Curtin University's response to the draft rec findings and information requests of the Pro Commission Report into Rural Research an Corporations	oductivity
12 November 2010	

Professor Linda Kristjanson Deputy Vice-Chancellor, Research & Development Curtin University

Contact:

The RDC model of agricultural research is the envy of the world. The great strengths of the RDC model are: that researchers – both applied and blue-sky – have direct connectivity to the agricultural sectors; delivering appropriate research efficiently to the users; the users having a direct say in determining their research needs and having a model that allows the forming, shaping and developing national collaborations, while also supporting excellence in individual research.

Summary of Curtin's position

- Curtin supports the establishment and funding of a new RDC, 'Rural Research
 Australia' (RRA) to sponsor non-industry specific R&D intended to promote
 productive and sustainable resource and rural social studies as well as those
 indicated in the paper. The incorporation of RIRDC with what was essentially the
 Land and Water Australia has some merit if land use and cumulative effect studies
 and social issues are included.
- The Australian Government **could adopt the HERDC reporting form** for state and commonwealth agencies to ensure consistency in definition and data collection across the whole of the R and D innovation system. This would identify and align HEI and agencies spend at a state and national level.
- Curtin University *does not support* reducing the funding contributions from the Australian Government for all of the existing RDCs or the phasing in of the reduction.
- Curtin supports the proposal to amend the Primary Industries and Energy Research
 and Development Act 1989 (Cwlth) 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, approved by the Minister for Agriculture,
 Fisheries and Forestry and managed separately from the R and D component. Curtin
 supports any amendments that ensure government contributions to any RDC that
 takes on marketing functions are only used to fund research and development, as
 defined in the Act.
- Curtin supports the Primary Industries and Energy Research and Development Act 1989 (Cwlth) should be amended so that statutory Rural Research and Development Corporations (RDCs) are required to commission an independent performance review at least every (5) five years, as is currently required for industry-owned RDC 3 years is to short a period for a meaningful assessment.
- Curtin supports processors being included in the levy collection process. As part of
 the supply chain processors should have an obligation to support their industry
 through levies as they derive benefits from the R and D both directly and indirectly.
- RDCs should have a requirement to return regional distribution of projects commensurate with the regional distribution of levy payments. Regional cross subsidy is a major issue in the current RDC programs and impedes some regions

from building research capacity in critical areas of the national R D and E Framework.

Overall spending on, and funding for, rural R&D

Curtin University *supports* the principle of not establishing target levels for overall research spending. However in times of long term production decline due to drought or other extenuating circumstances a minimum spend on R and D is required to support ongoing commitments to programs. Flexibility by the Australian Government to increase its contribution in these periods should be established.

Public funding principles

Curtin University *supports* the public funding principles.

Framework data collection and program coordination

A process for assembling and maintain data of total R and D expenditure could be also derived from the ABS 2 yearly collection of Higher education research expenditure by extracting RDC data. This could also be done yearly through breaking out the HERDC annual data collection for research expenditure in Higher Education Institutions (HEI).

The Australian Government could adopt the HERDC reporting form for state and commonwealth agencies to ensure consistency in definition and data collection across the whole of the R and D innovation system. This would identify and align HEI and agencies spend at a state and national level.

Changes to the configuration of, and funding for, the RDC model

Curtin *supports* that the Australian Government should retain a modified Rural Research and Development Corporation (RDC) model.

Curtin *supports* the establishment and funding of a new RDC, 'Rural Research Australia' (RRA) to sponsor non-industry specific R&D intended to promote productive and sustainable resource and rural social studies as well as those indicated in the paper. However, the incorporation of RIRDC with what was essentially the Land and Water Australia has some merit if land use and cumulative effect studies and social issues are included.

The current RDC model is not perfect. Many would argue that GRDC, Sugar and Cotton should be merged; there are difficulties funding pasture or oat research between GRDC and MLA. There are many "border disputes" that often mean that investments "fall through the gaps". Nonetheless the plusses far outweigh the negatives. The proposed new RDC is expected to cover all of public good research, but would it have the resources or expertise to eg reduce agricultural global warming gas emission by enhancing the use of legumes? Could it maximise water use efficiency by improving wheat cultivars? The proposed public good overarching RDC planned may be equally or even more unwieldy.

Curtin University *does not support* reducing the funding contributions from the Australian Government for all of the existing RDCs or the phasing in of the reduction.

A reduction of expenditure in RDC's will tend to focus investments into core "no-brainer" projects with short term goals such as breeding, cultivar testing and agronomic packages. The University sector in general and the ATNs in particular tend to contribute in more long term non-core research activities (often with a high risk/high return character). Such non-core investments will be squeezed out by a more short-term mindset.

The broader community benefits significantly from RDC research.

Broad acre cropping is suffering from a long term decline in it terms of trade. If research were curtailed, current trends to larger farm enterprises would be accelerated. This reduces the rural population and the rural income stream. Many rural communities would then lose viability. The pressing need is to raise income per hectare, so that modestly sized enterprises (<5000ha) are viable. This would ensure the sustainability of rural communities.

Principles to guide the future operation of the RDC program

Curtin **supports** transparent and accountable processes being part of the RDC operations.

The GRDC as an example uses an exemplary method to select investments. A panel and staff matrix including growers, consultants and scientists undertake a very rigorous selection and review process before deciding which project to invest in.

The GRDC funded project portfolio leverages very successfully. The research partners of the GRDC, small and large companies, State departments, universities and CSIRO typically contribute 50 to 70% of the costs of the projects.

The leverage is greatest in Universities where training of the next generation through higher degree students occurs. The more flexible research agenda of these students (compared to associated staff in CSIRO and state agencies) often provides very large advances that can be applied to the GRDC-funded project area.

Examples include overseas and nationally funded students who have discovered novel mycotoxins produced by wheat pathogens, discovered fungicide resistance for the first time, developed the first molecular markers for legume crops and analysed fungal genome sequences. Furthermore the students are well trained for employment in core areas.

The GRDC funds both pure and applied research. The GRDC funded (in 2004) the first and so far the only major genome sequencing project to have been analysed and published entirely in Australia. This piece of very blue skies research was supported by growers and has lead directly to reductions in losses to diseases valued a >\$100m pa.

The GRDC funds high quality research in areas poorly supported by the ARC. As an example a recent analysis suggests that only 7/1000 Biology panel project proposals included the words wheat, barley, canola or legumes. ARC COEs (eg CILR and PEB) have weak connectivity to agriculture.

Specific changes to help give effect to the principles

Curtin *supports* the principle that with guidance and the RDC-specific principles in place, requirements for formal Ministerial involvement in priority setting and approving RDCs' plans should be removed, except for the Fisheries RDC and Rural Research Australia.

Curtin *supports* the proposal to amend the Primary Industries and Energy Research and Development Act 1989 (Cwlth) 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, approved by the Minister for Agriculture, Fisheries and Forestry and managed separately from the R and D component. Curtin *supports* any amendments that ensure government contributions to any RDC that takes on marketing functions are only used to fund research and development, as defined in the Act.

Curtin *supports* the creation of a provision in the statutory funding agreements for the Australian Government to appoint a director to the board of an industry-owned Rural Research and Development Corporation (RDC) where that RDC requests such an appointment in order to complement existing board skills and improve dialogue with the Government.

Curtin *supports* the Primary Industries and Energy Research and Development Act 1989 (Cwlth) should be amended so that statutory Rural Research and Development Corporations (RDCs) are required to commission an independent performance review at least **every (5) five years**, as is currently required for industry-owned RDC – 3 years is to short a period for a meaningful assessment.

Curtin *supports* the recommendation that the Australian Government's Department of Agriculture, Fisheries and Forestry should prepare a publicly available, consolidated, annual monitoring report on the activities of the Rural Research and Development Corporations (RDCs).

Levy arrangements

Curtin believes that a separate levy for marketing should be established and administered separately and to keep the R and D levy for its stated purpose of research and Development. Research on markets and marketing under the full definition of research can be retained in the R and D project guidelines.

Curtin **supports** the principle of reducing the costs of changing levies and making the process simpler.

Curtin **supports** processors being included in the levy collection process. As part of the supply chain *processors* should have an obligation to support their industry through levies as they derive benefits from the R and D both directly and indirectly.

RDCs **should** have a requirement to return regional distribution of projects commensurate with the regional distribution of levy payments. Regional cross subsidy is a major issue in the current RDC programs and impedes some regions from building research capacity in critical areas of the national R D and E Framework.