



SALRC PRODUCER DEMONSTRATION SITE (PDS) PRIORITIES 2022

In response to a request from MLA, SALRC initiated a process of consulting with its seven regional producer committees in late 2021 and early 2022 to contribute an updated/ongoing and new list of PDS priorities for our region. The SALRC Chair met with all seven chairs of the regional producer committees on 3rd February 2022 to review previously submitted PDS priorities and compile any new priorities. It is important to note that although there are similar “themes” for PDS priorities across many of the seven SALRC regions, there are some significant differences in the way PDS projects should be planned and delivered in the vastly different agri/climatic zones that make up those seven SALRC regions. We have classified our regions into the following five agri/climatic zones and have indicated in the PDS priority table below, which of these zones should be targeted with the priority PDS projects:

- High rainfall, winter dominant rainfall zone (HRW)
- Low rainfall (<450mm p.a.), winter dominant rainfall zone (LRW)
- High rainfall, summer dominant rainfall zone (HRS)
- Low rainfall (<450mm p.a.), summer dominant rainfall zone (LRS)
- Semi-arid/arid rangelands zone (R)
-
-

1. PDS PRIORITIES PREVIOUSLY SUBMITTED BY SALRC AND WHICH REMAIN PRIORITIES FOR SALRC REGIONAL COMMITTEES

Note-some updates have been made to these previously submitted priorities.

Priority (note: ranking is across previously submitted and new PDS priorities)	Livestock industries priority issue to be addressed	Possible project components	SALRC agri/climatic zone(s) in which this is a priority
1	Animal husbandry and welfare	<ul style="list-style-type: none"> • Demonstrate at farm level the correct use and benefits (economic, animal wellbeing, producer satisfaction, market access) of using registered pain relief products in conjunction with routine animal husbandry practices (including mulesing, tail 	All zones

Priority (note: ranking is across previously submitted and new PDS priorities)	Livestock industries priority issue to be addressed	Possible project components	SALRC agri/climatic zone(s) in which this is a priority
		<p>docking, castration and dehorning) for sheep and cattle.</p> <ul style="list-style-type: none"> • Evaluation of management techniques in un-mulesed flocks. • Demonstrate best practice fly management to reduce chemical resistance and under circumstances of reduced efficacy of existing chemistry • Improved management of pink eye across a range of production systems in both sheep and cattle • Demonstrate best practice management of internal parasites in sheep and cattle for maximised animal performance and reduced drench resistance. Elements of best practice to include: <ul style="list-style-type: none"> - Drench product decision making and rotation of products - Drenching based on FWEC rather than at regular intervals - Drench resistance testing - Case studies of properties dealing with resistance issues - Drenching best practice (oral, injectable and backline) 	
2	Improve feedbase establishment, perennality and persistence in the high rainfall zones	<p>Demonstrate best management practices to address one or more of the following:</p> <ul style="list-style-type: none"> • Pasture/shrub selection • Restore feedbase after extreme events (drought, fires or floods) • Increase year round productivity • Improve establishment and persistence under increasing climate variability • Manage impacts of weeds • Region specific extension and demonstration of best practice to manage high priority weed species 	HRW, HRS

Priority (note: ranking is across previously submitted and new PDS priorities)	Livestock industries priority issue to be addressed	Possible project components	SALRC agri/climatic zone(s) in which this is a priority
		<ul style="list-style-type: none"> • Minimise bloat risk • Improve pasture establishment, productivity and persistence in landscapes prone to sub soil compaction or “hard pan” soil structure, or other soil constraints • Encourage diversity of plants for landscape and animal health • Increase grazing enterprise profitability • Assess yield %, growth rates, productivity and profitability per hectare of different pasture and supplementary feeding options for weaner lambs and calves • Management of invertebrate pasture pests • Quantify return on investment from improved pastures • Projects focused on persistence of pastures need to be longer term 	
3	Improved net reproductive performance in sheep flocks	<p>Demonstrate improvements in sheep reproductive performance and mortality rates through adoption of selected management techniques that are suited to specific agri/climatic zones. Management techniques to be considered for demonstration of impacts include one or more of the following:</p> <ul style="list-style-type: none"> • Responses to ewe condition scoring at key stages in the reproduction cycle • Joining length/mob size • Pregnancy scanning for litter size • Nutritional management to meet the requirements of triplet, twin and single bearing ewes • Predator control • Lambing group size • Meeting growth targets and overall management of ewe lambs 	All zones

Priority (note: ranking is across previously submitted and new PDS priorities)	Livestock industries priority issue to be addressed	Possible project components	SALRC agri/climatic zone(s) in which this is a priority
		<ul style="list-style-type: none"> • Early versus traditional weaning effects on ewe condition and health, lamb growth rates • On farm validation of costs and benefits of applying best practice management techniques within mixed farming operations • Impact of different reproductive management practices on labour 	
4	Improved net reproductive performance in cattle herds	<p>Demonstrate improvements in cattle reproductive performance, weaning rates and weaning weights through adoption of selected management techniques that are suited to specific agri/climatic zones. Management techniques to be considered for demonstration of impacts include one or more of the following:</p> <ul style="list-style-type: none"> • Supplementary feeding of weaners for growth vs maintenance through periods of limited pasture quantity and quality • Replacement heifer selection and nutritional management prior to, during and following first calving • Early calving of heifers to set up for increased lifetime productivity • Benefits of AI in commercial beef herds • Cow condition assessment prior to joining • Supplementary feeding methods effectiveness and cost efficiency • Pregnancy testing and foetal ageing • Predator control • Early weaning • Set and/or shortened joining periods 	HRW, HRS

Priority (note: ranking is across previously submitted and new PDS priorities)	Livestock industries priority issue to be addressed	Possible project components	SALRC agri/climatic zone(s) in which this is a priority
		<ul style="list-style-type: none"> Improved collection and use of data and performance information for better selection decisions for breeding herds 	
6	Precision/remote livestock and property management systems	<p>Evaluate the practical use of current and new technologies for remote collection and transmission of data to monitor and increase efficiency of management in relation to one or more of the following:</p> <ul style="list-style-type: none"> Animal health and welfare Stock location and movements Security Water and feed supply Predator control Virtual fencing Exclusion fencing monitoring and maintenance Robotic weed control Cost benefit analysis (including labour efficiency impacts) of options Engage technology service providers to raise awareness and support demonstration and adoption of options for Ag Tech 	All zones
8	Improved feedbase establishment, perennality and persistence in the low rainfall zones	<ul style="list-style-type: none"> Demonstrate the productivity and persistence of feedbase species and management systems, particularly perennial grasses and shrubs, suited to low rainfall mixed farming zones and rangelands. Encourage diversity of plants for landscape and animal health. Demonstrate the effectiveness and livestock productivity gains from management of invasive woody weeds/scrub in rangelands areas. 	LRW, LRS, R

Priority (note: ranking is across previously submitted and new PDS priorities)	Livestock industries priority issue to be addressed	Possible project components	SALRC agri/climatic zone(s) in which this is a priority
		<ul style="list-style-type: none"> • Quantify return on investment in confinement feeding 	
10	Animal husbandry and welfare/property protection	<p>Demonstrate best practice confinement feeding of sheep and cattle , with attention to:</p> <ul style="list-style-type: none"> • Site selection criteria • Optimum mob sizes • Joining and management of pregnant ewes and cows • Monitoring of animal health and nutritional status • Selection and development of feed rations • Decision making on when confinement feeding is justified (under drought conditions; bushfire recovery; other) • Mineral supplementation • Confinement feeding of cattle during winter to reduce impacts of grazing on water logged areas and to create winter feed wedge • Quantify return on investment of confinement feeding 	All zones
11	Business and environmental sustainability in response to increasing climate variability	<ul style="list-style-type: none"> • Demonstrate adaptation to climate variability on a range of commercial properties within a region through business planning, enterprise mix and risk management strategies. • Evaluate and demonstrate the impacts of a range of approaches to management of commercial grazing properties on one or more of the following criteria: <ul style="list-style-type: none"> - risk management - business performance - pasture productivity and persistence 	All zones

Priority (note: ranking is across previously submitted and new PDS priorities)	Livestock industries priority issue to be addressed	Possible project components	SALRC agri/climatic zone(s) in which this is a priority
		<ul style="list-style-type: none"> - environmental benefits such as soil health, groundcover, water quality and vegetation biodiversity - management of emerging, new weed and animal parasite/disease issues as a consequence of an increasingly variable climate. - 	
14	Pest and predator management	Demonstrate farm level benefits (production, animal welfare, economic), ecological and social benefits from control of abundant grazing competitors (kangaroos, deer, goats, rabbits) and predator species (wild dogs, foxes, cats and feral pigs) through currently available exclusion fencing and/or control programs.	All zones
16	Precision management of sheep and cattle nutrition	Evaluate and demonstrate the production and economic returns of a precision approach to diagnostic tests of the nutritional status of livestock, forage sources and soils-leading to more precise definition of livestock feed and health supplementation needs.	HRW, HRS
17	Performance of cattle or lamb finishing/trading enterprises	Demonstrating key indicators and benchmarks to improve the performance of finishing/trading operations for beef or lamb.	HRW, HRS



2. NEW PDS PRIORITIES DEVELOPED BY SALRC

Priority (note: ranking is across previously submitted and new PDS priorities)	Livestock industries priority issue to be addressed	Possible project components	SALRC agri/climatic zone(s) in which this is a priority
5	Evaluate carbon balances and trends on farms under different management practices, soil types and climates	<ul style="list-style-type: none"> • Determine GHG net emissions and emissions intensity and carbon sequestration trends for different management approaches/enterprises • Evaluate the impacts of the following on rates of carbon sequestration <ul style="list-style-type: none"> - Soil type - Perennial versus annual pasture dominance - Ground cover - Tree cover - Ponding /water infiltration works • Whole farm planning, management and auditing to reduce carbon emissions intensity while improving animal production, profitability and environmental sustainability. 	All zones
7	Best practice to minimise bloat risk in cattle	Develop and demonstrate decision support tools for assessment of pasture bloat risk.	HRW, HRS
9	On farm and supply chain evaluation of the impacts of no	Collaborative projects involving producers, abattoirs and others in the supply chain, to evaluate impacts on the paddock to plate pathway of changes in	All zones

Priority (note: ranking is across previously submitted and new PDS priorities)	Livestock industries priority issue to be addressed	Possible project components	SALRC agri/climatic zone(s) in which this is a priority
	mulesing, no castration and no tail docking of lambs	management such as no mulesing, no castration, no tail docking.	
12	Effective management of livestock foot health	<ul style="list-style-type: none"> • Demonstrate effective diagnosis and treatment of benign footrot (scald), virulent footrot and foot abscess • Demonstrate vaccination as a management strategy in footrot control. • Case studies of farms that have successfully managed footrot outbreaks. 	HRW, HRS
13	Increasing resilience of livestock through breeding and management	<p>Evaluate across a range of environments the impacts of genetics parameters and management decisions on resilience traits, including:</p> <ul style="list-style-type: none"> - animal health - heat tolerance - stress responses - pathogen susceptibility 	All zones
15	Effects of early nutritional management options for beef cross dairy breed calves	Demonstrate the costs and benefits of different feeding frequencies, feed sources and genetics on the subsequent growth rates and carcass quality of beef cross dairy calves	HRW, HRS
18	Increasing productivity and profitability of managed rangeland goat flocks	<ul style="list-style-type: none"> • Demonstrate improvements in goat reproductive performance, mortality rates and growth rates through adoption of selected management techniques that are 	R

Priority (note: ranking is across previously submitted and new PDS priorities)	Livestock industries priority issue to be addressed	Possible project components	SALRC agri/climatic zone(s) in which this is a priority
		<p>suited to specific agri/climatic zones</p> <ul style="list-style-type: none"> • Demonstrate safe, effective handling and management techniques to enable value adding to harvested rangeland goats through the supply chain, rather than direct to slaughter 	
19	Alternative fertilizer options to increase soil fertility, pasture production and grazing enterprise profitability	<p>Demonstrate the pasture productivity and profitability impacts of conventional and alternative fertilizer products, including:</p> <ul style="list-style-type: none"> - Compost - Fish waste - Poultry litter - Organic products - Agri-ash - Biochar 	All zones