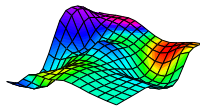


Written Submission to
Productivity Commission

regarding

Productivity Commission 2010,
Rural Research and Development Corporations,
Draft Inquiry Report, Canberra

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The purpose of this written submission is to raise concerns that BDA Group has with the underlying assumptions made by the Productivity Commission (PC) in their draft report on Rural Research Corporations¹.

(1) The rationale for intervention or public support of Rural R&D

The PC states that the *“aim of such funding [public] support should be to induce socially valuable rural R&D that would not otherwise have occurred²”*

We agree with this statement. The necessary condition for public support is that market failure exists and the sufficient condition for public support is that the support delivers benefits in excess of the costs that are incurred. Evidence that rural R&D delivers net benefits in itself does not justify public support. Public support has to bring forth R&D investments that would not otherwise be made. Many of the evaluations presented to the PC on returns from RDC investments only addresses the sufficient condition and does not provide evidence that market failure exists.

The PC report states that *“the key rationale for government intervention in rural R&D is to address spillover effects, which would otherwise discourage producers from investing in some socially valuable research.³”*

We do not support this statement and would argue that the investment of funds through RDC's to generate non-rural benefits should not be the main reason for public support via RDC's. Spillovers (or externalities), if significant, should be targeted directly, and more cost effective avenues are likely to exist. The federal government has many initiatives (for example - education, human welfare, drought support and ecosystem protection) that target externalities in the rural sector. The existence of spillover benefits will increase the attractiveness of any R&D investment, but a case must be made that the R&D investment would not occur without public support. That is, the public support of rural R&D has to bring forth R&D investment that (1) would not have otherwise been made and (2) generates benefits across all society (including the rural sector) in excess of the costs incurred across all of society.

“The key message here is that if socially valuable projects do not proceed, then even if the benefits are predominately private, society is still worse off⁴”.

¹ BDA Group provides consultancy services to a wide range of clients including RDC's and state and federal governments.

² Key points page 37

³ Key points page 37

(2) The levy mechanism overcomes the market failure associated with Rural R&D

We note that the draft report accepts that the levy mechanism does not overcome the market failure in its entirety and that even with the levy there will be underinvestment in rural R&D in Australia. We accept this position and note further that as the levy is voluntary the factors that give rise to the market failure, to some extent, remain. This position is also supported by ABARE who concluded that the levy mechanism may only serve to overcome some of the under-investment problem in rural R&D in Australia⁵.

We are disappointed that this key issue has not been addressed in the draft report, as it is main rationale for public support through the RDC's. We accept that it is difficult to estimate the optimal level of government support and also note that the levy was not initially designed to address a quantum value of underinvestment, but rather, to create incentives to stimulate private R&D and to some extent address the under investment that would otherwise occur. It is surprising that such an assessment has not been made and the role of the RDC's has not been examined in more detail. Instead, the PC basis its conclusions and recommendations on perceived equity in government support of rural R&D compared to government support of non-rural R&D.

(3) Is support of rural R&D 3 to 11 times greater than for non-rural R&D?

In the absence of any economically rational argument for changing the level of support of rural R&D (in either direction) the PC base their recommendations on a perceived inequity between support of rural and non-rural R&D. We have several concerns with this approach.

- (a) The analysis is based on a measure called net (post tax incentive) industry contribution to R&D. This is a flawed measure.

The derivation of the measure is based on a comparison of additional government cost compared to support of a standard business deduction (with a 30% tax rate). We show the workings in the tables below for the 125% tax deduction, which is the lower value that gives rise to the multiple of 11.

The measure perhaps gives some indication of the nominal support provided but it does not show how much support is provided to bring forth an additional \$100 of R&D. If we assume that without the support there would be no R&D then government support for non-rural R&D

⁴ Additionality – page 61.

⁵ ABARE 2006, Analysis of the Productivity Commission Draft Research Report Public Support for Science and Innovation, Prepared for Rural Policy and Innovation Division, Department of Agriculture, Fisheries and Forestry.

involves a cost to the government of \$7.50 to increase R&D investment by \$100. For rural R&D the government support funds R&D activities, that is, the \$91 of government support brings forth an additional \$191 of R&D or \$47.64 of government support brings forth an additional \$100 of R&D investment. This is not a multiple of 11 - it is a multiple of 6.4.

Non-Rural Business

Party	Standard cost item	R&D	Net Contribution
Business	\$70	\$62.50	-\$7.50
Government	\$30	\$37.50	\$7.50
Total	\$100	\$100	0

Rural Business

Party	Standard cost item	R&D	Net Contribution
Business	\$70	\$70	0
Government	\$30	\$121 (\$91 ⁶ + \$30)	\$91
Total	\$100	\$191	\$91

(b) Should a comparison be made against a standard cost item?

If the standard cost item were an R&D investment then no additional R&D would be brought forth and support for both rural and non-rural R&D would have no value – it just replaces private investment⁷. If we assume that the support does bring forth additional R&D it might be more appropriate to compare support against retention of profit as the otherwise case. This is shown in the Tables below.

Non-Rural Business

Party	R&D	Net Contribution
Business	\$62.50	\$62.50
Government	\$37.50	\$37.50
Total	\$100	\$100

Rural Business

Party	R&D	Net Contribution
Business	\$70	\$70
Government	\$121 (\$91 + \$30)	\$121
Total	\$191	\$191

⁶ From Table 7.1 page 153. This value will vary through time and across RDC's.

⁷ For rural R&D the \$91 of government contribution would need to replace \$91 of investment made by rural businesses.

For non-rural businesses the government contribution would be \$37.50 to bring forth an additional \$100 of R&D and this would compare to rural businesses of \$121 to get \$191 of R&D or \$63.35 to get an additional \$100 of rural R&D investment. This is a multiple of 1.69.

Clearly, the assumption that it costs the government 11 times the amount to bring forth an additional \$100 of R&D in the rural sector compared to the non-rural sector is seriously flawed.

(c) Is the measure useful?

Apart from our reservations above we would argue that the measure does not indicate the level of public support required to bring forth an extra \$100 of R&D investment in either sector. It can not be assumed that without the support there would be no R&D investment made. This will depend on the extent to which the support overcomes any market failure that might exist.

For example, in the senate inquiry on tax concessions it was reported that "*A major study by the Productivity Commission in 2007 concluded that: The extent to which the basic R&D concession stimulates additional R&D is low*". If we assume that the concession largely funds R&D that would have been undertaken anyway and that only 10% of investment is additional then the support figure of \$7.50 would in effect be \$75. That is, the government would incur a cost of \$75 to bring forth an additional \$100 of R&D. In this situation the concession would appear generous compared to support for rural R&D.

Of course, this conclusion can not be drawn unless there is an assessment of the extent of market failure in R&D investment in both the rural and non-rural sectors. But why would this be required? If government support were justified in each then society would be better off if support were provided. If however, there were budget constraints facing the government then investment alternatives would need to be ranked and investment made accordingly. If the decision rests solely on equity grounds then this should be a matter for political debate. The PC should exercise caution in recommending one equity distribution over another and confine their analysis to looking at the economic trade-offs from one distribution compared to another. Their analysis of market failure is very weak.

(4) Role of RDC's in total R&D landscape

RDC's provide a link between industry and public R&D agencies. This link provides two benefits that can be appreciated against the total R&D landscape in Australia for each given commodity.

(a) RDC's typically have industry involvement in developing investment strategies and selecting appropriate investments across the entire R&D portfolio of a given RDC. This brings a

commercial focus to R&D planning which was one of the main drivers of establishing RDC's in the first place. While it is necessary to talk about the quantum of R&D brought forward from government support via the R&D levy, it is also appropriate to consider the effectiveness of the private and public R&D investment that would otherwise occur. Here, effectiveness can be considered in terms of both larger benefits and the quicker realisation of benefits through time. This should be part of the PC's considerations in the preparation of the final report.

For example, a BDA Group study has reported that in 2006/07 \$61.6m was invested in cotton R&D by both public and private agents. The CRDC accounted for 20% and public agencies accounted for 50%⁸. CRDC investments involved partnerships with 60% of all R&D carried out, potentially enhancing outcomes for all parties. Public support through matching funds provided in the case of cotton R&D in 2006/07 was minimal, but significant in terms of outcomes achieved.

- (b) The second link that RDC's provide is scope for both private and public interests to be better matched at an individual investment level. As noted by the PC it is very difficult to determine the optimal level of government support for rural R&D⁹. To some extent this can be addressed by RDC's through the negotiated cost sharing for individual investments with research providers (both public and private). We understand that negotiated cost sharing positions vary considerably from investment to investment in each of the RDC's and are based on perceived benefits that each party is likely to obtain. These different cost sharing positions enable an optimal balance to be obtained between private and public support of specific investments. We would encourage the PC to examine in more detail the role of RDC's across the total rural R&D landscape, including provision of public support through other avenues than the support provided solely through RDC's. Simply, support provided through the RDC's provides the mechanism by which an optimal balance can be achieved between private and public support.

A focus solely on the amount of additional R&D that any support might bring forward ignores considerable social benefits that can be generated through the RDC structure as it exists. Further, reducing funding to RDC's to create the proposed *Rural Research Australia* agency to undertake non-industry specific R&D ignores the broader R&D landscape for Australian rural R&D that currently exists and would only serve to (1) increase administration costs on public funding and (2) reduce the effectiveness achieved under current structures.

⁸ BDA Group 2008, Triple Bottom Line Evaluation of Cotton Research and Development Corporation Investment over the 2003-2008 Planning Period, Report prepared for the CRDC, December.

⁹ Section 7.2 page 159.