Australian Dairy Farmers

Modernising the Research and Development Corporation system

20 December 2019

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Introduction

Australian Dairy Farmers (ADF) appreciates the opportunity to provide a submission to modernise and improve Australia's rural Research and Development Corporation (RDC) system. As the peak advocacy body representing Australia's dairy farmers, it is our mission to contribute to any inquiry impacting the interests of our members.

RDCs play a key role in advancing the productivity, competitiveness and sustainability of Australian agriculture. Using mandatory levies from farmers, matched funds for research and development (R&D) by government and other funding sources, they achieve these outcomes by delivering core services defined in Section 11 of the *Primary Industries Research and Development Act 1989*:

- investigate and evaluate the requirements for R&D in relation to the primary industry or class of primary industries in respect of which it was established
- prepare an annual operational plan to coordinate or fund the carrying out of R&D activities
- report to the Parliament, the minister and its representative organisations on R&D activities and their impact
- disseminate and commercialise, and facilitate the dissemination, adoption and commercialisation of R&D (extension)
- carry out marketing activities for the benefit of the primary industry or class of primary industries in respect of which the corporation was established if a levy is specified.

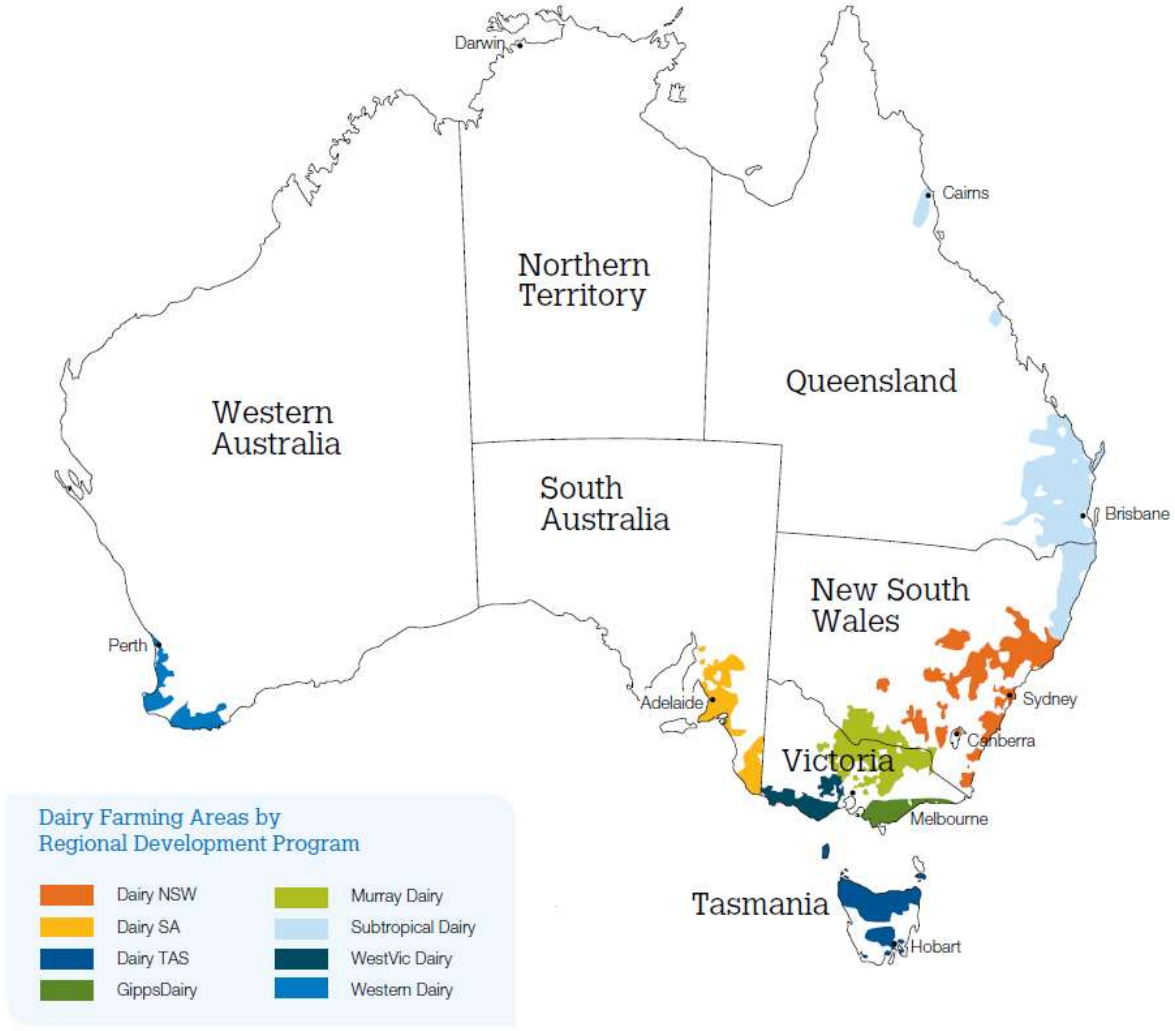
The Australian Government's *Modernising the Research and Development Corporation System Discussion Paper* asks 17 questions of Australia's 15 RDCs (5 Commonwealth statutory bodies and 10 industry-owned companies). These relate to value or return on investment, structure, function, funding and stakeholder management. This submission focuses on areas within this framework where reform is needed. It advocates for change at a strategic (chapter headings in the submission) and operational (bolded statements in chapter text throughout the submission) levels consistent with the discussion paper's structure and flow. ADF believes that if the Australian Government implements its reform agenda it will not only improve RDC functional integrity and return on investment, it will future proof industry service delivery long into the future. These are important outcomes for Australian taxpayers and industry stakeholders.

Industry overview

The Australian dairy industry comprises of 46,200 people working in over 5,213 farms producing around 9 billion litres of raw milk valued at $4.4 billion per annum and processing companies transforming the milk into high value dairy products. Around 65% of Australian dairy is sold on the domestic market. It is purchased from supermarkets and other retail or wholesale outlets for direct consumption or as ingredients in food and beverage. The total value of Australia's dairy exports is around $2.8 billion per annum. This positions Australia as the fourth largest dairy exporter with 6% of global trade. Approximately 125 Australian companies export dairy products to over 100 countries. The largest markets are China, Japan, Singapore, Malaysia and Indonesia (Dairy Australia 2019).

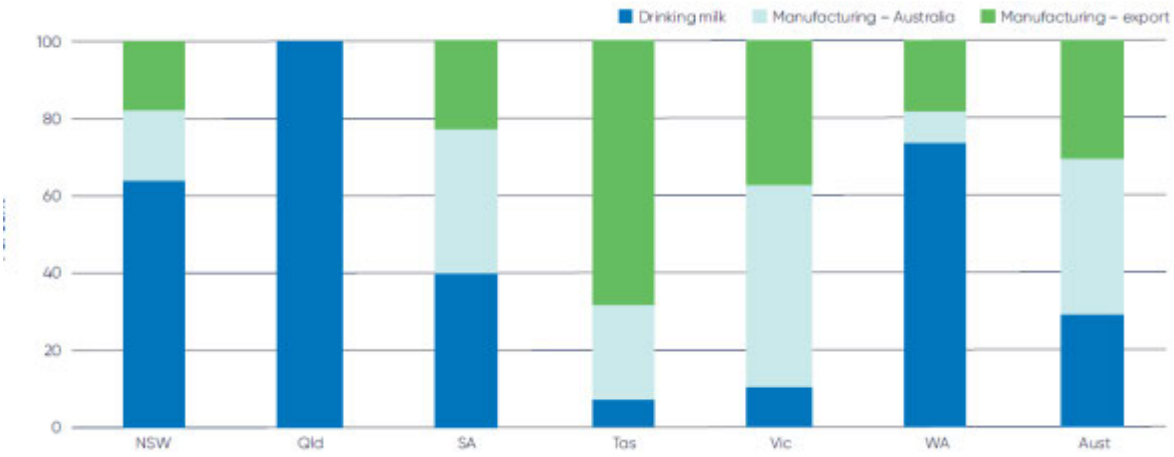
All Australian states produce milk and dairy products. Most of it occurs in Victoria, which accounts for 64% of Australia's national milk production (5.5 billion litres in 2018-19) and 79% of national dairy exports (Victorian Department of Economic Development, Jobs, Transport and Resources 2018). The remaining milk production comprises 12% in New South Wales, 10% in Tasmania, 6% in South Australia, 4% in Western Australia and 4% in Queensland. Southern New South Wales, Victoria, Tasmania and South Australia are mostly orientated around exports and manufacture of high value products whereas Queensland, northern New South Wales and Western Australia are more focused on fresh milk for domestic consumption.

Figure 1: Dairy farming regions in Australia



Dairy Australia (2019) *Australian Dairy In Focus*

Figure 2: Use of Australian milk by state 2017-18



Source: Dairy Australia (2019) *Australian Dairy In Focus*

The dairy industry is serviced at the national level by ADF, Australian Dairy Products Federation (ADPF) and Dairy Australia (DA):

- ADF is the national policy and advocacy body representing dairy farmers across Australia's six dairying states. State bodies, known as State Dairy Farmer Organisations (SDFO), pay a membership fee to participate in ADF's national policy development and delivery. ADF, like other commodity groups, is a member of the National Farmers Federation (NFF). This is the peak body representing cross commodity agricultural issues across the country. ADF has six staff and an operating budget of $2.2m (2018-19).
- ADPF is the national policy and advocacy body representing dairy product manufacturers. It has one staff member working three days per week.
- DA is the industry owned Research Development Corporation (RDC). In 2018-19 it had an operating budget of $56.5m (Dairy Australia 2018). This comprises $40.8m (72%) in industry projects/services and $15.7m (28%) in delivery and overhead costs. The breakdown of industry projects/services is $23m for farm R&D, $8.2m for farm extension, $6.2m for industry and community marketing (includes $1.5m for policy support) and $3.4m for trade and international market development. Areas covered in the RD&E are pastures and forages, feedbase and animal nutrition, genetics and herd improvement, resource management, animal health and fertility, farm business and workforce management and advanced management technologies. The breakdown of corporate administration is $4.7m for marketing and communications, $331k for sustainability, $1.1m for human resources and $9.6m for organisational performance.

On occasions ADF and ADPF come together under the auspices of the Australian Dairy Industry Council (ADIC) to represent the whole of the dairy supply chain. DA supports the ADIC in addition to ADF, ADPF and SDFOs with policy research and technical advice. ADF and ADPF (i.e. ADIC) are Group B members of DA. This provides for consultation on key DA initiatives e.g. strategic and operational plans, collaboration/partnership on industry initiatives e.g. Dairy Plan (https://www.dairyplan.com.au/) and representation on the DA's Board Selection Committee (with no voting rights).

Figure 3: Australian dairy industry organisational structure

Source: Dairy Australia (2018) *Australian Dairy In Focus*

Policy response

Increase the value of the RDC system for levy payers and taxpayers

RD&E and marketing, the two key functions of RDCs, are essential for growing agriculture's productivity, competitiveness and sustainability. It is through science that we can make rapid improvements in livestock, pastures, crops and biosecurity controls. For example, over time farmers have been able to select for an expanded range of traits like fertility and production methods to increase yield, lower cost and improve profitability. In regard to marketing, consumers are informed of the value and benefits of industry products which is key to their purchasing decisions.

The effectiveness of agriculture RD&E creating private and public benefit is well established. An evaluation of the effectiveness of RDCs have found that for every $1.00 invested in RD&E, $10.51 is returned after 25 years (Council of Rural Research and Development Corporations 2010). Payback also occurs quickly, with 60 per cent of projects showing a positive net present value by year five (Council of Rural Research and Development Corporations 2010). It is estimated that for the dairy industry RD&E has accounted for almost half of the total productivity gains the industry has accumulated over the past 30 years (Department of Primary Industries 2011). This is a positive cost benefit ratio of three to one.

Marketing has also demonstrated positive return on investment. Evolving Ways (2009) identified a return on investment of over 30 to 1 for particular agri-food investments in key markets. Stronger returns occurred where there was funding and service partnerships between government and industry.

Compulsory levies must continue to exist in the agricultural sector as they address market failures. They ensure the cost of delivering industry wide services are equally shared by those who benefit – the producers. This ensures there are no 'free riders' in the system and information and value is shared equally (Productivity Commission 2007).

A significant case also exists for public co-funding to continue where there are benefits which accrue beyond industry specific ones. These include research producing inter-industry spill overs and public benefits, for example improved community health and incomes, greater value for consumers, improved biosecurity, increased social equity, and increased scientific research capacity (Chudleigh, Lai & Thomy 2012). At a general level this investment can be described as addressing global food security and trade deficit challenges.

Australia is a relatively small and geographically isolated market. This places us at a disadvantage in terms of accessing and adapting new technologies from offshore multinational agricultural companies. Government support for agriculture RD&E can help address this deficit in the most efficient way i.e. it is less distortionary compared to other government initiatives. It is for these reasons why the Australian Government provides biosecurity services and matches industry expenditure on RD&E up to 0.5 per cent of industry Gross Value of Production (GVP).

There are various legislative instruments requiring Australian agriculture producers and exporters to pay compulsory levies. The *Primary Industries (Excise) Levies Act 1999* and *National Residue Survey (Excise) Levy Act 1998* impose levies in regard to the production, slaughtering and transferring of agriculture products. The *Primary Industries (Customs) Charges Act 1999* and *National Residue Survey (Customs) Levy Act 1998* imposes levies in regard to the export of agriculture products. The *Primary Industries Research and Development Act 1989* and the *Australian Grape and Wine Authority Act 2013* impose levies to operate statutory RDCs. The levy fee, associated expenditure, and organisations managing the levy services are prescribed for each product type.

The issue with the levies system and matched government funding is investment can be based on industry size, not RD&E value. For example, the Australian Dairy Futures CRC (2016) forecasts its innovations to deliver a positive benefit to cost ratio of 5.9:1 ($592 million from improved pastures and $456 million from improved herds - a total of over $1 billion less $137 million in R&D costs and $39 million in usage costs). This rate is higher than many 'business as usual' R&D investments in RDCs. It is important **the Australian Government and the Council of RDCs work strategically and collaboratively to allocate funds to areas where maximum value can be derived in each of the RD&E and marketing portfolios**.

Consolidate and strengthen cross sectoral RD&E

Most RDCs undertake some level of cross sectoral RD&E relevant to their industry. Some examples include irrigation efficiency and climate change adaptation. Various reports such as the recent *Agricultural Innovation – A National Approach to Grow Australia's Future* highlights the need for increased prioritisation, collaboration, capability and efficiency in undertaking cross sectoral RD&E. The *Precision to Decision Agriculture project* and *Plant Biosecurity Research Initiative* are examples of how this can be successfully operationalised.

It is important that the Australian Government facilitate collaboration between RDCs to enhance scale and reduce duplication of cross-sectoral RD&E activities. For this to eventuate, ADF recommends that the government **develop a clear framework to enable cross-sectoral collaboration between agricultural RDCs**.

Streamline the operations of RDCs

Australia's 15 RDCs were created at different times but often to fill gaps in industry RD&E and marketing services. The decision to create an RDC has been made at the industry level as opposed to a system level. As a consequence, each RDC is different in size, capability and effectiveness. For example Meat and Livestock Australia (2019) employs 265 staff and will invest over $279 million in 2019-20 across the pillars of customer and community support ($40m), market growth and diversification ($74m), supply chain efficiency and integrity ($47m), productivity and profitability ($70.5m) and corporate administration ($47.7m). This scale provides substantially more capacity and capability than any other RDC. For example, Forest and Wood Products Australia Limited (2019) employ 15 staff and will invest $15.8 million over the same period.

Some parts of industry and government have argued RDCs may not be as efficient and effective as they should be. For example, the Senate Standing Committees on Rural and Regional Affairs and Transport (2015) said that 'there is no question that the levy system and the structures that underpin it are complex, convoluted and difficult to penetrate'. RDCs, like all other business entities, should be required to measure and improve productivity and customer (industry) relevancy. Investment in corporate administration is important for building capability and delivering long term value but it should never be beyond an appropriate benchmark range.

Validating these claims and identifying opportunities for RDCs to reduce corporate overheads, increase efficiency and achieve economies of scale will require the Australian Government to **conduct a functional and capability review of RDCs**. For example, this may determine a need for RDCs to **explore a shared services model across the system** which may involve back of house services like information technology, human resources and records management system. This could be one way to provide levy savings for farmers and/or redirection of funds to more industry value added activities like marketing. If the review recommends change in the number of RDCs this has to be justified by capacity to deliver increased value to levy payers.

Strengthen the prominence of farmers in driving RDC service delivery

Farmers are the sponsors and customers of RDCs. They pay levies to deliver services they receive. Currently farmers are able to influence an RDC's work program by appointment to an RDC Board or sub-committee or via the RDC's consultation process. For example, Section 28 of the *DA Service Agreement* makes it a requirement for DA to consult with all levy payers.

RDCs need to have Board members who possess the skills and experience (including no conflict of interest) to make informed and impartial decisions on whether a levy is required and how it is to be spent. This includes expertise in marketing, RD&E and biosecurity – key services delivered from levies – and other industry and corporate expertise such as a Certified Practising Accountant, to balance decision making and provide comprehensive oversight of the business. As industry Board members are the legislative responsibility of the federal Minister for Agriculture, it is the Australian Government's role to continue to ensure that **recruitment and development of RDC Board members (skills and experiences) are targeted towards farmers relevant to the RDC's industry**. Where there are capability gaps, independent people from outside of industry should be recruited.

RDCs are required to develop strategic and operational plans to determine priorities, projects and investments. Generally, industry peak advocacy bodies are consulted when these documents are developed. For example, Section 13 of the *DA Constitution* requires DA to have a consultation procedure with its Group B members i.e. ADF and ADPF. However, some farmers have expressed concern that these consultation processes are not as robust as they should be. For example, the red meat sector maintains a very clear process to ensure RDC accountability. MLA consults with peak industry bodies to help set strategic priorities. This process involves reviewing the output/outcomes from the previous year's activities and investments, evaluating MLA's performance, setting strategic priorities and budget allocations for the upcoming financial year, and setting key performance indicators (Meat and Livestock Australia 2019c). To provide some level of consistency ADF recommends **strengthening the involvement of industry peak bodies in developing RDC strategic and operational plans. This includes participation in initial scoping workshops and opportunities to provide feedback on draft documents.**

Encourage increased investment in the RDC system

Over the past twenty years Australia has been investing between 1.8 to 2.2 per cent of its Gross Domestic Product (GDP) in R&D. This is below the OECD average of 2.3 per cent and less than many of Australia's major competitor countries (OECD 2018). Assuming equal research quality across countries this level of investment reduces Australia's competitive advantage. This has contributed to the slowing of dairy productivity growth over the past decade (ABARES 2018) and decline in export market volume and share to traditional competitors, the United States of America, Canada and New Zealand (US Dairy Export Council 2018). Attracting new participants depends on demonstration of competitiveness improvement and return on investment.

In 2009 the then Primary Industries Ministerial Council (PIMC) endorsed the *National Primary Industries RD&E framework* to better coordinate and more efficiently collaborate on agriculture RD&E. To implement the framework, PIMC endorsed 14 sectoral strategies: beef, cotton, dairy, fishing and aquaculture, forestry, grains, horticulture, new and emerging industries, pork, poultry, sheep meat, sugar, wine, and wool and 9 cross–sectoral strategies: animal welfare, biofuels and bioenergy, climate change, water use, animal biosecurity, food and nutrition, plant biosecurity and soils over a four year period since the framework's announcement. All primary industry government agencies, RDCs and the Australian Council of the Deans of Agriculture (ACDA) are signatures and deliverers of the framework (reconfirmed with the release of a *Statement of Intent* on 26 July 2017). Effective execution of the framework depends on the ability of RDCs to spend levy and government revenue on initiatives which deliver priorities articulated in the strategies.

To strengthen execution of the framework and enhance Australia's agriculture competitiveness, the Australian Government needs to **ensure Australia's R&D investment is equal or greater than the OECD average**. Traditionally the reliance has been on industry levies and government funding. A priority in the future should be on attracting commercial investment into the framework.

Strengthen linkages between RDCs and the value chain

Traditionally RDCs have been focused pre-farm gate for the benefit of farmers. For example, adopting new feed varieties to increase livestock output. While the majority of agriculture innovation initiatives continue to focus in this area, a greater percentage is being applied across the supply chain. For example, DA currently has a post farm gate program valued at $9.7m (Dairy Australia 2018). This comprises:

- $920k for International Market Support (China $315k, Japan $245k, Other markets $200k and SE Asia $160k)
- $175k for Supporting Manufacturing Innovation and Sustainability
- $200k for Large Supplier Engagement
- $2.275m for Maintaining Public Trust
- $776k for Market Information and Insights
- $370k for Influencer Engagement Health
- $300k for Primary Schools Engagement
- $150k for Human Health and Wellness Partnerships
- $150k for Managing Supply Chain Food Safety
- $50k for Effective Brand Management

ADF is of the view that payment of any service should come from those who directly benefit from those services. It is on this basis ADF believes that government should **mandate processors to pay levies for post farm gate programs delivered by their RDC**. The red meat industry has developed an innovative solution to encouraging processor investment in post-farm gate R&D, which could be beneficial to other industries. Through the Australian Meat Processor Corporation's (AMPC) Plant Initiated Project (PIP) program, processors can access up to 25 per cent of their compulsory levy to fund an R&D project. The remaining 75 per cent project cost is contributed either directly by the processor or other funding partner (minimum 25 per cent) with government providing matching 50 per cent funding (Australian Meat Processor Corporation 2019).

Improving the coordination and effectiveness of extension services

Extension services are delivered by government, industry and consultants to facilitate uptake of R&D and best practice. This involves providing assessments and advice to farmers in regard to the physical aspects of farming like management of soils, herds, crops, chemical use, water, natural resources, pests and diseases and performing various business management functions like budgeting and marketing. A key concern of ADF is these services i.e. extension is fragmented and are inadequately evaluated to determine effectiveness and drive continuous improvement.

Over the past five years the Victorian and New South Wales Department of Primary Industries and Grains RDC have been using an online extension system, called e-extension, to enable digital collaboration, facilitate virtual learning and promote knowledge exchange across the Australian grains sector. An evaluation of the pilot suggested that if this program was expanded to cover the entire agriculture sector improvements in the reach of agricultural extension services, adoption of improved farm practices and efficiency in government could be achieved. It is on this basis ADF recommends the Australian Government invest in the **development of a national collaboration platform and digital delivery framework for agricultural extension**. This would enable individual agricultural commodities to leverage commonalities in extension work while also maintaining the independence to undertake their own extension projects that service different needs of individual sectors. Capability development, participation of all RDCs and state governments and alignment with the National Primary Industries RD&E framework is required to make this effective.

Currently it is difficult to determine effectiveness against the framework i.e. uptake of agricultural R&D. The framework's website (https://www.npirdef.org) only displays strategies that have been developed for the various agriculture industries (including cross commodity strategies) and context relating to the framework itself. There are no reports containing information on strategy execution or achievement.

Typically, agencies report publicly against their own strategic or corporate plan via their annual report. For example, DA's *Annual Report*, which is considered best practice among the RDCs, contains outcome metrics e.g. profit increase per cow against its program e.g. genetics and herd improvement and strategic plan e.g. profitable dairy farms' goals. The issue with this approach is it gives no sense of whether the advice provided from the extension service was adopted or not.

Some RDCs report periodically against their industry strategy. For example, the dairy industry's RD&E strategy, called *Dairy Moving Forward*, was academically reviewed in 2005 and 2010 and is scheduled for another review in 2020. At the output level DA reports to a steering committee and back to government and other funding bodies to reconcile against service and funding agreements. The reporting gap is that outcome targets specified in the industry strategy are not monitored on a regular (annual) basis. As a consequence, investment priorities and annual operating plans are not determined by results or progress against outcome targets. No mechanism currently exists to provide producers with a clear report of the outcomes generated through their levy investment.

The Australian Government's requirement for RDCs to develop and deliver an *Evaluation Framework* in 2018 (included in statutory agreements) will help to address these issues. This initiative integrates input, output and outcome reporting across functions, projects and strategies. In recent months agriculture industries are starting to see the outputs of the framework via annual report cards. For example, at the DA AGM in November 2019, DA released its first *Performance Report* to provide results and transparency across its programs. This report is underpinned by a quarterly reporting dashboard which is used by management and the Board to monitor progress.

It is important that efforts made in delivering the *Evaluation Framework* are aligned and visible against the *National Primary Industries RD&E framework*. For this to occur it is recommended that the **government establish, coordinate and publish (on the framework's website) annual reports against the goals and targets in the industry strategies**. Reports should be provided once per annum for each strategy and include all agencies in receipt of government funding for RD&E. These actions will enhance transparency around agency performance and outcome achievement. More importantly it will better position the system to determine investment priorities based on program results.

Adequately define and resource policy and advocacy

Page 14 of the *Modernising the Research and Development Corporation System Discussion Paper* and legislation governing RDCs do not include policy and advocacy as functions that RDCs perform. These were omitted to ensure RDCs do not undermine government when in receipt of government funds (matched for R&D) and to recognise ADF and other agriculture industry peak bodies as the farmer advocates. As page 14 of the *Modernising the Research and Development Corporation System Discussion Paper* highlights Australia Pork Limited (APL) is an exception to the rule. This is due to APL's governing legislation, the *Pig Industry Act 2001*, enabling APL to use marketing levies, which is unmatched by government, to fund policy and advocacy.

Industry deregulation and structural adjustment has resulted in peak industry advocacy bodies undertaking increased policy work at reduced funding. As a consequence, most peak advocacy bodies have a small number of staff covering all policy topics (in the case of ADF there is only one policy staff member employed) and drawing down on their reserves or relying on grants and sponsorship to survive. Some RDCs, like DA, have developed policy research and advice capability and/or funding/service agreements to address the deficit and support their industry peaks (in the case of DA they have around 25 staff employed in policy support work). RDCs can do this where there are vague definitions of their functional capacity in their constitutions and service agreements. In the case of DA:

- Section 5.1 of the *DA Constitution* and the definition of 'industry services' in the *DA Service Agreement* allows DA to provide almost any industry service.
- Section 6 of the *DA Constitution* says that DA cannot directly or indirectly support agri-political activities; however, the definition of 'agri-political activity' in the *DA Statutory Agreement* (Section 1.1) provides some capacity to work in the area.

The Australian Government needs to intervene to resolve the resource imbalance and restore clear boundaries between policy research and advocacy. This involves **amending Section 11 of the *Primary Industries Research and Development Act 1989* to include policy research as a function for RDCs to perform**. Consistent with other R&D functions performed by RDCs the tasks to be performed under this function would be:

- formulating research questions and generating hypotheses relevant to a policy issue
- undertaking literature reviews and research methods including qualitative, quantitative, experimental, observational and mixed methods' approaches to analyse the issue and answer the question
- providing recommendations based on the evidence provided.

Outputs of this policy research function should be at an academically and scientifically publishable standard. It is vital that the research conducted by RDCs be credible to equip relevant peak advocacy bodies with a strong evidence base for use in submissions and presentations to politicians and other stakeholders.

Advocacy is critical for aggregating and distilling the policy research and presenting it in a way that represents the interests of industries and other aspects of society. This typically involves:

- developing strategies to affect policy change or action
- communicating with target audiences to help them understand issues and support proposals and actions
- engaging and influencing decision makers such as politicians.

For agriculture advocacy to not only survive, but thrive long into the future, it also (in additional to the RDC system) needs reform and resources. The Australian Government can support this process by **allowing agricultural industries to undertake advocacy by utilising the portion of levy investment that is unmatched by government funding. This would involve making (via legislation and/or service agreement) each RDC develop an agreement with their industry peak advocacy body to fund shared advocacy priorities.** Ideally these would be those articulated in an agency approved industry strategic plan. It is important to note the dairy industry has identified this as a high priority in its draft Dairy Plan. ADF will be making further policy reform statements in 2020 when these deliberations and processes are finalised.

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