Australian Government

Cotton Research and Development Corporation

SUBMISSION BY THE

COTTON RESEARCH & DEVELOPMENT CORPORATION

to the

Productivity Commission's

Rural Research & Development Corporations

Draft Inquiry Report

November 2010

CONTENTS

EXECUTIVE SUMMARY

The Cotton R&D Corporation welcomes the Productivity Commission Inquiry into Rural Research and Development as a timely opportunity to improve the rural R&D model.

The CRDC supports many aspects of the PC's draft report, especially its conclusion that the RDC structure has better linkages to industry, better adoption of results and better R&D management than other rural R&D programs, or the alternative of managing R&D programs within policy departments.

The CRDC supports the need for greater collaboration and investment addressing national strategic rural R&D issues. The establishment of a new structure 'Rural Research Australia' (RRA) is one of a number of options for how that might be achieved. We have made suggestions accordingly. Most importantly that government should articulate a vision for rural R&D, define success in more measurable terms and develops its capacity for engagement in rural R&D beyond a compliance role. CRDC is keen to work directly with government in addressing these actions. Without these steps it unlikely that the benefits we collectively seek from greater collaboration will be achieved.

The CRDC does not, however, support the PC's recommendation for a reduction in matching Commonwealth contributions. The establishment of a new public good-focused RDC should not be at the expense of matching funding for industry RDCs. That would likely lead to unintended consequences including an overall reduction in RDC investment on public good issues. Moreover, it would compromise the ability of industry RDCs to collaborate with RRA, or the like, on cross-sectoral issues, and thus on the ability to get this research adopted through industry adoption pathways.

The assumption that industry will make up the funding shortfall in our judgement is flawed, and not consistent with available evidence. It would jeopardise the necessary R&D capacity to achieve industry sector productivity growth, to improve competitiveness, environmental performance and so on.

Further the CRDC does not agree with the PC assessment that the return on public investment in rural R&D through the RDC model has been 'modest'. The CRDC believes it has evidenced that its R&D investments have contributed to substantive public good benefits. The Cotton Best Management Practices (BMP) program is a landmark case study in collaborative rural R&D for multiple benefits. The Productivity Commission in its 2007 report "Public Support for Science & Innovation" suggested that an example of public good would be an industry reducing pesticide use. The cotton industry is the classic example of this with R&D supporting industry to reduce its pesticide use by 85% with substantial measured public benefits accruing from eliminating contamination of riverine systems and exported beef (Schofield et al 2007).

We have provided additional information as to the cotton industry's total R&D expenditure and the relative private/public contributions.

There is a compelling rationale for Commonwealth Government investment in rural R&D. The challenges of meeting societal objectives for food, water and energy security, against a backdrop of a highly variable climate exacerbated by climate change, rapid demographic changes in Australia, and increasing competition for land and water resources, intensify the need for high quality rural research that targets both public and private objectives, necessarily in an integrated manner.

The achievements of the current model have been illustrated by the CRDC in its June submission. There would need to be a high degree of confidence that any proposed changes will deliver substantial net benefits, over and above what the current model currently delivers. The CRDC's assessment of the PC's proposed changes is that, as currently presented, they would erode rather than build upon the strengths of the RDC model and the performance of the rural R&D system as a whole.

INTRODUCTION

This submission complements the previous CRDC submission to the Productivity Commission Inquiry (Submission 114, CRDC 2010), and does not repeat the background information in the earlier submission. This submission responds directly to the Commission's Draft Report and is structured against its Draft Findings and Recommendations.

Overall comments

The CRDC supports many aspects of the PC's draft report, especially its conclusion that the RDC model has better linkages to industry, better adoption of results and better R&D management than other rural R&D programs, or the alternative of managing R&D programs within policy departments.

Further, the Cotton R&D Corporation supports in principle the recommendations in the Draft Report in relation to data collection and coordination, the desirability of reinstating a Government Director function, the need for flexibility with respect to RDC involvement in marketing, and the need to improve mechanisms for evaluation and performance review, and consolidated performance reporting of RDCs by DAFF. These are covered in more detail later.

However, the CRDC is disturbed by apparent contradictions in the PC's conclusions, and the lack of supporting evidence for some of these conclusions. We are concerned that the implementation of the PC's recommendations as currently presented would have perverse outcomes for rural R&D, the cotton industry, the communities and catchments in which the cotton industry is a key economic driver, rural Australia and the Australian economy more generally.

In particular, we disagree with the Productivity Commission assertion that the return on public funds via the RDCs has been "modest" and not a good return for the taxpayer in terms of public benefits. The Draft Report provides no empirical evidence to substantiate this proposition.

This assertion appears to rest upon a number of arguments and assumptions:

1. That RDCs have generated little in the way of "additional", socially valuable, R&D that would not have taken place if just private funds had been used.
2. That returns from RDC R&D have been overstated because other factors have contributed to productivity gains, such as farm consolidation and technological advancements including GPS, machinery and chemicals.
3. That in terms of government support for R&D, agriculture is treated relatively favourably.
4. That leveraging funds from government-funded research providers is double dipping, exacerbated by research providers undervaluing the cost of R&D.
5. That R&D could lift the productivity of marginal producers sufficiently to reduce the effectiveness of other structural adjustment policy programs.
6. That reducing the Commonwealth matching contribution would be offset by increased industry investment.
7. That the government invests 75% of the funding and furthermore that the private benefits outweigh the public good delivered.

Taking these points in turn:

1. CRDC can point to many research outputs of broad societal benefit in social and environmental terms that could not and would not have been delivered without substantial

public funding. The Cotton BMP program funded collaboratively by CRDC, LWRRDC/LWA and the Murray Darling Basin Commission is a classic example of such a program.

2. This view overlooks the role that RDC-funded R&D plays in enabling industry to use commercial innovations to best effect in farming systems and businesses. The PC then conversely suggests that because the benefit/cost ratios for rural R&D are generally high then this would justify higher industry investment.

3. Mullen (2010) mounts persuasive arguments that the relative difference between government support for agricultural R&D compared with other sectors is significantly less than is suggested in the Draft Report. Notwithstanding the relativities, it is more relevant from a public policy perspective to assess whether levels of R&D investment in other industries are appropriate, and whether they share similar circumstances to agriculture. If public investment in other sectors is way too low, it is hardly good policy to bring agriculture down to their level on spurious equity grounds.

4. 'Leveraging' also means partnerships and collaboration, objectives that RDCs have been strongly urged to pursue by the Australian Government over the last decade. Co-investment between RDCs and publicly-funded research institutions like CSIRO, CRCs and universities can benefit all parties through sharing risk, building critical mass, avoiding unnecessary duplication and making best use of scarce research resources.

5. Increasing the productivity of marginal producers to the extent that they don't need to be 'adjusted' out of the industry is a good outcome with public and private benefits.

6. The CRDC agrees that increasing private investment in R&D is a worthy objective. But we believe firmly that reducing the Commonwealth contribution is a very poor way of pursuing this objective and will in fact achieve the opposite outcome. There is a wealth of economic evidence to support the contention that people value the prospect of current loss of utility, relatively more than the prospect of future gains (even where the latter is worth more from a rational perspective). Levy payers will see a reduction in Commonwealth matching funds as a signal that the research is not valued as much by government as previously. The likely reaction will be along the lines of; "*Well if they are not longer going to put as much in, why should we?"*

7. The CRDC points to the recent study by the AFI (2010) that concludes that *"estimates of the share of private sector R&D in total national agricultural R&D (35.5% excluding compulsory levy funds or 50.0% including compulsory levy funds) are much closer to OECD averages than previous estimates".*

   With respect to the cotton industry specifically the CRDC has reviewed the estimates for total cotton sector R&D expenditure.

   CRDC has previously relied upon simple extrapolation of its expenditure, the additional CRC government funding and matching R&D provider in-kind to estimate expenditure in excess of $50m per annum. Beyond this an independent assessment, by the BDA group in 2008, calculated total cotton sector R&D expenditure to be $61.6m as per the following table (Table 1). When the government and industry shares of CRDC funding is considered the balance of public versus private funding is 61:39.

   The CRDC has sought to update this assessment for the 2008/09 year, but is still collating data from other organisations. In doing so we seek to highlight the additional contribution by growers outside of levies, private investments and in-kind support for rural R&D. Specifically we wish to reference the contribution to funding of CSIRO research through the royalty stream derived from grower adoption of CSIRO cotton varieties. CRDC's calculation for 2008/09 is that the CSIRO received $8m in revenue from these royalties (equivalent to $55 per hectare of cotton); $6.4m net of CRDC's share of $1.6m. CSIRO has reported through

the PISC Cotton Sector RD&E planning process that it expended $11.2m in all cotton research in 2008/09.

Table 1: Total Cotton R&D Funding: By source and Research Provider: $m 2006/2007

Source	*Research Provider*				*Total*
	Cotton CRC	***CRDC***	***Public***	***Private***	
CRDC	**$6.5m**	**$4.2m**		**$1.2m**	**$11.9m**
Public	**$18.9m**	**$2.8m**	**$10.0m**		**$31.7m**
Federal	$7.6m	$1.4m			
State	$6.0m	$0.9m			
Higher Education	$5.3m	$0.5m			
Private	**$2.6m**	**$1.4m**		**$14.0m**	**$18.0m**
	$28.0m	***$8.4m***	***$10.0m***	***$15.2m***	***$61.6m***

Note: Cotton CRC figures were sourced from the 2006/07 Annual Report. CRDC partner figures were estimated assuming an average 59% (by value) CRDC contribution to projects. This data was provided by the CRDC for the period 2003 to 2011. CRDC figure includes operational and overhead costs. Other public R&D was estimated by BDA Group and Private R&D was sourced from ABS Business R&D Expenditure tables for 2005/06.

We contend that the vast majority of CRDC projects have delivered various combinations of public and private benefits, and of social, environmental and economic outcomes (BDA Group 2008, Schofield et al 2007, Chudleigh et al 2006).

Chudleigh et al (2006) discuss the challenges of evaluating the social and environmental returns on R&D, firstly in terms of articulating a given impact and attributing a portion of that impact to a given piece of R&D, then in terms of quantifying the impact (e.g. adoption and dis-adoption rates through time and across regions), and then in terms of assigning a monetary value to it. Given the inherent uncertainties and the lack of conclusive empirical evidence cited by the PC, the unequivocal nature of the finding about 'modest' public benefits delivered by industry RDCs seems difficult to substantiate.

The broad thrust of the recommendations in the Draft Report in effect imply that there is a fundamental difference between public good and production-oriented R&D, and that this broadly equates to cross-sectoral versus industry-specific R&D. Under this dichotomy, the industry-focused RDCs and Industry-Owned Companies (IOCs) can deliver commodity-specific 'production' R&D, whereas the new public good RDC (Rural Research Australia) is to deliver the cross-sectoral, public good and transformational R&D.

The CRDC has a fundamental problem with this conception of the rural R&D model. It is a false dichotomy. The great strength of the model is the inherent partnership between industry and

government at its heart, and the mutual benefits this brings in terms of research relevance and uptake. This strength applies as much for public good research as it does for research that delivers an immediate production benefit. The CRDC accepts that there is a strong case for improving investment in the big, cross-cutting issues like water, energy, soils and biodiversity, and that dedicated research management capacity needs to be rebuilt in this area since the loss of Land & Water Australia. But equally, whatever mechanism is used to deliver such capacity, it will need to work closely with industry-focused RDCs like CRDC, just as did LWA. Our capacity to collaborate with such a body and to promote its outputs through our adoption pathways will be very limited if we have had our matching funding reduced and if we have in effect been directed to focus on research of immediate industry production benefit.

The Draft Report appears to assume the existence of 'additional', socially valuable, research that is separate from production research. The CRDC believes that this is an artificial construct that rarely occurs in practice. We anticipate that industry would equally argue that it should only fund 'additional', privately valuable, research and development.

In reality, reduction in Commonwealth matching funds would decrease the scale of the CRDC R&D portfolio rather than its scope. The CRDC always has and will continue to invest in R&D that delivers integrated environmental, social and economic benefits. The environmental and social footprint of the cotton industry within the valleys in which it operates are so well understood that the industry sees private and public good as intrinsically linked and inseparable.

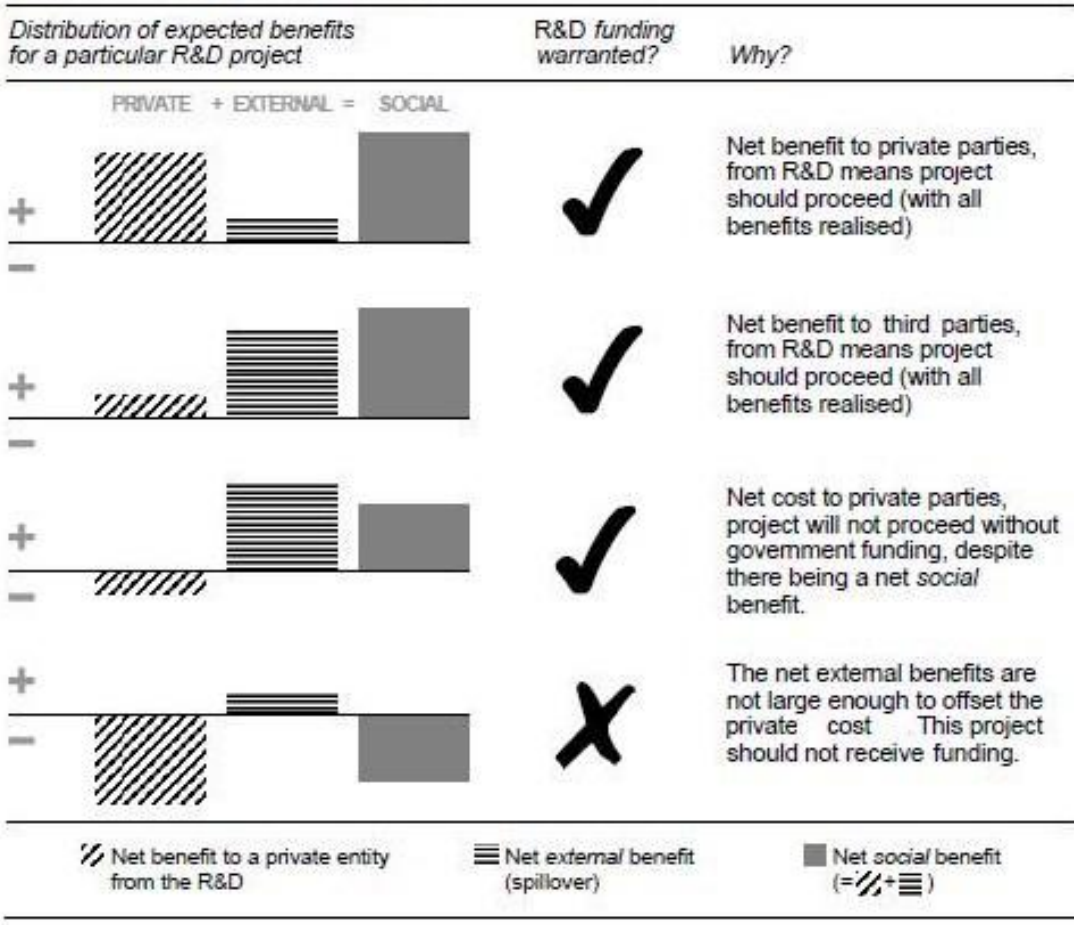
Apart from the conceptual problems we have with the way in which the Draft Report drives a wedge between 'private good' and 'public good' R&D, any reduction in Commonwealth matching funding would have significant practical implications for the CRDC:

- A significant risk is that industry will consider the reduction in matching Commonwealth contribution as a disincentive to invest in rural R&D through the RDC model.
- Whilst CRDC is committed to ongoing improvement in administrative efficiency, the scope for savings, without compromising effectiveness, is but a small fraction of the proposed loss of revenue.
- Any reduction in Commonwealth contributions will also impact on CRDC's ability to manage year to year variation in revenue from industry levies and could well necessitate further reduction in the scale of the R&D portfolio for risk management purposes.
- A policy impact assessment would conclude that RDCs will not be able to meet future PISC R,D&E commitments for sustaining research capacity and infrastructure.

As an alternative to cutting government funding to address the notion of perceived inequity, this submission suggests other options. We seek to incentivise increased private investment, deliver government's strategic priorities for public good outcomes and ensure Australia's rural R&D capacity to meet future challenges of food, water, land and energy security.

The great strength of the RDC model is that it does invest in projects that would fit in the middle two scenarios of Figure 1 below that deliver net societal benefits but would be unlikely to proceed in the absence of public investment. This is a more realistic conceptualisation than that depicted in Figure 3.1 (page 61) in the Draft Report, which proposes that in terms of public funding; only projects in the third category should warrant public investment.

Figure 1 **Spillovers from R&D**



In the world in which RDCs operate, judgements about concepts such as 'balance' are made at a portfolio or research program level, in the context of preparing five year Strategic R&D Plans. Within a given research program, key research questions are identified against the knowledge needs of intended end-users, whether on-farm, along the value chain, in catchments, communities or policy agencies. Research projects are procured through a range of processes (open competitive call, select tender, direct commissioning, joint venture etc) against the research priorities set out in the Strategic R&D Plan, and they are evaluated according to a range of criteria including proposed methodology, track record of the principal investigator(s), engagement of end-users, value for money and so on.

It is simply unrealistic to propose that judgments are made at the individual project level about the relative distribution of public and private benefits, and that projects with a positive private benefit should be disqualified from public support, as is implied by Figure 3.1 in the Draft Report.

The great strength of the RDC model, and one of the key reasons it is so envied internationally, is that it brings together government and industry research investment on mutually agreed priorities through strategic five year plans to deliver a range of public and private benefits through well-managed, integrated research portfolios. The Productivity Commission's Draft Report appears to attempt to dis-integrate the public benefit and private benefit dimensions of the model, and to halve public investment in the latter over time.

It is strongly the view of the Cotton R&D Corporation that, were the recommendation about halving the Commonwealth matching funding to be implemented, there would be a substantial reduction in both 'public good' and 'private good' research investment through the RDC model overall.

Overall Spending on, and Funding for, Rural R&D

Draft Finding 5.1 - Targets for R&D Funding and Intensity

The CRDC suggests that, whilst metrics for R&D intensity are interesting, a better way of considering the adequacy of rural R&D funding is to assess whether the agreed strategic outcomes are being met and the required R&D capacity is being maintained. For cotton, the development of the Primary Industries Standing Committee Cotton Sector R,D&E Plan has revealed that the drought-induced reduction in industry and government research funding has seen that measure seriously challenged. Strategic outcomes have continued to be met but R&D capacity in the cotton industry is now a 'veneer'. CRDC anticipates a time lag in the impact of these constraints on strategic outcomes.

Irrespective of any change to the rate of government matching, it is important to recognise that funding for cotton R&D is not static — there has and will be ongoing change in the share of inputs and benefits that recognise the changing needs of stakeholders. Beyond seasonal impacts we note:

- the transition in funding of plant breeding from public to private funding with CRDC's share of approximately $1.2m royalty income per annum ceasing in 2017;
- the increasing industry contribution to CSIRO research, through royalties derived from grower adoption of CSIRO cotton varieties;
- the move from public sector extension to a blend of commercial/private/public adoption support;
- Increasing value chain collaboration with in-kind contributions from Australian and international businesses; and
- Three cotton CRCs, with the current Cotton CRC and its Australian Government funding of $3.8m per annum ending in 2012.

Draft Finding 5.2 – Target for Government Share of R&D Spending

The CRDC is not opposed to the philosophical position that the level of Government funding should be assessed against broadly defined public funding principles. The PIERD Act clearly envisages shared benefits emerging from the R&D, which in turn merits shared funding.

Public Funding Principles

Draft Recommendation 5.1 - Principles for Public Funding of Rural R&D

The recommendation will not help to guide public funding allocations if the principles are impractical or are not determinative (e.g. additionality, leveraging), have intent that is not clear (e.g. recognising non-R&D drivers), or address problems that do not exist (e.g. structural adjustment, consistency). Unless the wording is tightened considerably, the PC's principles are likely to create more uncertainty and debate about public funding, than provide clarity or consistency in the provision of funding.

The Draft Report elsewhere expresses concerns about leveraging, yet there are many positive aspects to leveraging such as bringing co-ordination to R&D within a topic, sharing funding among interested parties (public and private) and obtaining engagement of relevant technical

specialties. Leveraging is envisaged by the PIERD Act. It is not clear how this 'principle' would single out leveraging that is 'administratively costly' from productive beneficial leveraging.

The CRDC unapologetically seeks to maximise the impact of its investment by co-investing with government research providers. We understand they do this willingly because they share our strategic priorities and have the necessary R&D capacity to deliver the outcomes sought. We see this as a strength of the rural R&D model; contributing to coordination, avoiding duplication, addressing gaps and optimal use of available resources. Coinvestment, as opposed to cost recovery, by a government research partner implies that they see public good in the endeavour. We are not sure why this is described in a negative manner in the Draft Report.

The CRDC values its partnership with government research providers. From time to time we do, however, question how costs are valued, overheads proportionally allocated, why information is not provided in a transparent manner and whether cost shifting is appropriate.

Framework Data Collection and Program Coordination

Draft Recommendation 5.2 – DAFF to Maintain Data on Rural R&D Funding

CRDC agrees with the objective of this recommendation. Other relevant agencies should be encouraged to collect similar data on R&D.

Draft Recommendation 5.3 – Coordination Mechanism for all Government Rural R&D

The CRDC agrees with the objective of the recommendation. We consider that the appropriate mechanism is the PISC RD&E Framework.

Changes to the Configuration of, and Funding for, the RDC Model

Draft Recommendation 6.1 - Modification of the RDC Model and Creation of 'Rural Research Australia'

The CRDC supports the finding underlying this recommendation that the RDC model is fundamentally sound and should be retained.

The CRDC supports the need for greater collaboration and investment addressing national strategic rural R&D issues. The establishment of a new cross-sectoral RDC 'RRA' is one of a number of options for how that might be achieved. The CRDC recommends the development of a business plan that outlines the strategic goals, portfolio of R&D required and then the costings to deliver the same through some alternative delivery models. Form follows function!

The debate over whether there is sufficient cross-industry R&D and whether this should be pursued through industry specific, collaborative or stand alone projects can only be resolved fully by specifying the research tasks in detail. A clear scoping and specification of the research agenda in this area should be a pre-requisite to a final decision about the means of implementation.

A key issue will be ensuring that workable adoption pathways exist with both government and industry stakeholders.

However the CRDC fundamentally rejects the proposition implicit in the Draft Report that public investment in cross-sectoral issues such as land, water and energy should be increased at the expense of Commonwealth matching funding for industry RDCs and IOCs.

While $50m per year through a vehicle like 'RRA' may increase the amount of cross-industry, NRM, broader rural R&D, once scoped out it is possible that $50m per year won't effectively

deal with the under-investment in this kind of R&D. Given the likely precipitous drop in investment on these issues within individual RDCs, it is likely that overall investment in these areas would decline under the funding model proposed in the Draft Report.

If RRA operates according to the principle of public funds only being using for 'additional', socially valuable, R&D then CRDC questions how the results of its R&D will be adopted. If RRA doesn't involve the RDCs as strongly as LWA did, then the adoption of its R&D outputs and effectiveness will be lower. Partnerships between RRA and industry RDCs would be severely constrained if Commonwealth matching funds for RDCs was reduced, limiting its access to industry adoption pathways accordingly.

CRDC acknowledges the alternative model presented by the Council of Rural RDC's. Equally another option would be for Government to work more closely with RDCs and provide incentives to increase investment in these areas. DAFF would be required to provide leadership for this approach, which would necessitate rebuilding the technical capacity within DAFF.

The CRDC considers that collaborative R&D should be funded by a mix of:

i. new public funds (restoration of public funds withdrawn from RIRDC and closure of LWA) or public funding raised by reductions in other departmental, CSIRO and University programs, which the PC finds are less well linked to industry, to address non-industry specific projects; and
ii. RDC funds (industry and Government funded) and public funds as core funding for co-ordination of joint projects among RDCs.

Draft Recommendation 7.1 - Changes to RDC Funding Arrangements

The CRDC does not support the PC's recommendation for a reduction in matching Commonwealth contributions. The assumption that industry will make up the funding shortfall is heroic to say the least. It jeopardises the necessary R&D capacity to achieve industry sector productivity growth, improve competitiveness, environmental performance and so on. The likely outcome will at best be variable, but much more likely in aggregate to lead to a reduction in overall investment that is much greater than envisaged in the Draft Report.

We agree that increasing industry investment in research is desirable. However there are much better ways to motivate this outcome than halving Commonwealth matching funding.

We provide additional information as to the cotton industry's total R&D expenditure and the relative private/public contributions (refer Appendix 1). The Draft Report Table 7.2 indicates the government contributes $116 for every $100 of industry levy contribution. This is correct for the time interval analysed but CRDC notes that Australian government contributions to CRDC since its inception in 1990 averages $99 for every $100 of industry levies.

The CRDC believes it can evidence that its R&D investments have contributed to substantive public good benefits.

The Cotton BMP program (Schofield et al 2007) is an outstanding case study in rural R&D. That program (along with complementary technologies such as the development of Bt cotton varieties) led to radical reductions in pesticide use within the industry and the elimination of cotton-linked endosulfan contamination (and consequent fish kills) in rivers in northern NSW and southern and central Queensland. It has been independently evaluated by Chudleigh et al (2006) as delivering substantial environmental and social benefits, not all of which are easy to quantify or to cost. Even confining the evaluation to those benefits that could be costed confidently, the program was assessed in 2005 as having a Net Present Value exceeding $280m and a benefit:cost ratio of around 6. Importantly, the then LWRRDC and the then Murray Darling Basin Commission were partners in the program, contributing around one quarter of the funding for the research phase, with CRDC and the Cotton CRCs leading the development and implementation of the very substantial extension effort associated with this program. This is a classic example of the strengths of the RDC model in action.

Principles to Guide the Future Operation of the RDC Program

Draft Recommendation 8.1 - Conditions on Funding of RDCs

The PC needs to give more clarity on how it proposes that these funding conditions would operate and be implemented. The CRDC is concerned that these conditions could undermine, rather than add to certainty for RDCs about public funding. Moreover, they may not be effective in assisting Government to determine and administer its public funding commitments.

At a broad level, CRDC is concerned that taken together, the Draft Report recommendations would subject the operations and funding of RDCs to various sets of objectives, principles, conditions and co-ordination requirements, in an uncertain hierarchy, that would place RDCs in an administrative web and add significantly to costs and constrain effectiveness, with limited benefits. It may be more appropriate for all of these matters to be dealt with together in some form of standing operating agreement between the Government and each RDC.

Dot point 1: While 'balance' is a conceptually appealing term, risk and returns are not correlated. Within its portfolio of investments, the CRDC manages a balance of shorter-term applied research and longer-term strategic research. The nature of the R&D varies with the strategic outcome sought, rather than a guideline on the amount of investment by science category. But typically it will entail a mixture of basic and applied research over time as well as development for practical application and adoption. Investment decisions are supported by detailed analyses including consideration of strategic fit, likely impact from investing or not investing, whether market failure exists, short or long term need, risk of not achieving outcomes and the likely adoption pathway.

Australian Government dot point 3: The Government does not control and cannot be made responsible for the actions of representative bodies. Wording should be amended to read: *'scrutinise nominated representative bodies for each of the statutory RDCs and take appropriate action if they are not suitably representative of the interests of the industries concerned or become dependant on funding from the RDCs they oversight'.* Government could ask those RDCs with which they have the latter concern to report on how they have complied with the Australian Government *"Guidelines on Funding of Consultation Costs by Primary Industry and Energy Portfolio Statutory Authorities*", July 1998

Draft Recommendation 8.2 - Amend the PIERD Act to include 'Additionality'

The CRDC does not agree with removing Ministerial responsibility *and accountability* for ensuring that guidance is provided on the government's strategic R&D priorities, approving RDC five-year strategic plans, annual operating plans and annual reports. The CRDC would welcome changes that increase rather than decrease strategic engagement with Government.

Draft Recommendation 8.3 – Amend the PIERD Act to permit Marketing

The CRDC supports the recommendation to provide flexibility in the model. At the same time, we believe that it is the prerogative of industry to decide whether this option should be enacted.

Draft Recommendation 8.4 – Amend the PIERD Act to allow for Government Director

The CRDC supports this recommendation.

We valued the contribution of Government Directors before the removal of the role. We note, however, that this role did not overcome the concerns expressed by Government that RDCs were delivering insufficient public good, or our concern that the Government could not articulate its public good needs with sufficient clarity to properly inform strategic research planning.

The CRDC would also support amendment to the PIERD Act to allow greater flexibility and pragmatism in addressing the circumstances of Board vacancies that can occur through the three-year term of a Board.

Draft Recommendation 8.5 – Amend the PIERD Act on Evaluation

The CRDC agrees in principle with systematic project, program and portfolio evaluation. However we believe that the Draft Report lacks clarity about the purpose and objectives for conducting evaluation.

We view project-level evaluation primarily as a management tool to assist RDC boards in developing, monitoring and updating research plans. It is a measure only of the relative return of the projects assessed.

Benefit cost evaluation is at best a partial measure of RDC performance. Measures such as Net Present Value or Return on Investment alone cannot be used to assess the overall importance of, or benefits arising from, research programs.

Accordingly, we do not agree that a requirement to undertake routine project evaluation should be included in legislation or SFAs. This should be dealt with as a principle of good governance.

Draft Recommendation 8.6 – Performance Review

The CRDC agrees with the recommendation for external performance review in principle. We accept our responsibility to measure and report performance and we conduct internal reviews to improve its performance as a matter of best practise. We would welcome an appropriately configured independent external review from time to time, around objective measures that would assist us to improve our performance.

We suggest that the reviews be held every five years ahead of and informing the preparation of each subsequent five year strategic R&D Plan, to maximise the utility of the review.

The Draft Report requests input on sanctions for poor performance. The CRDC believes the Minister already has the necessary legislated authority and mechanisms to deal with performance matters.

Draft Recommendation 8.7 - Consolidated Reporting of RDC Performance by DAFF

Subject to there being an agreed scope and methodology for RDCs to report to DAFF on their performance, CRDC supports this recommendation as long as this does not result in an increase in our compliance requirements.

We believe the recommendation should be amended to require DAFF and the RDCs to work co-operatively to produce an agreed scope and methodology on which the RDCs will provide information to DAFF for this purpose.

Levy Arrangements

Draft Recommendation 9.4 – LRS Performance Monitoring and Reporting

The CRDC agrees with the recommendation that LRS performance be subject to review, as all RDCs are required to use the services of LRS and to meet the cost of the services provided.

Given the requirement for industries to use LRS and pay for the services provided, the review process will be more effective and reliable if its independence is assured. We recommend that periodic review should be undertaken by the Auditor General.

Draft Finding 9.2 – R&D Distribution

The CRDC supports the finding.

Further Review

Draft Recommendation 9.5 – Future Review of RDCs in 10 Year

The CRDC accepts that Government and industry will wish to review their arrangements in rural R&D from time to time. If the five-yearly independent external reviews proposed above are introduced, then there should be sufficient good quality data to inform overall strategic reviews of the RDC model.

CONCLUSION

This is a timely review of the RDC model and the Productivity Commission's Draft Report makes a useful contribution in many areas. The Cotton R&D Corporation welcomes this opportunity to comment on the Draft Report.

The CRDC supports many aspects of the Draft Report, especially its conclusion that the RDC structure has better linkages to industry, better adoption of results and better R&D management than other rural R&D programs, or the alternative of managing R&D programs within policy departments. We agree with the recommendations in relation to data collection and coordination, the desirability of reinstating a Government Director function, the need for flexibility with respect to RDC funding of marketing, and the need to improve mechanisms for evaluation and performance review, and consolidated performance reporting of RDCs by DAFF.

However, from our perspective there is a conceptual flaw at the core of the Draft Report. The CRDC believes that the dichotomy it sets up between public good and private good R&D is false, misleading and potentially damaging. The best R&D investments at project and program levels are those which integrate their consideration of public and private benefits, and deliver a mix of public and private benefits accordingly. Moreover, the CRDC does not agree with the Draft Report's assessment that the public return on public investment in rural R&D through the RDC model has been 'modest'.

The CRDC agrees that there are strong arguments for building capacity within the RDC model to invest in the big cross-sectoral research challenges like water, energy and soils. Nevetherless, we believe that for the majority of this research agenda — as farmers manage more than two thirds of the continent and use more than two-thirds of its diverted freshwater resources — industry adoption pathways will be the most effective and efficient. Consequently, it will be critical to ensure that industry RDCs and IOCs can continue to collaborate and co-invest on these issues as we used to with Land & Water Australia. This would be much more difficult were Commonwealth matching funding to be reduced, and were we to be directed to focus more narrowly on research with an immediate pay-off for levy payers.

Accordingly, the CRDC rejects absolutely the way the Draft Report sets up funding for cross-sectoral research through a new RDC as a trade-off for Commonwealth matching funding of industry RDCs and IOCs. Any reduction in Commonwealth matching funding would compromise the effectiveness of all RDCs, including the proposed Rural Research Australia, and it would likely lead to a reduction in public good investment through the RDC model that is much greater than envisaged by the Productivity Commission.

We look forward to a more constructive framing of the issues and opportunities in the Final Report.

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APPENDIX 1

COTTON RESEARCH AND DEVELOPMENT CORPORATION
2009-10 COMMONWEALTH CONTRIBUTION CALCULATION
As at 26/11/2010

	PC Table 7.2	LEVY RECEIPTS (LRS levy disbursement exclude penalty)		Eligible R & D EXPENDITURE (as declared by CRDC)				Levy excess carried forward = cumulative levy receipts less cumulative CC	R&D excess carried forward = cumulative R&D expenditure less cumulative CC	(the lessor of Contingent Liability and C'wealth Liability)	ABARE GVP	ABARE 3 year Average	Levies Estimated 3 year Average	0.5% of GVP 3 year rolling average	COMMONWEALTH MATCHING (CC)	
	per $100 of levy	YEAR	Cumulative Total	YEAR	Cumulative Total	50% of R&D Current Year	50% of R&D Cummulative	CONTINGENT LIABILITY	C'WEALTH LIABILITY	AMOUNT TO PAY	Year				YEAR	YEAR
			(A)			(B)	(B)	(A-C)	(1/2B-C)							(C)
		$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
Life to Date			21,706,164.05		35,193,005.17		35,193,005.17	4,797,050.14	687,388.68	687,388.68						16,909,113.91
																687,388.68
1997-98	85	5,482,340.18	27,188,504.23	9,309,616.30	44,502,621.47	4,654,808.15	22,251,310.74	4,937,193.49	(0.00)	(0.00)				5,935,000.00	4,654,808.15	22,251,310.74
1998-99	118	4,796,674.80	31,985,179.03	11,337,749.48	55,840,370.95	5,668,874.74	27,920,185.48	4,064,993.56	0.00	0.00				6,370,000.00	5,668,874.73	27,920,185.48
1999-00	108	5,356,734.80	37,341,913.83	11,619,081.18	67,459,452.13	5,809,540.59	33,729,726.07	3,612,187.77	0.00	0.00				6,485,000.00	5,809,540.59	33,729,726.07
2000-01	98	6,929,849.47	44,271,763.30	13,547,505.81	81,006,957.94	6,773,752.91	40,503,478.97	3,768,284.33	(0.00)	(0.00)				7,995,000.00	6,773,752.91	40,503,478.98
2001-02	120	6,004,552.88	50,276,316.18	14,416,134.41	95,423,092.35	7,208,067.21	47,711,546.18	2,564,770.00	(0.00)	(0.00)				7,563,333.33	7,208,067.20	47,711,546.18
2002-03	102	7,136,619.63	57,412,935.81	15,327,569.76	110,750,662.11	7,663,784.88	55,375,331.06	2,421,389.64	383,784.88	383,784.88				7,280,000.00	7,280,000.00	54,991,546.18
2003-04	185	2,579,346.50	59,992,282.31	12,084,714.82	122,835,376.93	6,042,357.41	61,417,688.47	235,736.14	1,661,142.29	235,736.14				4,765,000.00	4,765,000.00	59,756,546.18
2004-05	94	4,575,830.21	64,568,112.52	11,003,635.36	133,839,012.29	5,501,817.68	66,919,506.15	493,217.01	2,844,610.63	493,217.01				4,318,349.34	4,318,349.34	64,074,895.52
2005-06	73	6,714,797.01	71,282,909.53	11,536,522.29	145,375,534.58	5,768,261.15	72,687,767.29	2,300,134.02	3,704,991.78	2,300,134.02	995,126,125			4,907,880.00	4,907,880.00	68,982,775.52
2006-07	110	4,168,401.77	75,451,311.30	13,618,822.25	158,994,356.83	6,809,411.13	79,497,178.42	1,891,869.12	5,937,736.23	1,891,869.12	541,581,374			4,576,666.67	4,576,666.67	73,559,442.19
2007-08	160	1,953,544.66	77,404,855.96	9,642,433.00	168,636,789.83	4,821,216.50	84,318,394.92	717,703.78	7,631,242.73	717,703.78	252,543,333	596,416,944	625,542,000	3,127,710.00	3,127,710.00	76,687,152.19
2008-09	102	2,383,459.12	79,788,315.08	7,797,230.00	176,434,019.83	3,898,615.00	88,217,009.92	665,368.57	9,094,063.40	665,368.57	663,698,634	485,941,114	487,158,865	2,435,794.33	2,435,794.33	79,122,946.52
2009-10	87	3,433,413.57	83,221,728.65	9,422,680.00	185,856,699.83	4,711,340.00	92,928,349.92	1,102,241.34	10,808,862.60	1,102,241.34	881,682,511	599,308,159	599,308,159	2,996,540.80	2,996,540.80	82,119,487.32
2010-11		0.00	83,221,728.65	0.00	185,856,699.83	0.00	92,928,349.92	1,102,241.34	10,808,862.60	1,102,241.34	1,532,000,000	1,025,793,715	0			82,119,487.32
2011-12		0.00	83,221,728.65	0.00	185,856,699.83	0.00	92,928,349.92	1,102,241.34	10,808,862.60	1,102,241.34						82,119,487.32
2012-13		0.00	83,221,728.65	0.00	185,856,699.83	0.00	92,928,349.92	1,102,241.34	10,808,862.60	1,102,241.34						82,119,487.32
2013-14		0.00	83,221,728.65	0.00	185,856,699.83	0.00	92,928,349.92	1,102,241.34	10,808,862.60	1,102,241.34						82,119,487.32
2014-15		0.00	83,221,728.65	0.00	185,856,699.83	0.00	92,928,349.92	1,102,241.34	10,808,862.60	1,102,241.34						82,119,487.32
Average	116.0															
98 to 10	105	61,515,564.60													64,522,984.72	
01 to 09	107	42,446,401.25													45,393,220.45	
Life to date	99	83,221,728.65													82,119,487.32	