Western Graingrowers

Response to Draft Report
Of the
Productivity Commission Inquiry

Into

Rural Research and Development Corporations

(With specific attention to Grains R&D)

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Introduction

The Pastoralists and Graziers Association of WA (Inc) (PGA) is a non-profit industry organisation established in 1907, which represents primary producers in both the pastoral and agricultural regions in Western Australia. This organisation has a history of taking on the status quo in order to deliver real benefits to producers. Examples include lobbying to end the single desk in wheat marketing, to abolish the wool reserve price scheme, and to eliminate the total and counter-productive control of the lamb marketing board. In each of these instances, evidence of vested interests advancing at the expense of producers abounded. We are proud to have fought those vested interests in the face of massive opposition.

Western Graingrowers, the grains committee of PGA, represents progressive Western Australian grain growers who believe in the benefits of competition and the reduction of government regulation within their industry. On average, our membership produces 30-40 percent of the Western Australian grain harvest per annum.

PGA and Western Graingrowers welcome the Productivity Commission's Inquiry into Rural Research and Development Corporations (RDCs). **This response to the Draft Report is made with specific attention to the Grains Research and Development Corporation (GRDC), as that is the RDC associated with this committee.**

Executive Summary

In response to the draft report of the Productivity Commission on their inquiry into Rural Research and Development Corporations, we make the following general comments:

1. In the absence of Government funding, the Private Sector will support research and development as well as basic science;
2. It is extremely difficult to measure advances and the impacts of specific investments or natural occurrences upon those advances;
3. That which is difficult to measure will be badly measured;
4. A productivity gain (since 1994) of 0.9% relative to farmers' contribution of 0.99% of Gross Value of Production represents an economic loss on investment (see attachments 1, 2 and 3); and
5. With a few notable exceptions including PGA's, every submission to this inquiry was made by people or entities who are direct beneficiaries of GRDC largesse.

Comment on Issues and Questions

<u>1. Productivity Gains Benefit Society</u>

Improvements in productivity are good for society. In the case of agricultural efficiency improvements, society benefits by way of (among other things):

- higher quality and/or cheaper food and fibre products;
- a smaller portion of household income going to food and fibre purchases;

- more resources available for leisure activities;
- more land area available for parks and recreation;
- more time available to farmers to work on ways to improve production practices.

> *"Productivity improvement is the dominant means by which living standards improve over the long term. Increased output (or decreased input use) leads to lower production costs and higher incomes. Consequently, productivity growth can mean higher returns on capital, higher wages, higher profits and increased tax revenue. It can also lead to lower prices for consumers and may benefit the environment as less land, water and chemicals are required to produce the same amount of output (PC 2005). As Krugman (1992) explained; 'productivity isn't everything, but in the long run it is almost everything'.*
> *-- Nossal et al 2009, page 6*

The best use of our research and development dollars, from every conceivable perspective, is to pursue further productivity gains.

2. The Private Sector Will Invest in Research and Development and Basic Science

In the Draft Report's third key point (page xiv), the Commission states:

> *"a significant part of the Government's funding contribution appears to have supported R&D that primary producers would have had sound financial reasons to fund themselves."*

This is true. Given that sound financial reasons to fund research exist, of course, producers will make that investment. Not only does the private sector invest into its own R&D, it has been shown that total spending on R&D as a proportion of GDP increases as private investment as a proportion of total R&D spending increases.

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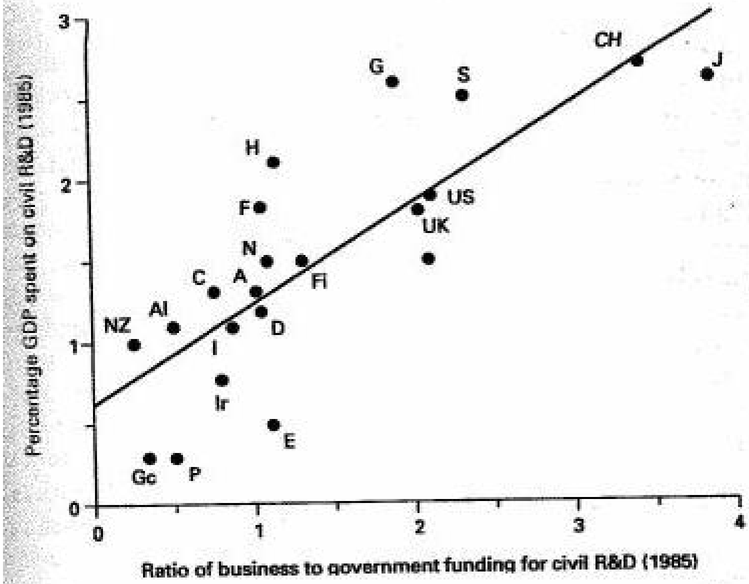


FIGURE 10.1 *Business: government funding (part 1)*

The data have been calculated from the figures in *OECD Science and Technology Indicators No. 3* (Paris: OECD, 1989). The equation is $y = 0.624 + 0.616x$, $r = 0.81$ ($P < 0.001$). See Figures 7.5 and 7.11 for a key to symbols.

Source: Kealey, Terence: The Economic Laws of Scientific Research, 1996, Macmillan Press Ltd, p241

Terence Kealey, author of <u>The Economic Laws of Scientific Research,</u> wrote of the strength of science not because of, but despite, the state:

> "In as much…as science has improved Man's mastery over the world, it has represented a cultural advance, since an improved intellectual technique must, by definition, be a cultural benefit. But that is no argument for governments having to fund it. Science is not a delicate little flower, whose fragility demands the protection of the state. Science emerged out of medieval Europe despite the opposition of the authorities, as was witnessed by the sufferings of researchers such as Roger Bacon, Vesalius and Galileo. Obviously the scientific method would never have emerged had every single powerful person in medieval Europe set out to destroy it – science always had friends as well as enemies – but its history reveals that the triumph of the scientific method did not require the active support of the state."

Given 1&2 above, the Commission's first stated "principle" in recommendation 5.1:

> ***The primary aim of government funding is to enhance the productivity, competitiveness and social and environmental performance of the rural sector and the welfare of the wider community by inducing socially valuable R&D that would not otherwise be undertaken.***

is wholly misguided.

3. Cutting Government Funding

The Commission proposes:

> ***"that the caps on matching government contributions to industry-specific RDCs be halved to 0.25 per cent of the gross value of production (GVP), with this reduction phased in over ten years."***

So long as Government insists, as it will do, on investing in politically expedient projects, rather than funding (with no strings attached) core projects with productivity gain as their objective, our society will fall far short on all stated objectives. The observed evidence as it relates to productivity gains bears this out.

In our original submission, we called for an end to Government matching funding of rural Research and Development Corporations. In order to obtain the Government matching funds, GRDC is investing in programs that are not focussed on increasing productivity and returns to growers, but rather on politicised, pre-determined investment areas focussed on the so-called "common good" of society at large. The Commission acknowledges this on page 2 of the draft report:

> *Moreover, the policy focus for rural R&D has shifted somewhat towards areas of cross-sectoral interest and wider community benefit (for example, addressing climate change), rather than solely on increasing industry productivity and returns to primary producers.*

Levy payers are not receiving an economic return on investment, as demonstrated with real numbers in Appendix 2 and Appendix 3 of our original submission. We are compulsorily contributing 0.99% of our gross value of production to GRDC for a 0.9% (at best – see Attachment #4) productivity gain. Given this fact, our levy contribution is effectively only a wealth transfer to RDC staff and contractors.

A key point in the draft report is:

> ***"The industry-specific RDCs should focus predominantly on R&D of direct benefit to their levy payers."***

No matter what amount of funding comes from other sources, the impetus exists for GRDC to tailor projects to accommodate research projects (and possibly outcomes) pre-determined by those other sources.

In Box 1 it is stated:

> ***"The RDCs are governed by boards, as well as being subject to various planning, consultation and reporting requirements imposed by the Government as a quid pro quo for its funding contribution."***

In the draft report, the Commission recommends that the various planning, consultation and reporting requirements be increased, and that the Commonwealth contribution be decreased. The quid pro quo will continue. RDCs will be made to give more for less as they pursue funding at any cost.

A complete decoupling of Government and levy payers' investments would yield the most streamlined and workable solution.

- Not only would taxpayers save on the explicit matching contributions, public funding of oversight and reporting mechanisms recommended in the draft report would be unnecessary, as GRDC would be accountable only to producers.
- Levy payers would get an organisation whose only loyalties would be to them and the productivity gains so critically desired and needed.

4. Quantitative Studies on the Benefits of Investment in Rural R&D

Rather than being quantitative, the studies (or at the very least, large parts of the studies) referenced by the Commission and by many of the authors of submissions to this inquiry are actually qualitative.

In Box B1, the Commission discusses problems with the highly-referenced econometric studies, and summarises thus:

> *"As the Commission noted in its 2007 report, the consequence of these various factors taken together is that any econometrically estimated return to R&D investment 'is too imprecise for calibrating funding' (p. 186). Indeed, recognising that Australian R&D efforts often depend heavily on research conducted overseas, even isolating the precise effect of domestic investment in R&D — whether public or private, rural or non-rural — is virtually impossible*."

As for the Sheng, Mullen and Zhao (2010) study, we endorse the Commission's conclusion:

> *However, while the study is a great deal more sophisticated than some of the previous empirical work, the reliability of its findings (and thus its policy value) is diminished by various empirical uncertainties. These include questions about the degree to which both productivity and rural R&D funding have actually declined. As with other studies, broader methodological issues are a further constraint on what conclusions can be drawn.*

5. Additional Issues to Specifically Address

Legislative Amendments

> ***Levies Act***
> *"Product-specific maximum levy rates should be removed from schedules 1 to 26 to the Primary Industries (Excise) Levies Act 1999 (Cwlth).*
>
> *"The Commission seeks further input on whether R&D and marketing levies should be separate; or combined into a single industry levy, with some scope for a Rural Research and Development Corporation (see draft recommendation 8.3) to vary the allocation of funds between R&D and marketing without seeking the formal approval of levy payers."*

Comment: This Act was passed as a protection against RDCs easily increasing levies without proper approval from the people paying the bills. So long as RDCs function within the PIERD Act, it is necessary to maintain this small check on the power of RDCs and the Government.

PIERD Act

Recommendation 8.1:

Principles to guide the future operation of the RDC program

As a condition of receiving government funding, Rural Research and Development Corporations (RDCs) should:

- *invest in a balanced project portfolio that includes longer-term, riskier and potentially higher-reward research, as well as short-term, low-risk, and adaptive research*
- *have in place effective processes to ensure timely adoption of research results*
- *use government funding solely for R&D and related extension purposes and not for any marketing, industry representation or agri-political activities*
- *promote effective communication with industry stakeholders, researchers and the Australian Government*
- *publish information on the outcomes of all completed research projects in a timely manner*
- *implement board selection processes that result in boards with an appropriate balance of relevant skills and experience, rather than a balance of representative interests*
- *pursue ongoing improvements in administrative efficiency*
- *undertake rigorous and regular ex ante and ex post project evaluation*
- *participate in regular and transparent independent performance reviews*
- *remedy identified performance problems in an effective and timely manner.*

For its part, the Australian Government should:

- *engage openly and constructively with RDCs and their industry stakeholders*
- *discharge its administrative responsibilities in relation to the RDC program in a timely and efficient fashion*
- *ensure that nominated representative bodies for each of the statutory RDCs continue to be suitably representative of the interests of the industries concerned, and not dependent on funding from the RDCs they are meant to oversight*
- *monitor the RDCs' performance in a way that will enable transparent assessment of the outcomes of the program as a whole, and identification of specific performance problems*
- *effectively communicate with RDCs in regard to opportunities to improve performance, and take prompt and appropriate action if performance problems are not satisfactorily addressed.*

Comment: Amending the PIERD Act to increase Government control over the RDC function will only exacerbate the existing problem of RDCs existing more for the appeasement of Government than for the pursuit of productivity gains for levy payers.

Recommendation 8.3:

> *"The Primary Industries and Energy Research and Development Act 1989 (Cwlth) should be amended so that the statutory Rural Research and Development Corporations (RDCs) can add marketing to their functions, where this is supported by the majority of levy payers and approved by the Minister for Agriculture, Fisheries and Forestry. The amendments should ensure that government contributions to any RDC that takes on marketing functions are only used to fund research and development, as defined in the Act."*

Comment: Marketing should exist wholly in the commercial, post-farm gate realm. Competition in a deregulated market is already dramatically improving marketing.

In our original submission, we stated that GRDC funds were being spread too thinly across too many areas. When GRDC is failing given their existing mandate, the last thing we should allow is an expansion of that mandate into non-core areas.

> *"The case for making industry representation a generally-allowable function for any RDC — statutory or industry-owned — should be considered as part of the proposed future review of the new RDC arrangements (see draft recommendation 9.5). In the interim, the two RDCs that already have an industry-representation role — the Australian Egg Corporation and Australian Pork Limited — should be allowed to maintain that function."*

Comment: The function of representing growers should be fulfilled within a voluntary membership arrangement, not within a compulsory levy arrangement. Our membership would reject outright that someone represents us because we are forced to pay them money every year. It is vital that RDCs oversee good, solid projects that seek gains in productivity. There is no place for "industry representation" in that mandate.

Recommendation 8.5:

> *The Primary Industries and Energy Research and Development Act 1989 (Cwlth), and the statutory funding agreements for industry-owned Rural Research and Development Corporations (RDCs) should be amended so that all RDCs are required to participate in a regular, transparent and comprehensive programwide project evaluation process, such as that currently facilitated by the Council of Rural Research and Development Corporations (CRRDC).*
>
> *Through the CRRDC, the RDCs should continue to explore means to increase the robustness of this evaluation process, including through:*

- *examining the scope to quantify, or put orders of magnitude on, environmental and social impacts*
- *including an allowance for overhead costs and implicit subsidies from publicly-funded research providers in all evaluations*
- *making provision for peer review of the evaluations*
- *informing future evaluations with periodic reviews of past evaluations to*
- *assess whether assumptions about adoption rates and additional extension related costs have proved to be reliable.*

Comment: Increasing the role of RDCs through mandating increased participation in a council of those RDCs is wholly counter-productive. RDCs should be accountable to the levy payers, not to the Government and not to a bureaucratic council that arises out of an amalgamation of RDCs that serves no real purpose.

We also strongly oppose expending scarce resources in any attempt to quantify the unquantifiable.

Comment on Rural Research Australia

Recommendation 7.1

The Commission seeks further input on the appropriate remit and funding for the proposed Rural Research Australia (RRA) and, in particular, on:

- *areas and types of non-industry specific rural R&D that would be relevant to promoting productive and sustainable resource use by the sector*
- *opportunities to beneficially consolidate funding and management of research that is currently the responsibility of other entities within this new Research and Development Corporation*
- *whether $50 million a year, plus additional funding for any research responsibilities transferred from other programs, would be a reasonable target for the government appropriation for RRA having regard to:*
  - *the desirable breadth of the entity's research remit*
  - *the extent of unmet, socially valuable, research needs within that remit*
  - *the appropriate degree of leveraging for an entity of this nature*
- *the rate at which RRA's funding appropriation could reasonably be increased towards the target level.*

Comment: On behalf of our members who are levy payers, we are concerned only with the efficient spending of levy dollars in pursuit of productivity gains.

We have no comment about how an RDC established by Government and wholly funded by taxpayers should be structured, managed or funded. We do note, however, the comment made by the Commission on page 138:

"Conversely, without any funding linkages to industry, one of the key strengths of the current model would be lost. In addition to increasing the risk of investment in projects of limited social value, the absence of any direct industry stake in research outcomes could make the new entity more vulnerable to short term budgetary pressures."

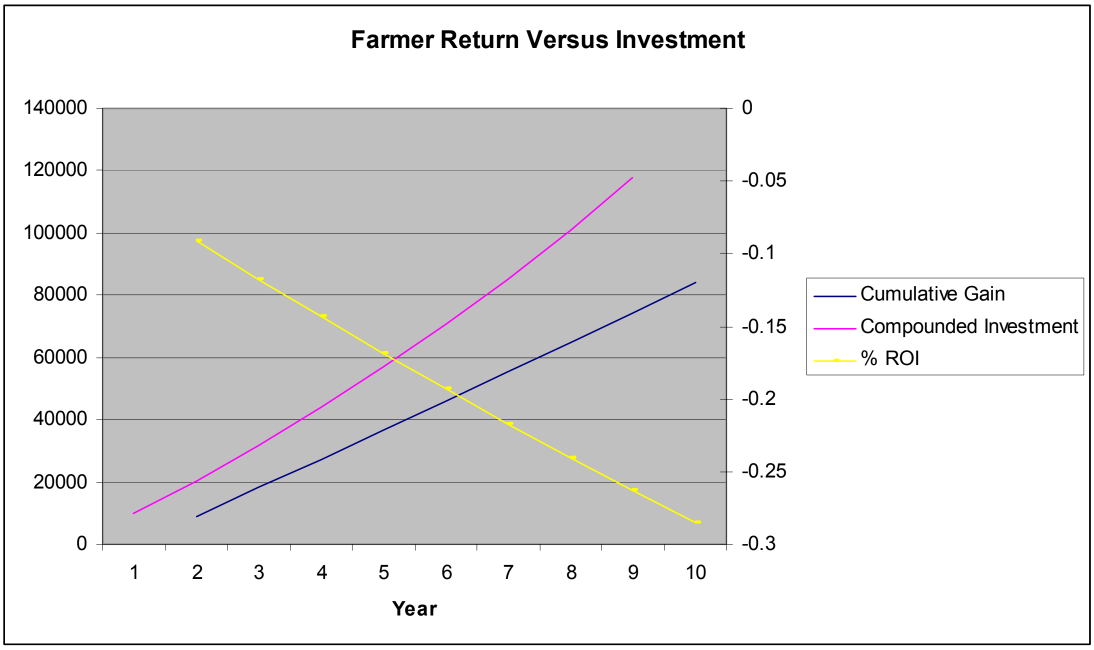
Conclusion

Western Graingrowers re-iterate our view that growers should be able to exercise more individual choice in the allocation of research dollars. To that end, we stand by our original recommendations:

1. **The core focus on productivity improvements must be re-established;**
2. **GRDC should forgo Government matching funding;**
3. **Under our recommendations, the PIERD Act (1989) would be redundant;**
4. **Collection of levies should be changed such that invoices are directly issued to farmers rather than being withheld from payments;**
5. **The mandate on GRDC spending should be tightened, so as to ensure a focus on productivity gains. Pre-breeding and National Variety Testing (NVT) are core activities supported by our membership;**
6. **Spending of monies on specific commodity research should be in proportion to contributions by that commodity;**
7. **The levy should be cut to 0.5%, which will yield enough funds to cover the tighter mandate;**
8. **Farmers should be encouraged to directly invest into whatever R&D organisation or research project they wish, with a tax deduction on that investment of 200% (capped at 1% of gross grain revenue);**
9. **GRDC should be corporatised, with shares granted in proportion to levies paid;**
10. **The role of board should be clear and simple: oversight of the mandate; and**
11. **The goal of any ensuing reforms should not be consolidation of existing research organisations, but rather the encouragement of competition, which begets lower costs and higher outputs.**

Thank you for the opportunity to submit further comments, and for your consideration of those comments.

Attachment #1



Compiled from the data in Attachment #2 below

Attachment #2

Sample Farmer - R&D Investment Versus Return

Year	Production (tonnes)	$/tonne	Sales	Add'l Value from Prod Gain	Levy Paid	Compounded Investment
1	4,000	$250.00	$1,000,000.00		$9,900.00	$9,900.00
+ .9% Gain	36					
2	4,036	$250.00	$1,009,000.00	$9,000.00	$9,989.10	$20,483.10
	36					
3	4,072	$250.00	$1,018,081.00	$9,081.00	$10,079.00	$31,791.09
	37					
4	4,109	$250.00	$1,027,243.73	$9,162.73	$10,169.71	$43,868.27
	37					
5	4,146	$250.00	$1,036,488.92	$9,245.19	$10,261.24	$56,761.60
	37					
6	4,183	$250.00	$1,045,817.32	$9,328.40	$10,353.59	$70,520.89
	38					
7	4,221	$250.00	$1,055,229.68	$9,412.36	$10,446.77	$85,198.92
	38					
8	4,259	$250.00	$1,064,726.75	$9,497.07	$10,540.79	$100,851.65
	38					
9	4,297	$250.00	$1,074,309.29	$9,582.54	$10,635.66	**$117,538.41**
	39					
10	4,336	$250.00	$1,083,978.07	$9,668.78		
				$83,978.07	$92,375.88	**$117,538.41**
	Productivity Gain[1]	0.90%				
	Price of Grain	250		Nominal / Real ROI:	-$8,397.81	-$33,560.34
	Interest Rate	6.00%		Percentage Return:	-9.09%	-28.55%
	Levy Rate[2]	0.99%				

[1] 0.9% represents cumulative productivity gains from all areas of R&D including levies, private on-farm investment, commercial (fertiliser, chemicals), CSIRO, CRCs, Universities, State Departments, matching funding, etc

[2] Levy rate for R&D is .99%. Farmers currently pay 1.02% for most commodities. The additional makeup of the payment is:

0.015%	National Residue Survey
0.010%	Plant Health Australia
0.005%	Emergency Plant Pest Response

Attachment #3

GRDC Cumulative R&D Investment Versus Return

Year	Tonnage	$/tonne	Total Crop Value	Add'l $ to Industry Due to Prod'y Gain	Levy Income	Matching Funds	Total Investment	Compounded Investment
1	30,000,000	$ 250.00	$ 7,500,000,000		$ 74,250,000	$ 39,980,769	$ 114,230,769	$ 114,230,769
2	30,270,000	$ 250.00	$ 7,567,500,000	$ 67,500,000	$ 74,918,250	$ 40,340,596	$ 115,258,846	$ 236,343,462
3	30,542,430	$ 250.00	$ 7,635,607,500	$ 68,107,500	$ 75,592,514	$ 40,703,662	$ 116,296,176	$ 366,820,245
4	30,817,312	$ 250.00	$ 7,704,327,968	$ 68,720,468	$ 76,272,847	$ 41,069,994	$ 117,342,841	$ 506,172,301
5	31,094,668	$ 250.00	$ 7,773,666,919	$ 69,338,952	$ 76,959,303	$ 41,439,624	$ 118,398,927	$ 654,941,566
6	31,374,520	$ 250.00	$ 7,843,629,921	$ 69,963,002	$ 77,651,936	$ 41,812,581	$ 119,464,517	$ 813,702,577
7	31,656,890	$ 250.00	$ 7,914,222,591	$ 70,592,669	$ 78,350,804	$ 42,188,894	$ 120,539,698	$ 983,064,430
8	31,941,802	$ 250.00	$ 7,985,450,594	$ 71,228,003	$ 79,055,961	$ 42,568,594	$ 121,624,555	$ 1,163,672,851
9	32,229,279	$ 250.00	$ 8,057,319,649	$ 71,869,055	$ 79,767,465	$ 42,951,712	$ 122,719,176	**$ 1,356,212,398**
10	32,519,342	$ 250.00	$ 8,129,835,526	$ 72,515,877				
				$629,835,526			$1,065,875,506	$ 1,356,212,398

Productivity Gain[1]	0.90%			
Price of Grain	$ 250.00	Nominal / Real ROI:	-$436,039,979.73	-$726,376,871.78
Interest Rate	6.00%	Percentage Return:	-40.91%	-53.56%
Levy Rate[2]	0.99%			

[1] 0.9% represents cumulative productivity gains from all areas of R&D including levies, private on-farm investment, commercial (fertiliser, chemicals), CSIRO, CRCs, Universities, State Departments, matching funding, etc

[2] Levy rate for R&D is .99%. Farmers currently pay 1.02% for most commodities. The additional makeup of the payment is:

0.015%	National Residue Survey
0.010%	Plant Health Australia
0.005%	Emergency Plant Pest Response

Attachment #4

Growth rate (%) of Total Factor Productivity for broadacre agriculture, 1978 to 2007

	All broadacre	Cropping	Mixed crop -livestock	Sheep	Beef
1980 to 1989	2.2	4.8	2.9	0.4	–0.9
1985 to 1994	1.8	4.7	3.2	–1.7	3.1
1989 to 1998	2.0	1.9	1.4	–1.2	1.6
1994 to 2003	0.7	–1.2	0	3.4	1.0
1998 to 2007	–1.4	–2.1	–1.9	0.5	2.8
1978 to 2007	1.5	2.1	1.5	0.3	1.5

Source: Nossal et al. (2009).