# **Horticulture Taskforce**

## **Response to**

## **Productivity Commission**

## **Rural Research and Development Corporations: Draft Report**

Horticulture Taskforce Members: *Avocados Australia Limited; AUSVEG; Australian Mango Industry Association; Onions Australia; Australia Rubus Growers Association Inc; Australian Passionfruit Industry Association; Australian Mushroom Growers' Association; Biological Farmers of Australia; Citrus Australia; Strawberries Australia Inc; Apple and Pear Australia Ltd; Nursery and Garden Industry Australia; Summerfruit Australia; Cherry Growers of Australia; Australian Banana Growers' Council*

**Executive Summary**

The Horticulture Taskforce was established in August 2010 to represent the interests of the horticulture sector – one of the fastest growing areas of agriculture in Australia. The taskforce currently has sixteen members covering avocadoes, apple and pears, mangoes, onions, rubus, passionfruit, mushrooms, vegetables, potatoes, citrus, strawberries, nurseries and gardens, summerfruit, cherries and bananas.

The Horticulture Taskforce is disappointed with a number of the Commission's recommendations. Specifically, the Taskforce does not support a reduction in the government's contribution to the research effort undertaken on behalf of the horticulture industries. The current system whereby the government matches dollar for dollar the monies raised by growers through statutory levies, the monies raised from growers from voluntary levies, and the funds raised by donor entities and organisations through voluntary contributions, is critical to overcoming market failures and in ensuring on-going productivity improvements across the supply chain. Indeed, rather than lowering the government's contribution to research, the Taskforce believes that funding should be increased, to enable the horticulture industry to better understand and adapt to climate change / variability and to address food security concerns.

The Commission has made the recommendation to reduce the government's contribution in an expectation that the shortfall would be readily replaced by growers increasing their levies and donor organisations stepping up to increase their own contributions. The Horticulture Taskforce is extremely doubtful that this would be the case. Growers are more likely to perceive the government's withdrawal as a lack of confidence in research and as abandoning its leadership role encouraging grower collaboration (which established the levy system in the first place).

This submission outlines what impact the reduction in the government's contribution might have on the horticulture industries. It puts the case in support of the research activities undertaken by the former Land and Water Australia but outlines why these activities should be done within the existing RDC structure rather than through the creation of another RDC. The submission also presents a case to support data collection, greater co-ordination, improved levy arrangements and an assessment of RDC research within the context of the broader rural R&D environment.

**Contents**

## 1. Reduction in Government Co-contribution

The Commission proposes that the government reduce its funding of rural research. Specifically, the Commission recommends (page XXVII) that:

"*the cap on the matching government contribution for industry-specific RDCs be gradually reduced over ten years to half its current level — that is, to 0.25 per cent of an industry's 'gross value of production' (GVP).*"

This recommendation is most perplexing because the Commission (p XX) acknowledges that past investment by the RDCs has been highly beneficial, and that although much of this has been of direct benefit to growers, Australia has benefited environmentally and socially.

The proposal to reduce R&D funding going forward is even more bewildering in light of two pressures - climate change / variability and food security - in which Australia has little experience and understanding. The Horticulture Taskforce considers that it would be more appropriate to increase, rather than decrease funding for rural research.

**Assessment of the impact of the proposal**
The Horticulture Taskforce is also disappointed that the Commission has made this recommendation without assessing the impact that it would have on:

- Specific industries and their levies
- The nature and type of research effort; and,
- The level of future productivity of Australian agriculture and the sustainability of the environment in which it operates.

An assessment is required to support the Commission's proposal. Otherwise the Government faces a real risk that agricultural productivity will decline.

An assessment is particularly required for each of the individual industries that comprise HAL (39 members covering over 70 commodity groups) because the application of the cap on the government's co-contribution for this RDC is extremely complex. Individual industries will have difficulties in advising their members about the full implications of the proposal because the degree to which any one industry is affected is dependent upon the impact on HAL as a whole.

Specifically, the complexities arise because:

i. The current cap is not applied to the Gross Value of Production of each industry and then aggregated to determine the HAL cap. Instead, the cap is applied to the total Gross Value of Production for horticulture.
ii. The cap is applied to HAL R&D expenditure which includes funds from both statutory industry levies and voluntary contributions.
iii. There are 27 separate industries which contribute statutory levy funds to HAL. Many of these industries also provide additional R&D funds through voluntary contributions.

iv. There are 12 separate industries which do not contribute statutory levy funds to HAL. However a number of these industries raise R&D funds via voluntary contributions.

v. Voluntary contributions might be sourced from either a voluntary levy (as in the case of the mushroom, processing tomato and the Victorian canned fruit industry) or from "one-off" project specific voluntary contributions (as in the case of the apple and pear industry and the avocado industry).

vi. "One-off" voluntary contributions are, by definition, impossible to predict as they are project dependent.

**Implications for horticulture**

HAL has reached or nearly reached its funding cap in the last few years. This has meant that a number of worthwhile projects have been deferred to following years which simply delays improvements in the productivity and hence competitiveness of the industries concerned. This defers benefits that arise in relation to the environment and public health. Inevitably, however, a number of good research projects are cut completely. Opportunities to make additional improvements in on-farm productivity, supply chain efficiencies, public health and/or the environment as a result of the research have therefore been missed.

There is a strong belief that HAL will continue to trigger its current cap going forward. The horticulture sector is an expanding one, and aside from cyclical and climatic variability, this trend is expected to continue. Additionally, one industry (apple and pear) has a number of contracts which, at least for the next five years, involve significant voluntary contributions which will push up the overall HAL spend.

Any reduction in the cap as proposed by the Commission will bring forward the trigger point and reduce the total pool of funds available for research. In turn this will force a greater degree of project rationalisation both within any one industry and across the horticulture portfolio. Rationalisation of the research effort will have both short and longer term implications. In the longer term, the productivity of horticulture will fall and the competitiveness of the industry will consequently decline.

In the shorter term the reduced pool of funds is likely to:

- Place pressure on projects partially funded by voluntary contributions. This is because grower levies are generally statutory and there would be an obligation on HAL to prioritise the matching of those funds first.

  The critical importance of voluntary contributions to the research effort in horticulture is addressed in Section 3 below.

- Undermine the use of co-ordinated research programs and instead favour the use of discrete projects as a means of developing and funding research projects.

  A number of industries, but most notably apple and pear, have commenced a shift away from funding discrete and at times ad hoc research projects through the General and Industry Calls. Instead, individual projects which are inter-related are integrated into one program and this is then commissioned by HAL. There a number of benefits from doing this. First, there is greater focus on corralling research which targets industry strategic needs and provides alignment with government research priorities. Second, it captures economies of scale in the research effort with the development of a portfolio of projects that are either inter-dependent or related in some way. This in turn means there is a greater collaborative research effort between researchers across institutions and across disciplines. Third, the larger size of the research effort means that the program can attract funds additional to grower levies and matched government funds. Fourth, it reduces administrative costs as the program manager is able to manage a number of projects simultaneously. Fifth, it provides long term commitments to research providers to ensure staff and program security.

Despite the benefits of undertaking research through an integrated program, it is likely that a reduced pool of funds - because the government reduces its matched dollars - will encourage continued use of the ad hoc project by project basis of undertaking research. By nature programs are necessarily large and require significant financial backing in order to bring together (integrate) multiple projects that are related. Additionally, each individual program tends to be centred in one strategic or priority investment area. In apple and pears, for example, programs might be in productivity; the supply chain; climate change; germplasm improvement; market access and biosecurity; market research; or, industry development. However, with reduced funds growers will be keen to see that their levy is spread across all of the key strategic investment areas rather than having a focus on any specific area. This in turn will thin the funds available for programs overall which will diminish opportunities for leveraging and where thinning is particularly acute, remove the ability to create a program at all.

- Place pressure on the collaborative Across Industry Program operated by HAL.

  Currently, HAL requires that 1.5% of all receipts be directed to the Across Industry Program which comprises R&D activity for the benefit of all horticulture as well as funding horticulture's contribution to across RDC initiatives. The Across Industry Program focuses on matters that are relevant across all horticulture industries, and covers issues such as climate change; market access; water use and water use efficiency; weed, pest and disease management; quarantine and biosecurity; and availability of labour.

  The compulsory contribution which funds Across Industry R&D activity is collected on all matched R&D levies and R&D funds, including the statutory levy and voluntary contributions. In effect this means that the government is able to leverage the funds provided by the private sector with its own funds to achieve its community research priorities.

  The 2010 Statutory Funding Agreement between HAL and the Commonwealth requires that the contribution to the Across Industry program be increased annually over the next five years to 5% by 2014.

  However, if there is a reduced pool of funds because the government reduces its matched dollars, levy payers are likely to argue that their research effort should be confined to meeting the needs of a specific commodity rather than the joint needs of similar commodities or all horticulture.

- Spread the administrative costs of HAL over a smaller pool of funds.

  That industries will take on an increasing share of the burden of covering the running costs of HAL is another important implication of a reduction in the government contribution. For example, if we assume that industry levies remain at their current level but the government contribution is halved, then the total funds available for HAL would be halved from

$80,000,000 to $40,000,000. It is also the Taskforce's view that voluntary contributions may also disappear. Even though the reduction in government funding implies that there is considerably less research activity to support, there is little to suggest that the cost of running the HAL business would decline. Indeed the members of HAL are advised on a regular basis that HAL is making considerable effort to maintain the minimum organisation required. If the cost of doing business remains at around $10,000,000 then the overhead costs will increase from 12.5% of turnover to 25% of turnover.

Table 1: Administrative Costs – impact on a reduced pool of research funds

| | |
|---|---|
| | |
| **Current situation** | |
| Industry Levies | $20,000,000 |
| Voluntary Contributions | $20,000,000 |
| Commonwealth Govt | $40,000,000 |
| HAL expenditure | $80,000,000 |
| Cost of Doing Business (12.5% of turnover) | $10,000,000 |
| Paid by: | |
| Industry Levies | $2,500,000 |
| Voluntary Contributions | $2,500,000 |
| Government | $5,000,000 |
| | |
| | |
| **Future situation** | |
| Industry Levies | $20,000,000 |
| Voluntary Contributions | Nil |
| Commonwealth Govt | $20,000,000 |
| HAL expenditure | $40,000,000 |
| Cost of Doing Business (25% of turnover) | $10,000,000 |
| Paid by: | |
| Industry Levies | $5,000,000 |
| Voluntary Contributions | Nil |
| Government | $5,000,000 |
| | |

Source: AUSVEG.

## 2. Reduction in Government Co-contribution – impact on industries

The Horticulture Taskforce has undertaken a "rough" assessment of what the cap reduction might imply for levies in a couple of industries. The assessments are "rough" in that it is assumed that the cap applies to the Gross Value of Production of the industry where in reality the government cap applies to horticulture rather than specific commodities. It is also assumed that production and levies remain at current levels.

**Apple and Pears**

One simplistic assessment implies that, in order to maintain the total pool of matched levy funds at the current level of $3.757m, the industry will have to find an additional half million dollars in Year 5 and an additional one million dollars by Year 10 (Table 2).

Table 2: Apple and Pear Levy Shortfall

| Year | Levy | Levy | Government | Government | Total Pool Matched Levy Funds |
|---|---|---|---|---|---|
| | $m | % Contribution | $m | % Contribution | $m |
| 0 (Current) | $1.879 | 0.500 | $1.879 | 0.500 | $3.757 |
| 1 | $1.973 | 0.525 | $1.785 | 0.475 | $3.757 |
| 5 | $2.349 | 0.625 | $1.409 | 0.375 | $3.757 |
| 10 | $2.819 | 0.750 | $0.939 | 0.250 | $3.757 |

Source: HAL

Our assessments imply that the levy on fresh apples would have to increase from the current rate of 0.73 cents per kilogram to 0.97 cents per kilogram by year 10 in order to maintain the same levy based funding pool. Similarly the levy on fresh pears would have to increase by 0.26 cents per kilogram over the same period.

However, these assessments tell only one side of the story. This is because they only consider the shortfall created by reduced government contributions to match the monies raised by grower levies. They do not show the impact of a similar reduction in the government's contribution to the matching of voluntary contributions which make up half of the total pool of research funds for the apple and pear industry.

The gross value of production for apples and pears in 2008/09 was $658.7 million. At the current rate of 0.5%, the government's contribution is capped at $3.3 million. In 2009/2010 the combined total of unmatched monies raised from apple and pear statutory levies and voluntary contributions totalled $3.36m (Table 3), indicating that the cap would have been triggered (in the event that it were applied directly to an industry).

If the gross value of production were assumed to remain at this level over the next ten years, the reduction in the cap rate to 0.25% implies that the government's contribution would be limited to $1.6 million. Given these figures, the A&P industry would be significantly disadvantaged and would have to find an additional $2.17m/ year (on existing funding levels) and an additional $3.82M at the 0.25% GVP Government matching level. Given that the current level of levy income is about $1.8M/year, this would need to treble the current industry funding levels.

The reduction in the cap will also have significant and unintended consequences for the apple and pear's move to a program based rather than project based R&D regime. While the reduction to 0.25% GVP for the government's matching contribution is not proposed to be fully in place for 10 years, APAL and HAL will need to bear the impact of this when considering and negotiating long term contracts. This is particularly relevant as the R&D plan approved by the apple and pear industry advisory committee in August 2010 specifically targets large integrated programs that involve long term research partnerships.

Table 3: Apple and Pear Funding Sources

| HAL Funding Source | 2008/09 | Year 2009/10 | 2010/11 Forecast |
|---|---|---|---|
| **Apples & Pears** | | | |
| R&D Levy | 1802976 | 1715019 | 1800000 |
| Government Matching | 1742814 | 1606102 | 2210137 |
| **Total R&D Levy (matched) Receipts** | **3,545,790** | **3,321,121** | **4,010,137** |
| A&P VC Expenditure | 739722 | 1646346 | 3321567 |
| Government Matching | 826557 | 1284301 | 3255170 |
| **Total VC (matched) Receipts** | **1,566,279** | **2,930,647** | **6,576,737** |
| Unmatched VC funds | | | |
| **Total Receipts (all sources)** | **5,112,069** | **6,251,768** | **10,586,874** |
| | | | |
| **Total Government matching A&P** | **2569371** | **2890403** | **5465307** |

Source: HAL

**Vegetables**

Likewise a reduction in the government contribution to rural R&D will have a significant impact on the vegetable industry. The vegetable industry currently has access to around $13.5 million per annum in funds from grower levies matched dollar for dollar by commonwealth government contributions. To maintain that total pool of funding, the vegetable industry would need to find an additional $650,000 in the first year, an additional $2 million in year 5 and an extra $3.7 million in year 10. That is, by year 10 the contribution by industry will need to virtually double from $6.48 million today to $10.18 million. Obviously this will require a significant increase in the rate of the levy imposed on growers.

Table 4: Vegetable Industry Funding Shortfall

| **Year** | | **% Red'n** | | **Levy** | | **Matching** | | **Total R&D** |
|---|---|---|---|---|---|---|---|---|
| **Current** | **Calc** | | | 0.5 | | 0.5 | | 1.0 |
| | $M | | | $6.480 | | $7.099 | | $13.579 |
| **Yr1** | **Calc** | -5% | | 0.525 | | 0.475 | | 1.000 |
| **Yr5** | **Calc** | -25% | | 0.625 | | 0.375 | | 1.000 |
| **Yr10** | **Calc** | -50% | | 0.750 | | 0.250 | | 1.000 |
| | $M | | | $10.184 | | $3.395 | | $13.579 |
| | | | | | | | | |
| **Percentage of current** | | | | 157.16% | | 47.82% | | 100.00% |

Source: AUSVEG

Again this tells only part of the story. About 16% of the vegetable industry's R&D funding is derived from the matched funds from donor (voluntary) companies and organisations. Grower levies would have to increase even more, or donor companies would have to bestow higher amounts for the industry to make up the shortfall created by any reduction in the government's matching of voluntary contributions.

**Other horticulture**

A story similar to that of apples and vegetables applies to all levy paying horticulture commodities. A reduction in government matched contributions implies a significant shortfall in the R&D funding pool. To maintain the level of research that is currently conducted would in turn require that industry doubling their funds by endorsing a significant increase in levies.

## 3. Voluntary Contributions

The Commission has proposed (p 176) that "*the overall level of funding provided to RIRDC to match voluntary contributions from (typically small or emerging) industries be maintained*". It is somewhat less clear, however, what the Commission proposes in respect to the voluntary contribution regimes that exists in the horticulture and red meat industries. For example, the Commission (p 215) states that it has *"reservations about the voluntary contribution arrangements"* and implies (p236) that some action is required.

Table 5: Matched Funds 2009/2010 Budget

| | Statutory Levy | Voluntary Contributions | Total Matched Funds | Percent Stat Levy | Percent VC |
|---|---|---|---|---|---|
| 09/10 | | | | | |
| HAL | $38,769,496 | $42,001,069 | $80,770,565 | 48% | 52% |
| Vegetables | $14,199,495 | $2,624,668 | $16,824,163 | 84% | 16% |
| Apple and Pears | $3,212,203 | $2,568,602 | $780,806 | 56% | 44% |
| Avocados | $2,655,596 | $180,579 | $2,836,174 | 94% | 6% |
| Mushrooms | $994,479 | $994,242 | $1,988,721 | 50% | 50% |
| Cherries | $602,458 | $696,467 | $1,298,925 | 46% | 54% |
| Citrus | $2,089,532 | $1,579,800 | $3,669,332 | 57% | 43% |
| Bananas | $1,790,299 | $366,834 | $2,157,133 | 83% | 17% |
| Nursery and Garden | $2,207,271 | $2,109,719 | $4,316,990 | 51% | 49% |
| Rubus | $85,339 | $201,882 | $287,221 | 30% | 70% |
| Summerfruit | $1,020,113 | $1,278,208 | $2,298,320 | 44% | 56% |

Source: HAL

The specific nature of this action is left unsaid. The Horticulture Taskforce therefore assumes that the Commission recommends that the government continue to match funding (albeit at a lower level) to both voluntary contributions and statutory levies. For example, the Commission (p 236) suggests that *"if funding for the industry-specific RDCs is reduced in line with the Commission's proposals {from a 0.5% cap on matching total funds to 0.25%}, there will be considerably less room in the system for contributions and matching of this nature. Accordingly, any need for action in this area would be diminished"*.

Voluntary contributions provide a significant component of HAL's source of investment funds. In 2009/2010 for example, HAL raised over $20m from voluntary contributions, equalling funds raised through statutory levies (Table 5). For some industries voluntary contributions are a critical component of the total funding pool, especially in the apple and pear, mushroom, cherry, citrus, nursery, rubus and the summerfruit industries.

The Horticulture Taskforce disagrees strongly with the Commission's reservations about voluntary contributions as they apply within the horticulture sector. Specifically, the Horticulture Taskforce does not support the view that either:

- The research outcomes arising from matched VC funded programs will only benefit the entity which contributes the voluntary contribution; or,
- That where overseas entities are involved in voluntary contributions, a substantial part of the benefit will flow overseas.

Additionally, the Commission's position on voluntary contributions associated with the smaller industries that sit within HAL appears to be at odds with the treatment proposed for those within RIRDC. Each of these is discussed below.

**VC research benefits more than just the entity concerned**

The Commission argues that research outcomes arising from matched VC funded programs will only benefit the entity which contributes the voluntary contribution. For example, the Commission (p 235) states *"where matching is provided in return for a contribution from an individual entity, it is more likely that the government funding will subsidise R&D that is heavily oriented to the particular needs of that entity. As such, it will be less likely that the R&D will provide the sort of benefits to other parties that would justify a public funding contribution*".

The Horticulture Taskforce has two criticisms of this conclusion which appears to have been reached without evidence or rationale.

First, the Commission has no basis for distinguishing between research that is partially funded by 'single entities' compared with research that is partially funded by voluntary contributions made by the same constituency that supply statutory levies. Within horticulture there are a number of circumstances in which VCs are funded from voluntary levies collected from all members rather than a "once-off" project specific voluntary contribution made by a single entity. For example, the Australian Mushroom Growers Association (AMGA) collects a voluntary levy from its 76 grower members that is in addition to and separate from the statutory levy collected by the Levy Revenue Service. Although some of that levy is used to run the organisation, a significant proportion is provided to HAL as a voluntary contribution to fund mushroom related research.

The Horticulture Taskforce has sought from HAL a breakdown of voluntary contributions from each source - voluntary levies and one-off project specific contributions - but their systems are unable to provide such information.

Second, the Commission's premise that all research funded by voluntary contributions will necessarily be heavily oriented to the needs of the funding entity is false, as it applies within the horticulture sector. Specifically, there are a number of examples where research efforts have been directed at improving the environmental footprint of the supply chain or at improving public health. For example, the Australian macadamia industry has used voluntary contributions - from the supply chain and the community - to augment levy funds to develop a recovery and conservation plan for the threatened remaining wild macadamia populations. As noted by the Australian Nut Industry Council (Submission 49, p4) the collaborative funding involves *"growers, other landholders, indigenous communities, local government and state government agencies. Without access to the current funding mechanism it is likely that the approximately 1,000 remaining wild macadamias could be extinct within two decades."*

Similarly, the mushroom industry has invested in a study to determine the role of mushrooms in reducing the incidence of breast and prostate cancer. This public interest research is supported by funds raised through voluntary grower levies. Likewise, the mushroom industry contributes annually to the Health Global Initiative which aims to provide high quality scientific information to the health profession, regulators, policy makers, and the general public on the health benefits of consuming mushrooms regularly as part of a balance diet.

Research activity by the nursery industry to minimise biodiversity decline is another example where research that is funded from voluntary contributions can and is directed toward outcomes that benefit the community as a whole rather than the growers or entities supplying the private component of the funds.

Likewise, a grower adoption and education program was developed for the Australian vegetable industry to provide vegetable growers with an awareness and understanding of carbon foot-printing: what it means to them as a farmer and business owner; how they can prepare for carbon accounting; the benefits of carbon accounting; and the changes they can make to make their farm and business more sustainable. The project was facilitated by HAL, with funding provided by Woolworths Drought Action Day, through Landcare Australia. This funding was then matched by Government research dollars. The project has involved the creation of a database and other tools to enable vegetable growers to measure and respond to their carbon footprint. This tool includes a spreadsheet to enable a grower to document and benchmark the footprint of his own management practices. As well as educating growers on what carbon foot-printing is and why it is fundamental to improvements to the environment, the tool is now being rolled out to growers across the country through workshops and webinars. Woolworths initially approached Horticulture Australia with an interest to fund a project to support growers' education in carbon accounting. This project is one which has broad application across the grower community, and benefits the wider community in the context of decreasing carbon emissions with issues such as climate change adaptability clearly on the government agenda in light of proposed emissions trading schemes.

Notwithstanding these and many other possible examples, the Horticulture Taskforce does acknowledge that some research funded by voluntary contributions *may initially target* improved efficiencies or reduced costs for the entity that provides a voluntary contribution. However, the Commission should note that HAL assesses the merits of such projects on the outcome that the research can ultimately deliver either back down the chain to growers or further along the chain to consumers, or to the community in general. For example, improvements in the way product is stored and handled can improve pack-out rates and reduce the costs of product being directed into ‘seconds’ markets or disposed as waste. The action of competitive markets generally ensures that the improved profitability is passed on to consumers in the form of lower prices and better quality product and in turn this helps to expand the demand for the grower’s product. In such cases a short-term proprietary hold on the research may be awarded to the entity that supplies the voluntary funds in return for the risk and effort in undertaking the research. However, the proprietary knowledge is required by HAL to be released to the industry after that initial period so that the research outcome can be captured by all such entities with flow-on affects to a wider pool of growers and consumers. In the vegetable industry, VC projects are now referred to a grower based Industry Advisory Committee (IAC) for endorsement before they are considered by HAL. This adds an extra level of oversight where the IAC considers the appropriateness of the level of investment, and the flow-on benefits for the wider industry and community.

**Overseas entities**

The Commission (p 236) argues that “*where overseas entities are involved {*in voluntary contributions*}, a possibly substantial part of any wider benefits supported by the government contribution may flow overseas”.*

In response, the Horticulture Taskforce notes that:

i. The Commission has not provided any evidence to suggest that a *“substantial part of the benefits”* arising from research funded in part by voluntary contributions from international entities does in fact flow overseas;

ii. HAL ensures that project proposals identify the distribution of research benefits, the distribution duly reflects the contribution made by each of the parties, and that this is reflected in the intellectual property clauses within the contracts that underpin the research;

iii. The leveraging of international funds provides an enormous opportunity for Australian horticultural industries to exploit international knowledge and know-how, to reduce the costs of research and to achieve the economies of scale that is required in some research activities.

   The apple and pear industry’s PIPS program is a good example of where international funding and research skills provide a catalyst to unlock separate and disjointed research effort and to fast-track critical outcomes for both growers and the community at large. The PIPS program packages research efforts from four organisations - TIAR (Tasmania), DPI (Victoria), DEEDI (Queensland) and PFR (New Zealand) - to address a number of inter-related orchard productivity and on-farm environmental issues. Specifically, the program requires collaboration between scientists in a number of key sub-program areas: integrated pest management (IPM); tree structure; and soil, water and nutrients. The PIPS program aims to demonstrate to growers how changes to orchard practises can reduce their environmental footprint and simultaneously achieve tangible cost savings and hence improved levels of profitability.

   The breadth and complexity of the PIPS program necessitated scale - $12 million over five years – well beyond the capacity of HAL whose total annual apple and pear matched levy program is around $3.5m. Collaboration between and joint funding with other organisations was therefore deemed both necessary and important to the success of an innovative and comprehensive investment program like PIPS. Leveraging and co-investment has provided PIPS access to specialist expertise across a number of technical disciplines and integrates specialist work-streams to ensure that findings are practical and can be incorporated into current orchard practices. The $3 million voluntary contribution by the New Zealand Institute for Plant & Food Research Limited (PFR) is significant for the Australian research industry. Many of the skills and knowledge required of the research activities are not currently available in Australia and the PIPS program enables an up-skilling of the Australian research capacity by bringing in both resources and the latest in international research to the program.

**Importance of Voluntary Contributions to Horticulture**

As the CRDCC has noted (Submission 128) the whole-of-chain, 'paddock to plate' focus of research undertaken by the RDCs is crucial to *"address productivity constraints, whether they are … directly related to production; environment related; or related to consumer preferences."*

Attracting the participation of the supply chain in research activities is vital because it improves the connection between the farm gate and the consumer and hence ensures that R&D activity is market driven and focused on delivering benefits to consumers. However, supply chain agents generally do not pay levies and therefore do not directly contribute to industry research. At times supply chain research is initiated by growers within the industry rather than by the supply chain agent itself. This may be because the supply chain agent does not share the same concerns or priorities that growers have in rectifying perceived inefficiencies or breakdowns in the flow of produce, materials, or information and in business relationships. However, collaboration with supply chain agents is considered a more fruitful endeavour and voluntary contributions provide the necessary means by which industries can access the required research funding.

*Consequences of a reduction in government funding on VCs*

The Taskforce believes that a reduction in the government contribution would refocus RD&E to addressing on-farm productivity alone rather than to issues along the supply chain. This is partly because growers are less likely to want to invest in research which may also benefit those - packers, processors, wholesalers, exporters, or retailers - who do not pay levies.

The Horticulture Taskforce notes that the Commission has considered the issue of statutory levies for processors and supports the view that these costs would be passed back to producers, which in turn may encourage growers to reduce their own statutory levies accordingly. However, it is important to note that the "supply chain" does not simply refer to the processing of fruit and vegetables. Indeed, there are only a few commodities within horticulture where R&D activity has concentrated on the processing sector. Rather, voluntary funding for supply chain research is generally targeted at pack-houses and storage facilities as well as at the wholesale, retail and export stages of the supply chain.

The Horticulture Taskforce also does not believe that entities within the supply chain would necessarily undertake research (or the right type of research) if the matched government funding of the voluntary system were removed or reduced. This is because many within the supply chain simply lack the scale required to undertake research projects of this nature.

Additionally, the eligibility criteria of the tax concession system would simply preclude many supply chain operators. In some cases this is because the scale of the project is too small. In other cases not-for-profit organisations (such as pack-house co-operatives, and industry organisations) do not record profits against which tax concessions may apply. A government contribution to match voluntary contributions replaces the incentives that are available to non-rural businesses under the R&D tax concession system.

*VCs and additionality*
A number of horticultural industries believe that voluntary contributions enable the industry to undertake additional RD&E effort. For example, the AMGA (Submission 155, p 4) argues that *"This is not a compulsory investment, but allows industry to invest at higher levels in R&D than would be possible if the industry was asked to commit that level of funding under statutory arrangements. Through the VC system, twice the quantum of the statutory levy is invested"* and "*the Voluntary Contribution matching of dollars in horticulture is vital to the industry. This assists in attracting industry investment in strategic projects that may not otherwise be funded.*"

*VCs enable additional extension activity*
Much of the additional research effort created by voluntary contributions is directed toward extension activities. This is because growers perceive a need to make up the shortfall that has emerged with the continued withdrawal of adoption and up-take services provided by State departments of agriculture. Growers fully understand that the worth of their statutory R&D levy payments is dependent upon their ability to take-up the resulting research outcomes and that this is a fundamental driver of improved productivity and increased profitability.

**Discriminatory Treatment of Small Industries**
The Commission has ignored the circumstances of a number of small and emerging commodity groups that sit within HAL and discriminates against them compared with those that sit under the RIRDC banner.

For example, the Commission has proposed (p 176) that *"the overall level of funding provided to RIRDC to match voluntary contributions from (typically small or emerging) industries be maintained"*.

HAL has a number of commodity groups (such as asparagus, melon, walnut, garlic, sugar plum, pistachio and blueberry) which contribute to research through either voluntary levies or voluntary contributions. Many of these industries are considered to be 'small or emerging" and are not yet in a position to seek a statutory levy to fund research.

It would not be appropriate to move these industries into the RIRDC banner. This is because there are many synergies which can be realised from the research being undertaken by their horticultural counterparts. For example, research undertaken by the macadamia industry can prove useful for pistachio and walnuts. Similarly, asparagus may benefit from the research undertaken by the broader vegetable industry and blueberries benefit from the research outcomes from the rubus industry.

## 4. Capacity and Willingness of industry to recover the shortfall

The recommendation to reduce the government co-contribution is based on the assumption that growers would be willing to raise levies to meet any funding shortfall left by the government's withdrawal or that private entities would be able to step up and make additional voluntary contributions. Specifically, the Commission (p83, 129) suggests that:

> *"Much of the RDCs' current research program would most likely still proceed with less or even no government funding*" because *"with levies in place to help to address free-rider problems, the inherent financial incentives for primary producers to collectively invest in productivity enhancing R&D would seem to be generally strong."*

The Horticulture Taskforce believes that it is highly unlikely that growers will be willing to raise their levies to meet the shortfalls created by the reduction in the government's contribution. This is because:

- Horticultural industries are often highly fragmented. In most industries there are a few very big businesses and a large number of very small enterprises. As one would expect, the large businesses tend to be progressive in that they are early adopters of technology. These businesses readily see the future stream of benefits of R&D and are, in the main, supportive of the levy and the use of levy funds.

  In contrast, small operators typically see the value of research once it is proven, that is, when it is demonstrated via an extension activity. However they are a mixed lot in regard to their support of research at earlier stages, especially where the research targets issues further along the supply chain, is novel, is risky, or where benefits will not be realised until the longer term.

  Such fragmentation means that levy changes are difficult to secure - as illustrated by the recent 2010 vote undertaken within the Cherry industry (Box 1). This is exacerbated by the 'rules' underpinning levy changes which require the approval of a majority of voters. In industries where votes are not based on production, the larger number of small producers will dominate decisions with regard to changing levies.

- The government contribution is seen as the "sweetener" to corral all of the micro businesses within the industry. The government contribution provides the incentive for them to invest a highly risky business (investing in research) and was the strongest selling point to get the growers to invest in R&D in the first place.

- Growers see the government's contribution as a means of levelling the "playing field", where internationally, agricultural industries receive much greater government assistance. For example, the OECD[1] estimates that producer support as a per cent of gross farm receipts averaged around 6% in Australia over the 2006 to 2008 period, almost half that of the US (at 10%) and considerably less than that of the OECD (23%) and the European Union (27%).

  It is clear that the Commission views (see p 51) public investment in rural R&D as an unsuitable compensatory mechanism for unfair practices abroad, with trade reform being their preferred approach.

  However this does nothing to discount heavily entrenched views.

Although there is no hard evidence to confirm suspicions, a number of horticultural industries also report that a reduction in the government's contribution is more likely to lead to grower calls to reduce (not increase) the levies accordingly. For example, Trevor Randford, CEO, Cherry Growers Australia explains that he does not believe "growers will agree to pick up the government slack if they were to reduce the funding. If so we would be looking for some savings in HAL corporate costs and less administration costs... In fact I feel that if the Government were to show any signs of pulling out their funding many in industry would push for the levies to be scrapped altogether. I have no written evidence just a gut feel."

[1] OECD (2009) Agricultural Policies in OECD Countries 2009: Monitoring and Evaluation.

## 5. Creation of Rural Research Australia

The Commission recommends that *"a new, government-funded, RDC — Rural Research Australia (RRA) — should be created to sponsor broader rural research that is likely to be under-provided by industry-specific RDCs."*

*Funding*

The Horticulture Taskforce supports the re-instatement, and indeed expansion of the activities undertaken by the former Land and Water Australia (LWA). As the Commission notes, "*there is little doubt that the overall payoff for both primary producers and the community from past* {rural research} *investments has been significant."* This sentiment would apply equally to the activities undertaken by the LWA.

**Box 1: Securing Levy Changes: Cherries – an example**

The poor likelihood of obtaining grower acceptance to increase their statutory levies to make up the shortfall is illustrated by the experience of the cherry industry.

An attempt to increase the R&D levy in 2003/2004 as well as introduce a marketing levy was so precarious – with a hung vote on one issue and a majority vote by only one for the other – that Cherry Growers Australia abandoned the outcome. A more successful outcome was achieved in 2005/06 when marketing and emergency response levies were established (at 3 cents and zero respectively) and the R&D levy was increased (to 4 cents).

In more recent times, the Cherry industry has faced higher subscription costs associated with Plant Health Australia. To recover these costs Cherry Growers Australia conducted a national poll of cherry growers via a "road-show" and information packages. The May / June 2010 poll was a postal ballot seeking very minor changes to statutory levies:

a) Retain the marketing levy at 3 cents.
b) Retain the emergency response levy ay zero.
c) Add a new plant health levy at 0.03 of a cent.
d) Adjust the R&D levy down from 4 cents to 3.97 cents.

Although 602 ballot papers were issued, only 154 returns were received. That is, only 25% of potential voters were sufficiently engaged to provide a response (with an 80% majority in favour of the resolutions).

Some of the apathy may reflect the fact that the overall impact of the levy proposals was nil – the new plant health levy being offset by a commensurate reduction in the R&D levy.

The point, however, is that the organisation, Cherry Growers Australia, felt that the only way it could establish a levy to raise sufficient funds to cover the costs associated with Plant Health Australia was to **reduce the R&D levy**. The organisation did not feel that growers were in a position to contribute additional funds – so the obvious proposal, to retain the R&D levy and introduce an additional levy was considered unpalatable to levy payers.

The Apple and Pear industry shared a similar experience. A resolution to increase the plant health levy from a seemingly insignificant 0.01 cents to 0.02 cents was only able to be achieved on the basis that the R&D levy was reduced by a commensurate amount. Industry intelligence indicates that this does not reflect the regard for which many growers have for the R&D levy, but rather that asking growers to contribute more and more is neigh impossible.

Such fragmentation means that levy changes are difficult to secure.

The Horticulture Taskforce believes that the monies allocated to the research activities previously undertaken by Land Water Australia (LWA) should be restored. The loss of the LWA represents a reduction of $13 million[2] in rural research and the replacement of those funds should be a high priority of government.

However, the Horticulture Taskforce does not believe that funding for those activities should come from a reduction in the government's contribution to the RDCs. Instead, funding should be from Consolidated Revenue as was the case when Land and Water Australia operated.

*Creation of a new RDC*

Although the Horticulture Taskforce supports the funding of LWA research activities it does not support the creation of Rural Research Australia. This is because:

1. The creation of another RDC will simply add to overhead costs. The Productivity Commission has found that administrative costs, as a share of total expenditure, averages between 10% and 20% for RDCs. This implies that a significant $5m to $10m of the proposed funding will be allocated to supporting the organisation. Both the rural sector and the tax-payer would be better off if the remit of the RRA were to be assumed by an existing RDC.

2. Implicit in the recommendations appears to be an assumption that R&D outcomes can be pre-determined, and in particular the break-up of social, environmental and industry benefits can be identified in advance of the R&D expenditure being allocated. This is incorrect, as countless examples of successful R&D and subsequent innovation adoption identify (Across Agriculture).

3. Establishing the RRA as a statutory authority under the *PIERD Act* would mean that it is vulnerable to the budgetary pressures of government. This is exactly what happened to Land and Water Australia (LWA).

4. Tensions between the various rural stakeholders will remain.

   The Productivity Commission argues (p xxxiii) that the RRA would remove *"the tensions that arise under the current arrangements from the attempt to use industry-specific RDCs to simultaneously meet both industry and broader research needs."*

   The Horticulture Taskforce believes that such tensions generally exist because (a) there are competing priorities for the limited funds that are available; (b) the agricultural and rural sectors comprise complex industries that differ markedly in maturity, size, production systems, location, and other factors which will, as a natural order of things, continuously create tension; and, (c) stakeholders and their specific requirements are not fully articulated.

   For example, it is unclear as to who the real stakeholders of the RRA would be. On the one hand the community, as represented by government, is the principal stakeholder where 'broad research' is undertaken. However, the Commission proposes that the RRA "*sponsor non-industry specific R&D intended to promote productive and sustainable resource use by*

[2] Government contribution in 2007-2008.

*Australia's rural sector...* {with a remit that broadly encompasses}... *land, water and energy use."* The Horticulture Taskforce believes that the crucial phrase here is "*Australia's rural sector".* If agricultural industries are the end-users it is critical that they have representation and are involved in research decision making because they are more closely connected to the industries concerned. As the Commission (page XXV) has already noted *"Reallocating the Australian Government's current funding contribution to the RDCs to either CSIRO or the universities would lessen interaction with primary producers — leading to fewer reality checks on the worth of R&D and slower uptake of research outputs.*" A similar effect would arise if the governments contribution was reallocated to an RRA which lacked sufficient grower (or RDC by proxy) input.

5. It is also not clear that the proposed RRA would achieve the government's objectives of reducing duplication, improving collaboration and obtaining greater focus on meeting government research priorities and whether it would do so more effectively or efficiently than the current RDC system. The Commission has provided no evidence or comment to this effect.

6. The Government already has mechanisms by which it can articulate its priorities.

   The Commission (p 130) suggests that in order to induce additional and socially worthwhile research under the current model, the Government *"would have to better specify its research priorities and, more importantly, be prepared to enforce those priorities - including through a greater willingness to reduce or withdraw funding if they were not met".* It would appear that the Commission does not believe that the Government has the capacity to do this. For example, the Commission argues (p 130) that the creation of the RRA would obviate the need for government *"to be more directive about the R&D that it wished to be funded in return for its matching contributions".*

   However, the government already has mechanisms by which it can articulate its priorities to the RDCs. For example, the Statutory Funding Agreement (SFA) by which Horticulture Australia Limited (HAL) receives the matching Commonwealth contributions enables the government to demand specific undertakings and funding is dependent upon those being achieved. The SFA for HAL includes a provision that requires industries to contribute to an Across Industry research program which enables collaborative research that benefits or relates to all within the horticulture portfolio. This SFA has only recently been amended and now includes a requirement that the contribution (from all statutory levies and voluntary funds) be increased to 5% over the next five years. This will encourage greater co-operation amongst the very different industries to invest in research which has a wider public benefit.

   There would appear some further scope for the SFA to be considered as a means by which government priorities may be better articulated and this should be explored.

In light of these concerns the Horticulture Taskforce believes that the research activities of the former LWA and funding from consolidated revenue to support that research ought to be restored but through the existing RDC structure. The Horticulture Taskforce suggests that some consideration be given to the Rural Industries Research and Development Corporation (RIRDC) taking on the proposed remit of Rural Research Australia.

## 6. Disparity with Assistance provided by the Tax Concession regime

The Commission uses an apparent disparity between the assistance provided by the matching R&D funding compared with that provided by the tax concession regime as a key plank in its proposal to reduce the government's contribution to rural R&D.

Specifically, the Commission (p XXVII) suggests that "*The current level of funding support for rural R&D via the matching contribution arrangements is, in a relative sense, extremely generous - between 3 and 11 times the rate of assistance provided to other industries by the generally available R&D tax concession. Neither the nature of the rural sector, nor the type of research that is currently sponsored by the industry-specific RDCs, warrants a disparity of this magnitude".*

The Horticulture Taskforce notes that the Across Agriculture submissions (116 and 163) dispute the methodology employed by the Commission to support the magnitude of the disparity between the two regimes. Moreover, the Horticulture Taskforce believes the Commission should note its own observation (p XXXVIII, 2007) that "*The extent to which the basic R&D concession stimulates additional R&D is low*"[3].

## 7. Co-ordination of Government Funding for Rural R&D

The Commission (p XXXIII) recommends that a mechanism be established to *"coordinate the Australian Government's various funding programs for rural R&D"***.**

The Horticulture Taskforce supports this recommendation and agrees that decisions to introduce new programs or to adjust funding for specific programs are less likely to be made in isolation under a co-ordinated approach.

More importantly, the Horticulture Taskforce considers that this initiative could act as a stock-take on all rural research that has been undertaken and is currently being undertaken. A stock-take is essential if duplication is to be avoided. A stock-take would also provide greater opportunities for broadly based research or research in one specific industry to be leveraged for adaptation (development) or adoption (grower uptake) in other industries.

However, the Horticulture Taskforce believes that the co-ordination should:

- utilise existing frameworks and not be undertaken by a new committee or new organisation;
- include State funding of rural R&D.

## 8. Additionality as a Statutory Objective

The Commission recommends (page XL) that the "*legislation and statutory funding agreements for Rural Research and Development Corporations (RDCs) should indicate that the ultimate objective of the public funding they receive is to induce socially-worthwhile rural R&D that would not otherwise be undertaken.*"

However this is contrary to other statements made by the Commission. For example, the Commission states (page XIV) that *"The industry-specific RDCs should focus predominantly on R&D of direct benefit to their levy payers."*

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[3] Productivity Commission (2007) Public Support for Science and Innovation Research Report

## 9. Data Collection

The Commission recommends that a process be established to collect and maintain robust data on R&D funding and spending flows. Whilst the Horticulture Taskforce supports this recommendation, it is important to note that R&D flows need to be seen within the context of industry productivity and profitability trends.

Across horticulture there is an acute lack of data on productivity and profitability. This type of data is essential if growers are to make commercially sound decisions. Indeed it could well be that the lack of profitability and productivity data has impeded the uptake of R&D by some growers. In turn this implies that there may have been (and will continue to be) a less than optimal investment in R&D outcomes. The lack of data also hinders the development of sound policy decision making.

The Horticulture Taskforce therefore believes that it is imperative that the government support the collection and analysis of productivity and profitability data as it does for Australia's broadacre industries.

## 10. Reporting Requirements

The Commission recommends that the RDCs be required to report on their performance.

At face value the Horticulture Taskforce has no issue with this. However, it is important to note that:

(i) Increased reporting requirements will inevitably increase overheads which will, in turn, reduce the pool of funds available to undertake research;

(ii) It will be extremely difficult for HAL (and any other RDC) to report on how it meets the objective of inducing socially-worthwhile rural R&D that would not otherwise be undertaken if this objective were to be incorporated into the legislation and statutory funding agreement as proposed by the Commission (see Recommendation 8.2, page XL). The Commission itself has acknowledged (page 79) that there are "*practical difficulties of precisely assessing what impact government funding for the RDCs has had on research outcomes. Significant judgment is involved in considering what part of the RDCs' research portfolio might have been privately funded absent the public contribution.*"

## 11. Improving the levy system

The Taskforce supports the Commissions draft recommendation 9.2, 9.3, 9.4:

DAFF *"should revise the Levy Principles and Guidelines document to ensure that the costs for an industry of seeking a change to a levy are commensurate with the magnitude of the proposed change."*

*"An indicative time limit of six months should be introduced for the implementation of new levies, and changes to the rates of existing levies, following the receipt of a complying proposal."*

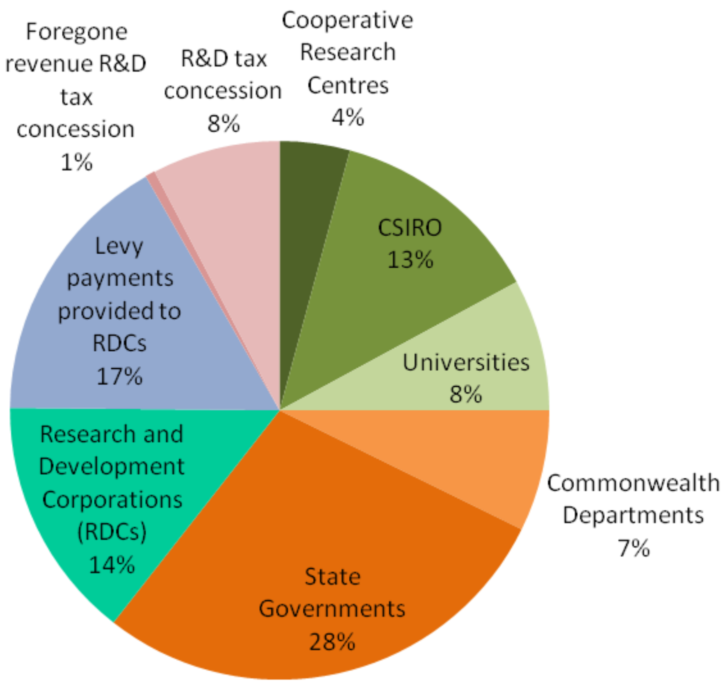
*"The Levies Revenue Service should routinely monitor its performance and the costs of collecting levies, and promptly communicate the results of that monitoring - along with details of any proposed changes to its procedures or cost allocation protocols - to stakeholders."*

The Horticulture Taskforce is pleased that the Commission has acknowledged that the processes for new levy proposals and amendments to existing levy rates is unnecessarily time consuming and costly for industries. The Levy Principles and Guidelines document should be revised to make the burden of complying commensurate with the nature of the proposed levy changes.

## 12. The broader context of RDC Research

The Commission (p 109) has made note that "*an appropriate research balance across the framework"* will be required where governments continue to *"contribute a major component of funding for rural R&D."* The Commission further notes that achieving an "appropriate research balance" will require clarity on what that public contribution is intended to deliver and robust governance and evaluation requirements, including regular independent program reviews to help ensure that for the R&D which is actually funded, the public contribution adds genuine value.

However, the Commission (p109) implies that only longer-term and riskier research represents an "appropriate balance" as it is only this type of research that would *"potentially be under-provided if there were reliance on levy funding alone".* Furthermore, the Commission notes that those RDCs *"that continue to invest exclusively or primarily in small scale, low risk, adaptive R&D should not expect to continue to have this research supported by the taxpayer."* The Commission fails to recognise that the "appropriate balance" of research will differ markedly between industries and will depend upon many factors including the type of research that has been recently completed and needs to be adapted and rolled out to industry in extension activities.




**Funding Sources of Rural Research**

Additionally, the Commission fails to judge the research undertaken by the RDCs within the context of the broader rural research environment. Research by the RDCs currently accounts for less than one-third of total rural research investment (Figure 1). The CSIRO, co-operative research centres (CRC), universities and government departments invest the remaining two thirds of rural research funds. Like the investment of RDC funds, these institutions also conduct research for the benefit of the farm gate or supply chain, as well as the public, by targeting environment and public health issues. However, it is the Taskforce's view that the research conducted by the CRCs, CSIRO and universities (which together account for one quarter of R&D investment) are predominantly oriented toward the public good or take a wider across industry perspective (overcoming market failures where diverse industries may otherwise attempt to free ride on the efforts of others). Moreover, these bodies also tend to take a longer term approach and undertake research which is much riskier.

By ignoring the research undertaken by the universities, CRCs, CSIRO and government departments, the Commission has unfairly portrayed the research by RDCs. The rural research picture should be assessed as a whole before determining the appropriate balance in the research undertaken by the RDCs.

*DOCUMENT END*