



**Response to
The Rural Research and Development Council's**

***Draft National Strategic Rural Research and Development Investment
Plan***

The draft Plan addresses two of the Terms of Reference given to the Council on its establishment:

- (a) develop a National Strategic Rural R&D Investment Plan for profitable, global competitive, sustainable, innovative and adaptable primary industries; and
- (b) establish a performance measurement and reporting framework.

The Plan identifies 17 findings leading to 13 recommendations categorised under the headings:

- Industry development
- Sustainable production
- Capacity in people
- Transformational R&D
- International links
- Institutional arrangements

The Plan and its vision for the rural RD&E system is consistent with the thrust of very many reports and deliberations over the past few years. The draft does a good job of summarising the overall situation and is up-to-date. A question that will arise is whether it says anything new since it is at such a high level and there will also be criticism related to the fact that the recent PISC process is largely ignored.

There are two recommendations that need clarification. The first of these is a recommendation around germplasm conservation. Thus, the Council recommends "that the Australian Government invest in conserving the genetic diversity of crops.... within Australia".

This area is the centre of a long and ongoing debate as to who is responsible for germplasm collections in Australia. There have been probably more than 15 reports in the last 30 years with the RDCs (with the notable exception of the GRDC) providing minimal financial support.

The Council needs to be explicit about who is responsible for the role in this area and to seek assurance that it comes with very strong guarantees regarding on-going financial support.

The second recommendation that needs monitoring is around institutional arrangements with a recommendation for “a key advisory body to guide more effective multi-sector cooperation and the prioritisation of investment in RD&E for Australia’s rural industries”.

The Council needs to be clear that developments in this space do not jeopardise strategic plans and investment processes that have come out of the National Primary Industries RD&E Framework which was endorsed in 2009.

The Plan also presents a Performance Measurement and Reporting system that purports to track inputs, outputs and outcomes of the system with a clear feedback mechanism. The draft Plan introduces this at a very high level at present, and before the final Investment Plan is presented, more detail should be provided.

“The Council has determined the following investment goals—to:

- facilitate ongoing industry development and adaptation to change through RD&E
- leverage innovation for growth along the value chain, with greater sharing of risk and reduced reliance on natural resources
- integrate natural resource management with farming systems to use natural resources more efficiently
- analyse and plan for climate change with sophisticated modelling to build understanding and develop adaptation practices and resilient systems
- build human capacity, capital and capability through high-quality education and training
- reward and retain world-class researchers through commitment above current investment levels
- develop social research and tools that enable rural communities to embrace change, enhance adoption and manage the impact of change
- develop elite genetic resources, emerging technology platforms and multidisciplinary capability for application to rural problems and opportunities
- invest to support, and in some cases accelerate, cross-sectoral RD&E strategies, such as those relating to bioenergy/biofuels and food and nutrition
- systematically link and collaborate with leading international groups to access funds, markets and knowledge to address shared Australian and global needs.”

The draft Plan could be made more user friendly by including some examples of what is likely to be proposed. For instance, it would be useful to improve the initial development and assessment of research areas. If we got the

planning and development right, then better outcomes would follow. Some current research is piecemeal but dressed up to look more multidisciplinary than it really is and maybe this is what is meant by “system-wide” leadership.

It is an ambitious hope to think that “the whole of government” will work in practice even though it sounds good in theory. In developing proposals to tackle the big issues it is probably preferable to build groups from the bottom up rather than rely on a top-down only approach as seems to be recommended in the Plan.

Research proposals should be independently reviewed by international peers.

We endorse the Council’s recommendation that a high priority is attached to education which includes researcher training and university-based research. The significant bigger picture issues here are:

1. The alarming ageing workforce statistics and
2. The trend away from any “curiosity-driven” research.

The first issue is recognised in the National Strategic Plan draft as investment in people. The RDCs have each recognised the urgent need in this area but the views vary on how much of a problem it will become. The universities are more in tune with the trends in this area and particularly an apparent trend away from direct and indirect research funding for post-docs and PhD students through RDC mechanisms, coupled with lack of clarity for career path in rural industry research. The decline in demand by students at undergraduate level is also a recognised trend and will significantly affect implementation of strategies to develop human resources.

The second issue is broadly recognised in the National Strategic Plan as “excellence in research”. A major reform proposed by some universities to the Productivity Commission (PC) Inquiry was to establish a rural research fund that was independent of the funds controlled by the RDCs. The rationale here is that RDCs are advocates for their levied farmers and very much industry focused, so it is appropriate that they should look for relatively short-term outcomes, but this leaves little room for more “academic”, high risk and long-term original research which will be vital for the transformational RD&E.

It is informative in this regard to look at the figures presented in the report for current (2008) dollars spent in the Ag/Vet/Environmental codes for ARC discovery grants (Fig 10), which total about \$2.5 M Australia-wide. If this roughly divides equally between these diverse areas it would equate to approx \$0.67M in all areas of agriculture. The response proposed in the draft PC report was to redirect some funds to establish a non-aligned body to fund a cross-sector research mechanism. This body would essentially establish another RDC and presumably absorb much of the fund in administrative/managerial costs; whereas we favour a peer-reviewed system that would be more like an ARC or NHMRC mechanism. Perhaps it could be administered via ARC (possibly as a special fund or at least under the control of a specific expert panel). This is more in line with the excellence in research

theme and would help reverse the move away from long range fundamental science in the sector.

It is worth repeating that Australia is at risk of problems stemming from the low investment in “blue sky” research. It seems that we are averse to investment in fundamental science which will leave Australia vulnerable when dealing with problems such as new pests or diseases tackling our monocultures since there will be a dearth of those equipped to deal with the applied problems in a timely manner. One such example is a *Fusarium* decimating *Pinus radiata* in its home territory in California which will be difficult to keep out of Australia.

Finally, the Plan identifies an initial portfolio balance split as follows:

- 40% for transformational investment for long-term outcomes
- 30% for near-term adjustment for mid-term outcomes
- 20% for capacity-building in people
- 10% for international linkage.

The Council identifies about \$3 Billion annual investment in rural RD&E.

Please note that in Table 1 the listed R&D expenditures for minerals and energy resources do not tally with the total column.