26 November 2010

Mr Philip Weickhardt
Presiding Commissioner
Productivity Commission
Locked Bag 2
Collins Street East
Melbourne VIC, 8003

Re: Inquiry into Rural Research and Development Corporations

Dear Mr Weickhardt

Meat & Livestock Australia (MLA), the Australian Meat Processor Corporation (AMPC) and the Australian Livestock Export Corporation (LiveCorp) welcome the opportunity to jointly respond to the Productivity Commission's draft report into Rural Research and Development Corporations (RDCs).

The Productivity Commission's Inquiry into Rural RDCs seeks to understand the extent to which the Government contribution to RDCs delivers an appropriate return to government in relation to public good benefits. From our point of view, our ability to deliver outcomes to the Government critically depends on knowing precisely what the desired priorities are. In the absence of an effective mechanism to clearly articulate these, it is understandable that the Commission has formed the view that RDCs are too narrowly focused on industry needs. However, we take this opportunity to reaffirm that the red meat and livestock RDCs view the Government as a key stakeholder and regard the Government's matching dollar for R&D as a privilege and not a right.

As service providers to the red meat and livestock industry we remain focused on ensuring this critical industry-government partnership meets the needs of both stakeholders efficiently and effectively. Our skills-based boards ensure a broader perspective is adopted and that the decision making and governance processes are robust. We are confident that the Government's investment in rural R&D in the red meat industry is delivering positive and substantial benefits to our industry and that spillovers to the public good ensure a return on tax payer funds.

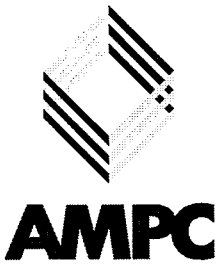
We welcome the opportunity to work with Government to obtain further clarity on future priorities and strategies and we commit to continuing to work closely with other entities in the rural R&D framework to deliver these outcomes. However, until this clarity is achieved, we believe it is premature to prescribe specific structures to enhance the RDC model.

We are most concerned with the Commission's draft recommendation that calls for a halving in the rate of government funding to RDCs. We believe that such an action would undoubtedly have wide reaching, detrimental impacts to not only the red meat and livestock industry but also the broader community. We therefore devote a chapter in our submission to outline the arguments that justify the retention of the current level of government funding to RDCs.

Should you wish to discuss our joint submission further please do not hesitate to contact Don Heatley on 02 9463 9232.

Yours sincerely

Don Heatley MLA Chairman	Gary Hardwick AMPC Chairman	Roly Nieper LiveCorp Chairman



Red Meat and Livestock RDCs' Joint Submission to the Productivity Commission

Inquiry into the Australian Government Research and Development Corporations Model

26 November 2010

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Abbreviations

ABARE – Australian Bureau of Agricultural and Resource and Economics
ACIAR – Australian Centre for International Agriculture Research
AFI – Australian Farm Institute
AGBU – Animal Genetics and Breeding Unit
AMPC – Australian Meat Processor Corporation
ARC – Australian Research Council
BCR – benefit cost ratio
BRS – Bureau of Rural Sciences
BTRE – Bureau of Transport and Regional Economics
CAT (scan) – computed axial tomography
CfOC – Caring for Our Country
CIE – Centre for International Economics
CL – chemical lean
CMO – Catchment Management Organisation
CRC – Cooperative Research Centre
CRRDC – Council of Rural Research and Development Corporations
CSIRO – Commonwealth Scientific and Industrial Research Organisation
DAFF – Department of Agriculture, Fisheries and Forestry
DPI – Department of Primary Industries
FAO – Food and Agriculture Organization
FTE – full time equivalent
GDP – gross domestic product
GVP – gross value of production
LEP – Live Export Program
LiveCorp – Australian Livestock Export Corporation
MDC – MLA Donor Company
MERI – Monitoring, Evaluation, Reporting and Improvement
MLA – Meat & Livestock Australia
MSA – Meat Standards Australia
NAP – National Action Plan
NRM – natural resource management
NZ – New Zealand
OECD – Organisation for Economic Co-operation and Development
OH&S – occupational health and safety
PIMC – Primary Industries Ministerial Council
PISC – Primary Industries Standing Committee
PSE – producer support estimate
R&D – research and development
RDCs – Research and Development Corporations
RD&E – research, development and extension
RIRDC – Rural Industries Research and Development Corporation
RRA – Rural Research Australia
US – United States

Executive summary

This submission is prepared jointly by the three red meat and livestock Rural Research and Development Corporations (RDCs) – Meat & Livestock Australia, the Australian Meat Processor Corporation and LiveCorp. It is written in response to the Productivity Commission's draft report related to its Inquiry into the Rural Research and Development Corporations Model.

We welcome the Productivity Commission's review of the RDC model and are encouraged that the Commission recognises the strengths of the model. Namely, these are the close consultative linkages with industry; the financial contribution of the levy towards the cost of R&D; the promotion of greater and faster uptake of research outputs; and performing a broader coordinating function with benefits beyond immediate R&D activities. In addition, we view ourselves as an integral part of the overall rural innovation system, partnering with universities, CSIRO, CRCs and State Departments to deliver outcomes for both industry and the government. Given the deficiencies in alternative funding vehicles, the Commission suggests that the case for retaining core elements of the RDC model is very strong.

We also agree with many aspects of the Productivity Commission's draft recommendations, namely:

- the need for overarching principles regarding public funding
- establishment of a database to track funding and spending flows within the rural R&D framework
- requiring RDCs to participate in a regular, comprehensive and transparent program-wide project evaluation process
- requiring RDCs to commission regular, independent performance reviews
- streamlining the levy principles and guidelines that deal with changes to levy rates
- introducing a time limit for implementing a levy proposal that complies with the relevant requirements
- RDC arrangements being independently reviewed after 10 years.

We understand the Commission's concern to ensure that the rural R&D system (and in particular the RDC model) delivers an appropriate return to government in relation to public good benefits. The red meat and livestock RDCs acknowledge and accept that government is a key stakeholder and believe we have the processes and systems in place to deliver against government priorities. We welcome constructive initiatives that seek to assist government to better articulate strategic priorities and outcomes to be delivered by the RDC model which would further enhance this important industry–government partnership.

However, we are disappointed the Commission has taken the view that the rate of government funding to RDCs should be halved. We strongly disagree with this view.

We argue that reducing the rate of government funding to RDCs is not justified on several grounds:

The Commission states that an alternative to the RDC model is unlikely to deliver as good an outcome for the community. This achievement of the RDCs, particularly the incentive provided for industry wide levy contributions, will be put at risk if funding to RDCs is reduced. Furthermore, we believe that cuts to RDC funding are premature without an overall assessment of the balance of funding across the total rural R&D framework.

The red meat industry faces particular and growing challenges including global food security; the imperative to produce more food with less water, less land and less fossil fuels; increasingly scarce and costly fertilisers and chemicals; securing workforce skills; long term climate change; and raised community expectations about environmental stewardship, biodiversity and animal welfare.

There will be a loss in industry and community benefits. Financial modelling indicates that $104 million less will be spent on R&D in the red meat and livestock industry in the 10 years to 2021-22. Using a conservative 5:1 benefit cost ratio, there is estimated to be $521 million less industry benefits over this 10 year period. The halving in the rate of government funding is likely to reduce adoption and industry capability building initiatives, reducing the speed and efficiency with which R&D outcomes are delivered to our industry.

We argue against the assertion that levies are likely to increase, as the government co-contribution provides the key incentive for producers to invest in rural R&D. There is also likely to be a significant reduction in broad-based R&D programs beyond the farm gate, particularly investments in high risk, broad impact R&D programs. The loss in community benefits would be far reaching including impacting the functioning of vibrant, rural communities; reducing Australia's contribution to addressing global food security; and reducing environmental, biodiversity, animal welfare and public health benefits.

There will be a double collapse in government funding with the reduction in Australian Government funding exacerbating reduced funding from state governments. The impacts from reduced state funding include reduced rural R&D human and resource capacity and capability; fewer RD&E providers; reduced intervention by private sector investors; and increased risks to small and medium enterprises.

The Government co-investment incentivises private sector investment in rural RD&E. In the case of the red meat and livestock RDCs the voluntary contributions matched by public funding via the MLA Donor Company stimulate significant private sector investment. Without the government matching contribution, private investment is unlikely to occur to the same extent. Rather, companies would choose to invest individually in applied R&D that addresses immediate issues, rather than long term, strategic and more fundamental R&D. Under this scenario, benefits to the broader industry and the community would not accrue.

The Commission's recommendations are based on considerable data limitations. The red meat and livestock RDCs argue that the Commission should not recommend a reduction in government funding until comprehensive data are available across the rural R&D framework so that better informed recommendations can be made.

For the above reasons the red meat and livestock RDCs argue that a reduction in government funding is not justified.

The red meat and livestock RDCs are also concerned that the Commission has discounted the progress made in cross-sectoral collaboration via the National RD&E Framework and the CRRDC and in projects initiated by the RDCs where common ground has been identified. In particular, this submission seeks to emphasise the commitment of the red meat and livestock RDCs to ensuring government priorities are addressed in relation to cross-sectoral and strategic research.

Red meat and livestock RDCs see no justification for the creation of the proposed new RDC (Rural Research Australia) as this will create additional non value-adding costs to the system and is likely to impact negatively on adoption of outputs. Furthermore, RRA is likely to duplicate what is currently being implemented by the RD&E framework cross-sector strategies. These strategies are creating a pathway for greater collaboration on the key cross-sectoral priority issues and as such we should continue this process before another RDC is created to do the same work. We propose an integrated RDC model which we believe will address many of the concerns and issues raised in the Commission's draft report, and will provide Government with the confidence that there are suitable processes and mechanisms in place to guarantee an appropriate return from the public investment in rural R&D.

We are concerned the Commission is not fully aware of the proactive approach taken by us to engage with government to determine their RD&E priorities. Despite these proactive attempts, the articulation of government priorities could be clearer. We strongly believe that decisions regarding structure and investment should follow clarity of strategy and outcomes. We take this opportunity to reaffirm that the red meat and livestock RDCs view the government as a key stakeholder and look forward to working with government to obtain greater clarity on future priorities.

Given the inextricable link between industry and community benefits of the RD&E commissioned by red meat and livestock RDCs, we maintain that the RDC model delivers outcomes efficiently and effectively to both investors: Australian taxpayers and levy payers.

1 Introduction

The red meat and livestock RDCs (Meat & Livestock Australia, the Australian Meat Processor Corporation and LiveCorp) welcome the opportunity to respond to the Productivity Commission's draft report into the Rural Research and Development Corporations.

Our submission is divided into chapters as follows:

- Chapter 2 outlines our arguments for why the retention of the current level of government funding to RDCs is justified.
- Chapter 3 provides responses to the Commission's draft recommendations.
- Chapter 4 outlines responses to the Commission's draft findings.

We are heartened that the Commission agrees that the RDC model has important strengths and delivers industry and community benefits.

Some of the strengths of the RDC model highlighted by the Productivity Commission that we also strongly agree with are the:

- close consultative linkages with industry
- financial contribution of the levy towards the cost of R&D
- promotion of greater and accelerated uptake of research outputs that help to ensure that public money is not spent on research of lesser practical value. In particular, given the deficiencies in alternative funding vehicles, the Commission suggests that the case for retaining core elements of the RDC model is very strong.
- performing a broader coordinating function with benefits beyond immediate R&D activities

We note and welcome the conclusion that many of the strengths of the RDC model have been deemed integral to achieving the required outcomes as detailed in MLA's, AMPC's and LiveCorp's first submissions. In particular, we welcome the fact that the Commission has highlighted the importance of the following:

- specific sector responsibilities of MLA, AMPC and LiveCorp
- continuation of a broad R&D and innovation agenda with government and industry investing along the R&D continuum
- independent governance arrangements including skills-based boards
- opportunity for integrated marketing and R&D functions
- continued separation of investment decisions from R&D providers (demand-driven not supply-driven R&D)
- opportunities to extend international partnerships and alliances
- integrated approaches to delivering both public and private objectives

However, the industry is seriously concerned that the RDC model will be significantly impacted by the Commission's draft recommendation to halve government funding. Specifically we argue the following negative consequences should this recommendation be implemented:

- strong industry-government partnerships which are based on matching dollars plus a mix of compulsory levies and voluntary contributions would be compromised
- whole-of-supply chain approach to R&D would be constrained as a reduction in government funding would result in a significant reduction in broad-based R&D programs beyond the farm gate
- depth of support for maintaining/building capability within both public and private RD&E provider networks would be significantly reduced
- reduction in RD&E which facilitates commodity trade in the international marketplace and is important in maintaining market access - for instance, in the areas of traceability and strategic microbiological research
- reduced capacity for agriculture to provide significant 'additionality' and 'spillovers' leading ultimately to negative social and economic consequences for rural and regional Australia

We do not consider it likely that industry would 'fill the gap' if Government funds are withdrawn.

Finally, while the red meat and livestock RDCs are very conscious of the requirement for appropriate processes to be in place to ensure government investments deliver adequate returns in terms of public good benefits, we do not support the creation and funding of a new RDC (Rural Research Australia) to achieve this. We believe this option will create substantial and unnecessary additional administrative costs (thus reducing the funds available to actually deliver public good outcomes); it will result in higher levels of duplication and further complexities in coordinating effort; and it will reduce industry engagement and adoption of R&D outcomes (necessary to give effect to public good benefits).

2 Justification for retaining current government funding

The red meat and livestock RDCs contend that halving the rate of government funding will have detrimental and wide reaching effects across the red meat and livestock industry, the agricultural industry and the broader community. We argue that reducing government funding is not justified on the following grounds:

1. As identified by the Productivity Commission itself, the current RDC model is delivering the best outcomes for the community compared to the alternatives, and any reduction in government funding would seriously jeopardise this
2. Government co-investment incentivises private sector investment
3. The red meat industry faces particular and growing challenges
4. Rural R&D capability will be lost
5. Industry and community benefits will be lost
6. The scope of RDCs' R&D has widened considerably in response to government requests, sometimes without additional funding
7. The Commission's recommendations are based on considerable data limitations
8. The recommendation to reduce the funding rate by half contradicts draft finding 5.1
9. The Commission's draft recommendation to reduce funding is based on questionable assertions

Each of these is discussed in detail below.

2.1 Compared to alternatives, the RDC model is best to deliver required outcomes for the community

The Productivity Commission draft report states:

While there are some shortcomings in the current RDC model, it is highly unlikely that a completely different approach would deliver as good an outcome for the community. (Productivity Commission draft report, 2010, p XXIV)

While the scope of the Commission's review was limited to RDCs it did briefly examine other entities within the framework and concluded (as per the above statement) that RDCs are well placed to deliver the required outcomes for the community. These achievements and future opportunities will be put at risk if funding to RDCs is reduced. This shortfall is unlikely to be met by increased levies from producers, livestock exporters and processors.

Cuts to RDC funding are premature without an overall assessment of the balance of funding across the rural R&D framework, or an assessment of the effectiveness of these other mechanisms.

2.2 In many cases RDC funding fosters private sector investment

The red meat industry RDCs consider that voluntary contributions (with the potential to attract matching government funds) have an important role to play in the red meat industry's overall research strategy. In MLA's case, these voluntary contributions are handled through MLA Donor Company and there is strong evidence that this mechanism has stimulated significantly greater levels of private investment in rural R&D both directly and indirectly. Independent benefit cost analyses of R&D investments via this mechanism demonstrate significant spillovers into broader industry and public benefits including:

- investment in important areas of strategic research such as robotics (which has been indentified in other government reports as a 21st century transformational platform)
- international partnerships which have facilitated access to new areas of intellectual property e.g. the application of artificial intelligence to manual assist devices aimed at reducing OHS injuries
- building industry capability and skills including programs to support the training of young graduates.

These investments are typically in high risk, long term strategic R&D that would not otherwise have occurred, and the availability of matched Government funds ensures benefits are not 'locked up' by single enterprises (as would be likely to occur).

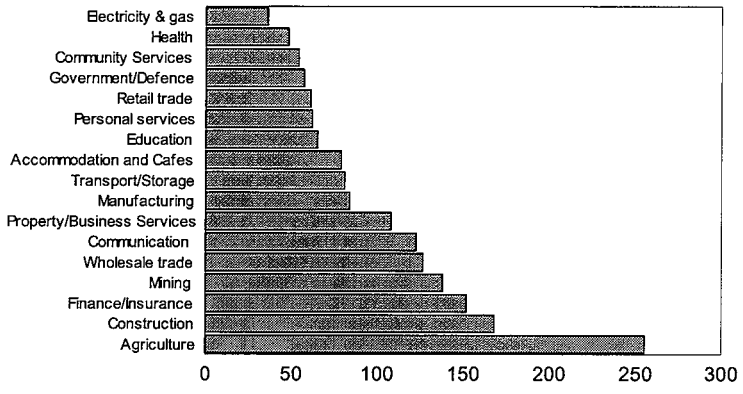
2.3 The red meat industry faces particular and growing challenges

The removal of $60 million of public funding each year from the RDC system by year 10 will occur at a time when the red meat industry will be facing a growing set of challenges and opportunities. For instance, the growing world population and the strong demand for food creates enormous opportunities for the Australian red meat industry which can be best realised via targeted R&D leading to the introduction of new knowledge and innovative technologies. In addition, challenges such as increasing customer expectations, the promulgation of consumer protection and animal welfare regulations, climate change, drought, carbon trading and greenhouse gas controls, labour shortages and other issues will place increasing pressure on the ability of the agricultural sector to remain productive and competitive in the world market. RD&E clearly has a vital role to play in helping meet the challenges facing our industry by improving productivity, maintaining our market access and securing Australia's reputation on the international scene.

In addition to these mounting challenges, agriculture is an extremely volatile sector in the Australian economy[1] (see figure 2.1) with the red meat and livestock industry highly exposed to extreme seasonal variability (see figure 2.2) and currency fluctuations.

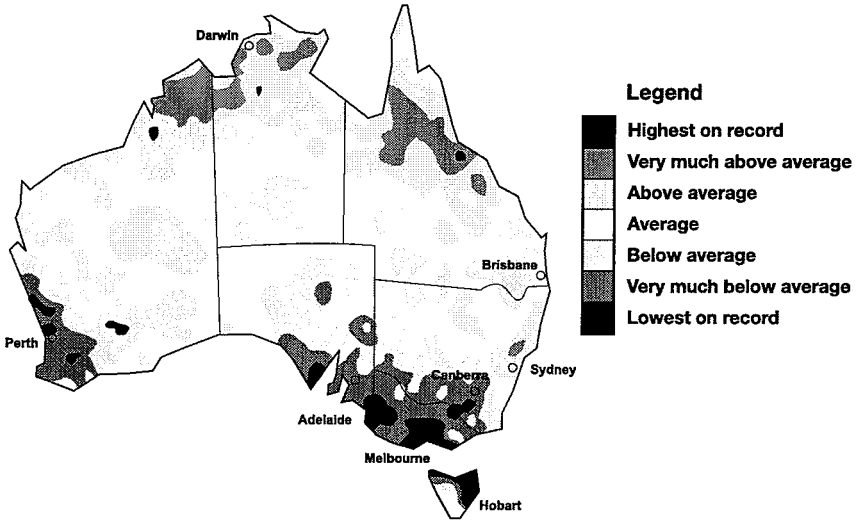
[1] Measured by the standard deviation of annual sector output between 1974 and 2003 (Productivity Commission, 2005)

Figure 2.1: Volatility of sectoral output in the Australian economy



Source: Productivity Commission, 2005

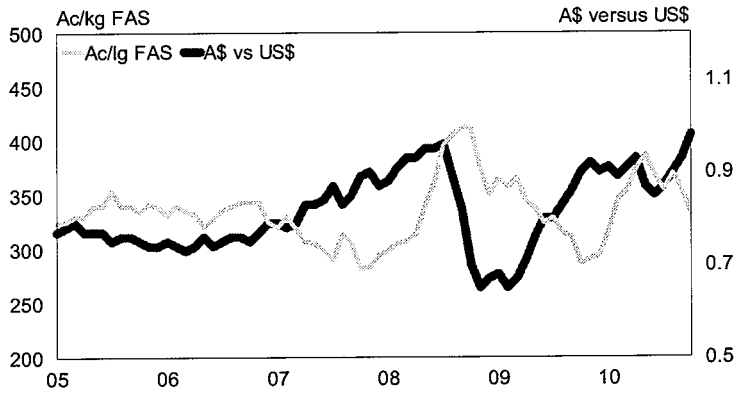
Figure 2.2: Rainfall deciles: 1 June 2006 to 31 May 2009



Consequently, businesses in the agriculture sector face higher risk levels than businesses in other sectors of the economy. Volatility in agricultural output can have a substantial impact on national growth rates, particularly during drought recovery cycles. A comparison of growth rates for GDP and non-farm GDP reveals that agriculture has reduced GDP growth by one percentage point during the last three droughts prior to 2005 (Productivity Commission, 2005, p 18).

Within the agricultural industry, the export-dependent red meat and livestock sector is highly vulnerable to movements in the Australian dollar. As Australian red meat exporters are price takers on world markets, the appreciation of the Australian dollar has adverse consequences. Figure 2.3 presents a graphical depiction of the impact the Australian dollar has on exporter returns for a commonly traded product (90CL cow beef in the US market) since 2005.

Figure 2.3: Australian 90CL export beef prices in the US against the Australian dollar



Source: Steiner Consulting Group

The Productivity Commission's Annual Report 2007-08 highlights that emerging challenges necessitate action to raise productivity, including through the government supporting R&D:

…the challenges confronting Australia lend urgency to policy efforts to raise national productivity. Innovation is a key to achieving this. There is an important role for government in building human capital and supporting R&D where the knowledge will be made generally available (Productivity Commission, 2008, p 21).

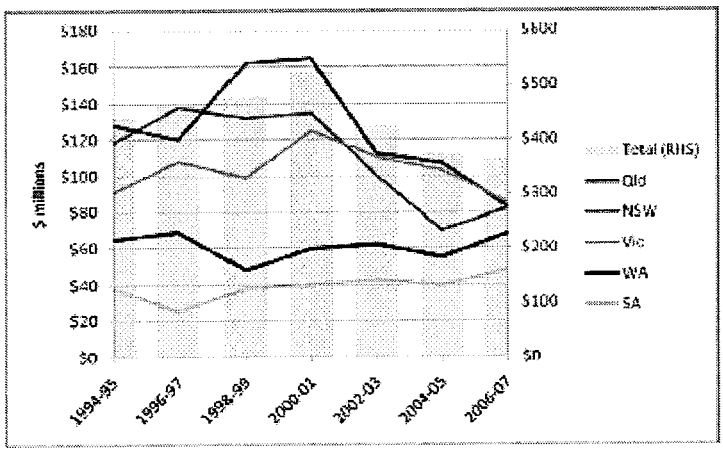
The Commission's recommendation to halve the spending cap is inconsistent with this statement.

2.4 Rural R&D capability will be lost

The removal of $60 million from the RDC system risks accelerating the rundown in human capacity and resources within the rural R&D framework. This rundown will further compound the decline that is already evident, as precipitated by the withdrawal of funding by state governments.

While this trend may not be apparent in every state and territory, the overall trend is a reduction in state and territory government support.

Figure 2.4: Rural R&D expenditure by state governments



(sourced from Across Agriculture submission, p 42)

This withdrawal in support has had the following impacts:

- It has reduced research capacity/capability. This has a significant effect on both the quality and quantity of research that is undertaken. Anecdotal evidence suggests that some state departments of agriculture have in the order of 90% of their budgets allocated to staffing and on-costs, indicating that any funds for actual operational activities are severely limited. From an extension perspective this has severely constrained the ability of MLA to extend R&D messages of a private and public good nature. For example, South Australia and Tasmania DPIs each have one extension officer to service the extension needs of the entire beef and sheepmeat industries in those states.
- Having fewer R&D providers (across any discipline) reduces competition and thereby threatens the quality of the R&D provided. Furthermore, R&D capacity in the livestock industry is both declining and ageing. Again, this has implications for the quality and quantity of the R&D that can be performed. The National RD&E Strategy for Animal Welfare found that of the 40 full time equivalents available in animal welfare, 44% were older than 51 years of age.
- Withdrawal of publicly-funded RD&E resources is not offset by increased investment by private providers. In many cases, the excessive risk (especially with more strategic research) and/or lack of commercial margin on the services provided means that agribusiness cannot sustain activity. In terms of extension, MLA is advancing progress towards a user-pays model (which aims to support more private sector delivery) for activities of high enterprise benefit, but this will not occur overnight and requires planning and careful definition of where public funds should and shouldn't be used in extending R&D.
- There may be increased risks to small and medium enterprises from international companies marketing products (e.g. gene marker tests) being released without Australian validation or research. These risks will only increase as public funds become less available, and there is not an independent supplier of information. This includes the increased risk of businesses attempting to adopt technologies, processes or other activities in their efforts to meet or manage market requirements or standards that without effective capability and funding in R&D will not be properly validated. A further impediment for small and medium enterprises is the hindrance in claiming matching dollars for R&D due to tax laws.

Any further reduction in Australian Government funding to rural R&D would inevitably exacerbate the above impacts. It is unlikely that private investment or even levies will increase to fill the gap.

In addition, the RDCs play a much larger role in maintaining R&D capability than suggested simply by their actual budgets. To a significant and increasing extent, employment and deployment in state agencies, and more recently CSIRO and universities, is tied to success in attracting 'industry' (i.e. RDC) funding. A proportion of state-based positions are either only created within MLA-supported projects, or the positions are only retained if the staff are successful in attracting MLA (or other) funds to cover their operating expenses (see case study in box 2.1).

As levies – especially in beef – are not indexed to industry value, this inevitably means that staff and operating capacity will decline. A further withdrawal from the Australian Government would result in further erosion of the resourcing and intellectual knowledge base of rural R&D research providers.

Box 2.1: Case study – impact of halving of government funding on the Southern Beef Program

The Southern Beef Program is a $6 million program managed by MLA (50% levies, 50% Australian Government). Approximately $1 million is invested into the More Beef from Pastures awareness and extension program, which has state/regional partners including several state DPIs, whose combined co-investment (cash and in-kind) amounts to approximately $4 million. In all cases, the partner organisations have made it clear that they would not make any investment in beef awareness and extension if MLA was not doing so. In several states, staff positions only exist because this MLA funding is available.

Regarding the research phase, approximately 40% of research positions in partner organisations in the Southern Beef Program only exist because of the industry and Australian Government funding via MLA.

In this example, the removal of the $3 million in matching funds would almost certainly mean the termination of an estimated 15–20 positions across southern Australia, including researcher positions which would never be replaced. There is no possibility of the private sector filling this gap, and only a very limited likelihood of it doing so in the extension phase.

MLA has been working closely with state DPIs, CSIRO and universities over the last five years on an overall strategy for coordinating resource (human and physical) management. In the past two years, this has been further advanced through the development of the National RD&E Framework strategies. In developing each sector or cross-sector strategy, the decline in current and future human resource requirements was identified. This decline reflects a combination of a demographic challenge within organisations (a 'bulge' in numbers of baby boomers initially employed in the 1970s) and a transfer of state funds to areas other than agriculture. It is clear that the reduction in public sector funding, especially in extension, is not being replaced by private sector provision (this mirrors the experience in New Zealand). While state governments and CSIRO, in collaboration with the RDCs, are already attempting to respond to the current decline in capability identified in their respective RD&E strategies, these efforts will be impossible to maintain (and deliver on the expected outcomes of the RD&E Framework) should funding to RDCs be reduced and capability continues to decline.

Overseas expertise is not the solution

The erosion in Australian rural R&D capacity cannot be replaced by drawing on overseas expertise. Australia already makes appropriate use of overseas expertise, mostly at the level of core knowledge generation. At the same time it is important to note that Australian agricultural science 'punches well above its weight' in fields relevant to Australian agricultural systems. For example, research commissioned by the Australian Council of Deans of Agriculture indicates that Australian papers in agricultural disciplines accounted for 6% of world agricultural papers between 2003 and 2007.

In contrast, Australian papers of all other science disciplines accounted for only 2.7% of world papers in all disciplines.

Australia imports overseas expertise in the form of young scientists, and a proportion remain in the country working on adaptation and application. This is considered good practice – widening the talent pool from which Australia draws – but this does not reduce the 'running cost' of agricultural RD&E, which are the salaries and operating costs of these people as they work in Australia.

2.5 Industry and community benefits will be lost

2.5.1 Loss in industry benefits

MLA has carried out financial modelling on the impact that halving the rate of government funding will have on red meat and livestock R&D expenditure. The following parameters have been used in the modelling:

- industry GVP increases by 3-4% annually
- production increases result in producer/processor levies increasing by 2-3% annually (due to increases in production)
- inflation is constant at 2.8%
- the Commission's recommended reduction in government matching dollars starts in 2012/13
- the industry benefit to R&D spend ratio is 5:1 (a conservative estimate based on red meat and livestock industry program evaluations)
- levy rates are not increased to fill the gap left by the government.

Based on these assumptions, MLA's total annual R&D spend drops from $102.7 million in 2010-11 to $77 million by 2021-22 (or $53 million in 2010-11 dollars). A total of $104 million less is spent on R&D in the 10 years to 2021-22. Using the conservative 5:1 benefit to spend ratio there is estimated to be $521 million less industry benefits over this 10 year period. This modelling does not take into account the increasing cost of R&D over this period.

While it may be premature to determine specifically where the red meat industry may be required to reduce investment in critical industry RD&E as a result of these substantial funding cuts, it is likely that the following impacts would occur:

- Any reduction in total R&D investment will have a consequential impact on productivity growth with subsequent economy and community-wide implications.
- Industry will likely choose to individually invest in applied R&D that addresses immediate market and policy related issues, rather than long term, strategic and/or more fundamental R&D.
- There will be a significant reduction in broad-based R&D programs beyond the farm gate.

- Individual enterprises are likely to continue to invest in short term incremental improvements. It is unlikely that investments in high risk, broad impact R&D programs such as robotics and automation will continue at the current level.
- Over time the focus on short-term incremental R&D will undermine the industry's capacity to remain competitive, as other competing countries continue to invest in these areas. (It is noted that the NZ Governement has recently allocated an additional $75 million to support productivity-related R&D in their red meat industry).
- The reductions in R&D programs post-farm gate will result in businesses focussed on investing in areas required to meet standards, trade and market requirements, rather than innovation and technological advances. This could leave Australia exposed in relation to its current clean, green and sustainable image on the world scene, and further undermine the industry's ability to remain competitive.
- Levies are unlikely to rise to meet the shortfall from government.
- The timeframe of obtaining research outcomes as well as the final level of adoption will be extended. This would have significant impacts on key areas of R&D required for market access and sustainability.
- There will also be implications for many of the current RD&E providers, demonstrated by the current analysis under the auspices of the National RD&E Framework. It is anticipated that this capability and infrastructure might not be maintained, if it is not supported into the future by joint government and industry R&D funding. In addition to a very negative impact directly on the industry, this would result in further losses of other public goods, including education and scientific output currently contributed by these RD&E providers.

2.5.2 Loss in community benefits

The above modelling does not include broader social and environmental benefits which, while difficult to quantify, we contend are substantial. As stated in MLA's first submission to the Productivity Commission, there is an inextricable link between rural R&D, rural industry and community benefits (pp. 26-30).

The Commission's research paper on *Trends in Australian Agriculture* (2005) also acknowledges the strong linkage between productivity and social and environmental benefits:

Productivity growth means that resources – such as land, capital and land – are being used more effectively and efficiently. Increased output and lower costs means that with more income per head of population, Australians can enjoy a higher standard of living. It can also translate into lower food prices for consumers. Productivity growth in the agricultural sector can also be beneficial for the environment – less land, water and chemicals to produce the same amount of output can mean reduced environmental problems associated with the use of such inputs (Productivity Commission, 2005, p117).

The major broader benefits are expanded upon below.

Major contributor to vibrant, rural communities

Vibrant rural communities are of fundamental significance to Australia and the red meat and livestock industry clearly impacts on sustaining these communities. .

The Australian red meat and livestock industry is composed of 70,000 producers, 300 processors, 650 feedlots, 35 livestock export preparation facilities and 55 licensed livestock exporters covering 50% of Australia's land mass, including in areas where livestock grazing is one of the few activities that is suitable for the land and climate. The industry employs approximately 175,000 people and the majority of these jobs are based in rural areas.

Vibrant rural communities mean less pressure on urban infrastructure, including a reduction in traffic congestion. MLA reiterates from its first submission that the Bureau of Transport and Regional Economics (BTRE) estimated in 2007 that current levels of traffic congestion impose a theoretically avoidable annual cost on Australian society of between $5 and $15 billion. The BTRE estimated that this amount will rise to between $10 and $30 billion by 2020.

Agriculture underpins 12% of GDP, but when factoring in flow-on economic activity it is estimated that the farm sector represents more than 40% of GDP of regional economies. Once multiplier effects are taken into account this escalates to 70–80% in many communities (National Farmers Federation 2010). Benefits that flow from a more productive red meat sector are benefits that deliver public good in areas such as employment, indigenous engagement, rural youth initiatives, community health and economic underpinning of a wide range of small and medium enterprise support businesses.

Role in global food security

The escalation of global food prices through 2007 and 2008 attracted public and policy attention both in Australia and globally. The rise in food prices is continuing into 2010 with the FAO food price index rising sharply since June. Another longer lasting food crisis will only be avoided if a concerted effort is made by all governments to raise global food supply (Sheales and Gunning-Trant 2009). This places a responsibility on governments to invest in measures to boost agricultural productivity. The Australian Government has promised $1.8 billion by 2015 for food security efforts overseas as part of its foreign aid budget.

The FAO forecasts that the supply of meat will need to increase by 74% to reach 470 million tonnes by 2050 to feed the 9.1 billion people on the planet (FAO 2009a).

Australia's key role in feeding the world's population, and maintaining food security in the region will also help maintain national security throughout the region. Food riots, in response to soaring food prices, have most recently occurred in Mozambique while the 2007-08 food riots occurred among developing countries, including countries in South East Asia such as Indonesia. Red meat and livestock RDCs have transferred knowledge acquired through R&D to developing countries to assist them in pursuing their food security goals (see box 2.2).

Box 2.2: Case study – building capability in the Indonesian cattle industry

As the Indonesian cattle herd appears to be in decline and demand for beef is rising, the Indonesian Government introduced an imperative to increase security of supply and set a goal to achieve beef self sufficiency by 2014.

Indonesia is a very close neighbour and is Australia's largest live cattle market, worth over A$400 million per annum. There is a strong synergy between the northern Australian cattle industry and the Indonesian cattle industry, as tropically adapted cattle suited to the Indonesian climate are fed on abundant local feed resources.

A joint funding venture between MLA and LiveCorp in identified program areas of R&D and marketing, the Live Export Program (LEP) provides technical assistance to increase capacity and livestock performance in Indonesia in areas such as training and education in cattle husbandry, breeding, animal health, nutrition, feed production and preparation, and animal handling concepts. These programs rely heavily on R&D projects that will benefit the performance of breeding enterprises using tropically adapted Australian cattle.

Similarly, the LEP breeding support programs (underpinned by R&D) have been developed for feedlotters with technical support through bull and cow selection workshops and training in breeding management aimed at increasing performance in these intensive environments.

The LEP is also working with Australian Centre for International Agriculture research (ACIAR) to implement a breeding project intended to develop a productive Brahman cow-calf system based on low quality feeds at village sites in East Java and Sumatra.

The LEP is also working with government agricultural departments and veterinary associations to assist them with extension and training needs of veterinarians undertaking farmer extension.

The capability building program in Indonesia assists Australia to gain recognition from Indonesian authorities as helping the country achieve increased breeding capacity and assisting towards the government's goal of increased beef self sufficiency.

The Australian Government's matching contribution with industry levies helps Australia respond to the challenge of global food security.

Environmental benefits

R&D in the red meat and livestock sector also provides public benefits in the form of environmental and natural resource goals, including biodiversity, threatened species, surface and ground water quality and climate change. Addressing environmental research outcomes in isolation from productivity related activities is likely to have little credibility in the eyes of farmers. Consequently, farmers are less likely to adopt the outcomes of environmental research that lacks relevance to industry context (see box 2.3).

Box 2.3: Case study – dryland salinity

The National Action Plan (NAP) was the national policy response to dryland salinity, funded jointly by federal and state governments. The program spent $1.4 billion of public funds (and drew in a larger volume of private funds) on 1,700 projects over seven years. The aim of the program was to achieve large-scale land-use change in dryland landscapes in order to contain salinity. Funding was directed to 21 of the 56 Catchment Management Organisations (CMOs).

Pannell and Roberts (2010) assessed the government's NAP and concluded: "Overall, with a few exceptions, projects under the National Action Plan generated few worthwhile salinity mitigation benefits and will have little enduring benefit."

Furthermore, Pannell and Roberts noted that "the likely response of landholders to interventions was not considered in any depth, if at all. At national, state and regional levels, it was generally naively assumed that, with sufficient effort and skill on the part of the extension agents, landholders would respond on an adequate scale to extension and the payment of small, temporary grants." (Pannell and Roberts, p 446)

This case study highlights that public good research in natural resource management fields invariably necessitates that R&D outcomes be adopted by landholders in order for the desired public good outcomes to be produced. Unless the outcomes are commercially attractive to producers, practice change and hence public good spillovers will not occur.

Though difficulties can arise when quantifying the environmental and social impacts of R&D, a number of MLA's evaluations have attempted to measure these impacts. MLA's recent evaluation on 'Promoting responsible use of resources for a healthy environment – The industry impact' (MLA 2010) identified the environmental impacts of the program (see box 2.4).

Box 2.4: Case study – ensuring sustainability case study

The MLA objective of ensuring sustainability aims to improve environmental management and satisfy community expectations, while maintaining industry access to productive natural resources. Over the past decade MLA has researched and promoted practices that support environmental sustainability and good business by improving management that affects water, soil, biodiversity and the atmosphere.

MLA's investment has provided the red meat and livestock industry with the evidence, knowledge and capability to promote widespread practice change that has improved environmental outcomes for the sector and the community. The MLA NRM reporting framework, developed in 2008 with the support of the Caring for Our Country (CfOC) program, measures change in practices that improve target natural resource conditions. It is consistent with CfOC's Monitoring, Evaluation, Reporting and Improvement (MERI) model and the CRRDCC Guidelines for Evaluation.

An independent review by The Centre for International Economics (CIE) found that a reliable time profile of adoption data had been consistently gathered and could measure change in seven key NRM practices since 1998. The benefits arising from these impacts have included:

- improved soil, water and biodiversity conditions
- greater producer preparedness to respond to future issues
- mitigation of future impacts on key natural resource conditions
- more informed industry policy and research agendas
- reliable time profiles of adoption data that are a valuable contribution to the CfOC MERI reporting framework.

The review concluded that rates of practice change increased over time and that MLA and its partners made a significant contribution to this outcome. Two significant conclusions drawn from the evaluation were that "the promise of private productivity gain is what motivates adoption and subsequent spillovers of wider community environmental benefits," and "MLA is an effective co-ordinator of stakeholder group interaction necessary to achieve broad-scale practice change."

Benefits for consumers

Consumers are the biggest beneficiaries of productivity gains in the red meat and livestock sector. For example, consumers recoup 61% of the benefit arising from an R&D outcome that delivers a 1% cost reduction in lamb production. Only 24% of the gain flows to producers. Similarly, an R&D outcome that delivers a 1% cost reduction in the production of grassfed cattle, 64% of the benefits flow to consumers and 28% flow to producers. The substantial benefits flowing to consumers are due to the high elasticity of demand. In contrast, non-essential industrial goods and services have lower price elasticity. Hence, when the supply curve shifts as a result of adopting a cost-saving technology, consumers benefit to a greater extent from innovations in the food sector versus the manufacturing sector. This widely dispersed spillover benefit of cheaper food to the community is a result of decades of rural R&D.

Exploring the link between red meat and nutrition means that red meat industry R&D has contributed to the growing body of evidence which suggests higher protein and low fat diets may help to prevent and manage critical public health concerns such as obesity and diabetes. MLA and AMPC funded important research which contributed to the development of the CSIRO Total Wellbeing Diet, which has helped more than 540,000 Australians lose weight.

The risk of illness and death from *listeriosis* from red meat consumption has been reduced. This equates to a $60 million consumer benefit and $281 million social benefit over 30 years (MLA 2007). Food safety R&D (as well as traceability, biosecurity and animal welfare R&D) helps underpin public policy with sound science to not only meet, but exceed domestic and international legislative requirements. Failure to provide adequate assurance to the public, consumers and local and overseas governments that Australian agriculture standards are underpinned by sound science will not only risk the adoption of new technology, but also has the potential to adversely influence the profitability and sustainability of some or all sectors of the industry and the nation.

Biosecurity benefits

Australia is free from many of the plant and animal pests and diseases and weeds that seriously impact productivity and market access globally. Australia also has unique flora and fauna that are at risk from the entry, establishment and spread of new invasive species. However, increased imports and tourism, together with the uncertainty posed by climate change, serve to increase the risk of new species entering and establishing on our shores. Breaches to our biosecurity are costly so it is imperative that government and industry collaboratively make sound, science-based decisions that maintain our competitive trade advantage and reduce biosecurity risks.

In terms of future biosecurity risks, there is a need for R&D that addresses both private and public good outcomes in relation to the development of risk assessment, management, detection, diagnosis of incursions and systems to underpin and enhance the market access of Australia's animal and agricultural products and protects our production systems and unique flora and fauna from the biosecurity risks posed by new invasive pests and diseases.

Animal welfare benefits

Animal welfare has become a core value in Western society, albeit for diverse reasons and with disparate individual foci. Consumer and public attitudes to animal welfare increasingly have the potential to affect the welfare standards of domestic livestock animals. Furthermore, the diversity of these consumer and public attitudes is expanding – there are now new signals emerging that indicate there is an increasing emphasis being placed on the importance of maintaining Australia's reputation in terms of delivering on sound animal welfare standards and practices. Research by Coleman and Hay (2004) indicates there is an increasing level of community concern about animal welfare, accompanied by new market signals such as broader public awareness and interest in how animals are managed across the production chain.

Consumer and public attitudes to animal welfare have the potential to dramatically affect the livestock production practices in society, either directly through buying behaviour or indirectly, through influence on policy, legislation and trade development.

Recent examples of this include the development of new standards for slaughter, live export and mulesing, all of which required investment for both research and extension towards ensuring practice change, from both industry and government.

The red meat industry is aware of these issues and have placed considerable effort towards establishing their own systems, guidelines and programs towards demonstrating best practice. As animal welfare issues and practices cannot be considered in isolation, these challenges must all be managed at the same time in order to remain efficient, viable, sustainable, productive and profitable.

RD&E undertaken by the red meat and livestock RDCs is directed towards ensuring continual improvement in livestock production and management to attain and demonstrate high standards and differentiate Australia on the basis of its unique production environment. Science also contributes by informing policy and standard development, developing new technologies and practices and promoting a well-informed debate on the appropriateness of animal welfare standards, inclusive of all stakeholders in the community. Consequently, the importance of sound science to underpin policy developments and ensure that new standards are able to effectively withstand national and international scrutiny is of critical importance.

In addition to the above, there have been strong linkages in the area of animal welfare R&D that deliver industry and public benefits. For example, the development of restraining boxes to ensure the humane slaughter of exported Australian cattle was funded by the live export RD&E program, but subsidised installation of approximately 150 restraining boxes throughout South East Asia and the Middle East was separately funded by LiveCorp and MLA and also, since 2006, by the Australian Government. In addition there are estimated to be more than 200 additional 'copy' boxes that have been built by local operators based on the original design. For all parties an important benefit was 'maintaining a social licence to operate' by ensuring animal welfare concerns with respect to the processing of Australian livestock in overseas markets were addressed. However, for the Australian Government, an important additional benefit was ensuring the maintenance of good bilateral relationships with countries such as Indonesia, Malaysia, Saudi Arabia and Egypt.

2.6 The scope of RDCs' R&D has widened considerably in response to government requests

Over the years, the red meat and livestock RDCs have been asked to address more issues by government (sometimes without any additional funding) in areas including food safety, biosecurity, climate change, traceability and animal welfare.

One example is in the area of climate change response and environmental resource management R&D. In 2000-01 MLA expenditure in this area was $6.6 million while in 2010-11, expenditure is expected to total $13.1 million, consisting of $5.1 million in government funds and $8 million in levy contributions.

The importance of these areas of R&D (which deliver economic, social and community benefits) is clearly recognised by industry.

In light of these additional responsibilities, funding to RDCs should be maintained to at least the current levels. Furthermore, given these broadening responsibilities that extend to supply-chain issues, red meat and livestock RDCs suggest that the calculation of GVP should be reviewed to include post farm gate values (see section 3.5).

2.7 The Productivity Commission's recommendations are based on considerable data limitations

The Commission acknowledged the "considerable limitations" of quantitative data when forming its views on the efficacy of the rural R&D framework and the RDC arrangements. The current inadequacies in datasets do not enable sufficient analysis to identify firm amounts of future funding, nor assess the true investment in cross-sectoral, community and public good R&D. Based on the Commission's recommendations, we comment that the data is only a starting point for discussion and that further input is required for industry to contribute to discussions on the appropriate remit and funding going forwards. At this stage, industry considers it too early to identify firm funding amounts for RDCs, cross-sectoral R&D or R&D to inform public policy.

Until such data are collected and analysed, the suggestion of reduced funding is considered to pose significant policy risks to the economy and to the future of RD&E.

2.8 The recommendation to reduce the rate of funding by half contradicts draft finding 5.1

The recommendation to halve the rate of government funding to rural RDCs conflicts with draft finding 5.1 that states that it is not appropriate to establish a target level for overall spending on rural R&D.

2.9 Recommendations based on questionable assertions

It is apparent to the red meat and livestock RDCs that the recommendation to halve the rate of government funding to RDCs is underpinned by a number of assertions which we take this opportunity to question.

2.9.1 *...much of this research* (in Australia) *involves adapting technologies developed overseas to meet local requirements. (Productivity Commission draft report, 2010, p 34)*

The red meat and livestock RDCs disagree with the above assertion. In many cases, R&D developed overseas is not transferrable to the Australian red meat and livestock industry, as in our view, the above statement is an over simplification of the R&D landscape. For strategic research, the RDCs avoid duplication and attempt to use overseas derived research to minimise the high technical risks in this area. However, there are key areas of agricultural research where Australia has no choice but to carry out fundamental or strategic research.

Examples include sheep and wool related R&D where little activity occurs outside Australia, or in areas such as vaccines where commercial organisations choose to focus R&D activities on high margin companion animal or human markets.

Similarly, Australia's standards, trade requirements and regulations are often higher than some of our trading partners, therefore adapting technologies from overseas is not always possible. In addition, some technologies and practices are simply not required overseas and therefore cannot be adopted and/or modified. Furthermore, R&D provides considerable underpinning of our domestic standards and our contribution to the world R&D scene. First class R&D to trade provides Australia with greater influence, involvement and opportunity for negotiation, especially where regulatory 'creep' is a risk from overseas countries that employ different practices and technologies and operate in different market conditions.

In the meat processing R&D sector, there are also limited options to adopt overseas technology which are either not suitable for Australian processing environments, or where suitable technology is simply not available. Experience has shown that generally significant further R&D is required to adapt such technology to Australian conditions. A specific example of this is abattoir automation, where labour shortages and OH&S requirements have been the driving factors in the development of world leading robotic systems based on R&D funded by MLA and AMPC. Where technologies are adapted from overseas (e.g. sheep automation from New Zealand or pork automation from Denmark), Australia's local processor requirements have necessitated considerable additional R&D to apply these technologies successfully. A more extreme adaptation and further R&D effort is required for technologies that have never been applied to processing environments such as the use of human medical based CAT scanning devices for meat quality and sensing purposes and 'cobotics' human assist technology for boning room OH&S use.

Within the livestock export R&D sector there is also very limited research available internationally other than that funded and completed as a result of MLA and LiveCorp investment. The Australian livestock export industry is the world leader in the development of standards and operating practices. A report titled "World Livestock Export Standards – A comparison of development, processes, systems and outcomes achieved" released by Alliance Resource Economics in 2006, stated:

> *that Australia has world-best livestock export standards in terms of coverage and capacity to deliver acceptable outcomes...For some export nations we could find no evidence of standards...Our major conclusion is that there are no formal systems in place in other countries that would add significantly to the effectiveness of the Australian livestock export standards...*

In all major disciplines, the red meat and livestock RDCs actively encourage and support local scientists to maintain expertise and knowledge at international levels. This has lead over many decades to the situation where Australian scientists at the research end of the RD&E pipeline make significant contributions to the world body of knowledge, while ensuring that Australia imports the latest ideas and approaches for trialling locally. A particularly good example is animal genetic improvement (see box 2.5).

Box 2.5: Case study – animal genetic improvement

The current state of the art methodology for animal genetic improvement is Best Linear Unbiased Prediction (BLUP), which was originally developed by a US scientist Professor Charles Henderson in the 1950s for application in dairy cattle. From 1960 to 1985, this method was introduced into animal breeding in all species and countries, usually by some mix of local scientists developing knowledge and expertise of the method via literature and in-service training, and then working with industry to apply the method in their local populations.

In Australia, this occurred through the Australian Dairy Herd Improvement Scheme (launched in 1980), BREEDPLAN (for beef cattle, launched in 1985), LAMBPLAN (meat sheep, launched in 1989) and MERINOSELECT (Merino sheep, launched in 2005).

In each case, local research groups have carried out the implementation. These groups are recognised as world leaders in the development and implementation of the technology and the genetic evaluation systems (ADHIS, BREEDPLAN, LAMBPLAN and MERINOSELECT) are all considered world-class.

As technology adaptation and implementation has proceeded, Australian researchers have played a greater role in developing the next phases of the technology, to the point where Australian scientists pioneered methods for exploiting and integrating new knowledge based on the DNA sequence into the existing evaluation systems. Australian scientists take that expertise to the world through both publication and delivery of training. In parallel, the Australian implementation systems have attracted bright young scientists from overseas, thus drawing on the international and local talent pools

Analysis of the total investment into animal genetic improvement systems outlined above shows that almost 100% of that investment has been in Australia, by Australian organisations. Australia makes very significant profits on that overall investment, mostly from improved local productivity and profitability in Australia, but also from royalties earned from overseas licensing of some of the technology. Despite the high profitability, the government investment was critical because:

- government matching dollars have been applied to the strategic and underpinning research areas that have long lead times to producer benefit.
- industry (MLA) and breeders pay for the more direct implementation aspects of the system
- sound economic research shows that of the total benefits generated by genetic improvement, only some 25–33% is captured by producers (Zhao X et al 2002) while the rest of the benefits are captured by consumers and wider community, so in equity terms, a community contribution can be justified.

2.9.2 Government funding support for rural R&D is much more generous than in most other parts of the economy. For instance: The government share of total R&D spending in Australia is a little over 40 per cent — around half the apparent share for the rural sector; and the level of Australian Government support for the RDC program is several times greater than the assistance provided through the general R&D tax concessions. (Productivity Commission draft report, 2010, p 94)

The red meat and livestock RDCs support analysis by the Council of Rural RDCs (CRRDC) that government funding to RDCs is not up to 11 times more generous relative to other tax incentives. Rather, CRRDCs analysis indicates the government contribution to rural R&D ranges from 1.2 to a maximum of 1.7 times the contribution provided to non rural R&D (CRRDC 2010).

2.9.3 ...The Commission expects that the reduction in total government funding, once the new arrangements are fully in place, would as least be partly offset by rural producers increasing their funding of industry-focused research...The current arrangements involve very large subsidies for research that rural producers would often have sound financial reasons to fund themselves (Productivity Commission draft report, 2010, p 169). High estimated benefit-cost ratios for many RDC sponsored projects — and often within a relatively short period of time — reinforce the notion that the incentives for private investment in such research would often have been strong (p XX-XXI).

Livestock producers in Australian beef and lamb industries have a national rate of return (excluding capital appreciation) of 0.6 per cent and 1.6 per cent, respectively. Similarly, meat processors operate on a very low rate of return. As discussed in section 2.3, producers operate in a highly volatile market, which affects their profitability from year to year. Beef farm profitability has been negative in six of the past ten years and sheep farm profitability has been negative for five years in the past decade. Consequently, producers and processors do not have compelling financial incentives to fund long term R&D, even if benefit cost ratios are high. Furthermore, the high level of risk associated with R&D and the five to 20 year lag time between conception and adoption provide further disincentives.

The government matching dollar is a strong incentive for maintaining support for compulsory levies among producers, lotfeeders, processors and livestock exporters. In the absence of the government matching dollar, producers, livestock exporters and processors would be more likely to vote for a decrease in levies during periods of lower profitability.

2.9.4 A greater role for the private sector in funding the RDCs would also bring Australia closer to the situation in other developed economies (Productivity Commission draft report, 2010, p 162)

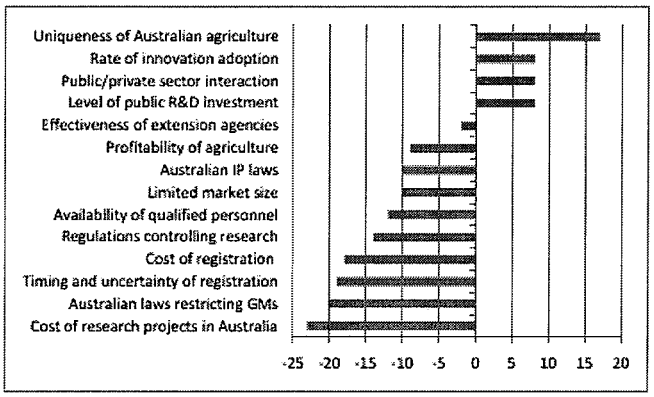
The Productivity Commission made the above assertion based on OECD data which it recognised as having "deficiencies". Australian Farm Institute research affirms the incompleteness of the OECD data, particularly the near absence of consistent data on private investment in agricultural R&D across countries (Australian Farm Institute, 2010).

In light of these deficiencies, the Australian Farm Institute commissioned a survey of Australian private sector investors in rural R&D in order to estimate the level of private R&D spending in Australia. The study concluded that the ratio of private sector food and agricultural R&D to total R&D expenditure was higher than previously published estimates that have been used for international comparison purposes, though still below other OECD countries.

The red meat and livestock RDCs have also witnessed large investments in R&D and technological advancements in our industry, particularly in the design, construction and improvements to abattoirs, feedlots, vessels, etc. While some of this stems from R&D work undertaken by the RDCs, much is done on a purely individual basis and is not therefore included in assessments of total industry investment into R&D. For example, new developments in shipboard ventilation systems which have been developed with private investment have resulted from more basis research undertaken in the livestock export R&D program.

The AFI study also examined a range of factors that either encourage or discourage R&D expenditure by private firms in Australia (see figure 2.5). The negative factors highlight that the intensity of private agricultural R&D investment in Australia is always likely to be lower than that reported for major nations internationally, even when data are reported on an internationally consistent basis (AFI, 2010).

Figure 2.5: Factors encouraging and discouraging expenditure in agricultural R&D by private firms in Australia



Source: AFI survey 2010

In addition to the above factors, the red meat and livestock RDCs can cite a further reason for under-investment by the private sector that elaborates a point made in the Across Agriculture submission. Given approximately two-thirds of Australian red meat is exported, it means that if a new veterinary chemical or pesticide was developed from Australian research, it would still need to be registered for use in all major international markets before it could be used on Australian farms or at processing plants. This makes it uneconomic for private businesses to consider the development of certain products and technologies for the red meat and livestock industry in Australia.

The AFI survey also found that respondents regard RDCs as playing a complementary role in rural R&D. In addition, respondents cited that the level of public R&D investment in rural R&D is one of the factors that encourage private sector investment. Hence, it is likely that under-investment in the private sector would be further exacerbated if funding to RDCs were reduced.

The development of a database to track spending and income flows in the rural R&D framework (as per draft recommendation 5.2) should enable the level of private investment to be measured accurately, especially if the measurement of private sector investment follows methodologies used internationally. However, the red meat and livestock RDCs argue that even if accurate statistics are available and conclude that private sector investment in Australia is lower than abroad, there are a range factors at play that can explain this lower level of investment. A reduction in funding to RDCs would discourage this investment even further.

2.9.5 While it is difficult to precisely determine how Australia's public support for rural R&D compares to other countries, data published by the OECD (2009) suggest that it is relatively generous. (Productivity Commission draft report, 2010, p 162)

The Across Agriculture submission to the Productivity Commission in June 2010 highlighted that the OECD's main index of farm support is termed the Producer Support Estimate and measures budgetary outlays as well as the extent to which trade barriers result in agricultural commodity prices that are higher than those prevailing in international markets.

Using the PSE measure, New Zealand is the only developed nation with a lower level of government support for its agriculture sector than Australia. In 2009 support to Australian producers (as a % of PSE) reached 3% while in New Zealand it was 0.4%. The OECD average was 22% (OECD 2010).

Support to Australian producers (% of PSE) decreased from 4% in 2008 to 3% in 2009, mainly due to reduced budgetary payments. Over the longer term % PSE declined from 10% in 1986–88 to 4% in 2007–2009. Future Australian farm support levels are likely to be further reduced due to the cessation of the dairy industry restructure scheme and the winding back of drought support payments as seasonal conditions improve. This means that the estimated level of government support for Australian agriculture in the future could be very close to the level reported for New Zealand.

The red meat and livestock RDCs agree with the Productivity Commission that trade distortions are costly. Every day Australian red meat and livestock compete with products from other countries that provide high levels of government support through border protection measures and production subsidies.

The matching government funding to RDCs is one of the few forms of support offered to the red meat and livestock industry. It is an effective and efficient form of support because it enhances Australia's global competitiveness without distorting market signals or leading to a misallocation of resources (the World Trade Organization views that government support of rural RD&E is considered minimally trade distorting). At the same time, it produces wider spillover benefits to the community and in the future may well be considered as a form of international collaborative investment assisting in the major global issue of food access and security.

3 Response to draft recommendations

The red meat and livestock RDCs have examined the Productivity Commission's 17 draft recommendations. We provide the following comments to those recommendations where we believe we can add value to the Commission's deliberations. Similarly, where relevant we have included text in response to the Commission's request for further information.

3.1 Draft recommendation 5.1: Institute an overarching set of public funding principles covering the basis for government to contribute to the cost of rural R&D, the relationship with other policy levers, and good program design features

The red meat and livestock RDCs agree with the overarching principle that the primary aim of government funding is to enhance the productivity, competitiveness, social and environmental performance of the rural sector and the welfare of the community by inducing socially valuable R&D that would not otherwise be undertaken effectively.

In addition, the red meat and livestock RDCs do not disagree with the Commission's suggestion that an overarching set of public funding principles could be of value, most particularly, if these principles assisted government to more clearly articulate a list of desired outcomes.

In developing draft recommendation 5.1, the Commission has considered a range of issues including:

- the role of rural R&D
- the importance of encouraging additional, socially valuable R&D
- coordination issues
- insufficient attention to adoption pathways
- the embryonic nature of the evaluation culture
- research balance issues.

The red meat and livestock RDCs endorse the importance of a proper consideration of the above issues and would welcome the opportunity to work closely with government to refine the suggestions made in the Commission's draft report into a set of clearly understood and unambiguous principles.

3.2 Draft recommendation 5.2: Establish a process to collect and maintain robust data on funding and spending flows within the framework

The red meat and livestock RDCs endorse this recommendation. It is clear that the current inadequacies in datasets do not enable sufficient analysis to identify firm amounts of future funding, nor assess the true investment in cross-sectoral and public good R&D. The RDCs, through the CRRDC, already have a level of knowledge in this area and should work with DAFF to design an improved process for the collection and reporting of data that provides the necessary level of detail without imposing additional arduous reporting requirements.

The database should be accessible to DAFF as well as the other entities within the framework. The national database would be useful to red meat and livestock RDCs, particularly when evaluating R&D programs that are co-invested with other providers in the rural R&D framework.

In addition we suggest that the PISC National RD&E strategies will provide further opportunities for data capture, on the basis that these strategies have included national audits of infrastructure, capability and investment. Within these strategies, there will be a process to review changes in data over time, providing an indication of inputs, including for areas of public good investment by both industry and Government. It is considered that this process, which provides for direct and strategic partnerships between industry sectors as well as between government and industry, will facilitate improvements in data capture, analysis and future benchmarking.

3.3 Draft recommendation 5.3: Establish a mechanism to coordinate the Australian Government's various funding programs for rural R&D

The Productivity Commission's draft report details a number of concerns regarding the overall coordination of government investment in rural R&D. In particular, the Commission seeks comments regarding how the following issues could be better addressed:

- promoting consistency in approaches across a number of programs that provide funding for rural R&D
- assisting in the identification of gaps and/or duplication in program coverage
- informing considerations regarding the effectiveness of overall government support for rural R&D
- ensuring states and territories and other relevant entities are fully aware of any changes to government rural R&D funding programs and the implications of these changes.

Clearly this recommendation covers issues which are much broader than just those concerning the RDC model and includes reference to the effectiveness of other elements within the rural innovation system such as CSIRO, ARC, CRCs and universities. However, as the Commission did not investigate these other areas, it is not totally clear what the full extent of the concerns are. As was discussed in MLA's previous submission (pp.74-76), coordination across the rural innovation system is likely to require consideration at multiple levels. While perhaps still too early to evaluate, it is considered that the PISC National RD&E Framework, plus the findings of the Rural R&D Council's investigation into a rural investment strategy will play an important role in informing government in relation to various funding programs for rural R&D and more broadly how these program areas could be better coordinated.

The basis for the RD&E Framework was in part to facilitate better coordination of RD&E activities across the rural innovation system. Additionally, it is noted that both PISC, through its PISC R&D Sub-Committee and the CRRDC, have activities underway towards developing agreed principles for evaluation, reporting and extension.

It is considered that the involvement of all RDCs in the new national cross-sectoral RD&E strategies and the intended interactions between these strategies and the sector specific strategies will facilitate the identification of gaps and/or duplication of resources, investment and program coverage.

Specifically in relation to RDCs, the red meat and livestock RDCs believe that the CRRDC provides a suitable mechanism to coordinate the interface between RDCs and the broader rural innovation system. It is anticipated that this role will continue to evolve and be enhanced to include:

- facilitating collective engagement by RDCs in the strategic assessment and delivery of broad rural R&D priorities
- assisting government to establish clear and measurable rural R&D priorities
- maintaining linkages with the Rural R&D Council as they develop the National Strategic Rural R&D Investment Plan
- providing an interface with the PISC National RD&E Framework
- creating stronger linkages between RDC investments and other government programs and departments
- assisting RDCs to identify common areas of skill gaps and to develop coordinated programs to address these gaps.

It is therefore suggested that the relatively new initiatives that are currently being developed be allowed sufficient time (3–5 years) to be properly embedded within the rural innovation system before the need for any additional coordinating mechanisms be determined.

However, the red meat and livestock RDCs consider that there is an urgent need for government to better articulate priorities in relation to rural R&D with a specific focus on cross-sectoral issues and areas of public good. It is likely that the Commission's finding that there has been an apparent shortfall in this area could be related to lack of clarity regarding government expectations rather than a real deficiency in the way RDCs have addressed these issues. In addition to identifying broad levels of investment in those areas that government believe are appropriate, it is clearly critical that government also articulates the broad outcomes they are seeking plus expectations regarding how measurement and reporting around these priorities should be undertaken. It will be important for all members of the rural R&D system (including RDCs, CSIRO, universities, CRCs etc) to have the opportunity to engage with government in the development of the broad priorities for public good/cross-sectoral R&D. As noted previously, in addition to the National RD&E strategies it is anticipated that the soon to be released Rural Investment Strategy developed by the Rural R&D Council will assist in informing this process (albeit this has not yet benefited from a high degree of industry or provider input). The process for coordination described here is further illustrated in figure 3.1 in the next section.

3.4 Draft recommendation 6.1: Create a new RDC, Rural Research Australia (RRA), to sponsor non-industry specific rural R&D. Leave industry-specific RDCs to focus on research of direct benefit to levy payers

In the Productivity Commission's draft report there is a detailed discussion regarding the suitability of the current RDC model to cater for so called 'more broadly-based research' which has public benefit as the major objective and government as the primary stakeholder. It is alleged that there are increasingly divergent R&D needs in relation to the current model's two principal stakeholders (government and specific industry sectors) and that the 'diversion of RDC funds, including a component of levy payments, into more broadly-based research will create a potentially significant tension with industry stakeholders' (p. 129). It is noted that one of the quotes (p. 132) supporting this view was taken from the CSIRO submission which commented that:

'*The RDCs operate well within their sector specific boundaries, but in our experience have been less well suited to address cross-sector issues that are emerging as national challenges (water, sustainability, climate adaptation and mitigation, healthy soils etc)*'

The red meat and livestock RDCs strongly disagree with these statements and in fact caution the Commission in taking (at face value) statements made by organisations with a vested interest in diverting government funds away from the current (successful) RDC model into alternative arrangements, an approach which the Commission itself rejects in the draft report (pp.132-134).

As noted in MLA's initial submission (pp. 26-30), there is an inextricable link between public and private benefits generated from the rural RD&E undertaken via the current RDC model. As discussed in the earlier submission, industry-specific RDCs provide government with a unique, efficient and effective means to deliver outcomes which combine both private and public benefits and are delivered at a lower cost than could be achieved by having the same funds invested in a separate entity such as is proposed in Rural Research Australia (RRA). As was noted in the original submission, a large proportion of 'public good initiatives' such as natural resource management not only give effect to government policy objectives in areas such as climate change but also deliver more sustainable and efficient production systems which directly benefit producers and other industry stakeholders. Realising desired public benefit from RD&E requires the uptake of new technologies by producers and other members of the supply chain and successful adoption is critically dependent on industry recognising and valuing the commercial benefits of adopting the technology. It is this latter point that the red meat and livestock RDCs consider is the most compelling reason why the Commission's draft recommendation in relation to the formation of RRA should be reconsidered.

In the draft report the Commission also alleges that under the current RDC model there is an 'under-investment' in the areas of broad public good RD&E. However, no quantitative evidence is provided for this assertion and similarly no economic analysis is provided to support the proposed $50 million per annum to be allocated to RRA (gradually over a five year period) to redress the alleged shortfall.

By its own admission, due to lack of data the Commission had difficulty coming to conclusions in a range of areas related to the appropriateness of levels of investment in RD&E, and presumably this included the area of 'public good' RD&E. The red meat and livestock RDCs are strongly of the opinion that more rigorous analysis of the current levels of investment in public good RD&E within the rural sector (including investments outside the somewhat narrow confines of the RDC model as has occurred in the current Inquiry) is required before definitive statements can be made regarding adequacy of current levels or, in fact, the efficacy of current models and mechanisms to support the delivery of outcomes.

In summary, the red meat and livestock RDCs consider that no compelling evidence is provided within the Commission's draft report to support the recommendation to create the infrastructure (and likely significant related administrative costs) that would be associated with the creation of yet another RDC in what would appear to be an already well-served RDC environment. It is our view that decisions regarding structure and investment should follow clarity of strategy and outcomes.

How should cross-sectoral and public good R&D be managed?

As noted in the comments in relation to draft recommendation 5.3, the red meat and livestock RDCs consider that a primary vehicle for the development and delivery of detailed cross-sectoral R&D programs (which will clearly be required to deliver public good outcomes in addition to developing a high level of industry engagement) should be the National RD&E cross-sectoral strategies.

The key principles and advantages of this approach include:

- wherever possible, existing structures and capabilities are utilised (preventing unnecessary duplication and need for new resource infrastructure)
- encourages the development of the lowest cost options, customised to the particular strategic cross-sectoral area (avoiding a 'one size fits all' mentality)
- ensures most effective delivery and implementation as existing links and relationships with industry are maintained
- provides the most effective mechanism for collaboration and coordination between purchasers, providers and implementers (all of whom have a 'seat at the table')
- provides a direct vehicle for Australian Government input and monitoring of the outcomes of cross-sectoral strategic priorities.

It is strongly recommended that government and industry (via RDCs) ensure that as these strategies evolve that they are provided with all the necessary support and resources they require to deliver the desired outcomes. It is anticipated that each of these cross-sectoral strategies will require a specific and customised delivery infrastructure, and a number of these are already under development.

It is considered that as the need for additional cross-sectoral strategies are identified (via the process described in response to Recommendation 5.3) then they could either be added to the list of National RD&E strategies (assuming this proves to be an efficient and effective mechanism for addressing these broad national priorities) or a suitable lead organisation could be identified to develop a business plan (in the case of RDCs this lead organisation could include a revamped RIRDC)

The red meat and livestock RDCs believe that there are additional opportunities that could be considered to enhance the current arrangements regarding cross-sectoral/public good RD&E. To further underpin the design of an enhanced mechanism, it may be helpful to consider cross-sectoral and public good RD&E within the rural context in two forms as follows:

- **Cross-sectoral/public good R&D** with a predominantly public good focus but that provides some benefit for producers and/or other participants in the supply chain such as processors and livestock exporters. To achieve both industry and policy outcomes it is likely that effective implementation will require high levels of engagement by the industry and these initiatives are therefore best managed and delivered by industry-focused RDCs (examples where this is already working well include Grain & Graze, Managing Climate Variability, and Pastures Australia). It is anticipated that the majority of cross-sectoral/public good R&D would fall into this category.
- **Public good R&D** that seeks to develop information of primary interest to various levels of government and to government agencies (principally, for the purpose of developing policy). This is likely to be a much smaller area.

Clearly both industry and government have mutual interests in the first category. Industry has interests because there are associated productivity and sustainability benefits from this type of R&D (albeit perhaps less obvious compared with productivity-focussed RD&E). Government has interests because industry engagement is critical to implementation and the delivery of public good outcomes. The red meat and livestock RDCs consider that there is ample evidence that industry is already embracing investment in this category of RD&E and that existing industry-based RDCs are the most appropriate to continue to support delivery of the outcomes. In addition, the National RD&E Strategies will, over time, assume responsiblities in these areas. Where gaps are identified that cover broader cross-sectoral areas that are not specific to a single industry, it is proposed that a revamped RIRDC could assume a leadership role.

In relation to the second category of public good R&D (i.e. where government is the primary stakeholder and government policy the principal objective), the red meat and livestock RDCs agree with the Commission that it is unrealistic to expect that industry will willingly agree to substantially contribute to this area of work. It will therefore be necessary for government to underpin this component of the public good R&D purely from consolidated revenue. Once again it is not clear what level of investment will be required here but it would appear that there are already significant funds being invested by government across a range of predominantly uncoordinated initiatives (outside the RDC framework).

It would appear that the first step should be for government to gain a clearer understanding of existing initiatives (and total levels of government investment) and to then determine whether these are appropriate. This was outside of the scope of the Commission's Inquiry.

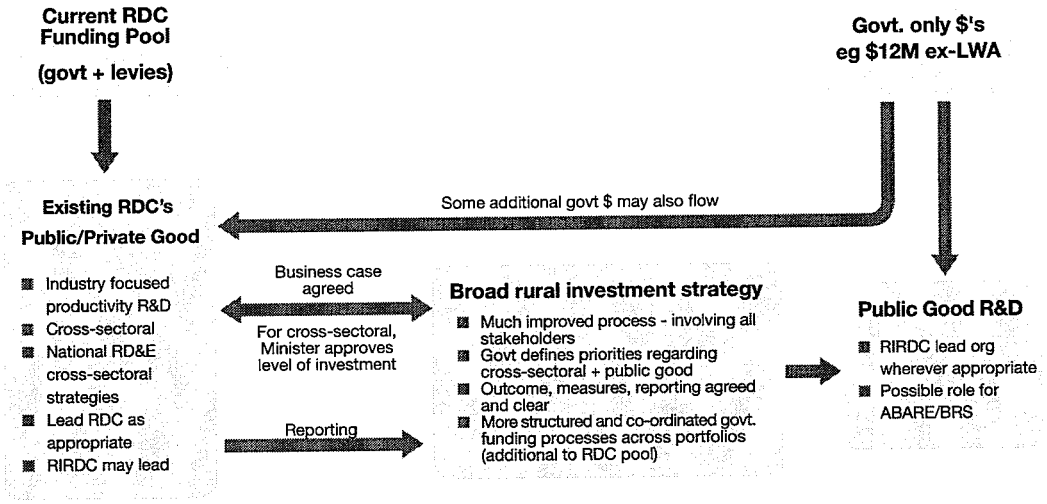
To achieve synergies and to leverage skilled (and scarce) R&D resources, the red meat and livestock RDCs consider that these public good policy initiatives could co-habit with the other combined industry/public good initiatives (e.g. within RIRDC). Alternatively, this area of policy R&D might be better separated into another organisation such as BRS/ABARE but with close communication with RIRDC and other RDCs as appropriate in order to leverage knowledge and avoid unnecessary duplication.

It is noted that based on these proposed enhanced arrangements, the structure of RIRDC may need to be modified, particularly in relation to board representation.

It is acknowledged that additional enhanced mechanisms to ensure adequate levels of investment into government cross-sectoral priorities may be warranted. However, due to the significant deficiencies identified by the Commission in relation to data, plus the fact that the current review has been limited to only part of the rural innovation system that is engaged in cross-sectoral and public good R&D, the red meat and livestock RDCs consider that it is premature to determine specific levels of investment that may be required in the future to underpin adequate levels of investment in these areas. Based on analysis to be undertaken by the PISC National RD&E strategies and the Rural R&D Council and clearer direction by government regarding desired outcomes, both CRRDC and RIRDC could work with the industry RDCs to determine appropriate levels of investment in public good/cross-sectoral RD&E within the rural context. Based on the development of specific business cases, RDCs would then be in a position to identify appropriate areas for engagement and co-investment. When finalised, these business plans could be submitted to government for approval. It is anticipated that not only RDCs will contribute to this portfolio, but that ultimately state governments and others would also contribute assets and resources as required. In addition, depending on the nature of the portfolio, it is likely that additional government funds will be required and the red meat and livestock RDCs recommend that consideration be given to returning funds such as the $12 million per annum. previously allocated to Land & Water Australia to the rural innovation system for this purpose.

A summary of the enhancements proposed for the RDC model is illustrated in figure 3.1.

Figure 3.1: Proposed integrated RDC model



The red meat and livestock RDCs believe that these enhancements to the RDC model will address many of the concerns and issues raised in the Commission's draft report, and will provide Government with the confidence that there are suitable processes and mechanisms in place to guarantee an appropriate return from the public investment in rural R&D. In addition, the proposed enhancements are not prescriptive and create opportunity for government and industry to collaborate on the development of broad strategic priorities prior to 'locking in' prescriptive funding models and structures that may or may not deliver the desired industry and public good outcomes. The enhanced model clearly imposes greater responsibility on the Australian Government to engage in the process of establishing clear strategic priorities for investment and articulating the broad outcomes required. In addition, the enhanced model implies a greater degree of formality in the preparation and endorsement of business plans. It is recommended that the enhanced model be progressively implemented over the next five years, and then be allowed a further five years to become embedded and deliver results leading up to the proposed 10 year review.

3.5 Draft recommendation 7.1: Progressively build up government funding for RRA to around $50 million pa over ten years. Reduce government funding for the existing, industry-specific RDCs to half the current rate.

As discussed extensively throughout this submission, the red meat and livestock RDCs strongly disagree with both aspects of this recommendation. As was detailed in Chapter 2, the red meat and livestock RDCs argue that halving the rate of government funding is not justified and will have serious negative effects on the scientific community, the red meat and livestock industry and the wider community. Furthermore, it would place Australian agriculture – already regarded as having one of the lowest levels of government support in OECD countries – at an even greater competitive disadvantage. It would also discourage private investment in rural R&D and would ultimately remove the ability for the red meat and livestock industry to have access to the tools and know-how to respond to the growing, emerging challenges. Furthermore, the unique partnership between government and industry provides the best chance of having research outcomes being adopted by industry that in turn creates spillover benefits for the community. Without industry support, R&D outcomes are unlikely to be delivered as effectively and efficiently.

On the subject of funding, we would also suggest the Productivity Commission consider reviewing the calculation of GVP. In the red meat and livestock industry the GVP is currently calculated at a farm gate value. We argue that the GVP should be extended to include off-farm values given our broad involvement along the supply chain. We collectively see value in investing in R&D across the supply chain as the benefits from the R&D accrue to other players of the supply chain. For instance, producers benefit from this whole-of-chain approach to R&D (Zhao et al 2001 concluded that producers receive 25% of the benefit from processing research). DAFF and the Minister have also issued us with directives to broaden our involvement into off-farm issues. In light of this broadening focus, we believe the GVP calculation should also be broadened.

3.6 Draft recommendation 8.1: Implement a set of principles setting out the conditions that should attach to public funding for RDCs and the obligations on the government as a key stakeholder in the program

The red meat and livestock RDCs welcome the implementation of the principles and believe we already adhere to the majority of them.

- Red meat and livestock RDCs currently invest in a balanced project portfolio that includes longer-term riskier and potentially higher-reward research, as well as short-term low risk and adaptive research (see table 3.1).

Table 3.1: project portfolio across the red meat and livestock RDCs

	MLA	AMPC	LiveCorp
Strategic basic	9	1	4
Strategic applied	26	16	31
Development	34	36	41
Capability building	21	37	12
Adoption and commercialisation	10	10	12
Total	100	100	100

- Red meat and livestock RDCs have in place effective processes to ensure timely adoption of research results as we undertake specific analyses of each sector to identify those factors that may be constraining uptake of R&D outcomes. The communication and research adoption frameworks (e.g. Making More from Sheep, More Beef from Pastures, and the Northern Beef Program) provide comprehensive resource packages for communicating R&D outputs and key management principles and practices to industry. In the off-farm portfolio, detailed value propositions for new technologies are developed as part of detailed adoption and commercialisation plans. Adoption rates are monitored to inform future evaluation studies in which realised benefits are more accurately quantified.
- Red meat and livestock RDCs are involved in a range of RD&E strategies that focus on socio-economic and public good issues such as climate change, food safety, biosecurity and animal welfare.
- As the recognised entity to attract matching government funding among the red meat and livestock RDCs, MLA uses government funding solely for R&D and related extension purposes and not for any marketing, industry representation or agri-political activities. However, it supports the alignment within the same business entity of both R&D and marketing functions as we have found that this has delivered economies of scale and created many opportunities to ensure R&D is consumer focused and relevant. **In relation to information request 9**, the red meat and livestock RDCs are wary of the notion that funds could be allocated between R&D and marketing without seeking the formal approval of levy payers. In the unlikely event that the board of an RDC is too heavily focused on either marketing or R&D, this may result in them inappropriately altering the funding allocations.
- Red meat and livestock RDCs communicate extensively with industry stakeholders, researchers and the Australian Government. MLA's communications strategy aims to ensure that all stakeholders (primarily the company's 47,000 members, as well as the broader group of levy payers, the Australian Government and industry organisations) are aware of the services and solutions created by their investments in the company, to demonstrate how these services and solutions are of relevance to them, and to encourage stakeholders to engage with the company in order to maximise the benefits their investments derive. MLA's communications effectiveness was demonstrated in the member survey carried out most recently in August 2010. Overall satisfaction with MLA's communications activities rated at 3.8 out of 5; 73% of members know "a lot" or "a fair amount" about what MLA does;

and 89% of members reported getting some or a lot of value from their MLA membership. More than 10,500 producers engaged with MLA's on-farm program activities including More Beef from Pastures, Making More from Sheep and Producer Demonstration Sites last year. MLA also participates in briefings and meetings and provides written reports to government and industry stakeholders about its strategic direction and performance outcomes.

AMPC, as part of its recent review of R&D activities, examined options for continual improvement in communication and members services. The review (Arche Consulting) highlighted improvements in the way that R&D outcomes are communicated to key stakeholders, including members, industry bodies and councils, Government and the community. Stakeholder feedback captured for the review has demonstrated clear recognition of these improvements. The 2009 member survey resulted in responses from 27% of members and strategies are underway to ensure these targets will be further improved in 2011-12 in accordance with the AMPC Communications Plan under review.

Under the three year performance review undertaken in 2010 to allow for negotiation of a new Statutory Funding Agreement, AgEconPlus found that there was very strong support for the activities of LiveCorp and the Livestock Export Program. Through consultation with members as well as government and industry stakeholders overall satisfaction with performance increased from 3.62 to 3.8 out of 5 or an increase of 4% to 76% across the 19 focus areas.

- Red meat and livestock RDCs place high priority on the communication of the results of completed research projects in a timely manner. MLA's submission dated 13 August outlines how MLA communicates research outputs with industry stakeholders in a range of meaningful formats e.g. tools, workshops, calculators, events, magazine articles/case studies. A complete list of R&D projects will also appear in MLA and AMPC's Annual Operating Plan from 2010–11. Project final reports are continuing to be added to MLA, AMPC and LiveCorp R&D databases. The red meat and livestock RDCs also participate in briefings and meetings and provide written reports to government and industry stakeholders regarding strategic direction and performance outcomes. Livestock export R&D projects are reported in the same way through MLA and are also available through regular quarterly stakeholder updates, through the LiveCorp website and summarised in the Annual Report.
- All three red meat and livestock RDCs have boards with an appropriate balance of relevant skills and experience, rather than a balance of representative interests. The skills-based board enables a broader perspective to be gained rather than having a narrower industry focus.
- Red meat and livestock RDCs pursue ongoing improvements in administrative efficiency. Having MLA as the only body in the red meat industry that attracts government matching dollars provides considerable cost savings. Through the joint relationship between MLA and LiveCorp (the Livestock Export Program) these harmonisation benefits have also extended beyond the program areas of R&D to include joint programs in the areas covered by receipt of marketing levy income as well. This extends to jointly funding staff, administration aspects, program delivery and planning & evaluation (see box

3.1). MLA and AMPC through their Memorandum of Understanding, jointly deliver services in a manner that minimises administrative burdens.

Box 3.1: Case study – LiveCorp cost savings from joint relationship with MLA

LiveCorp and MLA jointly provide R&D and marketing services to the livestock industry (the joint program). By operating jointly with MLA, LiveCorp achieves significant cost savings in the following areas:

Staff

Nine staff are jointly funded by LiveCorp and MLA. In the absence of the joint program LiveCorp would have to fund most, if not all, of these staff to deliver what are essential services for the livestock export industry. Savings: $690,000

Office accommodation

MLA provides office accommodation at its headquarters for four of the joint program staff. One member of the joint program is located at the LiveCorp headquarters. Four joint program staff are based overseas, and while these overseas offices are jointly funded, the livestock export joint program staff share the offices with other MLA staff. The cost to LiveCorp of overseas office accommodation would be significantly higher if it had to establish its own overseas offices. Savings: $112,000

General administration costs

Some general administration costs would be much higher for LiveCorp if it was required to locate four extra staff in its headquarters (almost double the current staff numbers) and administer two overseas offices. Savings: $65,000

Project management

LiveCorp is able to take advantage of MLA's project and financial management systems and its arrangements for contracting research and other service providers, preparing and printing publications, and protecting intellectual property and copyright. This enables LiveCorp, the smallest RDC, to ensure that the costs of managing the projects within the live export program are kept at a level able to be achieved by one of the largest RDCs. Savings: $150,000

Total savings: $1,017,000

If LiveCorp and MLA acted separately, MLA would have to duplicate a significant proportion of the activities in the joint program because of the demands of producers paying levies for livestock supplied to the live trade. Thus, a significant proportion of the total savings estimated above would represent net savings to the funders of the joint program – exporters, producers and the Australian Government.

- Undertake rigorous and regular ex ante and ex post project evaluation (see MLA's first submission, p 53-57). AMPC and LiveCorp, in collaboration with MLA, are focused on continual improvement in establishing, analysing and reporting performance related information generated by R&D programs, including contributions to cost-benefit studies undertaken to provide information on adoption and impacts of investments. The red meat and livestock RDCs are also contributing to similar evaluation processes within the RD&E Strategies and the RDC wide evaluation processes being developed and implemented by the CRRDC. For more specific details on LiveCorp and LEP evaluation please refer to the LiveCorp letter outlining updated information to the original submission.
- All three red meat and livestock RDCs participate in regular and transparent independent reviews, with the most recent ones completed in 2010.
- Remedy identified performance problems in an effective and timely manner. MLA's recent performance review by Arche Consulting found the company has delivered value to stakeholders and maintained high standards of corporate governance, evaluation and planning processes. The review also highlighted key areas for improvement, principally regarding longer-term strategic planning and KPI setting and reporting. MLA, LiveCorp and AMPC are in the process of addressing these areas for improvement as well as other recommendations.
- **In relation to information request 8**, the red meat and livestock RDCs suggest that sanctions for ongoing underperformance should continue to be agreed as part of the Statutory Funding Agreements. It is suggested that underperforming RDCs should be subject to increased reporting and oversight by DAFF and be reviewed at shorter intervals (every 1–2 years).

3.7 Draft recommendation 8.2: Lessen Ministerial involvement in the priority setting and planning processes of the industry-specific RDCs

Assuming the government's funding contribution remains at the current rate, the red meat and livestock RDCs would continue to place a heavy emphasis on the Australian Government's research priorities in guiding its R&D portfolio and seek clearer guidance from the government in relation to the desired R&D outcomes and how these should be measured and reported. Previous sections of this submission outline how improved processes for coordinating government involvement could be developed.

3.8 Draft recommendation 8.5: Require all RDCs to participate in a regular, comprehensive and transparent program-wide project evaluation process

Red meat and livestock RDCs endorse recommendation 8.5. The RDCs are committed to subjecting their programs to an evaluation framework that is credible, rigorous, comparable and that is resource efficient. Over the past five years significant effort has been devoted to improving this framework and it is anticipated that the effectiveness and reliability of evaluations will continue to be enhanced.

The framework used is compatible with the evaluation framework developed by the Department of Finance and Administration and with the Guidelines on Evaluation Practice developed by the CRRDC. The red meat and livestock RDCs have taken a leadership role in the area of evaluation and we are proud of our achievements in this area. MLA's recent performance review by Arche Consulting concluded that:

MLA has developed a robust approach to evaluation, and has comprehensive processes in place to assess performance and the delivery of benefits to industry and levy payers and also *The Review Team finds with confidence that MLA has delivered value to the industry and levy payers since its inception.*

3.9 Draft recommendation 8.6: Require all RDCs to commission regular independent, performance reviews

The red meat and livestock RDCs endorse draft recommendation 8.6. As noted previously, all three RDCs have completed independent performance reviews in 2010 and are currently implementing initiatives to address the recommendations.

3.10 Draft recommendation 8.7: Require DAFF to prepare a consolidated publicly available, annual report on RDC program outcomes

Red meat and livestock RDCs are concerned about the potential resource commitment required to fulfil this recommendation. Whatever the process, it should be administratively efficient. The industry also questions the value of having program outcomes consolidated. Rather, RDCs could prepare individual reports using a standard template.

3.11 Draft recommendation 9.1: Abolish product-specific maximum levy rates

While the current product specific maximum levy rates are not restricting the red meat industry's research and development efforts, red meat and livestock RDCs agree with this recommendation in the longer term. The current product-specific maximum levy rate is an unnecessary restriction given a case still needs to be made to levy-payers to alter the levy and strong industry support needs to be demonstrated to government for a change to be made.

3.12 Draft recommendation 9.2: Streamline those parts of the levy principles and guidelines dealing with changes to levy rates

Red meat and livestock RDCs agree with this recommendation.

3.13 Draft recommendation 9.3: Introduce an indicative time limit of six months for implementing a levy proposal that complies with the relevant requirements

Red meat and livestock RDCs agree with this recommendation.

3.14 Draft recommendation 9.5: After the RDC arrangements have been fully implemented undertake a further, independent, public review

Red meat and livestock RDCs agree that 10 years is a reasonable timeframe to conduct an independent, public review of the RDC arrangements. This period of time should allow the impacts of any changes and enhancements to the model to become apparent, given the length of time lags of R&D between concept and adoption. However, if obvious and unintended negative consequences are realised before year 11, there should be capacity for the arrangements to be reviewed earlier.

However, as noted in this submission, we believe such a review should be undertaken explicitly within the context of the broader rural R&D system. The Commission itself has identified the many limitations associated with an arbitrary constraint on viewing the RDC model in isolation.

4 Response to draft findings

The red meat and livestock RDCs provide the following additional comments in relation to the Commission's draft findings.

4.1 Draft finding 5.1: It would not be appropriate to establish a target level for overall spending on rural R&D. Emphasis should be on ensuring the policy framework is comprehensive. Settings within the framework should facilitate efficient use of available public and private funding and timely and effective responses to emerging needs.

Red meat and livestock RDCs agree with this finding that it is not appropriate to establish a target level for overall spending on rural R&D. However, this finding contradicts draft recommendation 7.1 that prescribes the cap on matching contributions for statutory levies to be reduced from 0.5% to 0.25% of GVP. This also applies to the arbitrary proposed allocation of $50 million to cross-sectoral/public good R&D.

Rather than impose a target for overall spending, emphasis should be on ensuring the policy framework is comprehensive, government has clearly articulated strategic priorities and outcomes, public and private funds are used efficiently and responses to emerging needs are timely and effective.

The current RDC model facilitates the efficient use of public and private funding. As the Productivity Commission's draft report states in section 6.2, the RDC model is superior to the alternatives for delivering outcomes for the community. Rather than withdraw government funding from RDCs, a review of the entire rural R&D framework should be commissioned, following which an assessment should be made whether public funding should be redirected from those parts of the rural R&D system that are not working as efficiently and effectively.

It is disappointing that the Commission's terms of reference was focused on only one element of the rural R&D framework – the RDC model – rather than on the entire rural R&D framework.

4.2 Draft finding 5.2: The appropriate share and overall level of public funding should emerge from an assessment of all various programs that government funds taking into consideration any evidence of failings.

Red meat and livestock RDCs agree with this finding and reiterate the response made to draft finding 5.1 that before government funding to RDCs is cut, a review of all components of the rural R&D framework should be undertaken. Cross-sectoral R&D and the internationalisation of R&D are two key aspects that need to be examined in a whole of framework viewpoint, rather than be examined in isolation within the RDC model.

4.3 Draft finding 9.1: R&D levies on processors should not be extended beyond their current application.

AMPC and MLA consider that the current application of levies for meat processors is beneficial to the industry overall and demonstrates benefits to other sectors of the supply chain and the broader community.

4.4 Draft finding 9.2: RDCS should continue to recognise and cater for differing regional research needs but not precisely calibrate the expected regional distribution.

The red meat and livestock RDCs agree that we should continue to recognise and cater for differing regional research needs. MLA's on-farm program is divided into north and south with regional research committees reporting to each. The 'bottom up' approach for identifying research priorities from grassroots producers complements the 'top down' approach which feeds into broad national government and industry research priorities. Hence, the research priorities of both co-contributors are communicated, as are the regional and national R&D needs.

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