

# Submission

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Productivity Commission

Inquiry into Rural Research and Development  
Corporations

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Cattle Council of Australia

June 2010



## **Foreword**

Australian agriculture is running on the outcomes of research conducted over a decade ago and will require greater effort to overcome the significant future challenges of market demands and production constraints. As highlighted in the comments below, the focus of research and development must be on putting new technology and improved practices in the hands of producers as efficiently and effectively as possible.

We need to make sure that our research framework is appropriately structured and resourced to deliver the tools and technologies that farmers will need to remain viable and continue to deliver benefits to the Australian economy, community and environment.

‘While we are currently enjoying the benefits of giant strides in agricultural research often described as the ‘green revolution’, those practices are largely realised. We need new research to meet the new challenges of a changing and growing world population.’

‘...as the world demand for food increases, Australia could stand to play a crucial role in the business, security and ethical imperatives of helping to meet changing world needs. This will require implementing new science and new practice and making better links between the two....’

*Australia’s Chief Scientist, Professor Penny Sackett, in a note to the Australian Institute of Agricultural Science and Technology Conference held in Canberra 11 March 2010*

## **Executive Summary**

Cattle Council's submission to the Productivity Commission's enquiry into Rural Research and Development Corporations is based on the terms of reference set by the Assistant Treasurer as they relate directly to Australia's beef cattle producers. In summary, Cattle Council believes there is a need for increased Government investment in agricultural research and development based on the argument that:

- agricultural RDE benefits the Australian economy, environment and society;
- productivity growth in agriculture has slowed as public investment in RDE has stagnated;
- greater RDE intensity is needed for Australia's agricultural industries to remain internationally competitive and continue to deliver public benefits; and
- the public good nature of RDE and the structure of agricultural businesses mean that Government investment is required to deliver sufficient levels of RDE.

Cattle Council believes that RDCs (or industry services bodies) fill an important niche in Australia's rural RDE system by:

- providing national focus and consistency to RDE;
- using supply chain information to drive consumer focussed RDE;
- providing strong return on investment to Government on research aligned with national RDE priorities;
- allowing input from producers to keep research relevant and assist uptake; and
- managing industry programs and supporting traditional roles of Government.

This submission also explains the role of industry organisations such as Cattle Council in monitoring the use of industry levy dollars by RDCs to maximise the return on investment of producer contributions. Because of the matching funding arrangements for eligible RDE activities, Cattle Council is also working to maximise the benefits of public investment in agricultural RDE.

## **Abbreviations and Glossary of Terms**

CCA – Cattle Council of Australia

MLA – Meat and Livestock Australia

NRM – Natural Resource Management

RDC – Research and Development Corporation. For the purpose of this submission RDC also includes industry services bodies such as MLA.

RDE – Research, Development and Extension

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## **1 Cattle Council of Australia**

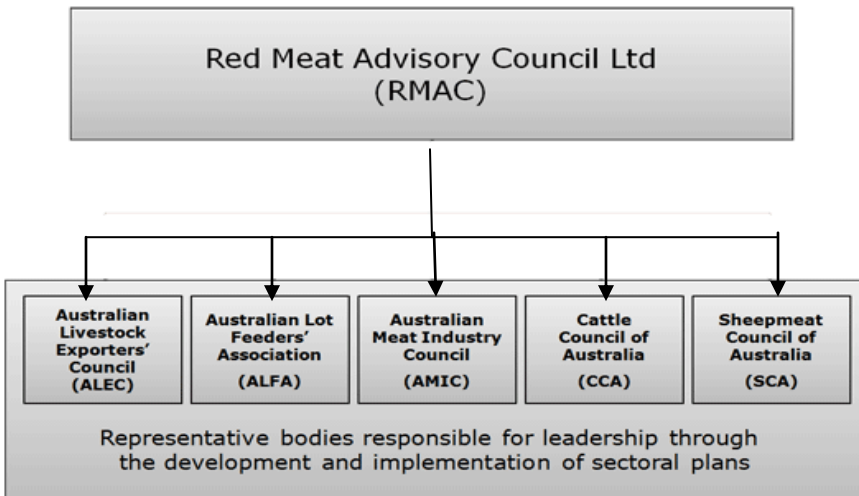
The Cattle Council of Australia is the peak producer organisation representing Australia's beef cattle producers. The objective of the Council is to represent and promote the interests of Australian beef cattle producers through wide and regular consultation with, and policy advice to, key industry organisations, relevant Federal Government Departments and other bodies regarding issues of national and international importance to beef cattle producers.

Cattle Council has a federated structure, made up of seven State and Territory farmer organisations that in turn have direct producer members. CCA's broad membership base makes it the only organisation representing all of Australia's beef cattle producers on beef industry specific issues.

## **2 Red Meat Industry Structure**

Cattle Council is a prescribed body under the Australian Meat and Livestock Industry Act (1997) and is one of five peak councils that make up the Red Meat Advisory Council (see figure 1 below).

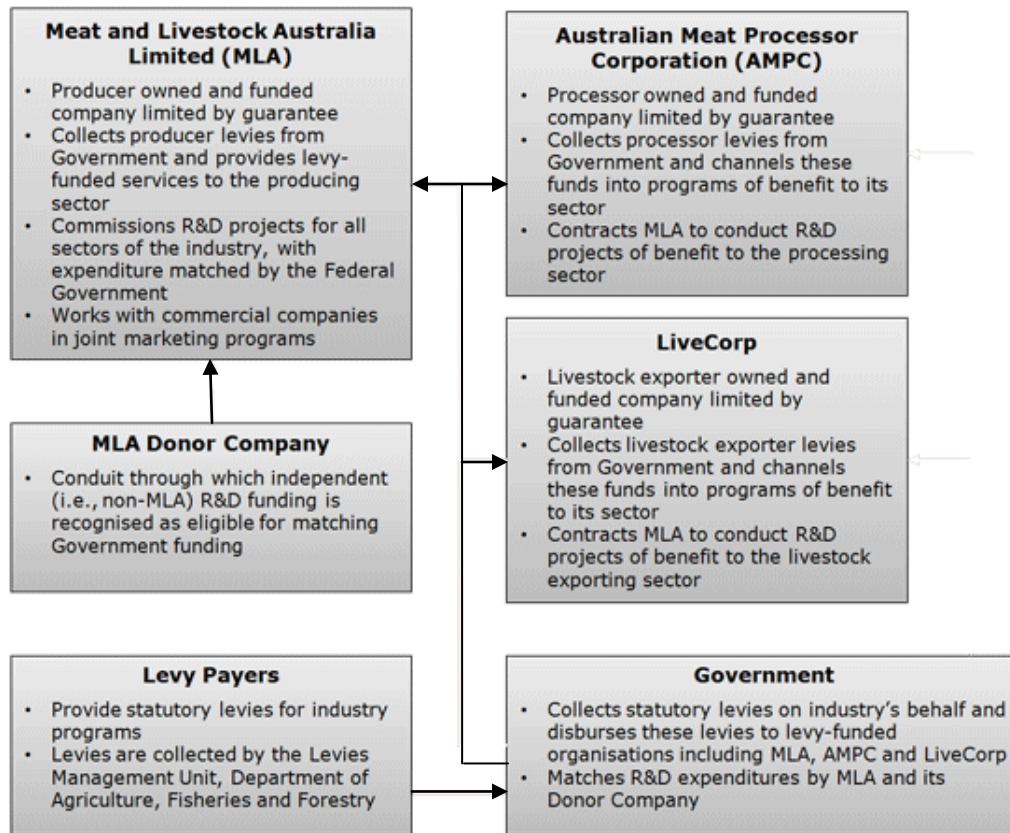
**Figure 1: Structure of the Red Meat Advisory Council**



The Red Meat Advisory Council is the policy making arm of the red meat industry. Cattle Council, along with the Australian Lot Feeders Association are the primary source of advice to the Australian Government on issues involving the expenditure of the cattle transaction levy, the majority of which flows to the industry services body, Meat and Livestock Australia.

The service delivery arm of the red meat industry is outlined below in Figure 2. As seen in that diagram, Government collects levy income through the Levies Revenue Service and then distributes it, with matching funding for eligible research and development activities, to the relevant services body or research and development corporation.

**Figure 2: Funding Streams for Red Meat Industry Service Organisations**



### **3 Importance of a Strong and Competitive Agriculture Sector**

For background on the importance of Australian agriculture sector and its place in global agricultural production Cattle Council refers to the detailed analysis and discussion of provided in a cross industry submission prepared by the Australian Farm Institute and supported by Cattle Council. CCA believes that agricultural industries, and in particular the Australian beef cattle industry, provide important returns to the Australian taxpayer through the provision of the following public benefits

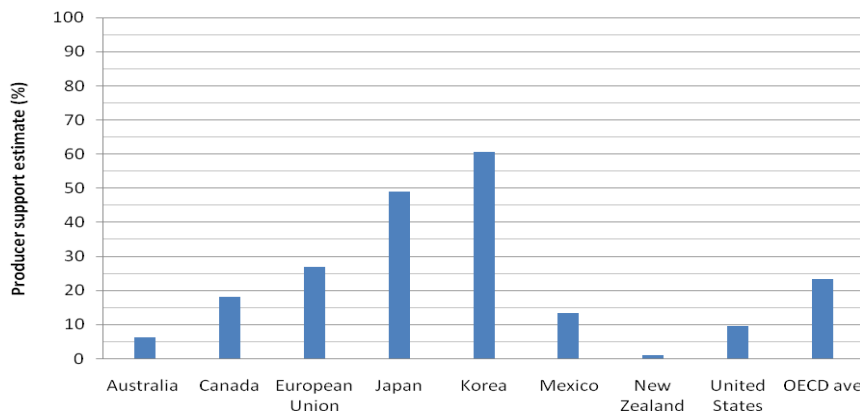
- Provision of low cost, nutritious and safe food – Australia’s reputation as a supplier of reliable, safe beef is internationally recognised.
- Managing Australia’s natural resources – Australia’s beef cattle producers manage 43% of Australia’s land mass and land management influences air and water quality.
- Maintaining export diversity – In 2008-09 Australia exported 967,729t of beef and 893,158 live cattle worth approximately \$5.6 billion. Beef exports are consistently in Australia’s top 10 exports of goods and services.
- Supporting regional economies and communities – The beef cattle, live export and meat processing industries employ 121,000 people, many in rural and regional areas. Without viable agriculture to support rural and regional communities, more of Australia’s population would migrate to already congested cities.

Agricultural industries attract limited Government investment relative to their contribution to employment and exports. For example, Australian Government support of the automotive industry, estimated at \$1.1 billion per year in 2006-07 (PC 2008), is justified based on the industry's contribution to exports and employment. The Australian beef industry alone is a larger exporter and direct employer than the automotive industry, yet receives comparatively little Government support.

### 3.1 Maintaining competitiveness

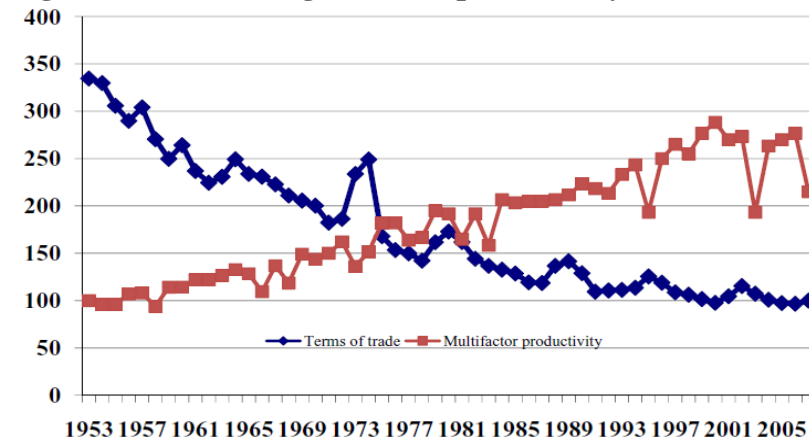
Australia's beef industry is an export driven and internationally exposed industry and must continually innovate to remain competitive against far more heavily supported countries (see Figure 3). Continued innovation and productivity improvement through research and development is critical for producers to maintain their competitive position in international markets.

**Figure 3: OECD Producer Support Estimates for 2006-2008**



Agriculture's declining terms of trade have historically been balanced by productivity growth (Figure 4). Mullen (2010) states that in recent years, the historical rate of 2% annual productivity growth has not been achieved, and has in fact been declining for broadacre industries. This points to the need for increased investment in research and development to deliver the necessary future productivity growth to maintain the competitiveness of the Australian beef industry.

**Figure 4: Trends in agricultural productivity and terms of trade.**



From Mullen 2010, source data from ABARE

Another factor impinging on the competitiveness of export focused agriculture is the sustained high value of the Australian currency. Demand for Australia's mineral resources is expected to underpin continued strength in the Australian dollar, hurting the competitiveness of other key exports such as education, agriculture and manufactures. Renewed focus on RDE is needed to drive the productivity gains necessary to keep agriculture competitive and maintain diversity in Australia's export base (see box 1).

**Box 1:** The Australian Government has recognised the need to invest in infrastructure, skills and productivity in export industries other than mining to maintain export diversity. In an interview with ABC's PM program on 23 March 2010, Finance Minister Lindsay Tanner raised the issue of export diversity when asked if Australia's economy had become too reliant on China.

LINDSAY TANNER: 'I would say that we do need to reinvigorate the breadth of our exports.' 'Minerals are always going to be critical for Australia. There's no question about that. But our strategy of improving infrastructure and skills and lifting our productivity very much has in mind the need to revive our performance in some of our other exports which have been languishing.'

#### **4 Rationale for Government investment in Rural RDE**

Cattle Council believes there is strong rationale for Government investment in RDE based on well understood market failure that results in underinvestment in rural RDE. This market failure is primarily caused by:

1. the large number of producers that make up the industry are unable to capture sufficient benefits from conducting RDE as individuals;
2. it is difficult to exclude anyone from benefiting from research once it is in the public domain;
3. collection of compulsory levies are required to avoid the 'free rider' effect of some benefiting from research paid for by others;
4. there are spillover benefits to the wider community that are not captured by the immediate industry; and
5. the small, geographically spread nature of the predominantly family owned and operated businesses involved in beef production inhibits private sector delivery of RDE, leading to underinvestment.

These arguments are expanded in the cross industry submission prepared by the Australian Farm Institute and will not be discussed extensively here. In addition to market failure, there are several other justifications for Government investment in rural RDE.

##### **4.1 Core Government Responsibility**

There are some areas of rural RDE that are core Government responsibilities, such as investing in biosecurity RDE to protect industry and the community from biosecurity threats. Government also has an important role in supporting Australia's scientific infrastructure through training scientists with a capacity to perform applied research in rural sciences.



Government also has responsibility for education more broadly. Farmers tend not to access government supported institutions such as universities and technical colleges for ongoing learning activities, instead most formal learning takes place on farm through group learning. Government support for extension is a contribution towards farmer education, just as Government support for the tertiary sector is a contribution to the education of other professionals.

#### **4.2 Promoting an Innovative and Responsive Industry**

Investment in RDE positively influences the agricultural industries capacity to adapt and change strategic direction. Agricultural industries are very different to other manufacturing industries. For example, a change in strategic direction of the car industry requires movement from three companies, Ford, Holden and Toyota. For change to occur in an agricultural industry, it needs to occur in tens of thousands of autonomous businesses.

All Australians benefit from an industry that is innovative, adopts new technology and is able to adapt to changing circumstances. Government can contribute to an innovative and responsive industry by supporting an efficient, functional rural RDE sector that facilitates efficient technology transfer.

#### **4.3 Maximising Return on Investment in NRM Activity**

Some have argued that Government money should not be used for activities resulting in private benefit (Frontier Economics 2006 p.iii). Cattle Council disagrees and argues that the Government can achieve a much higher return on investment in NRM activities by investing in RDE that shifts sustainable land management practices from commercially marginal to viable activities. For example, a small research investment can demonstrate that managing perennial pastures and maintaining ground cover can increase profitability, the research can lead to widespread adoption of more sustainable land use practices. This is a far more efficient use of Government money than investing in localised NRM activities that have no private benefit, as there is no incentive for broader uptake and adoption of those practices.

#### **4.4 Withdrawal of State Government Effort**

Cattle Council believes the reduction in effort of State Government agencies in RDE and agriculture more broadly provides further justification of Commonwealth Government investment in rural RDE. Cattle Council believes the stagnation and withdrawal of State and Territory Government investment in agricultural RDE as identified by Mullen (2010) needs to be replaced with increased Commonwealth investment. Industry is also increasingly called upon to manage and support functions traditionally filled by Government such as food safety and integrity. Industry increasingly supports this function through industry run programs such as Livestock Production Assurance and residue monitoring supported by levy contributions through the National Residue Survey. The ongoing costs of operating these programs do not attract matching Government contributions.

## **5 Likely response of industry if Government reduces RDE effort**

One of the issues raised in the Productivity Commission's discussion paper is the likely response of industry and the private sector to a reduction or redirection of the Government co-contribution to RDE investment. Cattle Council believes that the cyclical nature of agriculture means statutory levies and Government matching funding is required to maintain industry investment in RDE.

Australia's beef cattle producers see investment in RDE as a mutual obligation between industry and government and the matching funding is critical to maintaining producer commitment to pay levies, particularly through tough times. Producers would see the removal of the Government contribution as a disincentive to invest in RDE. Without matching funding for RDE, producers may be tempted to shift a greater proportion of levy expenditure towards marketing activities which provide a more immediate return on investment. The matching funding helps to maintain producer interest in long term, strategic RDE activities.

There is substantial literature that shows significant return on investment for RDE (CRDCC 2008 and others). While returns are strongly positive, investment in RDE is risky by nature and not all investments go on to provide strong positive returns. The likely response of industry to a withdrawal of government investment would be a narrowing of research scope to projects that offer the highest rate of return over the shortest payback periods, with minimal risk. This change in RDE focus and scope would see a shift in investment away from:

- projects offering lower financial returns but higher public benefits;
- long term research into technologies that may offer significant breakthrough such as pasture variety breeding and livestock genomics;
- projects with long lead times from commencement of research, through development, regional adaptation, extension and adoption; and
- research that might provide substantial technological breakthrough and productivity growth but is perceived to have a higher risk of failure.

The government contribution supports a more strategic use of levy funds in RDE by allowing industry to fund the types of projects that will be necessary to drive improvements to sustainability and long term competitiveness of the beef cattle industry and not just the quick return, low risk projects.

The Government must also consider the likely influence that any net reduction in rural RDE investment might have on human capital in the RDE sector. Any reduction in overall investment will result in further loss of human capital in the research sector, which is already at critically low levels. Loss of technical expertise will limit future RDE capacity and place further constraints on long term productivity growth.

## **6 The RDC Model**

Cattle Council's comments on the RDC model focus on the matching funding arrangements for eligible RDE activities and the organisational structure of the beef cattle producer's industry services body, Meat and Livestock Australia. Many of the questions raised in the discussion paper relate to the internal operations of the RDCs and will not be addressed here.

Rural RDE produces a mixture of private and public benefits that flow approximately equally to industry and the broader community (CRDCC 2008). The matched dollar for dollar arrangement is an appropriate and administratively simple way of ensuring public contribution to the public benefits delivered by rural RDE. It would be far too complex to measure where the benefits flow and to direct Government investment accordingly.

## **6.1 Meat and Livestock Australia**

The role of MLA goes beyond the functions of research, development, extension and marketing to include other services for industry, government and the community such as the food safety and integrity programs, Livestock Production Assurance and the National Livestock Identification System.

Cattle Council is supportive of inclusion of the marketing function in industry services bodies. The link to consumers is used to drive market focused research priorities and develop new products and processes focused on consumer needs. This is particularly important for export exposed industries such as beef where the overseas network of MLA offices can help focus industry programs and RDE to maximise returns for industry and capture the benefits of growing export markets.

The Commission's discussion paper raises the issue of consolidation of RDCs. Cattle Council believes that where appropriate, collaboration between RDCs already occurs. Cattle Council has observed this particularly with Dairy Australia on bobby calf management and methane reduction initiatives and with Australian Wool Innovation and GRDC in the grain and graze program. These examples indicate that there is no barrier to collaboration when it makes sense to do so.

Meat and Livestock Australia is already the industry services body to multiple industries of beef, sheep meat, goats and live export, as outlined in the introduction. Internal budgeting allows the levy streams of different industries to be used for distinct purposes within the MLA budget.

Cattle Council believes that the number of industries serviced by RDCs is a balance of achieving synergy while limiting overhead costs. Multiple industry RDCs have greater potential synergy and higher overhead cost in maintaining separate finance, administration and communication systems, while single commodity RDCs may miss opportunities for synergy with other like industries. Cattle Council believes the current structure allows for synergy while keeping overhead costs to a minimum.

Cattle Council also has concerns over the potential of RDC mergers to influence the specialised expertise of RDC program managers, as well as Peak Council's access to key personnel. If accountable to too many industries, program managers may become lost as it becomes difficult for them to split time between commodities. Peak Councils also rely on specialised technical knowledge of program managers for policy and technical advice. It would become more difficult for RDCs to recruit program managers with adequate technical knowledge across a wider range of industries if mergers were to occur.

## **7 Importance of the RDC Model**

Cattle Council believes that RDCs fill an important niche in the rural research and development framework that cannot be filled by either State or Commonwealth Government agencies. The RDC model provides a national, whole of industry approach to investing in RDE and offers the capacity to seek the provider that delivers the best value outcome.

State Government agencies have an important role in delivering regionally specific RDE and Commonwealth agencies, such as CSIRO, have a niche in long term strategic RDE. While all fill important niches, Government agencies will tend to focus on research priorities that they can deliver internally and match the skill set of their researchers. The organisational structure of RDCs means they are more flexible than Government agencies and able to respond more quickly to changing research priorities. The RDCs can offer greater continuity in research programs than Government agencies which can be bound by short term funding cycles.

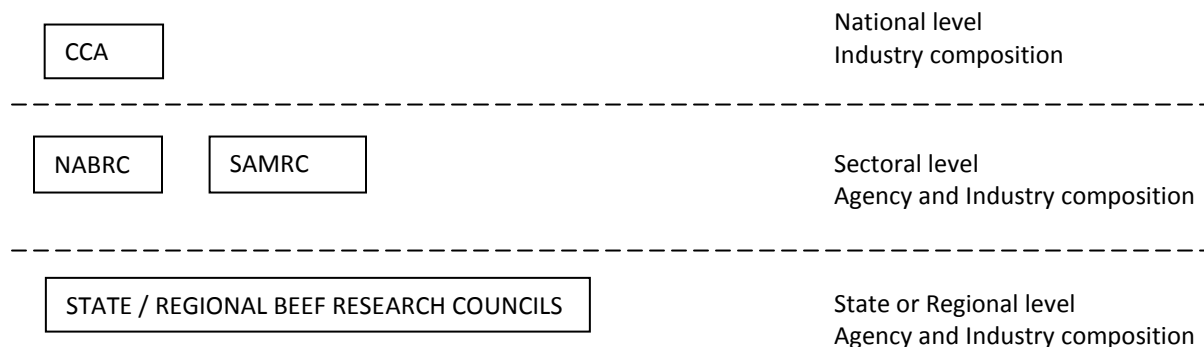
Another critical feature of the RDC model is the avenue for direct producer involvement in RDE that is critical to keep RDE activities relevant to producers and to assist in the adoption of RDE outcomes. Strong producer commitment and involvement in the RDE process is essential to drive uptake of new technologies, increase innovation and productivity growth and deliver optimal return on Government investment in RDE. While State agencies do work closely with local producers, there is no avenue for direct producer engagement in shaping research priorities.

## **8 RDE Priority Setting Within Industry**

Cattle Council's RDE policy is developed in cooperation with our State Farming Organisation members, we also engage directly with MLA through an internal research and development taskforce that discusses RDE priorities and makes recommendations to MLA and CCA on policy issues relating to RDE. CCA also has reciprocal membership arrangements with the Northern Australian Beef Research Council (NABRC) and Southern Australian Meat Research Council (SAMRC).

### **8.1 Input of RDE Advice from NABRC and SAMRC**

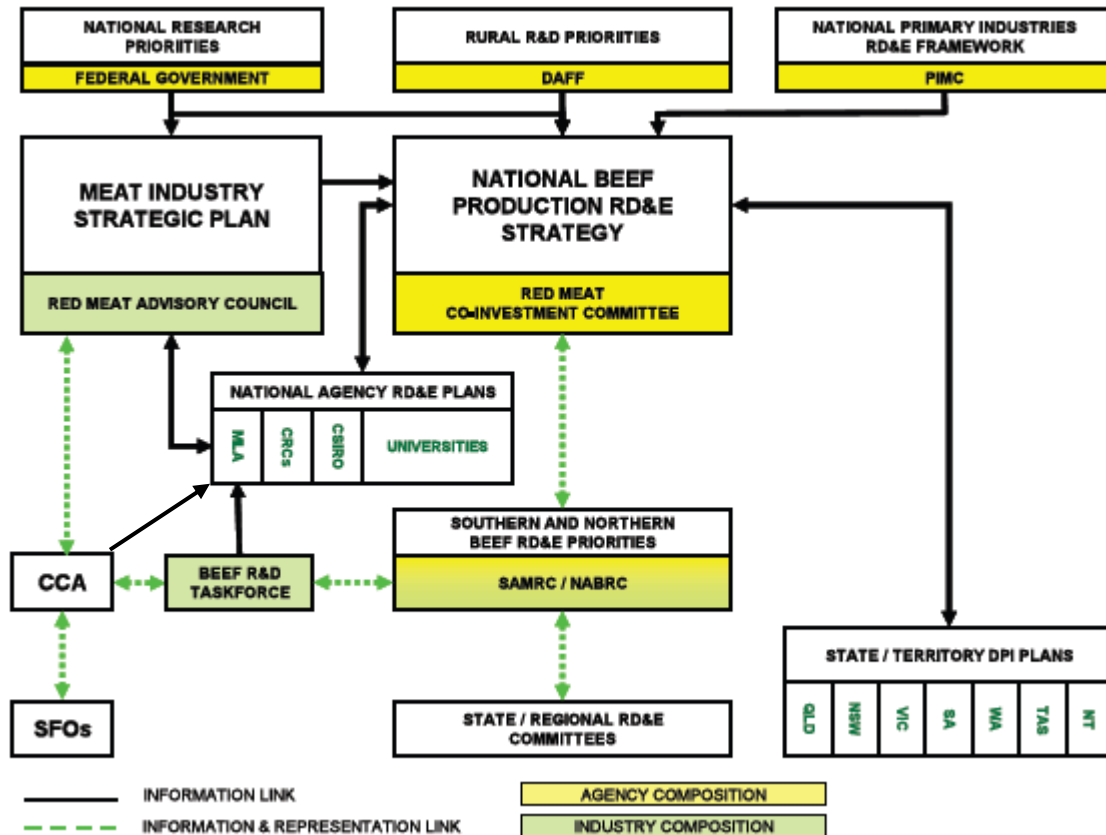
NABRC and SAMRC are the key industry-agency forums with the responsibility for determining and advising on strategic requirements for RDE activities in the Australian beef industry. They are independent advisory bodies whose membership includes all the major beef research agencies and educational institutions as well as local producer representatives.



NABRC and SABRC do not have an executive function, but provide advice on RDE priorities to CCA, which has the executive function of approving MLA's annual operating plan.

Figure 3 below shows how CCA, SAMRC and NABRC facilitate direct producer engagement in RDE priority setting. NABRC and SAMRC provide avenues for direct producer engagement in the National Beef Production RD&E Strategy and CCA provides avenues for direct producer engagement in setting the strategic direction for the industry services body MLA.

**Figure 3: Process of RDE priority setting and consultation in the Australian beef industry**



## 9 Governance Arrangements of RDCs and the Role of Peak Councils

Cattle Council has an important role in monitoring levy expenditure and believes that successful, functional RDCs depend in part upon successful, functioning Peak Councils.

Cattle Council sees the cattle transaction levy is an investment in the future of the beef cattle industry. CCA's role is to work with service providers to maximise the return on investment from producer levy expenditure that funds in part the operations of MLA, Animal Health Australia (AHA) and the National Residue Survey (NRS). By working to maximise return on levy dollars, Cattle Council is also working to maximise return on the taxpayer dollars that match industry funding. Cattle Council's broad membership base through the State member organisations means that service delivery bodies are kept accountable to all of Australia's beef cattle producers.

Industry services bodies such as MLA are accountable to both Government and Peak Councils. Cattle Council believes that the added level of scrutiny provided by industry organisations increases the absolute need for RDCs to utilise all income as effectively and efficiently as possible. Cattle Council scrutinises MLA's RDE budget through an internal research and development taskforce. We also scrutinise the marketing budget, together with other councils and members of the beef supply chain, through a marketing taskforce. These taskforces then report to CCA and CCA reviews and, if satisfied, approves the MLA annual operating plan. Cattle Council believes that this level of scrutiny, combined with MLAs reporting requirements to Government, would compare favourably with the statutory obligations of the RDCs administered under the PIERD Act.

## **10 Improvements in the RDC model**

Cattle Council believes that the RDC model is fundamentally strong and does not require significant structural change, but recognises there is room for improvement. Cattle Council is working with MLA and other organisations to continuously improve beef industry RDE, including placing greater emphasis on monitoring and evaluation, uptake and adoption.

Industry is strengthening the regional RDE committee model (NABRC and SAMRC), particularly in light of its more significant role under the National Beef Production RD&E Strategy. CCA is formalising communication and interaction with NABRC and SAMRC and the committees are developing their own options to ensure long term financial sustainability.

NABRC and SAMRC have an important role in the National Beef Production RD&E Strategy, both in feeding up research priorities and feeding back extension. As mentioned earlier in this submission, direct producer engagement is critical to maintaining relevance and uptake of rural RDE and CCA will continue to work with NABRC, SAMRC and MLA to foster direct producer engagement in RDE.

CCA believes that the National Beef Production R,D& E Strategy provides an appropriate system for integrating the research priorities of industry and Government to maximise the benefits of RDE to industry and the Australian public. It will require the long term commitment of both government and industry to successfully deliver on its objectives.

## **11 Improvements in Rural RDE More Generally**

Cattle Council sees opportunities for improvement in the rural RDE system beyond the RDCs, with opportunities for Government and industry to drive improvement.

Industry and Government will need to work together to develop a recognition of the value of continuous learning amongst producers, particularly given the gradual withdrawal of State Government delivered extension services. CCA believes RDC's have a role in facilitating private sector delivery of private benefit extension services and working with governments to ensure national consistency in the cost and delivery of extension activities that provide a mix of public and private good outcomes.

## 11.1 Government

Government has an important role in driving improvement in the rural RDE system. The current Government arrangements, particularly at a Commonwealth level are confusing and clarity is needed as to where the policy responsibility for rural RDE sits.

Under current arrangements the Australian Government appears to be three national approaches to rural RDE:

1. the National Primary Industries Research, Development and Extension Framework, an initiative of Primary Industries Ministerial Council
2. the Rural Research and Development Priorities, managed by the Department of Agriculture, Fisheries and Forestry in line with the National Research Priorities
3. ‘the government’s key advisory body on rural r&d’ the Rural Research and Development Council

In addition to this, Australian Government funding of agricultural RDE is administered through four Australian Government Departments plus the CSIRO (see Box 2). Industry would benefit greatly from clarification of where the policy responsibility for a co-ordinated approach to the funding of Rural Research and Development sits.

**Box 2** – Commonwealth Departments with responsibility for Agricultural RDE: Department of Agriculture, Fisheries and Forestry (funding for the RDCs), the Department of Foreign Affairs and Trade (Australian Centre for International Agricultural Research), the Department of Innovation, Industry, Science and Research (Cooperative Research Centre program), and the Department of Education, Employment and Workplace Relations (Universities).

Government could also improve governance arrangements by developing performance targets and benchmarks linked to research and development priorities. While there is current consistency in research objectives between Government and industry plans, there are very few measurable targets attached to Government research priorities. Having measurable targets could assist industry in the development of industry strategic and operational plans to deliver results for industry and the broader community.

## 11.2 National Consistency

Cattle Council sees the development of the National Primary Industries Research, Development and Extension Framework as a significant change in approach to rural RDE. It is clear that there will be a great need for co-ordination of these strategies to keep research activities relevant and aligned nationally and to combat the inertia of agencies continuing to do what has always been done.

CCA believes that the competencies of the RDCs fits well with the coordinating role required under the national RDE strategies and we see MLA as having an important role in the National Beef Production RD&E strategy. There must however be appropriate resourcing of RDCs to perform the coordinating function, industry cannot be asked to pay for improved administration and efficiency of Commonwealth and State Government research agencies.

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