



Project overview



Livestock Productivity Partnership (LPP) Program Review

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Brief summary

The Livestock Productivity Partnership (LPP) is a collaborative research and development (R&D) partnership involving MLA Donor Company (MDC), NSW Department of Primary Industries (NSW DPI), University of New England (UNE), Commonwealth Scientific and Industrial Research Organisation (CSIRO), the Tasmanian Institute of Agriculture (TIA) and the University of Melbourne (UM), aimed at boosting livestock productivity and developing new R&D capacity. The program commenced in 2017 and the current partnership phase will be completed in 2022.

The current LPP partners are interested in investing in additional projects in the future by extending the current partnership beyond the initial 5-year period, revising and expanding the scope of the program and bringing in new partners. To assist with informing this process, and to ensure that the target outcomes of the LPP program are delivered according to plan, an external review team, managed by Beattie Consulting Services and including Warren Straw Consulting, Farminganswers and Inspiring Excellence, was engaged by MLA on behalf of the partner organisations to conduct a review of LPP performance and progress to date.

Objectives

1. LPP Performance Review: Performance review of the LPP to date including operations, governance, and project performance.
2. M&E Strategy Review: Utilising the results from the LPP performance review, the LPP M&E strategy was evaluated and recommendations made for improvement to ensure consistency with MLA's evaluation framework as utilised in the 2015-2020 MLA impact assessment process, and to deliver maximum returns from LPP investments.
3. Path2Impact Assessment: To assess and define the predicted economic impact of investments made to date, based on assumptions on adoption, on-farm productivity benefits and the cost of implementation. This was based on the MLA output (product) based impact assessment framework.

Project outcomes

Program Achievements

At an R&D level, the objective of the LPP was to develop and demonstrate, by 2022, region and system specific feedbase options, new animal phenotyping and farm management tools with quantified potential to reduce the cost of production (\$/kg liveweight) (CoP) in commercial grazing enterprises in the target region by at least 5% in real terms. The findings from an *ex ante* impact assessment of 8 out of 14 LPP projects where on farm impacts were able to be quantified indicates that the program is likely to be successful in achieving this outcome. The estimated potential of product area R&D outputs to reduce CoP if adopted on farms ranged from 5% to 24%.

In undertaking the delivery of R&D projects to date, program partners identified a range of key benefits associated with the LPP partnership model. These highlights of participation have included:

- Collaboration, both formal and informal, across and within partner organisations, e.g. sharing of skills and knowledge, co-location of trial sites, sharing of students, and sharing of data and samples.
- Capacity and capability building in relevant research disciplines, particularly through development opportunities provided for students and younger scientists. To date, LPP has involved the appointment of 17 honours students, post-graduate students, and post-doctoral fellows on LPP projects.
- Improved access to next and end user input into research projects.
- Better research outcomes from the longer-term funding provided.

- Better research outcomes through the large scale and scope of the LPP projects across broad geographical areas.
- Opportunity for blue-sky, strategic research that would typically be more difficult to secure funding for through the annual call.
- Commercial partner benefits via access to research over a wider geographical area than they are resourced to perform internally, and to independent data for marketing purposes.

In achieving these R&D benefits, LPP projects have mostly been delivered according to project milestones and timelines to date, with only a small number of milestone variations required based on delays which were outside of the control of project managers (e.g. due to drought and impacts of COVID-19). This was a commendable achievement given that many LPP projects were established in 2018 and 2019 during seasons of severe drought in NSW. In some cases, additional resources were provided by research organisations to ensure that projects were able to commence and continue during the drought, for example additional staff time and use of irrigation to establish trial sites. Project managers and LPP program leaders have also been proactive in creating linkages between LPP projects through a range of different mechanisms.

Actively engaging next and end-users in project development and delivery is a core feature of the LPP model. Broadly following design led thinking (DLT) principles, especially for projects that are close to market, is now an accepted part of LPP. While not strictly following all stages of DLT (specifically the development and testing of options), the partnership's insistence on applying DLT has resulted in producer engagement that is largely fit for purpose. It is acknowledged that development and testing of options may have occurred as a precursor to previous related research projects and/or as part of internal processes for defining research directions and priorities.

LPP project managers have also been proactive in identifying opportunities for adjusting the original scope of research activities based on DLT approaches utilising feedback obtained from producers and findings from other research projects. In particular, the LPP Industry Advisory Group (IAG) and other producer-based committees have performed an important role within LPP that is valued by program stakeholders.

Opportunities for Improvement

Governance and Operations

The review found that the LPP Management Committee members are positive and passionate about LPP and their role in the partnership. While the operation of the committee has evolved and improved over time, several areas were identified where further improvements could be made for delivery against required functions. The most important of these areas included:

- While the strategic direction of the LPP has evolved over time, there is no systematic process in place to review the strategy in response to emerging risks, needs and opportunities. This could be addressed concurrently with a review of the management committee charter.
- There are mixed views among stakeholders regarding the effectiveness of the LPP management committee's project selection process, with concerns raised about the impact of actual or perceived conflicts of interest on the rigour and transparency of the process.
- There are opportunities for improving the objectivity and transparency of the project selection process to increase the ability of the management committee to select projects that are likely to have the most impact on achieving program KPIs and target outcomes, and to assist in identifying any gaps in meeting program research objectives.

Other opportunities identified for improvement within the LPP governance and operations structure related to clarification of the role of the LPP Coordinator relative to the perceived roles of other positions within the management structure (i.e. MLA Project Managers and LPP Program Leaders), improving the LPP Communication Plan as a document that is fit for purpose to support required communication outcomes for the partnership as projects move toward completion over coming years, and reducing timelines for project contracting processes to provide a more tangible administrative incentive for organisations to join the partnership and to facilitate more formal collaborative projects.

Monitoring, Evaluation and Adoption

In terms of monitoring and evaluation of the program, there is ambiguity around the purpose of the LPP in that different stakeholders define success of the program in different ways. The management committee must agree on how success of the LPP should be defined in ways that meet the needs of all partners. The LPP Strategic Plan has only one SMART¹ industry wide KPI, which is for at least an average 5% reduction in CoP for producers in the target area by 2030 via a coordinated adoption program post LPP. This measure of success aligns with the Meat Industry Strategic Plan (MISP), but may not necessarily reflect the measures of success for other organisations, and at the farm level, as a single indicator does not capture all of the potential benefits from adoption of the outputs from LPP projects on farms. Other farm level KPIs stated as being '*under consideration*' in the strategic plan relate to farm profit and production parameters, however target improvements are not identified.

In addition to these industry KPIs, the LPP Strategic Plan also identifies a range of operational KPIs, however no target levels of performance are specified for any of these KPIs in the plan. There is an opportunity to add performance targets around some of these KPIs, and to incorporate additional new KPIs for the LPP that capture outcomes other than on-farm impacts that may align with the objectives of partner organisations. For example, formal KPIs, including target levels of performance, could be established around publication of scientific and extension papers and research and extension capability and capacity building across the relevant research disciplines and target regions.

The industry wide target of 5% for reduced CoP across the LPP target regions by 2030 also requires further consideration in terms of the scale of the LPP investment relative to the size of the target audience, the potential funds available for adoption activities post the R&D delivery phase of the program, and the timelines for expected future adoption of research outputs. All of these variables will impact on determining how realistic the current target of 5% is as a measure of success.

While the review found that the estimated potential of product area R&D outputs to reduce CoP ranged from 5% to 24%, in terms of industry wide impacts, the results of the *ex ante* impact assessment indicate that given the current planned and funded adoption activities and pathways for each product area, the LPP is estimated to result in a 1.0% decrease in cost of production per kg LW in real terms by 2030 across the target regions, which is well short of the target outcome of 5%. This result is not unexpected given that it was noted in the strategic plan that reaching this target would require a co-ordinated adoption program post LPP. In order to reach the target of

¹ Specific, Measurable, Achievable, Relevant and Timebound (KPIs)

5% by 2030, the level of adoption achieved would need to be around 45% of the target region, compared to the current estimated rate of 8%.

While the LPP has been successful from an R&D perspective to date, all partners also recognise the need to achieve on farm adoption of LPP research outputs. The difficulty for some partners is that the requirement to achieve industry wide adoption of R&D outcomes was not clearly identified as the intent of the program in the LPP Strategic Plan, and their organisations do not have a requirement for achievement of adoption as a measure of success from their investment in the program. As a result, partners are yet to agree on what contributions they are willing to make to co-fund the proposed budget in the draft LPP Adoption Plan for extension and adoption activities.

While research organisations do not have a remit for achieving adoption, and nor do their skill sets align with this outcome, these organisations do have an obligation to provide ‘adoption ready’ outputs from their research activities, which means that some level of development will be required to test and trial project findings in commercial contexts across relevant target regions. LPP partners therefore need to reach an agreement as to what constitutes an appropriate level of ‘demonstration of options’ for improving farm productivity, so that these options are then ready to be taken up by MLA and/or other LPP partners or external organisations, to fund extension and commercialisation activities associated with achieving widespread adoption and impact.

The challenge for LPP moving forward is that unless the management committee is able to demonstrate that the potential options generated by the program R&D for improving on farm productivity are able to be extended and adopted across the target region to maximise industry wide value from the investment, MLA is unlikely to be able justify funding a successor program to LPP at the end of the current planning period in 2022. In order to demonstrate success of the LPP in generating impacts across the target regions, a greater focus on adoption planning and investment in extension activities is required as projects move toward completion. While it was beyond the scope of this review to provide a fully developed adoption plan for the LPP, as this activity would require considerably more time and resources than was available to the review team, the draft LPP Adoption Plan has been reviewed and critiqued, and a process and framework to assist with guiding further recommended development of extension and adoption planning for the program has been provided.

Future research and recommendations

Given the many benefits of the LPP model noted above, some yet to be realised, an extension of the partnership in another phase is considered to be warranted. This is also required to enable many of the LPP research outputs to be extended and adopted by industry. Planning for a successor program, building on the lessons and successes of LPP, needs adequate time to define new goals, objectives and KPIs, and to plan implementation. That planning phase should involve input from other players with the right mix of skills and close engagement with key industry stakeholders. It was noted by stakeholders that the current LPP funding model provides difficulties for partner organisations in terms of their capacity to provide matching MDC funds for an LPP successor program, thus exploration of additional funding sources is warranted. However, in the event that no new funding is available for a successor to the LPP, consideration should be given to identification of an exit strategy for the program.

While the LPP is considered to provide many benefits as a model for R&D delivery, the review has identified a range of opportunities for improving the governance and operation of the LPP in addition to opportunities for

improving LPP monitoring and evaluation processes and future adoption approaches. A series of 35 recommendations has been developed to address these opportunities, which are presented along with key findings in Appendix A. The highest priority actions are presented below in summarised form as six key recommendations.

Key Recommendation 1: Partner organisations to reach agreement regarding the overall purpose of the LPP program

The management committee should:

- Reach agreement regarding the intended purpose of the LPP (i.e. demonstrating potential or on-farm adoption with measurable productivity impacts).
- Determine SMART KPIs for agreed on-farm impacts for defining success of the program that capture the types of on-farm benefits generated from adoption of LPP research outputs.

Key Recommendation 2: Improving the capacity to monitor and evaluate success of the LPP

LPP management committee should:

- Identify what additional KPIs partners need for their own organisations to define and demonstrate success from their investment in the LPP. Based on these needs, the management committee should consider the addition of further KPIs to reflect these outcomes. In future, the management committee should also consider the addition of further SMART KPIs to reflect any changes in the strategic direction of the program, with particular reference to measurement of environmental impacts, e.g. reduction in greenhouse gas emissions, and the needs of any new partner organisations.
- In defining KPIs for the LPP, the proportion of total investment in the MLA Path2Impact Assessment Framework Category 1 compared to Category 2 and 3 projects should be considered to ensure that relevant KPI targets are realistic and achievable. Opportunities for further development of LPP Category 2 projects should be considered whereby they may be able to be included as Category 1 projects in the future. It is also recommended that the management committee consult with the MLA Evaluation Group to explore opportunities for reporting on the value of investment in Category 2 and 3 projects in a different way, to potentially include these indicators of success as KPIs in the strategic plan.

Key Recommendation 3: Improving the capacity and capability for adoption of the expected R&D outputs from the LPP

The management should:

- Reach agreement as to what constitutes LPP Development & Extension activities and what activities are required to achieve adoption but are outside the LPP's current remit.
- Delineate between required Development & Extension that is funded by LPP partners, and adoption that will be funded by MLA and other relevant stakeholders with a remit for adoption outcomes, and develop approaches that flow from Development & Extension to adoption with clearly defined responsibilities and funding models.
- Appoint a dedicated LPP Adoption Manager, funded 50% by MLA and 50% pro-rata by LPP R&D partner organisations.

- Utilise a framework (such as Bennett's hierarchy²) to further develop the adoption and evaluation plan for each project and the overall LPP program. A framework for further development of LPP monitoring, evaluation and adoption has been provided as an appendix.
- Ensure that targets for adoption are around 'Practice Change', rather than 'Levels of engagement' or 'Improvement in Knowledge, Attitudes, Skills and Aspirations (KASA)³'.

Key Recommendation 4: Improving governance of the LPP

The management committee should:

- Review the LPP strategic direction at agreed regular intervals to assess the appropriateness of the strategy in light of emerging risks and new opportunities.
- Improve the project selection process to increase transparency and objectivity, to increase the alignment of selected projects with their intended impact on program outcomes and KPIs, and to assist with identification of gaps in delivery against research objectives.
- Establish a Project Reference Panel, reporting to the management committee, to increase independence and rigour in the assessment of future project proposals.
- Complete a review of the LPP Charter following the acceptance of this report and ensure that appropriate metrics are collected and reported to monitor progress and performance against required management committee functions.
- Undertake contingency planning for an outcome of no successor LPP program.

Note: Recommendations around improvement to the project selection process will only be relevant to the extent that new project proposals are received within the current investment timeframe.

Key Recommendation 5: Improving the operational delivery of the LPP

- The LPP Coordinator to review and revise the LPP Communication Plan to ensure that it is effective and actionable, with input from communication specialists as required.
- MLA to identify opportunities to streamline their project contracting process to provide a more tangible administrative incentive for organisations to join the partnership and to encourage collaborative project investment.
- The LPP Chair should convene a meeting of the Coordinator, LPP Program Leaders and relevant MLA Program Managers to resolve issues with role clarity and responsibilities for each position and to provide a forum to openly discuss any concerns about working relationships and performance.

Key Recommendation 6: Facilitating increased value from a possible successor program to LPP

- For any successor program to LPP, MLA should engage the Coordinator directly, rather than via one of the partner organisations, with the cost and operating expenses of the position shared pro-rata by all parties to the LPP agreement. It is recommended that a review of the current position description be undertaken

² Bennett, C (1975)

³ Bennett, C (1975)

with revisions made where considered appropriate relative to the role required. The position should be filled via an expressions of interest process and could be part-time, depending on the role requirements and the nature and scope of the consortium.

- If a decision is made to take a proposal to the MLA Board for a successor to LPP, planning should begin up to twelve months before LPP's completion date to ensure adequate preparation and industry engagement. The first and most critical step in that planning process is to determine the goals, SMART objectives, targets and KPIs for a future partnership. Issues of scope, geography and potential partners would follow from that critical step. The planning process should also involve players from outside the current partner organisations, including key industry stakeholders, adoption experts and other R&D organisations with appropriate capability. A review of the current LPP MDC funding model is also recommended to determine what additional sources of funding could be utilised.