

## **Productivity Commission inquiry into the Australian Government Rural Research and Development Corporations model**

### **Introduction**

Animal Health Australia (AHA) appreciates the opportunity to contribute to this important debate that is likely to influence the future level of public funding for rural research, development and extension (RD&E).

AHA is an innovative partnership of the Australian Government, state and territory governments, major livestock industries and other animal health stakeholders. Within the framework of a not-for-profit company, AHA manages more than 50 national programs that improve animal and human health, biosecurity, market access, livestock welfare, productivity, and food safety and quality.<sup>1</sup>

AHA has a structure that facilitates flexible and responsive management of animal health issues and accountability via an independently selected board of Directors responsible to members.

It is because of AHA's inclusive membership that it is uniquely placed to facilitate the continuous improvement of Australia's animal health system and meet emerging challenges through partnerships with industry and governments. The company performs an important role in bringing service providers and beneficiaries together to ensure the interests of all stakeholders are considered in strategy, policy and program development.

While R&D is not a major focus of the company's business activities, AHA does have a legitimate interest in the quality and delivery (application) of R&D outcomes and their important contribution to the viability of the national animal health system. In addition, the company has direct input into several specific R&D activities including coordination and management of a major initiative through the Meat and Livestock Australia Donor Company to address key risks in Australia's foot and mouth (FMD) disease preparedness and response capability.<sup>2</sup>

The company has close links with a number of relevant Rural Research and Development Corporations (RRDCs) – two being members (Australian Egg Corporation Limited and Australian Pork Limited), two being Associate Members (Livecorp and Dairy Australia) and four with which we have close relationships (Meat and Livestock Australia, Rural Industries RDC, Australian Wool Innovation and Fisheries RDC). We maintain relationships with all governments, peak industry bodies, service providers and relevant Cooperative Research Centres (CRCs) and participate in strategic planning and priority setting. AHA was a partner of the recently completed Australian Biosecurity CRC (AB-CRC).

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<sup>1</sup> <http://www.animalhealthaustralia.com.au/>

<sup>2</sup> <http://www.mla.com.au/About-the-red-meat-industry/About-MLA/Media/Media-releases/New-5-million-dollar-five-year-FMD-preparedness-program->

In Australia, RD&E is funded and carried out by a complex web of research investors and providers. Strategic coordination across these groups is a necessary requirement of a national RD&E system to focus research efforts, avoid fragmentation and duplication, and provide best use of finite resources in an environment with competing priorities.

It is with this understanding that the Primary Industries Standing Committee (PISC) is leading the development of the National Primary Industries RD&E Framework<sup>3</sup>, whose principles are:

‘... intended to guide efforts to enhance the collaboration, coordination, efficiency and effectiveness of RD&E efforts nationally. In addition, continued and coordinated investment in RD&E helps to provide Australia’s primary industries with the necessary capability (people, infrastructure and information) to improve their productivity, sustainability and competitiveness.’<sup>4</sup>

The Framework is endorsed by the Australian Government, state and the Northern Territory governments, all RRDCs, CSIRO and the Australian Council of Agricultural Deans. It is underpinned by a number sectoral and cross-sectoral strategies which provide means for coordinating setting of priorities, identifying capability gaps and developing strategies for managing and resourcing RD&E.

Shared priority setting establishes a solid foundation for the development of partnerships and RD&E with mutually beneficial outcomes. AHA is managing the development of the Animal Biosecurity RD&E Strategy under the PISC Framework in consultation with animal industries, governments and research providers.

### **Rationale for government support**

One of the key challenges for Australian livestock industries and governments is to determine how much should be invested in rural RD&E, by whom and how. The underlying principle of investment is that the beneficiaries should pay, but it is sometimes difficult to draw the line between private and public good.

The Australian Government Rural R&D Priorities<sup>5</sup> which were developed in consultation with state and territory governments, industry, research funders and providers, provide a basis from which to provide public funding of research.

Applied research is generally undertaken by commercial parties for economic gain, where there is an expectation that investment in research will lead to acceptable financial returns. However, some important applied research may not be undertaken commercially due to economies of scale in a relatively small market like Australia or the lag times in realizing the benefits. Conversely, some applied research may have broader public good, for example to support significant investments already made by governments and industry to protect market access and trade.

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<sup>3</sup> <http://www.daff.gov.au/agriculture-food/innovation/national-primary-industries>

<sup>4</sup> PISC National Primary Industries RD&E Framework Statement of Intent - [http://www.daff.gov.au/data/assets/pdf\\_file/0020/1450631/rde-statement-intent.pdf](http://www.daff.gov.au/data/assets/pdf_file/0020/1450631/rde-statement-intent.pdf)

<sup>5</sup> <http://www.daff.gov.au/agriculture-food/innovation/priorities>

In fact, many of the priority issues in rural RD&E in Australia have wider impacts than economic benefits to one or more industries. Much of this research is exploratory and the outcomes tend to have broad ranging, sometimes uncertain, outcomes such as changes to behaviour or accepted practice, and for which there is no quantifiable economic return. Animal biosecurity and livestock welfare are two such areas.

As environmental awareness has increased, the general community has come to view landholders as managers of a resource on behalf of the Australian, and indeed the global, public. And that support for improved efficiency in the use of these resources, or alternatives that can reduce environmental impact, can only be beneficial for the Australian public at large. The community is demanding better management of our natural resources, e.g. water, and as ‘global citizens’, are becoming more aware of global issues such as food security, food safety, emerging disease, biosecurity, biodiversity, zoonoses and more. There is a public expectation that governments will take the lead on these types of issues.

There is a clear argument for government investment in agricultural RD&E where there are social and environmental benefits. There is also an argument for partnerships with industry for important research which has economic benefit but in which industries are unlikely or unwilling to invest alone. Reasons for this include long lag times, economies of scale, and uncertain research outcomes.

Although the Productivity Commission Issues Paper states that past successes are not a basis on which to provide future funding, the economic figures stated in the Issues Paper and elsewhere suggest that there are still significant gains to be made by investing in agricultural RD&E. When looking at the opportunity cost of investing scarce resources, it is apparent that the return on investment for agricultural RD&E is still high. In this case, it is not just the benefit-cost analysis of projects or portfolios that should be considered but the optimal use of finite government funds. The Council of RRDC Chairs’ evaluation report 2009<sup>6</sup> concludes that the high returns being delivered by RRDC programs suggests that there is still significant under-investment in this area. This suggests that public monies spent in this area will indeed return, dollar for dollar, a better return to the Australian public than the same money spent elsewhere.

Further, the AB-CRC has reported that up to 80% of the work of the CRC would not have been done had the CRC not been successfully established. The success of the CRC has highlighted to animal health stakeholders the significant public good that can be derived from these sorts of programs and there is much concern about the ability to address important animal biosecurity RD&E now that the CRC has been discontinued.

If government resources were to continue to be withdrawn from rural RD&E, a large gap is likely to appear. Relying solely on our past intellectual capital is inherently risky, and likely to result in longer-term deficiencies and vulnerabilities.

Sustainable sources of RD&E funding enable investment in long term programs and continued development and maintenance of expertise in rural industries. It attracts good people to consider research as a viable career option. This is essential to maintain capacity and resilience in times of crisis or adversity, and to maintain an essential national resource.

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<sup>6</sup> <http://www.ruralrdc.com.au/Page/Evaluation+/Evaluation.aspx>

Capacity will be lost if appropriate institutional arrangements don't exist to support the development of these people. AHA manages a number of programs including the National Animal Health Laboratory Strategy to try and address this critical and imminent shortage of expertise and talent. A succession strategy is required for retaining important skills and knowledge for rural industries' ongoing competitiveness and sustainability. A reduction in capability will lead to very long lead times in training and development of appropriate expertise, and a reduction in resilience.

## **Partnerships**

Partnerships are critical for effective advancement of RD&E objectives. Industries need the assistance of governments to achieve market access, and the assistance of research institutions in training people with expertise in rural areas; governments need assistance of industries to develop appropriate and implementable policy, support regulation and to gather industry information.

AHA has established a credible track record in brokering and managing collaborative national relationships including the Emergency Animal Disease Response Agreement (EADRA). The EADRA is a legally-binding agreement between all governments and major livestock industries to share the costs and fulfill certain responsibilities with respect to emergency animal disease preparedness and response. The agreement was drafted in an environment of goodwill and a strong commitment of parties to honour the intention of the agreement. Our experience is that such inclusive relationships and commitment to shared outcomes are essential for partnerships to be effective.

It should be noted that since its signing in 2002, the EADRA has been tested and shown to be effective in dealing with several emergency disease outbreaks. The agreement is regarded as a successful model that is now being considered by several other countries.

## **Models for funding rural RD&E**

It is AHA's experience that the model of leveraging funds from industry and government is mutually beneficial and provides enhanced value per investment for every party. In addition it helps to develop robust relationships, clear understanding and a shared vision.

Levies collected from producers are used for RD&E through different mechanisms. For example, the cattle industry provides levied funds to Dairy Australia and MLA which are matched by the Australian Government through the RRDC model. AHA receives a portion of the levy into the Cattle Disease Contingency Fund<sup>7</sup> and to manage specific AHA programs. The Fund is for use in animal health related activities as agreed by a board with majority industry representation. Among other activities, the Fund has been used for research into emergency animal disease diagnostics, animal disease surveys and vaccine development. Similarly, the honey bee industry contributes levies to the Rural Industries RDC and through AHA into the Honey Bee Contingency Fund; and the sheep industry into MLA, Australian Wool Innovation Ltd and the AHA-managed Sheep Industry Health and Welfare Trust.

Australian Pork Limited uses levies for research and development in a number of areas. The Research and Innovation division of the company carries out the work previously undertaken

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<sup>7</sup> [http://www.animalhealthaustralia.com.au/programs/corp\\_activities/funds.cfm](http://www.animalhealthaustralia.com.au/programs/corp_activities/funds.cfm)

by the Pig RDC and receives matching funds from the Australian Government. R&D undertaken in other divisions of the company (e.g. marketing and policy areas) do not receive matched funds.

*Ad hoc* leveraging of levied funds also occurs. AHA is managing a project on behalf of the FMD susceptible industries (cattle, sheep, goats and pigs) and the Australian Government, through the MLA Donor Company, to invest in research to address risks in Australia's FMD preparedness and response capability. This work is to be carried out by CSIRO.

The above examples highlight that the management of levied funds varies between industries due to different industry requirements. Any model for co-investment of levied funds needs to be flexible enough to fulfill the requirements of public investment but still be relevant to the investing industry.

It is clear that the way forward for agricultural industries is through partnership arrangements. Models such as the RRDCs have the flexibility to deliver a balance between commercial and public good and can be responsive to emerging needs. It is because of the difficulties in separation between some private and public good benefits that organizations like RRDCs are so important. Research with clear commercial or public benefits will be taken up by the appropriate organizations.

Rural RDCs play a role of facilitation and coordination within the RD&E space of a particular industry and indeed across industry sectors. The establishment of the Council of RRDC Chairs and various cross-sectoral partnerships (e.g. Feed Grains Partnership) increases collaboration, coordination and efficiency across RDCs. The RDCs are signatories to the National Primary Industries RD&E Framework and accordingly agree to sustain partnerships with other signatories. They have taken a leadership role in the development and implementation of industry relevant strategies and play a support role to the other strategies. Indeed the other signatories 'acknowledge that the RDCs have complementary knowledge, skills and resources necessary to jointly progress the objectives of the RD&E Framework.'<sup>8</sup>

It is important to recognise that the RRDCs are one of the few avenues by which cash enters the rural RD&E system in Australia. Without such significant cash input into the system it would be impossible to mobilize research efforts in most agricultural sectors. Indeed there have been proposals that a cost-sharing model (agreement) might be developed or expanded to cater for areas such as biosecurity, livestock welfare and other important cross-sectoral issues.

## **Conclusion**

The risks of not maintaining a robust, well-resourced rural RD&E culture in Australia are many, and include:

- Reduced ability to access markets, both domestic and international
- Decreased competitiveness in a market driven by the need for increased efficiency

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<sup>8</sup> PISC National Primary Industries RD&E Framework Statement of Intent - [http://www.daff.gov.au/data/assets/pdf\\_file/0020/1450631/rde-statement-intent.pdf](http://www.daff.gov.au/data/assets/pdf_file/0020/1450631/rde-statement-intent.pdf)

- Inability to be responsive in a constantly changing physical, political, social and economic environment, e.g. disease incursions, emerging diseases, consumer protection, agricultural protectionism, climate change, food security, increasing public concern about agricultural production ethics
- Erosion of capability/expertise, weakening our long-term national capability
- Reduced reputation of our research sector internationally which may lead to reduced funding for further valuable research and loss of research expertise to overseas countries.

Strategic, nationally coordinated, sustainably funded RD&E is needed to support our rural industries. RDCs are not the only model through which these goals can be achieved but the principles of collaborative partnerships, leveraging of funds and shared priority setting should be maintained.

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