

## The Australian Benefits from RIRDC's R&D and Adoption

# Submission in Response to the Productivity Commission's Draft Report into Rural Research and Development Corporations

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## **Abbreviations**

ABRE-BRS The Australian Bureau of Agricultural and Resource Economics – Bureau of

**Rural Sciences** 

AMPC Australian Meat Processor Corporation

CIE The Centre for International Economics

DAFF Department of Agriculture, Fisheries and Forestry

FWPRDC Forest and Wood Products Research and Development Corporation

GRDC Grains Research and Development Corporation

LEK LEK Consulting

LWA Land and Water Australia

MDBA Murray Darling Basin Authority

PIERD Primary Industries and Energy Research and Development Corporation

R&D Research and Development

RDC Rural Research and Development Corporation

RIRDC Rural Industries Research and Development Corporation

SRDC Sugar Research and Development Corporation

## **Executive Summary**

#### **Supported recommendations**

The Rural Industries Research and Development Corporation welcomes the publication of the Commission's *Draft Report*. RIRDC supports a number of recommendations set out in this *Draft Report*. In particular, RIRDC supports:

- the Commission's general support for the RDC model;
- the intention of the Commission's broad principles for government funding;
- the removal of Ministerial approval;
- the introduction of marketing levies; and
- the inclusion of a 'government director' on the RDC board.

## New and emerging industry evolution

The RIRDC submission argues that new and emerging industries should not be equated with 'infant industries' as there is a clear dynamic whereby a proportion of new and emerging industries develop into sustainable long term industries, each delivering significant public benefits to publicly funded R&D.

Thus the RIRDC is concerned that the Commission's comments on new and emerging industries need to incorporate more the understanding of the nature of the research needs for new and emerging industries, and or their ability to develop into sustainable long term industries.

### A public good RDC

RIRDC supports proposed enhanced arrangements to ensure a greater focus on national investment in a sustainable and cohesive future for the sustainability of Australian agriculture and the community as a whole, that is, in the public good. RIRDC also supports greater cross cutting research and development which further integrates streams of research across industries and disciplines. However, rather than set up an organisation, RIRDC considers that its structure and mandate make it a strong alternative to the proposed Rural Research Australia recommended by the Commission. Public good research and integrative disciplinary approaches to on the ground research issues has been the hallmark of RIRDC's approach since its inception. RIRDC has the strong support of its industry stakeholders in expanding its emphasis on public good research.

RIRDC has already established considerable research advisory, policy and collaborative approaches and documented procedures for undertaking cross-cutting research. It has in place the experience and in-house and national advisory expertise to bring together diverse

funding and expertise to expand its social good research and development in the agricultural sector. It also has extensive research partner relationships across governments to underscore expansion of social good research. This is especially critical in current times of climatic flux which combined with water reform in the Murray Darling Basin which is impacting on regional communities and a diverse agricultural base. RIRDC is well positioned to develop to embrace and perform the role the Commission proposes for 'Rural Research Australia'. This could proceed with minor modifications to its current structure and with a clearly specified set of operating principles. This would involve considerable administrative and set up cost savings and build on RIRDC's historically strong linkages to diverse industry groups including those from other RDC's and other research provider agencies and educational training institutions.

## **Matching funding**

RIRDC does not agree with the Commission's conclusion on matching funding, and notes that the broad in principle approach taken by the Commission is subject to considerable limitation. RIRDC would prefer an approach that allowed RDCs to continue to develop an evidence base (as originally proposed by the Commission in its 2007 report).

### **Benefit of the Productivity Commission Review**

The Rural Industries Research and Development Corporation thanks the Productivity Commission for the opportunity to interact on its review of Rural Industry Research and Development Corporations. We look forward to working further with the Commission and Government.

This review has given RIRDC an important opportunity to review our business and its processes and future. As a result we consider that RIRDC is well placed to expand and develop its work to create a national focus of public good research in innovation and sustainability for the Australian agricultural sector.

#### 1 Introduction and outline of this submission

RIRDC welcomes the opportunity to make this submission in response to the Productivity Commission's *Draft Report* into Rural Research and Development Corporations.

RIRDC welcomes the publication of the Commission's *Draft Report*. RIRDC strongly supports a number of recommendations contained in this *Draft Report*. These are considered in sections 2 and 3 of this submission. Section 3 in particular points out that while supporting the general recommendation for a 'public good' RDC, this is a role that is an integral part of RIRDC's portfolio of activities. RIRDC has the skill set, stakeholder linkages and internal governance arrangements to incorporate the role identified by the Commission for its proposed RRA.

It is notable that RIRDC already invests in social good research in co-venture arrangements with many research and development corporations and government agencies both at the state and federal levels.

RIRDC has concerns with some of the recommendations and with particular aspects of the analysis contained in the *Draft Report*. These are examined in sections 4 and 5 of this submission. Section 4 considers in particular the Commission's comments on new and emerging industries, while section 5 provides brief commentary on the Commission's recommendation to reduce matching funding.

## 2 Supported recommendations and findings

#### Support for the RDC model

RIRDC welcomes the Commission's broad support for the RDC model as an effective way of funding agricultural and related research into the future. As RIRDC noted in its initial submission, it considers that the RDCs are a successful national institutional innovation that allows research coordination without placing unnecessarily prescriptive requirements on the nature of that research. All RDC research however does accord within the broad platform of key national concerns in the agricultural sector as indicated by the Federal Government the RDC model also allows the coordination of diverse researchers and diverse research needs. RIRDC has also worked within this model to successfully collaborate with industry and government in an exemplary advisory panel network which grounds and focuses research and development and adoption.

## **Articulation of public funding principles**

RIRDC welcomes the broad articulation of a series of public funding principles. In particular, RIRDC considers that the principles related to:

efficient delivery of research outputs through effective intra and inter-program coordination;

- appropriately resourced mechanisms to promote adoption; and
- transparency and accountability in regard to program outcomes;

are very well reflected in RIRDC's current and past operations. RIRDC's comprehensive and flexible investment framework (which includes a focus on adoption) across industry specific and cross-cutting research along with its rigorous evaluation framework, all allow the efficiency and transparency called for in these principles.

## **Removal of Ministerial approval**

RIRDC is comfortable with this recommendation as it is consistent with broad public funding principles.

## Introduction of marketing levies

RIRDC supports this recommendation. RIRDC has previously argued that this change would be beneficial in its own operations as promotion and market development can, in many cases, reasonably be seen as an important step in bringing new ideas to the market.

RIRDC considers that levies for marketing and R&D should be kept separate.

## Inclusion of a 'government' director

RIRDC supports the recommendation for a director on RDC boards who has experience in government policy processes and public administration. Further, RIRDC sees merit in current public servants fulfilling this role.

## 3 Establishing a public good RDC

## **Key points**

In view of the facts that:

- RIRDC already has a mandate for cross cutting and public good research (established in the PIERD Act):
- RIRDC has already demonstrated the ability to successfully collaborate with a wide range of RDCs and research providers; and
- RIRDC has an extremely flexible and successful investment framework applicable to a wide variety of circumstances; then

there is a strong case that the functions of the public good RDC proposed by the Commission would be best performed by RIRDC which has the policy, accountability, transparency and coventure investment structures in place.

## A public good RDC

The Commission has recommended the establishment of a new RDC ('Rural Research Australia') with a remit to sponsor non-industry specific R&D, in particular R&D that does not necessarily lead to direct benefits to levy payers but that focuses on public good and cross cutting R&D issues.

RIRDC considers from its own experience of high level investment performance in this field that such public good and cross cutting research will lead to significant benefits to the broader rural sector as well as the national economy. RIRDC agrees that greater focus on public good research can be accommodated within the existing RDC model.

Rather than create a new separate RDC, RIRDC suggests that such a cross cutting RDC effectively already exists in what is currently the National Rural Issues Portfolio within RIRDC. Indeed, RIRDC considers that there are strong arguments for the proposed public good RDC to be established within RIRDC, essentially as an extension of RIRDC's current cross cutting programs. There are three broad arguments for this:

- first, this is a role RIRDC already partially fulfils (albeit within a limited budget);
- second, the work of a public good RDC will clearly involve the need for considerable collaboration between RDCs. RIRDC already engages in considerable public good related collaboration. Separating the public good aspects of existing RDCs is not a straightforward task, and without considerable collaboration, the venture is unlikely to be successful.
- third, while the objective is to separate private and public benefit R&D, both types of R&D ultimately need to be adopted within the rural sector if they are to be successful. This

requires that public good RDC maintains a sound understanding of farm based adoption principles as well as impacts along the value chain and indeed impacts on community benefit. RIRDC is already implementing a comprehensive approach to ensuring adoption of research outcomes.

#### RIRDC as a cross sectoral and national issue RDC

Since its inception under the PIERD Act in 1989, RIRDC's Charter has included cross sectoral and national interest R&D. Indeed, the second reading speech of the PIERD Bill states clearly that that RIRDC's role is to 'incorporate multi-industry and national interest R&D for rural industries' (PIERD Bill 4.10.1989, p. 5).

RIRDC considers that establishing a new RDC on the premise that the cross cutting functions do not already exist would involve unnecessary additional financial and institutional costs. The functions proposed for the new RDC to a large extent already exist within RIRDC's current structure without compromising the overall intent for the new RDC and with minimal changes to RIRDCs operating and management practices.

#### RIRDC's demonstrated success in cross sectoral research

From its inception, RIRDC has operated with two broad portfolios of interest –specific industries R&D and cross sectoral and national interest R&D.

Multi-industry programs have included Agroforestry and Farm Trees, Agribusiness and Trade, Climate Change, Farm Health and Safety, Extension and Information Systems, Education and Training, Pest and Disease Control, Farm Business Management, Farming Systems and Structure and Change. Most recently RIRDC has introduced The National Weeds and Productivity Research Program which will focus on a cross-sectional approach to weeds research. These programs were developed following exhaustive review of the issues and discussion with a wide range of stakeholders and other R&D Corporations.

The Multi-industry Activity Area in RIRDC has continued throughout RIRDC's existence following several restructures and reviews under various names, including "Future Agricultural Systems", "Capacity Building and Competitiveness" and "National Rural Issues". RIRDC has initiated, managed and successfully implemented numerous successful cross industry cooperative ventures. These have included:

- Collaborative Partnership for Farming and Fishing Health and Safety, with financial contributions from the Grains, Cotton, and Sugar Research and Development Corporations and the Department of Health and Ageing.
- Cooperative Venture for Human Capacity Building in Rural Industries. This initiative was supported by considerable financial contribution and commitment of several partners,

- including the Dairy, Meat, Sugar, Grape and Wine, Grains, Land & Water, Horticulture, R & D Corporations, DAFF, and MDBC to the pooled R & D program.
- Investing in Youth Studentship Program with financial contributions from Australian Wool International, Meat & Livestock Australia Ltd, Wine and Grape R&D Corporation, Australian Pork Ltd, Horticulture Australia Ltd, Australian Egg Corporation, Cotton R&D Corporation, Chicken Meat Program RIRDC, Grains R&D Corporation, and the Department of Agriculture, Fisheries and Forestry.
- Australian RIRDC Rural Woman's Award which is supported by the the Department of Agriculture, Fisheries and Forestry, Department of Regional Australia, Regional Development, Local Government and the Arts, Rural Press, ABC Rural, Westpac Bank and State and Territory Governments.
- Aboriginal and Torres Strait Islander Rural Development R&D Program which is a RIRDC response to a request from Indigenous leaders for a R&D investment framework to fund this area following the abolition of Land & Water Australia.
- Joint Venture Agroforestry Program, supported by considerable financial contributions and which met multiple cross-government and industry goals in relation to carbon sequestration, salinity, regional development, biodiversity, timber production, and risk management on farms. It was successful in pre-empting the needs of policy, industry and the community several years before these became major issues. It was a partnership between RIRDC, LWA, FWPRDC, MDBA (formerly the Commission now the Authority), DAFF, Environment Department, Australian Greenhouse Office, with contributions from GRDC and MLA.
- Bioenergy Australia a collaboration of about 90 paying members which facilitates the development of bioenergy. It started out as collaboration between RIRDC, ERDC, GRDC and the Environment Department and has grown to include members from other R & D Corporations (SRDC, MLA), companies in fuels and electricity industries, renewable energy industries, growers, research institutions, NGOs and numerous Commonwealth and State government departments. Bioenergy Australia provides for Australia's membership of the International Energy Agency's Bioenergy research program.
- Methane to Markets in Agriculture (M2M) research and development program -a collaborative program between RIRDC, MLA, Pork Australia, AMPC, Dairy Australia, DAFF and the Australian Lotfeeders Association. The M2M R & D plan has been internationally acclaimed by the International M2M Committee and Chair, as a model for other countries to aspire to.
- The Role of the Internet in Rural Australia. RIRDC coordinated contributions from seven R & D Corporations and develop the first national and comprehensive study to raise awareness of the joint problems with telecommunications infrastructure and capacity of users in rural Australia in relation to Internet access and use.

- "Missed Opportunities", a jointly funded project between RIRDC and DAFF which defined and quantified the contribution of women to rural industries. Through research and consultation, it has also identified strategies for harnessing talented women in decision making within the rural sector. This research has resulted in farmer organisations implementing identified strategies to successfully increase involvement of women in decision making.
- The National Weeds and Productivity Research Program. Most recently RIRDC has developed the National Weeds and Productivity Research Program which will adopt a crosssectoral collaborative approach to tackling weeds issues on farming and other public and private land.

## RIRDC's approach to cross industry R&D programs

As the above examples illustrate, RIRDC has a significantly strong track record in successful cross industry R&D and adoption programs. RIRDC has the personnel, systems and processes which provide a streamlined approach to developing new cross-industry or public good initiatives. Following a review in 2009 by consultants PWC, RIRDC has also initiated a 'Business Process Review' which has enhanced internal management structures and systems for delivery of numerous cross cutting and multi-disciplinary programs.

## RIRDC's flexible research management processes

RIRDC considers that its current research management processes are adaptable and scalable. Indeed, RIRDC's structure and systems are geared to handle industries of different size and 'maturity' as well as a range of cross-cutting public good activities. RIRDC's processes can be applied to suit specific circumstances.

RIRDC has established a successful approach to managing research in a wide variety of industries and disseminating the results of the research to the wider agricultural community. [This is evidenced by RIRDC's website compendium at <a href="www.rirdc.gov.au">www.rirdc.gov.au</a>] Through its investment and evaluation frameworks combined with industry based Advisory Committees, RIRDC is able to obtain both valuable research results for individual commodity and industry groups as well as outcomes in cross cutting issues of concern to the whole rural sector.

RIRDC's investment framework (set out in more detail below) is an extremely flexible approach that avoids a 'one size fits all' straightjacket for R&D funding. Indeed, RIRDC could hardly manage its diverse portfolio without such a flexible framework, allowing both calls for research proposals and direct commissioning of projects at the same time as providing discipline to ensure that likely adoption and the probabilities of success are maximised.

#### RIRDC's investment framework

RIRDC's investment framework allocates funding to its wide range of activities at three broad levels:

- first, at the portfolio level;
- second, at the program level for research within each portfolio; and
- third, at the *individual project* level.

### A working model: RIRDC as the national interest RDC

If RIRDC was to take on the role the Commission proposed for the new RDC, then it would be reasonably straightforward to develop a model for RIRDC's extended operations that is consistent with RIRDC's investment framework management and guidelines. RIRDC supports the model proposed in the CRRDC submission for 'An Enhanced RIRDC – an alternative to Rural Research Australia'. This may involve some reconfiguration of RIRDC's Board and some modifications to its operations.

From a RIRDC perspective, the critical elements of this proposal are the consultative arrangements that would guide development of a business case for programs and projects that could be classified as 'public good'. Consistency with National R&D priorities and the PISC RD&E Framework would be a key driver in developing the business case. The model proposed in the CRRDC submission fits naturally within RIRDCs existing and successful investment framework and could be implemented without the need to develop new processes and frameworks.

The advantages to this model are:-

- It takes advantage of RIRDC's existing flexible research planning and commissioning processes (along with RIRDC's successful project management software);
- It takes advantage of RIRDC's recognised role in collaboration;
- It directly builds on an existing function within RIRDC;
- It prevents public good research from being too far removed from agricultural production systems and networks of communities;
- It ensures that public good projects are established within a systematic investment framework and subject to ongoing evaluation;
- It ensures alignment of public good research with overall government objectives at the same time as ensuring broad consistency with other RDC and national research activities.

#### **Magnitude of funding**

The quantum of funding for a public good RDC should be related to the likely benefits that could emerge. While it is difficult to answer this without a full portfolio analysis, broad calculations indicate that potential benefits are likely to be substantial.

For example, research on climate change mitigation (CIE 2009) indicates that including agriculture in any broad based mitigation scheme could reduce the cost of mitigation by between 0.3 and 0.5 per cent of (baseline) GDP. This is a clear public benefit. However for agriculture to be included in any broad based scheme would require considerable cross sectoral research. In present value terms over 50 years of abatement the reduced GDP cost of including agriculture amounts to around \$65 billion.

Another example is in the provision of water for the environment in the Murray-Darling Basin. ABARE-BRS (2010) estimate that limiting irrigation diversions to provide additional water to the environment would reduce national GDP by around 0.1 per cent (relative to baseline). Even calculated over the short period between 2015 and 2020, this amounts to a 2010 present value of \$5 billion. On the other side of this, recent research (Morrison and MacDonald 2010) has suggested that providing additional water to the Coorong would generate environmental benefits of between \$4 billion and \$7 billion.

This situation is complex however, and relates to the evolution of water use efficiency in major flood irrigated regions. In a different vein there is a need for further investment in public good research within the Murray-Darling Basin, for example, involving impacts on regional communities of both losing water and of increased water for environmental purposes. This is one research and adoption field that RIRDC is positioned to develop if there were further public sector and private sector investment. Mining, rural industry development and community sustainability is another research and extension field that RIRDC could develop should the investment funds be available. The emergence of expanded and more diverse industry growth within Australia's rural and regional and remote areas necessitates a wider investment perspective.

These examples indicate that there are substantial economic impacts of land and water reform in Australia and these are intrinsic to some of the core research areas for a public good RDC.

## 4 New and emerging industries

## **Key points**

New and emerging industries under RIRDC research management are not the same as 'infant industries' in the sense that they demand large and ongoing protection such as has been given to infant manufacturing industries.

Through RIRDC's lengthy but evolving research management experience, new and emerging industries have well defined research needs and trajectories. Such industries also have well defined and characterised progression from being new to established. Figure 1 shows this general transition in an idealised development cycle.

RIRDC does not categorise new and emerging industries as 'infant' as a traditional infant industry is protected with ongoing investments which is not the role of RIRDC.

#### **Emerging industries versus 'infant' industries**

RIRDC notes that the Commission's discussion around new and emerging industries which proceeds on the basis of equating them with 'infant' industries and, at least implicitly, with the 'infant industry' argument for protection.

It is understandable that the Commission would be concerned about any arguments for public funding that seem similar to traditional and discredited arguments for protection of particular 'infant' manufacturing industries. Arguments for 'infant industry protection' have had a sorry history in Australian policy, and it is no doubt true that many of these infants simply did not grow up and continue to receive public funding.

RIRDC therefore considers it crucial to point out that in the context of R&D funding, the tempting analogy between new and emerging agricultural industries and Australia's failed history of infant industry protection is very misleading. Rather, the nature of R&D support for new and emerging industries should be considered on its own merits.

## **Key sources of difference**

There are at least three major differences between protection for infant industries and R&D support for new and emerging industries.

First, the objective of R&D funding for selected new and emerging industries is not to 'protect' them from import competition, but rather to provide a fundamental knowledge foundation to place them on a sustained growth path. While the Commission argues that it is hard in practice to determine the basis on which an industry is emerging, RIRDC has established sound principles for doing just this (see further discussion below).

Second, the objective of R&D funding for new and emerging industries is not to establish industries that exist elsewhere (overseas), but to undertake research to help us better

understand Australia's comparative advantage which is considerable in view of the diversity of new natural Australian foods. The intent of R&D support for new and emerging industries is to provide research foundations for the development of new industries which may well be suited to Australia's environment or emerging market and consumer tastes.

Clearly, the intent of R&D support for new and emerging industries is to provide research foundations for an entirely domestic industry which may include growth within overseas markets. In many cases some of these industries are new globally.

Third, the failure of Australia's infant industry arguments in the past was related to a lack of genuine public good aspects of the protected industries. Again this is in contrast to the new and emerging industries that require R&D funding. As RIRDC's initial submission pointed out, many of these industries are associated with genuine public good outcomes or externalities. But even in the absence of public good outcomes, the coordination problem associated with funding R&D in new and emerging industries justifies some form of government action. In this case, however, compulsory levies are not sufficient because of the very small capital base of the new industries. Public R&D funding in the early phases of an industry's research is justified as a transition to levy arrangements once the industry is established

## Defining a progression from new to established

Throughout 2009, RIRDC undertook a comprehensive evaluation of its New Rural Industries Portfolio (with the assistance of international consulting firm LEK Consulting Pty Ltd). There were a number of aspects to this in-depth review, but one of the key findings was to define an evidenced based progression from new to emerging to maturing industries in terms of empirical evidence around industry production values and growth. Such an evaluation has never been undertaken for a suite of such rural industries in Australia. This broad cycle of new to emerging to maturing is summarised in Figure 1.

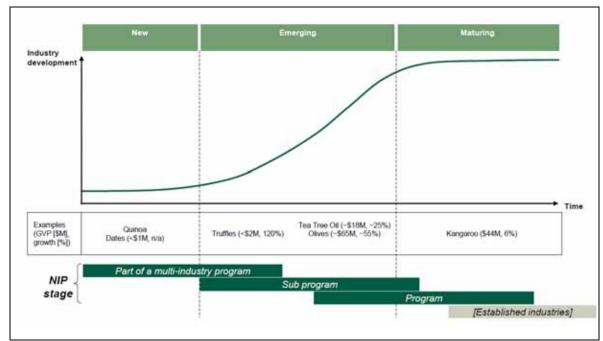
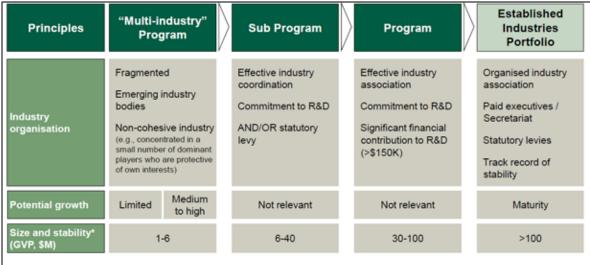


Figure 1: A lifecycle of industry development

Source: RIRDC, LEK internal report

New industries can be clearly but realistically aligned along a development cycle based on industry value of production, e.g. canola, mangoes, etc. Further, the industry development cycle can also be thought of in terms of the ability to achieve coordination within the industry itself. This aspect of the progression is summarised in Figure 2. As industries grow, their capacity to 'organise' and move towards establishment of a levy to fund R&D and other activities is reflected in the nature of RIRDC engagement and R&D programs. The transition time and success varies across industries. Identifying a point at which an industry becomes "mature" or "established" cannot be predicted. It should also be noted that while some industries follow a clearly defined path to maturity or can be established they may in fact remain too small to fund levy arrangements or fully functioning industry organisations.

Figure 2: Graduation of industries through a portfolio



Source: RIRDC, LEK internal report

Previous research commissioned by RIRDC (Wood et al 1994) identified a range of growth patterns and sources of growth for new industries that emerged over the broad period 1950 to 1990. In the majority of these, R&D was an essential component of industry development, both before and after commercialisation of the industry.

Wood et al identified a number of characteristic growth patterns for emerging industries — some leading to sustained growth and others not. Interestingly, many of the industries that were previously emerging are now well established. The broad evidence strongly suggests that new industries 'grow up'. The research was able to identify a number of characteristic lags between R&D and its impacts. These lags varied by type of research, but had average lags ranging from 2 to 6 years.

## **Expectation of large spillovers**

The Commission noted that there would be a special case for new industries if it were expected that spillovers from these were larger than for established industries. This is very difficult to judge. However, RIRDC considers that the argument could be phrased slightly differently to note that funding principles which recognised public good effects from research would inevitably recognise a sound case for new and emerging industries.

As RIRDC argued extensively in its initial submission on the Commission, the new and emerging industries that RIRDC currently funds are associated with a number of substantial public good or spillover benefits and that in many cases there is an expectation that these may be larger than spillovers that could be obtained in established industries.

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#### **Established Rural Industries**

RIRDC's established industry portfolio covers research into seven industry groupings: honeybees, chicken meat, rice, horses, organic systems, fodder crops and pastures seeds. These industries face challenging operating environments that require ongoing innovation and responsiveness. Declining terms of trade, increasing international competition and distorted markets combined with climate variability and change and natural resource management all put pressure on these sectors. Continued productivity growth underpinned by innovation is a crucial part of this response.

Some of the established industrie's research programs are funded by a statutory levy, while others are based on voluntary contributions. Unlike RIRDC's other portfolios, research in these areas does not necessarily have an explicit public policy focus, so the return to government funding contributions is more difficult to define (as is the case for most activities supported by rural R&D corporations). Nevertheless, there are clear public benefits emerging from RIRDC's research programs in these industries. These benefits are diverse. RIRDC's previous submission demonstrated these benefits through the provision of three case studies from the honeybee industry, the rice industry, and the chicken meat industry.

RIRDC is a natural home for small but established industries, including the seven currently at RIRDC. These industries benefit from the experience and skills RIRDC has with managing multiple industry programs across those in the new and emerging portfolio and from the issues addressed in the cross cutting rural issues portfolio. Experience has demonstrated that established industries such as these 'get lost' in RDCs focused on larger industries.

## 5 Reducing matching funding

#### **Key points**

The Commission had presented arguments for reducing matching funding. This is in contrast with ongoing efforts by the RDCs to measure the impacts of the research they fund.

An alternative would be to continue current matching arrangements while evidence on the incremental benefits of this continued to be collected.

#### A core recommendation

Reducing the matching funding for levy contributions is clearly a major recommendation in the Commission's *Draft Report*. Indeed, for many participants, this recommendation is likely to dominate views about the Draft Report in general. As RIRDC has documented, it considers that many of the recommendations are sound, and it would be unfortunate if these were missed in a dominant discussion about funding levels.

Further, RIRDC expects that the Council of RDC Chairs will make some major comments on this particular recommendation and hence will not duplicate that discussion in this submission. RIRDC wishes however to make some comments about broad conceptual difficulties with the Commission's recommendation and the process by which it was derived.

#### **Principles for determining matching funding**

The Commission's recommendation is based around an implicit argument that government support should be equated between different sectors, or at least that the divergence should not be as large as it currently appears in the case of agriculture. However, as the Commission understands, the broad distribution of funding should be based around the relative incremental induced net benefits from those funds. There is no particular reason why this should imply equating funding between industries.

Indeed, the Commission's own findings from 2007 that 'The extent to which the basic R&D tax concession stimulates additional R&D is low, particularly for large firms'. (Productivity Commission 2007, Finding 10.2) seems to suggest that there may be a case for higher relative funding in agriculture.

Further, the Commission previously recognised this broad funding principle in its 2007 finding on RDC matching funding that 'The extent to which public funding is reduced should be determined by an independent assessment of the induced spillovers associated with that support'. (Productivity Commission 2007, Finding 10.3)

However, the Commission now appears to wish to abandon the empirical base of this recommendation in favour of a more in-principle and judgemental approach. There is an irony in this approach in that since the Commission's 2007 recommendation, RDCs have tended to work harder on developing an evidence base to help demonstrate the case for public funding. While

this impact work is incremental and while much of it remains developmental, it seems to be difficult for the Commission to now argue that this broad evidence base is not relevant to public funding.

#### Conclusion

It would be a reasonable judgement to argue that:

- given lack of induced benefits from general measures such as the R&D tax concession;
- given the clear focus on additionality in developing RDC research projects (as set out in RIRDCs initial submission); and
- given the commitment to continue to develop an empirical evidence base,

then there is no urgency in reducing matching funding as there is a possibility that it remains appropriate. Rather, the question should continue to be addressed while the evidence base continues to be developed.

The RDCs have committed to continue to develop precisely the evidence needed to make a true evidence-based recommendation.

The Rural Industries Research and Development Corporation looks towards further working with the Commission and wider government. This Productivity Commission Review of Rural Research and Development Corporations has given us an important and fruitful opportunity for reflection on our business focus and processes.

As a result we consider the RIRDC to be a very opportune operational vehicle for the development of a public good RDC.

Such a public good RDC is of critical importance to the national economy and communities as Australia experiences increasingly complex challenges both to the economics of the agricultural sector and to its communities. The public good RDC would serve to mitigate and anticipate the increased threats and opportunities to the national agricultural production sector from elements as diverse as climate and trade.

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