

**WALRC Research, Development and Adoption - 2016/17 Issues and Prioritisation**

Category	Associated Issues
<p><b>OVERARCHING OF ALL KEY ISSUES</b>  <i>Collaborative Research, Development &amp; Adoption + lack of Skilled Industry (on farm, education etc)</i></p>	
<p><b>Feedbase Management</b></p>	<ul style="list-style-type: none"> <li>• Quality x Quantity</li> <li>• Pasture utilisation &amp; feed conversion efficiencies (how are they effected by grazing management, pasture type and genetics)</li> <li>• Feed efficiency selection (including genetics)</li> <li>• Water use efficiency (manage for better ground cover)</li> <li>• Out of season feed gaps (e.g. forage shrubs, drought tolerant perennial pastures, autumn feed gap &amp; feed transition)</li> </ul>
<p><b>Business Approach</b></p>	<ul style="list-style-type: none"> <li>• To develop a model of 'decision points' for livestock producers to be able to make EARLY objective decisions about selling stock, quitting lambs as stores, buying in feed etc.</li> <li>• Logistics and viability trading livestock.</li> <li>• Discover the barriers and address strategies to instill a culture of business evaluations and benchmarking in livestock systems.</li> <li>• Business analysis of novel/innovative production systems.</li> <li>• Develop a framework for small, local, time limited (2- 3year) groups with regular meetings, high levels of information sharing and an advisor or mentor to facilitate discussions. Business discussion groups.</li> <li>• Optimising production to best match market prices and adapt to environment.</li> </ul>
<p><b>Systems Based R &amp; D/Mixed Farming</b></p>	<ul style="list-style-type: none"> <li>• Genetics x Environment x Management</li> <li>• Production systems (pasture, genetics, management calendar, target market, livestock &amp; cropping systems synergies and opportunities, land usage)</li> <li>• Costs of Production in mixed farming</li> <li>• Pasture/Fodder innovation systems &amp; management for Mediterranean climate/seasonality</li> <li>• Crop x Pastures interface (e.g. pasture carryover after successive crops, integrations management, pasture impacts on no till cropping/management, crop grazing impacts on following years crop).</li> </ul>
<p><b>Technology</b></p>	<ul style="list-style-type: none"> <li>• Increase adoption of 'BIG Data' - Livestock Data link (industry compliance, enhanced productivity)</li> <li>• Increase incentives to lift carcass weights (meat science cutting)</li> <li>• Use of technology for FOO calibrations for grazing (NDVI, smart phone, UNE FOO App)</li> </ul>

	<ul style="list-style-type: none"> <li>• Improve On farm management (robust, simple, reduce managerial complexity)</li> <li>• Pastures and technology uptake</li> </ul>
<b>Reproduction</b>	<ul style="list-style-type: none"> <li>• Increase reproductive rates</li> <li>• Improved fertility &amp; weaning %</li> <li>• Fertility through feed base management</li> <li>• Lifetime performance (reproductive efficiency)</li> </ul>
<b>Supply Chain</b>	<ul style="list-style-type: none"> <li>• Supply chain knowledge at producer level</li> <li>• Producing consistent yield, carcass specifications, meat quality (include Genomic Research)</li> <li>• Valued based marketing using saleable yield and eating quality score</li> </ul>
<b>Animal Health</b>	<ul style="list-style-type: none"> <li>• General animal health</li> <li>• Emerging worm resistance</li> </ul>
<b>Lamb Survival</b>	<ul style="list-style-type: none"> <li>• Reduction of mortality rates/neo-natal mortality rates</li> <li>• Understand interaction between mob size or stocking rate and other animal, paddock and environmental- factors which influence lamb survival, including ewe condition score, feed on offer and weather during lambing.</li> </ul>
<b>Pest Management</b>	<ul style="list-style-type: none"> <li>• Wild dog control and increasing prevalence</li> </ul>
<b>Practice Change</b>	<ul style="list-style-type: none"> <li>• Labour saving devices</li> <li>• Developing a compelling case for change (tradeoff, synergies, antagonism)</li> <li>• Get Lifetime Ewe Management learning embedded in &gt;50% of sheep businesses</li> </ul>
<b>Social License</b>	<ul style="list-style-type: none"> <li>• Public perception of sheep industry - poor public perception can cause business issues</li> </ul>