

2021-22 Investment Call – Producer identified RD&A priorities from North Australia Beef Research Council Inc



Table 1: Identify new research, development or adoption gaps, activities and strategies to achieve the desired outcome/s.

(* For R&D, clearly identify the research gap. For adoption detail a possible strategy that producers would engage with to achieve the intended outcome.

MLA Program Area	Priority Rank	Outcome Sought	Link to MLA Program of work and/or Red Meat 2030	To adequately achieve the outcome, identify R&D and/or adoption gaps or strategies? (*)	Committee/s origin (refer key pg 5)
Grassfed Beef	1	Develop whole systems for managing breeder productivity.	<p>MLA programs: NB2 Animal health, welfare and biosecurity Grazing and pasture management Genetics and animal breeding Feeding, finishing and nutrition Environment and sustainability Business management</p> <p>Contributing to Red Meat 2030: <i>Doubling the value of Red Meat production by 2030.</i> <i>Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices.</i></p>	<p>RDE&A</p> <ul style="list-style-type: none"> Develop and demonstrate breeder management systems that maximise productivity and profitability for specific business enterprise goals and production environments. 	SEQBRC WQBRC BRAC KPIAC
	15	Driving productivity through genomics	<p>MLA programs: NLGC, NB2 Genetics and animal breeding</p> <p>Contributing to Red Meat 2030: <i>Doubling the value of Red Meat production by 2030.</i> <i>Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> Research to increase productivity in all areas. 	KIM SEQBRC
Sustainable Feedbase Resources	4	Practical pathways to sustainable pasture	<p>MLA programs: LPP, NB2 Grazing and pasture management Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Doubling the value of Red Meat production by 2030.</i> <i>Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices.</i> <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> Enhanced ability to manage native pastures Improved strategies for selection and establishment of sown pastures Managing the pasture woody vegetation balance 	CQBRC
	11	Rotational grazing, wet season spelling and stocking rate management to improve land condition.	<p>MLA programs: NB2 Grazing and pasture management Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>RDE&A</p> <ul style="list-style-type: none"> Better use of rotational grazing techniques. (Wambiana grazing trial does not address rotational systems) 	NQBRC NWQBRC
	14	Optimisation of On-Farm vegetation (pastures, forage, trees) for productivity, profitability & sustainability)	<p>MLA programs: NB2 Grazing and pasture management Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices.</i> <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> How can a farm do a pasture mix and stocking rate to avoid a drought related sell down and maintain consistent profitability throughout the enterprise? 	SQBRC

MLA Program Area	Priority Rank	Outcome Sought	Link to MLA Program of work and/or Red Meat 2030	To adequately achieve the outcome, identify R&D and/or adoption gaps or strategies? (*)	Committee/s origin (refer key pg 5)
	16	Developing and trialling alternative grass/legume species to extend protein-digestibility and animal performance into the dry season.	<p>MLA programs: LPP, NB2 Grazing and pasture management</p> <p>Contributing to Red Meat 2030: <i>Doubling the value of Red Meat production by 2030.</i> <i>Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> Alternative grass and legume species adapted to diverse soil types and climate zones 	NQBRC
	18	Grazing management strategies for improved pasture recovery after drought.	<p>MLA programs: NB2 Grazing and pasture management Environment and sustainability</p> <p>Contributing to Red Meat 2030: Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</p>	<p>RDE&A</p> <ul style="list-style-type: none"> Identify management options to ‘prime’ the pasture to maximise the response to rain Build on previous research and: <ul style="list-style-type: none"> a) review existing information in combination with b) determine current management practices for drought management and interaction with land condition and financial results; c) scale up examples of effective management within on-ground research complemented by modelling of longer-term outcomes. 	WQBRC
Animal Wellbeing	5	Seek alternatives for painful husbandry practices.	<p>MLA programs: AWP, NB2 Animal health, welfare and biosecurity</p> <p>Contributing to Red Meat 2030: <i>Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> Multiple projects required to deliver at least one commercially viable alternative Research into pain relief vs techniques differ - both needed High priority need for an alternative to spaying: faster, easier to use, safer 	PIL
Sustainability and CN30	6	Causes, consequences and management of woodland thickening	<p>MLA programs: NB2 Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>RDE&A</p> <ul style="list-style-type: none"> Data required to inform incoming vegetation laws (Qld) Includes management of thickening: which species - eg eucalypts and carissa Potential sleeper issue. Potential tree density link to rainfall. 	NQBRC
	7	Understanding the importance of plant and animal biodiversity to enhance grazing land management and profitability	<p>MLA programs: NB2 Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> Important social licence issue Ongoing support for JCU biodiversity work at Wambiana 	NQBRC NWQBRC
	17	Carbon footprint/energy audit measurement methodologies and tools.	<p>MLA programs: CN2030, NB2 Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>RDE&A</p> <ul style="list-style-type: none"> Demonstrate to government what is occurring in the north - investment in southern rangelands carbon Demonstrate the meaning of ‘carbon neutral’ 	KIM PIL

MLA Program Area	Priority Rank	Outcome Sought	Link to MLA Program of work and/or Red Meat 2030	To adequately achieve the outcome, identify R&D and/or adoption gaps or strategies? (*)	Committee/s origin (refer key pg 5)
	10	Understanding soil health and its impact on rejuvenating degraded rangelands.	<p>MLA programs: NB2 Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> Particularly in relation to degraded soil around water points in north Australian rangelands 	NWQBRC
	19	Biological control of Navua Sedge	<p>MLA program: Grazing and pasture management</p> <p>Contributing to Red Meat 2030: <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> Effective management and control of Navua sedge 	NQBRC
	20	Fall army worm surveillance / management / research / quantify impact	<p>MLA Program: Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> A better understanding of: <ul style="list-style-type: none"> Distribution Pattern and rate of spread Management Impact 	KIM PIL
Other	9	Identify and mitigate barriers to adoption of best knowledge practices.	<p>MLA programs: NB2 Producer adoption Business management</p> <p>Contributing to Red Meat 2030: <i>Doubling the value of Red Meat production by 2030. Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices. Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>RDE&A</p> <ul style="list-style-type: none"> A better understanding of how to achieve more effective practice change 	SQBRC

Table 2: Identify ongoing research, development or adoption priorities that remain a priority from previous investment calls:

(*) For R&D, clearly identify the research gap. For adoption detail a possible strategy that producers would engage with to achieve the intended

MLA Program Area	Priority Rank	Outcome Sought	Link to existing MLA projects, MLA Program of work and/or Red Meat 2030	To adequately achieve the outcome, is the gap in R&D or adoption? (*)	Committee/s Origin (refer key pg 5)
Grassfed Beef	2	Improving the rumen function through strategies and/or products to increase productivity (particularly on low quality diet) and decrease methane production.	<p>MLA programs: LPP, CN2030, NB2 Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Doubling the value of Red Meat production by 2030.</i> <i>Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices.</i> <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> Proven and cost-effective technologies to enhance rumen efficiency Proven, deliverable and cost-effective rumen technologies that decrease net methane production in ruminants. 	WQBRC CQBRC BRAC
Sustainable Feedbase Resources	3	Managing Climate Variability & Drought Preparedness	<p>MLA programs: NB2 Grazing and pasture management Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices.</i> <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>RDE&A</p> <ul style="list-style-type: none"> Better preparation and strategies: use past learnings. Amount of fodder on hand per breeder. Modelling past rainfall as indication of future. <p>Linked to priority 8 - Short/Long term weather forecasts - accuracy</p>	SQBRC WQBRC
	12	Optimising supplementation including effectiveness of supplementing different animal classes (eg weaners vs breeders)	<p>MLA programs: LPP, NB2 Feeding, finishing and nutrition</p> <p>Contributing to Red Meat 2030: <i>Doubling the value of Red Meat production by 2030.</i> <i>Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices.</i></p>	<p>E&A</p> <ul style="list-style-type: none"> Cost effective supplementation programs that support early weaning Cost-effective supplementation programs for different classes of livestock eg weaners vs breeders Cost/benefit analysis PGS opportunity? 	KIM
	13	Regenerative grazing to improve land condition and increase production.	<p>MLA programs: NB2 Grazing and pasture management Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Doubling the value of Red Meat production by 2030.</i> <i>Our livestock – We set the standard for world-class animal health, welfare, biosecurity and production practices.</i> <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>R&D</p> <ul style="list-style-type: none"> An understanding of how managing graze periods and rest periods with <i>grazing</i> animals might optimise plant <i>growth</i> and plant health. 	ASPIAC
Other	8	Short/Long term weather forecasts - accuracy	<p>MLA program: Environment and sustainability</p> <p>Contributing to Red Meat 2030: <i>Our environment – We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</i></p>	<p>DE&A</p> <ul style="list-style-type: none"> Continue to encourage BOM to enhance the accuracy of their forecasts and provide appropriate support BOM where and when required. 	SEQBRC

Note: The priority issues highlighted in red are highly specific for their RBRC region.

SEQBRC – South-east Queensland Beef Research Committee

SQBRC – South Queensland Beef Research Committee

CQBRC – Central Queensland Beef Research Committee

WQBRC – Western Queensland Beef Research Committee

NQBRC – North Queensland Beef Research Committee

NWQBRC – North-west Queensland Beef Research Committee

BRAC – Barkly Regional Advisory Committee

KPIAC – Katherine Pastoral Industry Advisory Committee

ASPIAC – Alice Springs Pastoral Industry Advisory Committee

KIM – Kimberley Beef Research Committee

PIL – Pilbara Beef Research Committee