: actions implementing plan	Priority	Time frame
Increased on farm profitability	Increased productivity and reduced input costs	Refined animal husbandry	Further mulesing alternatives Preoperative anaesthesia for castration and tail docking Review "Best Practice" 2008 Qld University document for currency Develop finishing systems for Merino lambs		
		Labour efficiency improvements	<p><i>Wool shearing:</i> ** work with commercial interests already committed to area Portable/ mobile (chain shearing) shearing infrastructure Shearing ergonomics: upright shearing and crutching, as well as positioning of the animal Noiseless handpiece Literature review alternative fibre cutting mechanisms in light of current technologies</p> <p><i>Wool harvesting:</i> ** work with commercial interests already committed to area Review barriers to commercial uptake of previous wool harvesting technologies Improve Bioclip wool capture net, particularly for superfine wool (eg biodegradable film/ net) Biological chemical for use in rams and all ages of sheep (fertility issues)</p> <p><i>Animal husbandry:</i> Analysis and cost benefit of different handling and infrastructure systems, including pros and cons for animal welfare Field days with equipment demonstration **collaboration with commercial interests Case studies of producer use of new infrastructure innovations Investigate effect of trace element deficiency on host resistance to parasite infection Extension of information on native shrubs containing tannins for worm control Easy care sheep: not explored</p>	<p>High High</p> <p>High High</p> <p>High High</p> <p>High</p> <p>High</p> <p>High</p>	<p>Short Short</p> <p>Short Short</p> <p>Short Short</p> <p>Short</p> <p>Short</p> <p>Short</p>
		Genetic tool development and uptake	<p>Identify 4 teat ewes for Merino Select database Identify effect of 4 teat ewes on increasing lambing percentage Merino Select: promotion and adoption of ASBV's</p> <p>Ewe bloodline trials for heritability efficiency Benchmarking bloodline analysis from wether and ewe trials for traits Research and development of feed conversion efficiency trait Research and development of increased productivity traits Research and development of fibre curvature trait (report the ASBV) Validate genomic enhanced breeding value on farm before release</p>	<p>High High Commercial interest Medium High</p>	<p>Short Short Commercial interest Short Ongoing</p>

			Develop a measure of feed conversion efficiency: review CSIRO work Relate fibre ASBV's with product characteristics		
		Feed efficiency	** cross reference with Genetic tool development and uptake		
		Reproductive efficiency	Extension and adoption of precision farming for reproductive efficiency: not explored		
		Adaptable pasture systems	Investigate capacity for sheep to self medicate against trace element deficiencies in pasture Review previous trace element work to inform future projects Investigate ways to re-establish and maintain native and perennial pastures, focusing on native's drought tolerant capacity, in all zones and enterprise systems Native pasture species commercialisation Pasture genomics research to improve drought tolerance Extension of pasture cropping techniques: low level investment Develop on farm test for trace elements Develop alternatives to fertilisation programs Validate alternative fertilisation programs in different systems in different climatic zones Balancing soil biology to improve NPK availability Establish the link between nutrient cycling and tie control grazing and extend	High Medium High High Medium High Low	Short Ongoing Long Ongoing Ongoing
Sharing in the value chain at low risk	Effective, efficient and open communication supply chains ** check terminology vertical integration? This may need to be split into supply chain efficiency and supply chain transparency see Alix Turner email	Accurate supply chain intelligence	Common language established through each part of the supply chain to allow expression of market drivers on inferior blending and lot sizes Establish baseline knowledge levels through supply chain on different wool types and their use, and impact of blending of quality Promote the improved consistency of a top from minimal skirting, preshear crutch, belly and fleece combined (Sud Woola)	High High Commercial interest	Short Short Commercial interest
		Managing risk of sharing in value chain	Communication of alternative wool selling systems and their risk management, learn from other industries Promotion of alternate selling systems: to growers, dialogue with customers or Austrade Cost benefit analysis and value propositions as to why to change selling system Workshop to define principles relevant to developing an efficient decentralised wool trading system that is free of the limitations of the sequential auction process and that, as far as is possible, establishes the true value of wool instead of merely discovering the (lowest) price at which it can be bought at a particular instant. Wool described as recognised brands/ varieties and grades in the selling system	Low Commercial interest Commercial issue: may involve Austrade Low Commercial issue	Long Commercial interest Commercial issue Short Commercial issue

		Developing confidence in wool product	Science to support marketing performance benefits of wool, eg sleep Meeting market specifications compared to synthetic fibres: not explored		
		Increasing efficiency of processing	Identify energy use efficiencies in the processing chain, through learning from the life cycle analysis **collaboration with commercial partners Cost benefit analysis on investigation into lanolin Clarify volume, value and ownership of lanolin, to inform investment into environmental credentials of lanolin as product for human and industrial use Increasing uptake of innovations with commercial partners and ensure delivery of product through improved contracts: improved business planning in pre-commercialisation phase Investigate potassium recapture from wool (current research)	Medium Low Low Low	Ongoing Long Long Long
Consumer confidence in wool products	Meet market demands for product integrity and quality	Assess and address credence characteristics	Establish and facilitate supply chain dialogue over verifying credence characteristics on farm without traceability post farm gate Develop measurement devices to meet customer needs: knitting structure, wool type, comfort Scientific approach to support story of credence characteristics Support “natural, biodegradable and renewable” image of industry through scientific approach to identified gaps in this marketing Recognition of best practice Investment to support policy development of animal welfare standards and guidelines	High Medium Low High	Short
		Chemical use	Individual farm certificate for on farm chemical residue test results Lock test from one line validates chemical residues status of wool clip	Commercial interest Low	Commercial interest Long
Consumer confidence in the wool farming system	Recognised environmental and farming system credentials	Farming sustainability	Review potential for increasing availability of phosphorus in soil (Carol Hungerford) Quantify water and energy use in closed system where sheep are used as tools to manage environment Review “Land Water Wool” before investing in new programs, relating to sheep as tools to manage environment, and use results for image promotion and product integrity Identify management systems to increase profitability, focusing on Merino lambs including feedbase and nutrient levels ** link with MLA extension	High Low High	Short Short Short
		Addressing climate variability	Information to allow adaptation of farming systems to balance impact of climate variability on feedbase (CSIRO model, Grass Grow adapted to different systems)	Low	Long

		Identify carbon baseline	Quantify Australian carbon footprint of segments (in wool enterprise, in fleece, in product, in soil) Identify management opportunities to capture carbon on farm Develop system to measure carbon sequestration Research to support industries position on carbon Define impact of carbon economics of farming and profitability	High	Long
		Identify water, energy and chemical use	Through chain environmental impacts (chemical residue, water, energy, emissions) with equal investment from all parts of chain, commercial issue post farm	Medium	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	<p>Topics for extension: Standards and guidelines for sheep Reproductive efficiency: weaning rates and management in adverse seasons Easier access to publications and journal articles: through online availability Current publications on multi purpose sheep and meat characteristics Targeted industry extension focusing on use and understanding of ASBVs Animal health producer groups for worm and lice control How to use lice detection tests</p> <p>Update Wool Cheque Promote and extension of Wool Cheque Demonstrate economic advantages of Merino in production system</p> <p>Promotion and positive profiling of industry: not explored Attraction of young growers to industry: not explored Promotion of wool production to other farmers, to increase profile of wool industry and attract new entrants Livestock and farming promotion campaign to community: note explored</p>	High	Short
				High	Short
		Information adaptation	Economic argument for adoption of product innovation		
		Support for strategic thinking	Accurately benchmark cost of production (fibre diameter, fleece weight, body weight) of wool portion of enterprise by rainfall and wool type Culture of learning along the supply chain Improve relationship of peak body and RDC to support international messaging and to increase strength of the industry		
		Skills development	Mentor grower champions for wool industry and grower group leadership: not explored		