



RD&E Blueprint

LEP RD&E Program

February 2020

Version 1



LiveCorp and Meat & Livestock Australia acknowledge the matching funds provided by the Australian Government to support the research and development detailed in this publication.

This publication is jointly published by LiveCorp (ABN 88 082 408 740) and Meat & Livestock Australia Limited (ABN 39 081 678 364).

©2020

Care is taken to ensure the accuracy of the information contained in this publication. However, neither LiveCorp nor Meat & Livestock Australia accepts responsibility for any decisions taken as a result of this information.

Reproduction in whole or in part of this publication is strictly prohibited without the prior written consent of both LiveCorp and Meat & Livestock Australia.



Contents

1	Introduction.....	4
1.1.	Role of the Blueprint	4
1.2.	Development of the Blueprint	5
2	About the LEP RD&E Program.....	6
2.1.	How is the Program funded?	6
3	How the Blueprint will be used	7
3.1.	Livestock Export Research and Development Advisory Committee (LERDAC).....	7
3.2.	Management Committee	7
3.3.	Generating projects.....	8
3.4.	Decision-making process.....	8
4	Priorities	11
4.1.	GOAL 1: Greater transparency of animal health and welfare in the supply chain	11
4.2.	GOAL 2: Understanding and addressing animal health and welfare risks in the supply chain	11
4.3.	GOAL 3: Improving the uptake, adoption and commercialisation of better animal health and welfare practices and tools	12
4.4.	GOAL 4: Improving supply chain efficiency and regulatory performance	13
4.5.	GOAL 5: Supporting better market access conditions for Australian producers and exporters	13
5	Measuring impact.....	14
5.1.	Defined benefits	14
5.2.	Ongoing project and program review	14
6	What next.....	15
6.1.	How to bring a project concept to the RD&E Program.....	15

1 Introduction

The Livestock Export Research, Development and Extension Program (RD&E Program) is undertaking a range of initiatives to:

- improve engagement with industry
- guide selection and funding of R&D projects
- better realise the benefits from R&D to improve both animal health and welfare outcomes and industry performance, including ensuring R&D outcomes are fully extended and adopted across the livestock export supply chain.

As part of the process, this Blueprint has been developed to guide decision making that focuses on ensuring R&D investments align with strategic goals of the livestock export industry and the broader red meat industry, and that industry priority areas are addressed in a structured and consistent way. The Blueprint will therefore support the RD&E Program objectives of improving animal health and welfare and bring benefits to industry. Implementation and oversight of the Blueprint will be supported by updated governance structures, new processes and decision-making tools.

1.1. Role of the Blueprint

One of the challenges for effective R&D in livestock exports is that the industry is diverse, it traverses the breadth of the country and the supply chain extends beyond Australia. A key driver for the Blueprint is the desire from both industry and R&D providers for greater clarity on what the RD&E Program seeks to achieve.

The role of the Blueprint is to provide visibility and clarity on the priorities for RD&E Program funding. A common understanding of focus areas ensures that industry stakeholders, R&D partners and individual researchers and service providers understand and agree industry priorities at the start. This ensures the focus remains on demonstrating how projects contribute towards industry goals.

This document is the outcome of extensive engagement with livestock export industry stakeholders. It is a condensation of industry R&D priorities into a series of goals that align with both the Australian Livestock Export Corporation (LiveCorp) Strategic Plan and Meat & Livestock Australia (MLA) Strategic Plan. The Blueprint also specifies:

- the industry priorities for R&D
- how the RD&E Program will make investment decisions
- how project ideas may be proposed.

This Blueprint is not a governance document; it contains only an overview of the processes for selecting RD&E projects for investment. The Blueprint is not a strategic plan – but it aligns with existing industry strategic plans. The funding allocation is set by agreement between LiveCorp and MLA at the start of each financial year.

The Blueprint will be reviewed annually to ensure that its priorities are relevant and that it incorporates new developments in the livestock export supply chain.

1.2. Development of the Blueprint

This Blueprint has been developed by Noetic Group on behalf of the Livestock Export Program (LEP) following extensive engagement with exporters and producers – the primary contributors of levies to the program. The Blueprint has also had input from the Australian Government (Department of Agriculture, Water and the Environment) and from other stakeholders interested in animal health and welfare. All stakeholder input was reviewed and used to formulate a series of priorities that align with the strategic goals of LiveCorp and MLA. This process will be repeated regularly in order to refresh the Blueprint and to ensure its ongoing relevance.

The Blueprint was developed based on the following set of principles:

- **Prioritise R&D opportunities.** In general, there are more proposals (and opportunities) for research than there are funds available. Additionally, it is likely that some R&D priorities in the Blueprint may not have proposals (or obvious projects) ready for funding. The Blueprint describes clear R&D priorities and outlines the process for prioritising projects and allocating limited funds into areas with the greatest impact.
- **Represent producers and exporters equally.** Given that funding to the program is provided equally by producers and exporters, equal consideration must be given to their issues and input. In general, addressing issues and opportunities of the supply chain are mutually beneficial. Where this is not the case, equal voice and equal input by producers and exporters must be considered.
- **Incorporate public expectations and community sentiment.** The RD&E Program considers the wider expectations of society on the industry and its practices and focuses on delivering meaningful improvement to animal health and welfare.
- **Present an agenda that is clear but able to incorporate changing priorities.** While significant effort has been made to engage broadly, there are likely to have been opportunities that were not apparent at the time of developing this Blueprint. As a result, the contents must be adaptable to new opportunities and able to incorporate new issues and priorities.
- **Emphasise collaboration and prevent duplication.** There is a library of completed research in livestock exports and from other R&D sectors and bodies within the red meat sector. The RD&E Program must remain aware of completed work and of ongoing work and seek to collaborate in relevant research from outside of livestock exports.
- **Provide clarity on how decisions are made.** The RD&E Program must show that it assesses project proposals in a structured manner that is consistent with R&D priorities and program objectives that allows it to justify decisions on what projects do (or do not) progress.
- **Judge individual projects on their merits.** While the RD&E Program targets projects that address the priorities outlined in the Blueprint, all proposals must also be assessed against technical merit, value for money and risk criteria. The RD&E Program will reach out to new partners, researchers and service providers and identify opportunities for R&D projects that target priority areas.

2 About the LEP RD&E Program

The Livestock Export Program (LEP) is a formal joint venture between the Australian Livestock Export Corporation (LiveCorp) and Meat & Livestock Australia (MLA) that seeks to enhance the productivity, sustainability and competitiveness of the livestock export industry and support an industry culture of continuous innovation, improvement and growth. The LEP includes three in-market programs and a research, development and extension (RD&E) program.

The RD&E Program invests in research and development (R&D) projects that support the improvement of outcomes for the livestock export industry. Through the projects it funds, the RD&E Program also aims to foster the development and delivery of extension material to promote the awareness of project outcomes in industry and increase their adoption in business practices. The RD&E Program operates in three key areas:

- Achieve continuous improvement in animal health and welfare across the supply chain.
- Improve supply chain efficiencies and regulatory performance.
- Enhance market access and conditions for both existing and new markets.

The purpose of the RD&E Program is to invest in projects that seek to build knowledge, fill gaps in existing understanding, and develop, trial and implement practical extension outputs in the areas of animal health and welfare, supply chain efficiencies and market access.

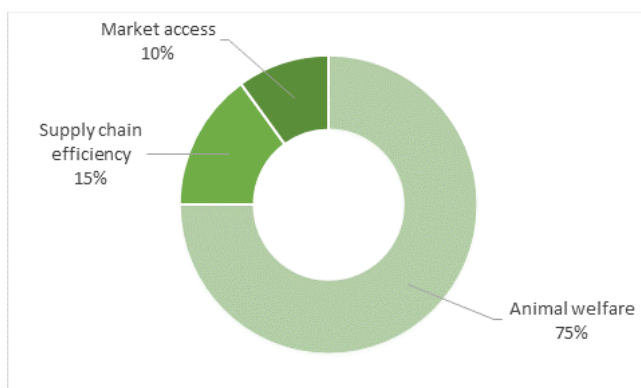
As a result, the RD&E Program’s portfolio of projects must balance research projects with outcomes that inform the industry and government with practical outputs that have a tangible impact in the industry. Any proposal that falls outside the scope of the RD&E Program is not eligible for funding.

2.1. How is the Program funded?

The RD&E Program is funded by LiveCorp (25%), MLA (25%) and the Australian Government (50%) and is administered and managed by MLA as part of the Research, Development and Adoption business unit, which is legislated to receive Australian Government RD&E funding.

The annual budget varies as levy income changes from year to year. For 2019-20, the total budget for the RD&E Program is budgeted to be \$2.4 million.

LiveCorp and MLA target the following funding allocations for the RD&E Program:



3 How the Blueprint will be used

The Blueprint will provide clear guidance on the kinds of projects that the RD&E Program should be funding. It will also allow a scorecard to be developed to ensure that industry R&D priorities that are identified are being researched.

3.1. Livestock Export Research and Development Advisory Committee (LERDAC)

LERDAC is the skills-based strategic advisory committee for the RD&E Program that comprises producer and exporter representatives (nominated by the red meat and livestock industry peak industry councils), an independent technical advisor, an animal welfare/social science representative, an independent chairperson, a LiveCorp representative and a MLA representative.

The purpose of LERDAC is to provide strategic research advice and represent industry priorities and community expectations. This includes:

- advising on the strategic priorities and objectives for the RD&E Program that are captured in the Blueprint
- ensuring the RD&E strategic priorities appropriately reflect issues and opportunities for the livestock export industry, including issues that are relevant to producers and other businesses in the livestock export value chain
- remaining informed of issues of public concern that may affect the community's attitude towards the livestock export industry, and seeking to address them through the RD&E strategic priorities.

To achieve this, LERDAC is engaged in the consultation process with industry and stakeholders in the development of the Blueprint and receives reports and updates from the RD&E Program on progress against the priorities to assess if objectives are being achieved.

3.2. Management Committee

The Management Committee is the decision-making body for the RD&E Program that represents LiveCorp and MLA. These organisations are ultimately accountable for the RD&E Program's funds and are responsible for the delivery, investment and performance of the RD&E Program.

The purpose of Management Committee is to oversee delivery of the Blueprint through proper governance and management of the RD&E Program. This includes:

- incorporating the strategic advice of LERDAC into the management of the RD&E Program
- overseeing the RD&E Program budget and ensuring appropriate allocation of funds, particularly where the number of viable projects is greater than the available funds
- assessing portfolio balance, including risk profile, and acting to address it where necessary
- assessing whether the portfolio aligns with the strategic priorities
- assessing research concepts to be taken to LERDAC, where appropriate

- approving terms of reference to be published for the tender and procurement process and approving the preferred research proposals for funding
- monitoring project progress and assessing project milestones
- reviewing project deliverables, accepting final project reports and approving closure of projects
- assessing if completed projects have delivered their intended benefits/outcomes
- ensuring extension and adoption activities identified for the project are either completed or transferred to, or progressed on, the appropriate pathway
- ensuring stakeholder communication activities on research projects is undertaken.

3.3. Generating projects

The priorities listed in the Blueprint will facilitate the identification and development of project ideas in three ways:

1. Producers, exporters and other supply chain stakeholders can suggest ideas to the RD&E Program. The Live Export R&D Manager will work with stakeholders to develop the ideas into project concepts.
2. The Management Committee, in collaboration with researchers and service providers, can develop project concepts to address specific priorities that fit within the guidelines of the Blueprint.
3. Periodic investment calls will be used to source preliminary proposals for high priority areas of research using existing MLA approaches.

3.4. Decision-making process

The Management Committee and LERDAC are committed to ensuring that they are continually investing in and managing a balanced portfolio of RD&E projects. The projects in this portfolio must meet industry needs, qualify under the provisions of the RD&E Program and provide real and clear benefits for exporters and producers.

As a result, each project will be progressed through a consistent Management Committee led decision making process where successful projects progress from 'concepts' into viable projects. At each step, the Management Committee will either:

- progress the project
- reject the project and provide feedback
- seek further information to make its decision.

When necessary, the Management Committee will seek LERDAC's advice on project concepts and their suitability or will seek more information from individuals with knowledge or interest in the R&D area.

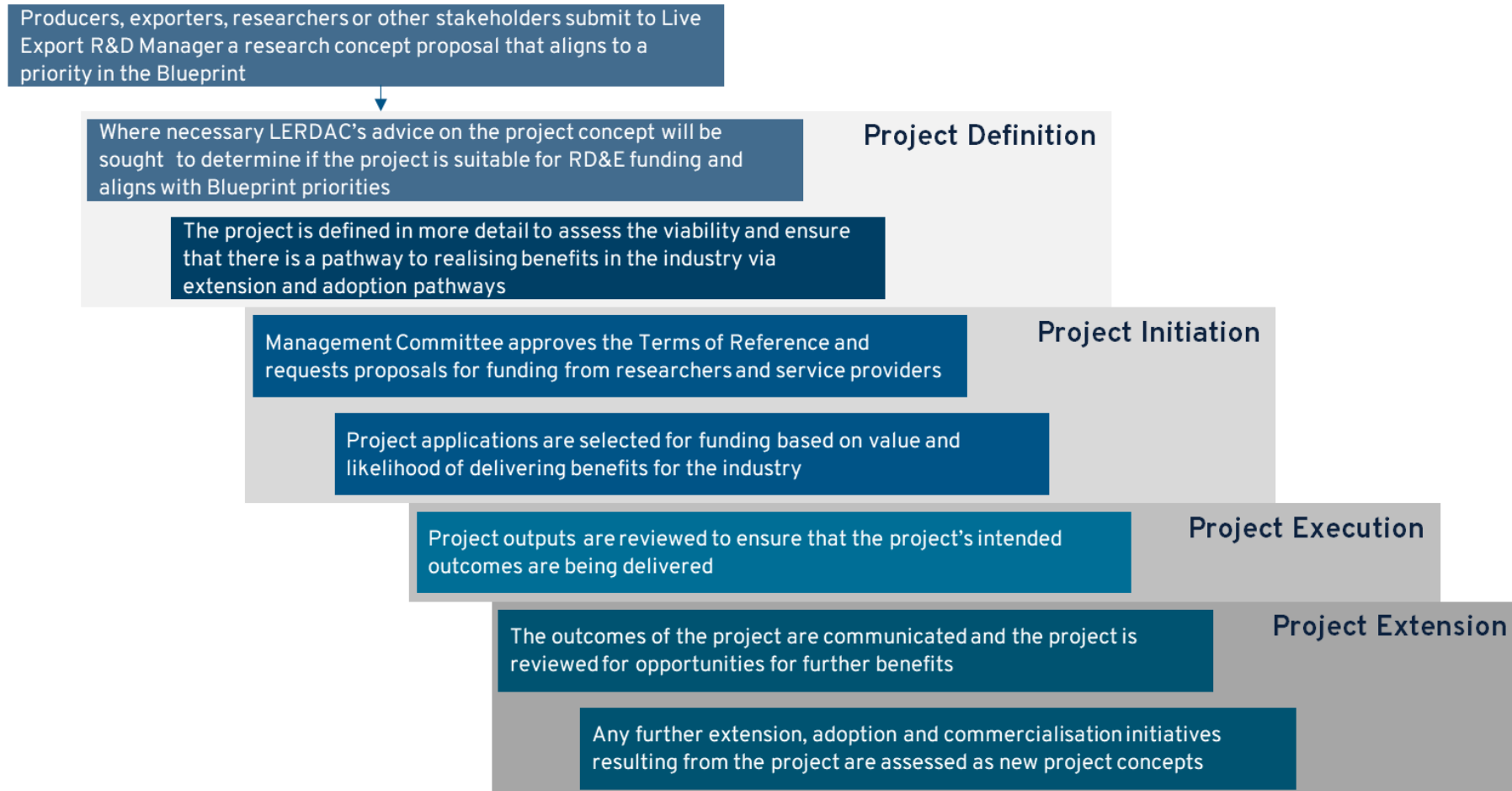
- Projects that need large investments, are complex, or potentially impact across industries may require the services of a Consultative Committee whose members bring specific interest or



knowledge in the topic of the project. This Committee will be established at the discretion of Management Committee and will have input into:

- shaping the project’s Terms of Reference
- designing the study or studies
- assessing ongoing performance of the project
- maintaining alignment between project outcomes and RD&E Program priorities.

Figure 1: The process for progressing a research and development project, including projects aimed at uptake, adoption and commercialisation.



4 Priorities

The following R&D goals will guide decision making on funding and ensure that the RD&E Program is seeking real and clear benefits for the industry. Consistent with the LiveCorp and MLA strategic objectives, these goals are mostly focused on improving animal health and welfare outcomes.

The R&D priorities referred to under each goal reflect issues or opportunities for the RD&E Program to address. Many of these issues are also being addressed by other programs of work within LiveCorp, MLA, the Livestock Export Program and the industry itself. Any R&D project intended to support wider industry goals must be focused on expanding knowledge or applying knowledge in the sector.

Noting the funding available in the RD&E Program, not all priorities are able to be addressed simultaneously. It is intended priorities will be addressed across the Blueprint's five year timeframe.

4.1. GOAL 1: Greater transparency of animal health and welfare in the supply chain

Our understanding of the animal health and welfare risks, our ability to determine the effectiveness of animal health and welfare practices, and our desire for continuous improvement require systematic and consistent data collection across the supply chain and across regions. There is a significant opportunity to standardise the data currently collected and create more meaningful information about what is happening across the supply chain. This information will create many opportunities to improve welfare and to provide feedback to producers about how their animals fare along the supply chain.

Priorities

Ensure the processes are in place to:

1. Standardise data collection to promote completeness of supply chain information, transparency and benchmarking.
2. Collect data on and assess the farm-level influences and pre-ship boarding factors that affect animal welfare.
3. Provide producers with information on the health and welfare of the livestock they have supplied to live export and actionable feedback on how they can improve welfare outcomes in the livestock export supply chain.

4.2. GOAL 2: Understanding and addressing animal health and welfare risks in the supply chain

In concert with collecting more data, there are ongoing and emergent risks to animal health and welfare that the RD&E Program must address where possible. Heat stress risk on ships should be better understood and ways to reduce risk explored. Shipboard factors such as stocking density, bedding and feed also affect animal health and welfare, and the management of these and other relevant factors on ships needs investigation in order to improve performance.

There are also opportunities to improve animal welfare outcomes in market, particularly in terms of slaughter and handling practices – some with potential to offer far reaching animal health and welfare benefits that extend beyond the Australian livestock export supply chain and into the communities and businesses that Australian businesses work with.

Animal health and welfare improvements will be identified from research projects. A focus on evidence-based change, identified from good research, will ensure that industry practices, standards and policies are most effective.

Priorities

1. Improve understanding of, and identify effective controls for, animal health and welfare risks that operate along the supply chain, including in overseas markets, along with timely prevention management strategies.
2. Facilitate better stunning outcomes through the uptake and use of industry leading tools and practices.
3. Explore infrastructure, environment and management factors that improve animal health and welfare on ships.
4. Better understand and aim to address public expectations of animal health and welfare across the supply chain.

4.3. GOAL 3: Improving the uptake, adoption and commercialisation of better animal health and welfare practices and tools

R&D projects that promote better practices, tools and adoption bring valuable animal health and welfare benefits when effectively adopted. The RD&E Program will focus on identifying effective ways to ensure better uptake of research project outcomes. Experience has shown greater innovation and effort is often required to facilitate effective adoption and that at times a separate project may be required to embed new initiatives.

The RD&E Program can create tangible benefits for the industry by exploring all effective options for extension, such as:

- working with companies to implement viable tools, products or data in the livestock export supply chain
- updating training and tracking the completion of training in the industry
- influencing industry standards and assurance programs to make them more effective.

Priorities

1. Improve the training environment to encourage uptake of leading animal health and welfare practices across industry.
2. Support and promote the adoption of better health and welfare practices in market, including understanding the cultural and social factors affecting animal handling practices.
3. Drive adoption of tools and techniques for identifying and assessing animal health and welfare risks.

4.4. GOAL 4: Improving supply chain efficiency and regulatory performance

There are opportunities to improve efficiency in the industry that will foster closer alignment between the needs of the regulator and exporters. Such opportunities include increased automation, better instrumentation, improved monitoring (such as environmental conditions) and more timely identification of trends.

R&D can lead to better identification and management of risks for improved welfare and animal performance on voyages – such as real-time knowledge of route conditions, better understanding of the characteristics of the animals, and early interventions to reduce risk through the supply chain.

Demonstrating a more sophisticated understanding of risk will allow management and regulatory resources to be directed to areas (and times) of greatest welfare risk. Once proven this may bring greater regulator confidence in the management of risk along the supply chain and focus the effort of industry and the regulator on the places of greatest risk.

Priorities

1. Improve information recording and facilitate automation of reporting.
2. Enable better risk assessment and risk management across regions, species and environmental factors to support a risk-based regulatory approach.

4.5. GOAL 5: Supporting better market access conditions for Australian producers and exporters

The conditions under which producers and exporters can safely supply live animals to international markets will determine the success of the industry. Successful long-term export markets bring important benefits to both Australian businesses and the importing countries. Australian businesses promote the most contemporary welfare practices and bring high quality products to the communities they work with.

The RD&E Program has an important role in enabling producers and exporters to better understand and service their markets with animals produced and provided to high welfare standards which in turn contributes to stronger international relationships.

Priorities

1. Support better exporter and importer control and assurance over animals in market to reduce the risks of leakage and poor animal welfare outcomes.
2. Improve industry knowledge of the risks and opportunities through the supply chain.
3. Provide stakeholders with knowledge of trends, preferences and expected market requirements that can inform their business practices.
4. Support adoption of practices to improve livestock performance through the live export supply chain.

5 Measuring impact

5.1. Defined benefits

Measuring return on investment for the RD&E Program requires consideration of numerous effects, such as supply and market conditions, regional variations, policy and regulation and supply chain impacts. There is always a long lag between completion of a RD&E project and the full adoption of outcomes by industry and along the supply chain. Quantifying the impact of RD&E on animal health and welfare change, supply chain efficiencies and market access is difficult. This in turn makes economic evaluation even more difficult.

To help better understand the financial and non-financial benefits, emphasis in the RD&E Program is to clearly identify and define each project's intended benefits at initiation. Where there is an intention for extension and/or adoption this will be done in a more deliberately planned way, with a suitable adoption strategy planned and implemented to maximise the opportunity for benefits to be realised by industry.

These benefits underpin key project and program metrics and will inform MLA's regular economic impact assessment to estimate return on investment for projects and RD&E programs.

The RD&E Program will focus on achieving identified financial and non-financial benefits.

5.2. Ongoing project and program review

The RD&E Program is subject to MLA's economic impact assessments, which provide an overall evaluation of the financial benefit arising from the program for industry. Outside of this assessment, the RD&E Program must maintain an ongoing, fit-for-purpose regime of assessment using the following approaches:

- Evaluating individual project outcomes with peak industry councils, independent animal welfare experts, individual organisations and other researchers. Outcomes of the project are reviewed against the strategic objectives of the RD&E program, budget, milestones and terms of reference.
- Evaluating whether the RD&E Program can meet its overall investment targets as set out in LiveCorp's Annual Operational Plan. In case of a shortfall, consideration will be given to factors that are outside the control of the RD&E Program, such as inability to secure project applications that address the RD&E Program's objectives.

- Evaluating outcomes for each of the stakeholder groups individually to get a sense of the overall impact created by the RD&E Program:
 - For exporters and producers – impact on profitability, regulatory standards, adoptable practices and industry sustainability.
 - For supply chain – impact on tools, systems, data, technology and training.
 - For government and interest groups – impact on animal well-being and industry sustainability.

Ongoing review of the RD&E Program will also include periodically refreshing the contents of the Blueprint and research priorities by re-engaging with industry stakeholders.

6 What next

The RD&E Program will take stock of previous and current R&D projects to identify research gaps and opportunities for extension, adoption and commercialisation. The RD&E Program will then, based on available funding, invite industry stakeholders to submit suggestions for projects relevant to the Blueprint priorities. The RD&E Program will also seek to attract new and existing researchers or service partners to apply for funding to address the Blueprint priorities.

6.1. How to bring a project concept to the RD&E Program

A producer, exporter, researcher or service provider should discuss their ideas for projects with the Live Export R&D Manager or with a member of the Management Committee representing MLA and LiveCorp. The following courses of action may then apply:

- If the idea is well-developed or has a clear fit with research priorities, you will be invited to submit a short Project Concept Brief. This submission presents key information on the research priority you are addressing, how the project will be undertaken and what outcomes will arise.
- If the suggestion is less developed or it is unclear how the proposal matches the research priorities, you will be asked to discuss your idea with the Live Export R&D Manager, who will provide advice on the idea and how to best develop to a Project Concept Brief for submission to Management Committee.

Producers and exporters are encouraged to work with LERDAC members or directly with the RD&E Program to ensure that industry knowledge is brought to bear in the definition, delivery and extension of R&D projects.