## SUBMISSION TO PRODUCTIVITY COMMISSION

## **RURAL RESEARCH & DEVELOPMENT**

## TAMWORTH 15<sup>TH</sup> NOVEMBER 2010

Government recommendation and changes:

SEE PAGES 33&34 of the September 2010 draft recommendations.

The recommendations take a very broad approach to outcomes and there is an underlying connotation that over time spending by Government to be reduced (Recommendation 6.1 &7.1) for Rural research & development

- In light of a the current world view of an increasing population, climate change and a inability for the world to
  maintain food security the reduction in any governments program to research & development in food
  production would fly in the face of all scientific advise
- While the current R&D model is seen as effective there are several critical items that have not been addressed
  in any great detail. The recommended changes are in most cases cosmetic and will have no major effect on
  performance and are more about shuffling the deck chairs rather than making the Rural R&D program effective
  and efficient delivering "Ground breaking results". The indifference between "safe Science" and " radical
  development" are not questioned extensively.

Within Rural Research& development the expediential gains are not found in R& D that has been extensively developed over a number of years. I can only discuss what I am familiar with and that is crop development and in particular plant breeding Research & development. Particular plant cultivars such as wheat, barley, oats, non GM soybeans and pulse crops. The expediential gains in 'food production "within these traditional crops are minimal yet the R&D programs continue in these arena's instead of diverting a portion of the R&D resources to new and potential crop types that add value to the overall agricultural system that should be striving to deliver sustainability.

It is not only the basic R& D that needs to be supported and invested in by governments it is the "process and policy " that is required to make the R&D deliverable in commercial terms .

In the seed Industry, there is a very good example of Government 's part withdrawal of funds support into Research & Development of New Cultivars of commercial crops with the implementation of legislation that allowed the commercial development of the Industry . The legislation introduced in 1989 for Plant Breeders Rights saw significant cuts in funding to the seed industry in favor of legislation that was too allow investment by commercial parties within the Industry . The Investment has occurred but not without complications that have had significant implications to the Industry . Government changes to the R&D Structure and continued involvement in refining the policy has been minimal and slow . It is the lack of continued government support in validating the collection process LEGALLY that is letting the Industry down , it's a bit like having legislation for driving a car to fast( speeding) without implementing policy to catch the offenders . Imagine that no speeding camera's or high way patrol ????? The process of a collection system for royalties was implemented to augment seed Industries R&D costs . The Industry has the capacity to be commercially viable as long as there is an appropriate cost effective means of collecting the royality. This is where government has let the Industry down and in turn slowed R&D investment .

\*\*\* GOVERNMENT NEEDS TO IMPLEMENT POLICY & LEGLISLATION THAT ALLOWS COMMERCIAL OUTCOMES SO THE FUNDS(levies collected). THROUGH AN EFFECTIVE AND THOROUGH COLLECTION PROCESS. THESE FUNDS FORM THE CATYLIST (levies through a royalty collection), BEING RE-INVESTED INTO RESEARCH& DEVELOPMENT.\*\*\*\*\*\*\*

The Seeds Industry is a good example that sets a precedent for other Rural research & Development to follow . The implied implications of not having a complete and thorough collection system are event with research concluded by Industry showing that in some cases less than 50% of the EPR levies are being collected .

Improvements to the system and the levy being made mandatory by government is essential to allow Industry to become "self Sufficient " in its R&D .

If governments set the correct policy and introduce effective levy collection ALONG with Investment Incentives for private investment into Rural Research & Development there is opportunity for government to slowly withdraw from 'Specific Enterprise" R& D

The key elements are:

- 1. Utilization of Intellectual Property (IP) & Intellectual Technology (IT) law by the government to set the correct structures in place to allow for specific Enterprise R&D to realise a return on investment. There needs to be a new approach to this, such as:
  - a. The Government needs to utilize its contributed funds for the "high risk Research "and any potential commercial outcomes from High Risk Research should be partnershipped with either other government agencies or private Enterprises in commercializing the intellectual property or technology .With government sharing in the commercial outcome to generate more research dollars.
  - b. Putting policy in place to allow equity investment incentives by the Investment market into Research & development, some examples of the type of policy required are;
    - Tax Concessions for R& D 150% tax deduction for every dollar spend on legitimatized Rural R&D
    - ii. Low taxable rates on dividends paid on R& D development . Current Foreign investment into Australian Business has a taxable rate on dividends paid of 7% . R&D should be under the same system
    - iii. No capitol gains tax on any dividends received

Thorough out the draft report there is reference to setting up stringent protocols for monitoring performance (draft recommendations 8.2 & 8.5.)

I question this approach as the cost of self examination are more often than not time consuming and unproductive. Setting sound principles or Key PREFORMANCE INDICATORS and benchmarking these across all relevant R& D Industries is a far more productive process than lengthy enquiries processes . These audits or reporting processes are more often than not unproductive. Understanding the level of "risk" and the potential outcome across the three critical triple bottom line areas of

- 1. Ethic & Environmental Advantage
- 2. social community Benefit
- 3. Economical gain

Should be the basis of formulating the key performance indicators for research.

I have witnessed firsthand the non-productive process of participants required to report at set intervals and have a underlying uncertainty in continued funds influence the reporting process. The key elements of any research program needs to be:

- 1. Setting of required outcomes for R& D from the onset of the program
- 2. Make funding security as a prerequisite of the total program rather than for set period of times

- 3. Subject to "rated Risk" of the R& D item allow for "reassessment and evaluation" of the structure and timelines of the R&D program at set intervals, uninfluenced by funding arrangements.
- 4. Remove the current reporting requirements and replace them with performance rewards . I have been involved with R&D programs and been involved in the reporting process and I see that it is time consuming and unproductive . The reports are seldom dealt with or reviewed to give positive outcomes .
- 5. Remove the current ongoing requirement to tender for R&D funds the time and implications are unproductive and take up time by key researchers . R& D programs need to be driven by required deliverables not governed by available funding .
- 6. More often than not key personal are taken away from productive research by the need to lobby and market their research projects to gain attention for funding. This is unproductive, there needs to be a clear delineation between key research staff and administration/promotion/marketing personal.

The three key areas that I believe are not thoroughly addressed by the Draft report are:

- 1. Government participation in Commercial Pathways to allow for "fail safe " collection processes where Industry is self supporting of its R&D programs .
- 2. Private investment into Research & Development. Suitable incentives to attract the equity markets into Rural Research & development.
- 3. The right Criteria and mechanisms to allow for productive research. Self reporting doesn't work.