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	Footrot vaccine: multi serotype Toxoplasmosis abortion risk from wild cats Modify Johne's disease vaccine for improved efficacy, reduced injection site abscess, improved OHS Lice control: not explored	High High	Short Short
		Labour efficiency improvements	Wool shearing: Protocols on anaesthesia for ram shearing Expression of interest for improving shearing handpieces and shearing harvesting Old infrastructure: not explored	Commercial issue	Short
			Wool harvesting: Improve Bioclip wool capture net Wool harvesting technologies: not explored	High	Short
			Animal husbandry: Parasite vaccines Sheep behavioural relating to self dosing Cost benefit analysis for use of precision management system Develop identification systems: RFID Pastures application for preventative worm treatments Biological control of worms Mechanised self dosing system	High High High High Commercial interest: Gallagher	Long Long Long Long Long Short
		Genetic tool development and uptake	Research and development of productivity traits Research and development of lice resistance traits: not explored Research and development of robustness traits Research and development of birth weight traits Research and development lamb survival traits Research and development of mothering ability and maternal instincts Ongoing investment in Merino ASBV tools Identify genetic resistance trait for Johne's disease Promotion of easy care sheep and fitness for environment (eg mouth confirmation/feeding/grazing) Quantify and promote level of accuracy of genomic breeding values Development of snp chip technology to increase accuracy ASBV	Ongoing High	Short

	Extension on how to use the information generated from snp technology: simple, usable form, with commercial collaboration	High	Short Ongoing
Feed efficiency	Address feed inefficiencies related to methane production **collaboration with ruminant livestock RDC's	Medium	
Reduced on farm mortality	Immune system boost: identify immune system key regulators and cost effective supplementation		
Adaptable pasture systems	Pasture genomics research to improve species and adaptability: low phosphorus input pasture species **collaborate with grains industry Long term persistence of pastures	High High	Long Long
	Choice of pastures for seasonal requirements and climatic variability	High	Long
	Salt tolerant pastures	High	Long
	Pasture species that provide shelter and feedbase	High	Long
	Perennial legumes in declining autumn rainfall reliability scenario: identify new species of perennial legumes for nitrogen fixation that are resilient to climate change	Medium	Long
	Literature review of international research of nitrogen fixing grasses for Australian application Review technology on phosphorus fixation from previous works (findings in 1980's)	Ongoing	Long
	**collaborate with grains industry Decision support tool for phosphorus use **collaborate with grains industry Scoping study on phosphorus sources **collaborate with grains industry		
	Literature review and review CSIRO study on plant chemical processes which release elements into soil		
	Independent assessment of pasture species	High	Short
Pasture grubs	Literature review done on previous work on pasture grub control (winter corbie Oncopera rufobrunnea, red headed cockchafer Adoryphorus coulonii) Biotechnology to control pasture grubs, eg transgenesis of Phalaris resistance into ryegrass	High (start now)	Long
	Decision support tool for chemical usage for pasture grub control Species or treatments that increase the efficiency of uptake of nutrient supplementation	High	Short
Learn from other industries	Soil scoping study of effect of soil biodynamics on mineral availability Cost of production on MLA website: review currency of Wool Cheque on AWI website	Medium High	Long Short
	Barriers to adoption of EBV's	High	Short
Whole farm measurement and monitoring	Improve Pastures from Space for Tasmanian use: issues to be addressed include cloud cover, satellite passes, size (hectares) of readings ** cross reference with pastures strategy	Low	

Sharing in the value chain at low risk	Effective, efficient and open communication supply chains ** check terminology vertical integration?	Accurate supply chain intelligence	Database of wool selling outlets, quality and location, available as webpage Continue point of sale education program: clean green image (include chemical usage compared to Prolana- Argentina) Verification of organic status, achieving consistency between different organic systems and promotion of organic status in garments Support wool production forecasting and supply chain information, link with decision making for future research investments, inform strategy development and targets for collaboration Dialogue with brokers for identifying and declaring credence characteristics	High High Ongoing	Short Short
		Increasing supply chain efficiencies and productivity by working with processing facilities on one-to-one basis	Mills benchmark performance Increasing uptake of innovations with commercial partners and ensure delivery of product through improved contracts: improved business planning in precommercialisation phase		
		Product Innovation	Discuss with different fibres to develop novel blends and brands Whitening of wool: not explored Colour and design: not explored		
		Developing confidence in wool product measurement for quality	Facilitate workshop for manufacturers on consistency of fabric test methods Product labelling for shrinkage and comfort factors	High	Short
		Managing risk of sharing in value chain	Review into wool futures and other industries futures trading regarding risk management strategy for industry and to identify barriers to adoption, how to make it of more relevance to wool growers **link with critical mass issue	High	Long
Consumer confidence in wool products	Meet market demands for product integrity and quality	Assess and address credence characteristics	Identify benefits associated with delivering and verifying credence characteristics on farm (lamb mortality, tail docking, transport, castration) Cost benefit analysis on including measures of animal welfare in NWD (lamb mortality, tail docking, transport, castration) and their auditing	Medium Low	Long Long
		Chemical use	Verification of drug company chemical application regimes where residues fail to meet international cut offs Continue Pesticide Residue survey	Commercial interest Ongoing	Commercial interest
Consumer confidence in the wool farming system	Recognised environmental and farming system credentials	Farming sustainability	Wildlife management: Quantify effect of loss of pasture from wallabies, possums and white cockatoos Novel controls (range of tools and alternatives) to 1080 Support passage of alternate toxins and delivery methods to APVMA registration (eg Feratox/ cyanide)	High	Immediate

		Addressing climate variability	Validation of current modelling of pastures for long term investment (eg ryegrass production) **check type of modelling & meaning of statement		Long
		Identify carbon baseline	Quantify Australian carbon footprint of segments (in wool enterprise, in fleece, in product)	Medium	Short
			Literature review of other industries regarding carbon trading	High	Short
		Identify water, energy and chemical use baselines	Address public perception on water and energy use in Merino enterprise: life cycle analysis		
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: market research to inform right subject at the right time, Timing of workshops to maximise exposure <i>Topics</i> : Innovations for wool production Residue levels from use of lice chemicals extension Uptake of Merino ASBV's targeted extension: including case studies on how to use ASBV's and returns to the enterprise How ASBV's are developed Targeted ASBV extension to ram buyers and breeders	High Ongoing	
			Management of flock for animal survival and welfare, reproductive efficiency and lifetime ewe management Management of footrot, lice and Johne's disease Identify skills gap (market research): productivity, drought and its effect on animal health, reinforce the basics of animal production Multiple methods of delivery Pod cast media for extension on productivity Ipad project One page document/ email with multiple grabs with links to full articles Independent tracking for functionality of web programs and recommendations for improved web design Communication network for production: online forum/ chatroom (? moderator)	High Ongoing Ongoing	Short
			Improved technology and format for webinars: interactive, personable electronic medium (not lecture style) Develop grower champions for wool through grower leadership program Promote leaders through online case studies, Landline and Beyond the Bale stories Extension of treatment options for pasture grub control Extension of avoidance of soil acidity through increased nitrogen absorption Demonstrate economic advantages of Merino in production system, and compare with alternative breeds Request APVMA require labels on chemical packaging have larger print fonts	High Med-Low	Short

Information adaptation	Identify systems and share knowledge re adapting production systems Learn from other states disease control programs (eg lice, footrot) Update LiceBoss and WormBoss with research findings	High	Short
Support for strategic thinking	Analysis to determine tipping point beyond which industry investment to support production volumes in declining demand scenario is unviable Cost benefit analysis to be done to inform research decisions	High	Short
	Collect data and calculate value of industry by micron to guide expenditure for ongoing justification of support to industry Analysis of labour requirement needed to support contracting industry Socioeconomic analysis of impacts of alternate sheep breeds Culture of innovation commercialisation, including branded extension packages State by state benchmarking of wool production Demonstrate economic advantages of Merino in production system Confidential independent review of how the mulesing threat was handled to produce lessons learnt and strategic plan to manage future threats	High High Ongoing High	Short Short Short Short
Skills development	Business improvement on farm: not explored Shearing, shed hand and wool classing training and promotion (including OH&S) where market failure exists Build skills to accurately benchmark wool portion of enterprises and how to analyse results, targeted at young producers, with ongoing facilitation to	High High	Ongoing Short
	encourage adoption Training opportunities for young people in wool (secondary and tertiary): Increase promotion of scholarships and Australian Wool Education Trust Develop vocational training at TOCAL & Longreach, school trips and resources for teachers, connected approach with agricultural curriculum		