



Recommendations arising from an analysis of changes to the Australian agricultural RD&E system

Warren Hunt, Colin Birch, Frank Vanclay, and Jeff Coutts



The business of agricultural research, development and extension (RD&E) has undergone considerable change in Australia since the late 1980s, moving from a domain largely dominated by government departments to a situation of multiple actors, and where rural industries now directly contribute funds towards RD&E efforts. However, the transition has not been without impacts on the overall agricultural RD&E agri-food capacity of the nation, and there are now indications of reduced capacity and slowing productivity gains in certain sectors. If not addressed, there is the risk that the future resilience of industries could be threatened, affecting parts of the Australian economy and compromising Australian contributions to global food supply on export markets and a slowing of agricultural innovation.

Research and extension are interdependent partner disciplines, and the separation of the two has deleterious effects on capacity and resilience building. This is a warning about the consequences of reduced investment in agricultural RD&E, and learning about how research and extension can transition from traditional public sector models to systems that have greater flexibility and, importantly, ownership by the industries themselves.

To suggest that the Australian agricultural research, development and extension system has failed would be incorrect. The development of a policy model that saw the implementation of the Rural Development Corporations and Cooperative Research Centres was a major step-change for the agricultural sector, and did ensure the maintenance of capacity when many other developed nations were abandoning different aspects of their agricultural RD&E. Australia took a different policy pathway, which has been largely successful. The model achieved a milestone in persuading rural industries to contribute financially to their own RD&E needs. While not on a full cost basis, it did achieve that important goal of getting industries to 'buy in'.

However, the initiation of RD&E levies and matching Australian government funds sent signals to State and Territory Governments that they could divest and redirect funds to other sectors. The RDC/CRC model has only been as effective as it has because of the legacy RD&E capacity remaining in Departments of the different jurisdictions, which have effectively supplemented the efforts of the RDCs. The effects of State and Territory Government public policy decisions to reduce or discontinue services

because of fiscal or ideological drivers is now resulting in a situation where expert RD&E capacity available to agricultural industries in Australia is under threat. The agricultural knowledge and information system is not functioning as effectively as it could as it has a number of points where capacity has been fragmented. This will impact upon

IN THIS ISSUE

Recommendations arising from an analysis of changes to the Australian agricultural RD&E system	1
<i>Warren Hunt et al</i>	
From the Editor	4
<i>Maryse Bourgault</i>	
Robbie Commens receives top horticultural award	4
Opinion Letter	5
<i>Roy Murray-Prior</i>	
Perverse Incentives	6
<i>Gregorio Billikopf and Celina Lemus</i>	
Inside your editor's head	8
<i>Maryse Bourgault</i>	
Young Extensionist Corner	10
<i>Erin Sinclair</i>	
New Members	11
Contact Details	12

Recommendations arising from an analysis of

the future resilience of rural industries. It will also exacerbate the ongoing decline of enrolments and graduations of professionals into the agricultural RD&E fields via tertiary institutions.

Developing a way forward for sustaining agricultural RD&E capacity in Australia does not necessitate reinventing the past. Returning to legacy public sector models will not have the support of State governments which are already under considerable fiscal challenge in a post-global financial crisis world. Consideration of what innovations might now be possible in a globalised agri-food environment should be at the forefront of the agricultural RD&E discourse as agriculture production, processing and science moves beyond the control of state and even national governments. These are our recommendations for Australia:

Develop industry-owned RD&E institutions

With a retreating level of State and Territory Government investment, industry-owned RD&E institutions offer the best prospect for building and retaining long-term human capital in the agricultural research and extension sciences for industries. Moving beyond an RDC framework that simply brokers projects on a competitive basis, to agencies that possess research and extension staff and preserve RD&E capacity on behalf of their industries is critical. The new institutions would understand the importance of capacity building. They would not fund at the margins but contribute to the whole RD&E effort of the industry, i.e., investing in core activities that underpin industry success.

Such institutions could ensure succession of knowledge and skills over time. This is vital for ongoing industry development. Institutions can also build and better sustain social capital between themselves and their client base by having staff that are in periodic contact with them. Where there are multiple agencies involved in particular industries' RD&E efforts, rationalisation into single corporate entities for the purposes of efficiency must occur. An example of a longstanding and successful model has been the Australian sugar industry's former Bureau of Sugar Experimental Stations, now known as Sugar Research Australia. Other industries should consider the utility of this model as it represents integrated self-contained RD&E capacity owned by an Australian agricultural industry.

Further expand producer, processor and government co-investment in RD&E and agri-food industries

This will require negotiated statutory investment levies which may surpass the existing level of contributions under the

current RDC scheme. If the Australian Government is attesting to the value of R&D investment, grower and processor funds should continue to be matched by the Commonwealth. An expanded role for extension must be embedded in these new agencies to ensure that new knowledge, systems and technological innovations proceed more efficiently. Processors of agricultural products have long benefited from advances of agricultural RD&E but in the case of many industries, they have contributed limited amounts to the investment and advancement of RD&E.

Producer, processor and government co-investment arrangements have been demonstrated in the Australian sugar industry for many decades, and remain the central plank for its ongoing RD&E capacity. This position is defensible in industries where field-based factors have a significant impact on factory performance, and importantly factory throughput, which drives the processor's profitability – a clear case of mutual dependence that is often forgotten by those in the processing sector. Having the funder and provider in the one organisation as argued in this proposal may be an issue, though such conflicts can be managed, but this must be achieved through a completely transparent model.

Avoid total deregulation of RD&E

Findings from a review of New Zealand's Crown Research Institutes (CRIs) indicate that a completely deregulated RD&E competitive framework should be avoided. Formed in 1992, CRIs were effectively given a charge to become financially viable and to operate on commercial lines. According to the CRI taskforce, in a review of the CRIs, a past policy imperative of government for the CRIs to be economically sustainable has had some negative impacts upon the nature of the science generated and affected the net benefits to client industries. It stated that there were inconsistencies between creation of value for the organisation as opposed to the greater good for New Zealand. Furthermore, the existing funding and governance arrangements for CRIs inhibited collaboration with universities and the private sector and effectively made them competitors in what should have been a collegiate function of government in enabling industrial advancement.

The CRIs have also had little in the way of extension capacity. New Zealand discharged its public sector involvement in extension in 1987 and consequently R&D generated by the organisations relies on industry service providers or private consultants to undertake many active extension works. The function of extension, or as articulated in the review

'technology transfer', also came under scrutiny. This role was seen to have been undervalued by the agricultural CRIs and was highlighted as a core responsibility with an emphasis to develop, invest in and manage intellectual property or innovation with the intent of expediting its passage into outcomes for stakeholders.

Integrate research and extension capacity within institutions

Extension services must not be considered as add-ons, they must be fully integrated into the process and delivery of research, and be active in providing feedback from industry stakeholders to research elements, as well as in identifying farmer innovation which can be tested through science. Extension agents should function as credible technical experts in their specific roles, and be present in the field. An absence from the field results in a decline in support for extension services. Appropriate planning, provisioning, and skilling of extension in adult education skills and process should be used to complement and not be a substitute for technical competency. A separation of research and extension capacities is detrimental and should be avoided.

Reduce bureaucracy

Any new institutional arrangements must eliminate excessive management hierarchies common to the former public sector 'Departmental' models. Less complex management structures allow for more flexibility, increased responsiveness to resolve issues, and reduced cost structures.

Create a new focus for State Government Departments of Agriculture

Should industries and Commonwealth take full responsibility for mainstream agricultural industry RD&E, State and Territory Government Departments of Agriculture will be able to be realigned to as development support agencies for new and emerging agricultural industries. Presently many State Governments are focussed on working with the larger established industries as they can more easily obtain matched commonwealth funds through which the States and Territories can then supplement their Departments. The larger and established industries should be encouraged towards greater independence. Subsequent to these changes State and Territory Government RD&E entities could focus on longer term strategies for increased industry diversity and greater value-adding to enhance gross state agricultural product. Because of collective public benefit outcomes, State and Territory governments must maintain ongoing commitments to biosecurity, product integrity and policy functions.

changes to the Australian agricultural RD&E system

Embed a consumer focus within RD&E effort

RD&E effort should be considered in reference to its contribution not just to the producer, but how the investment translates to benefiting consumers. RD&E institutions will require systems that ensure organisational awareness of the needs and wants of consumers so as to facilitate better targeting of RD&E efforts. This will reduce the risk of diversions along interest lines of professionals within agencies, or with industry stakeholders involved in decision making that might have separate and even selfish agendas. It is essential that a balance be maintained in effort dedicated to the various resource management, production, and value-adding streams along the value chain, else there will be a risk to industry capacity to resolve different bio-physical or market orientated eventualities.

Positive externalities outcomes must be considered

Planners and implementers of RD&E efforts must consider issues in the context of economic, environmental and social responsibilities and outcomes. Rural industries operate within communities, and their impacts and benefits cannot be evaluated in isolation of these component parts. This is where the public investment component can be further justified in terms of collective public good benefits.

Ensure that rural industries partner more closely with universities

The possibilities of universities partnering with industries, and functioning as learning and service hubs for agriculture should be further explored. This concept could be focussed around universities strategically positioned to service rural industries in formalised service partnerships. This could translate into situations where industries invest in university faculties in order to guarantee both RD&E services, as well as ongoing skilled technical professionals.

Ensure strategic use of private sector actors

There will be ongoing utilisation of private sector capacity where industry-owned institutions require additional expertise or geographic positioning of RD&E capacity. Private sector actors will continue to act as instruments of institutions to undertake certain research or extension functions particularly in areas where an institution's service delivery is absent.

Further develop international collaborative arrangements

Further international and agency agreements between sister industries in other nations, and increased sharing of personnel and

interchange of skills and innovations will further enable potential maximisation of productivity gains.

Maintain professional diversity in governance of institutions

An increased commitment to ensuring a level of professional diversity in the governance and management of industry-owned RD&E institutions is critical to avoid conflicts of interest, and any potential aversion to innovation amongst industry decision makers. The Productivity Commission encouraged the movement of industry RDCs towards skills-based as opposed to representative selection of board members.

Focus on industry and national outcomes

Strengthening of performance monitoring and enforcement, both at the micro-level with specific projects conducted by the institutions, as well as at the macro-level over individual organisations, is essential to ensure sustained confidence in the institutions by contributors of funds.

Ensure proper oversight over the use of public funds

A reformed RD&E system requires system oversight by an independent umpire (e.g., an ombudsman or commissioner). This is to oversee the collective institutions framework and ensure probity with the use of public funds. This will provide additional rigour to the Australian agricultural RD&E system. Prior to when many RDCs became corporatised, Government Directors were appointed to RDC boards, and a Parliamentary Secretary oversaw the different bodies and acted as a conduit between the RDCs and the Minister of Agriculture. This structural arrangement has since been abandoned by most corporatised RDCs, and has been blamed for the emergence of some contentious governance issues within them.

Local action in a global context

Agriculture now functions in a global context. The proposal to raise and invest in national industry-owned RD&E institutions offers an assurance that future innovations in Australian agriculture are not gradually accumulated and centralised in an oligopoly of globalised agribusiness and food corporations. Externally-based stakeholders will not necessarily always have the Australian national good as their first priority. Should there be gradual centralisation of Australian agricultural science innovation in the hands of trans-national corporate agribusiness, situations could emerge where, either inadvertently or deliberately, Australian trade or national food security interests could be compromised. The approach to establish industry-owned RD&E institutions with government co-investment provides

an anchor for ongoing development and innovation to remain in the hands of Australian industry. It is a paradigm of capacity and resilience building as opposed to cost shifting.

The current RD&E model is not likely to be supplanted until there is sufficient stimulus to drive that change. The Australian Government is indicating at least empathy to bolster public sector investment into the RDCs model, because it now recognises the multiple advantages to Australia in regard to economic and social and environmental outcomes. Increasing fiscal pressures both at the state and at the federal levels may hasten the passage to a tipping point. So too may the pressures of global population growth and demand, increases in food scarcity, price hikes, impacts from climate change, and other unforeseen drivers act as stimulus for policy change.

Text selected from the full article by Maryse Bourgault.

Hunt, W., Brich, C., Vanclay, F., Coutts, J., 2014. Recommendations arising from an analysis of changes to the Australian agricultural research, development and extension system. Food Policy (44):129-141.



The lead author, Warren Hunt, is an extensionist of 22 year experience. His career began in the pastoral zones of Western NSW and QLD working in rangeland management and wool. He progressed to program leadership roles, coordinating integrated pest management in Australian sugar, and later managing a state-wide sheep program for the University of Tasmania. He currently leads the extension effort of the NT Department of Primary Industry and Fisheries. He has also submitted a PhD thesis investigating extension's contribution to capacity and resilience building in Australian rural industry.



FROM THE EDITOR

Good day and welcome to our last paper edition of ExtensionNet! As of next edition, we will be moving to an electronic format for our newsletter in an effort to cut costs (and maintain the cost of membership low). We are considering implementing a cost recovery system such that you could continue to receive your ExtensionNet in paper format for a small fee if you chose this option through your membership renewal. Please let us know if you would be interested in this option.

Since members don't always know what the management committee is up to unless they are involved in it or in a subcommittee, I thought I would share some of what we did during our face to face meeting last February. Beware, this is highly subjective!!! ☺.

You will notice that we now have an opinion letter section and a young extensionist's corner. The inaugural opinion piece sees Dr. Roy Murray-Prior argue that we need to do more to promote extension as an important and integral part – and often even a first stop - of the RD&E process, while Erin Sinclair, the winner of the 2013 Amabel Fulton Award for Excellence in Extension by a Young Professional shares her tips for effective interactions between growers and experts.

Also thought-provoking is our front page article by Warren Hunt and colleagues and their recommendations for the improvement of the current RD&E system in Australia. I encourage you to contribute to the discussion by submitting an opinion letter for the next edition!

Congratulations are due to Robbie Commens for getting the Horticulture Australia's 2013 Young Leader Award, the most prestigious national horticulture industry award for people under the age of 35. Robbie's leadership, commitment, energy and genuine approach were praised, and contributed to the success of the Australian Macadamia Society extension program. Read about it below.

As always, we appreciate feedback and would you go as far as to offer a contribution to the next edition... Well, that would just make my day!

Happy reading!

Maryse

Robbie Commens receives top Australian horticulture award

Alstonville's Robbie Commens has taken out Horticulture Australia's 2013 Young Leader Award, the most prestigious national horticulture industry award for people under the age of 35.

31-year-old Mr. Commens, who is the Productivity Development Officer at the Australian Macadamia Society, received the award for his outstanding services to the Australian macadamia industry over the past three years.



The award recognises his dedicated work with the 700+ Australian macadamia growers (found in the Bundaberg, Gympie, Glass House Mountains, Northern Rivers and Nambucca regions) and his commitment to managing the industry's massive annual \$1.5 million research and development program.

He is best known for his work in coordinating events, field trips, research forums and industry working groups that provide Australian macadamia growers with the most up-to-date research, tools and information they need to be able to improve the way they farm.

His work in the key areas of pest and disease management and canopy management has resulted in improved returns for macadamia growers, and he was the driving force behind the development of a workforce labour pool (in conjunction with Regional Development Australia) earlier this year which attracted \$180,000 of investment to the industry.

AMS Chief Executive Officer Jolyon Burnett said Robbie's results spoke volumes about his ability to get Aussie macadamia growers to adopt 'best practice' on their farms, which ultimately helps Australia to maintain its world

leadership position.

"Robbie is well known for his ability to bring industry members together – growers, farm managers, scientific researchers, processing companies, consultants and experts - in order to share ideas and information and work together," said Mr. Burnett.

"The ultimate aim is to raise the professionalism, sustainability and profitability of the Australian macadamia industry, and Robbie's leadership, commitment, energy and genuine approach to assisting growers to adopt 'best practice' has helped to completely turn around our extension program.

"He's part of an outstandingly dedicated and professional team at the AMS that have helped to make our industry body effective and relevant to all members."

In winning the award, Commens pipped representatives from more than 40 other Australian horticultural industries– from almonds and apples to pears, potatoes, turf and table grapes, making this accolade arguably his finest achievement to date.

"I am ecstatic about receiving this award, I haven't stopped smiling since I found out I won," said Mr. Commens.

"Over the past three years the Australian macadamia industry has gone through some really tough times, predominantly because of bad weather. However, our growers have maintained their resolve and long term focus, and their belief in the viability and profitability of this great industry.

"This award is recognition of their determination, and also recognises the work of the Australian Macadamia Society Board and staff. I wouldn't have even been in the running if it wasn't for all the support and guidance they provide."

Robbie received the HAL trophy at a special awards ceremony in Sydney late last week, and was back at work in Lismore this week preparing for an extensive regional 'MacGroup' tour of macadamia growing regions, which started in Nambucca yesterday and will finish in Bundaberg next week.

More than 200 macadamia growers are expected to attend the MacGroups organised by Robbie, which will focus on production, orchard floor management and soil health and showcase some of Australia's leading macadamia orchards.



Opinion Letter

Extension as a leader of R&D programs

Roy Murray-Prior

We extension professionals, and I include myself in this criticism, have been failing in one of our most important extension jobs, to demonstrate and promote the view that extension needs to be integrated into applied R&D programs from the beginning and that facilitated participatory processes are critical to the success of RD&E programs.

Recently, I was reading an Australian Centre for Agricultural Research publication (Makini et al. 2013) about the new buzz words of 'agricultural innovation systems' and 'agricultural innovation platforms'. This document made the statement that local stakeholders and leaders need to 'buy in' and that this 'is a deviation from past approaches that took the involvement of leaders as optional' (p. 13). Give me a break; this has been an important model in extension since at least Tully in the 60's (see Tully 1964 and ExtensionNet 14(2)). It was also at the core of the landcare movement of the 80s and 90s. Still, we should be grateful that it is beginning to be acknowledged and that they recognise that stakeholders include 'farmers, input suppliers, financial institutions, extension agents, research institutions, policy makers and other actors' (Makini et al. p. 14). Although, for me, the key groups missing from this list include the value chain leaders (often the retailers) and other market chain actors, although to be fair they are referred to in other parts of the document, but not as being critical to success.

For me, in most situations, farmer groups need to be at the core of the RD&E program – not as token 'lead' or 'innovative' farmer(s) on the research committee. I am not telling any of you anything new, but farmer groups must be central to developing the research and development priorities, designing the research, identifying the research findings that offer manageable solutions to problems, developing practical solutions based on these findings and promoting them to other farmers. The outstanding work of the farmer groups associated with the Grower Group Alliance is excellent example of this. Extension professionals can have an important role in facilitating this process and helping design and test communication strategies to scale the key messages up and out. Personally I believe this should be a key focus of government extension, because that is a clear public good.

As I have already inferred, good RD&E should also be market driven, and by this I mean that consumer and retailer market research and value chain analysis should be integrated with and in many cases should lead the production research. This is one area where we have often failed in Australia, although across the ditch they tend to do it better. One problem with trying to do this is that some funders believe this is a job for the private sector, which it is in part, but when designing publically funded research programs, the private sector will often be unwilling to share this information – and besides they are the customers for the farmers' products. Once again, this is also too important to be left to market researchers, because farmers need to get first-hand experience of what retailers and consumers are demanding so they will focus on producing the appropriate quality. We all know that many farmers won't accept something unless they have experienced it and this is just as true for market information as it is for production information. A related issue is that farmers have a large say (in Australia) on deciding research priorities for many R&D corporations and their focus tends to be closer to home, which can be a problem for funding market and value chain research. If they are involved in understanding their market then they will be more likely to support the market research.

Two excellent PhD theses that I have read in the last couple of years (Barbara King (2011) from Melbourne University and Nurul Hilmiati (2012) from Queensland University) (the first based on an Australian case and the second on Indonesian cases) reached similar conclusions; a dedicated facilitation process is required for effective RD&E, which requires engagement of stakeholders throughout the process if the findings are to be scaled out and lead to practice change. Barbara focussed in particular on the important role of collaboration facilitators as project leaders of research projects, rather than researchers. Their findings overlap with those of Sulaiman et al. (2010) who evaluated a large number of projects in South Asia and found that a wide suite of innovation management tasks are required and the skills required to do this are broader than most researchers have. I believe extension professionals can fulfil this role, provided they have at least some of the skills required in tasks such

as research, negotiation, communication, facilitation, advocacy and working with farmer and other groups, but it will require a change in mind set for researchers, policy makers and funders of research for it to occur more broadly.

So – what is my message? – which is nothing new to you all - but still needs to be emphasised:

- Good extension process is at the core of good applied research and development.
- Farmer groups who represent a majority of farmers in an area/industry will also be at the core of the process.
- Researching and developing the best way to communicate relevant messages is just as important as researching the problem itself.
- In most cases research needs to be market driven and include relevant value chain actors.
- Someone with an innovation systems perspective and collaboration facilitator skills needs to lead the project and they require a range of skills that are at the core of skills that good extension professionals should have.

My challenge to you is to promote and take on this role at every opportunity.

References

- Tully, J. (1964). Operational research in agricultural extension in Queensland. *Agricultural Progress*, 39, 66-76.
- Makini, F. W., Kamau, G. M., Makelo, M. N., & Mburathi, G. K. (2013). *A guide for developing and managing agricultural innovation platforms*. Canberra, ACT: Retrieved from www.aciar.gov.au
- King, B. J. (2011). Sharing expertise: Creating collaborative knowledge networks to strengthen RD&E outcomes. Doctor of Philosophy University of Melbourne, Melbourne, Vic.
- Hilmiati, N. (2012). Making research count for farmers: an analysis of participation and communication in agricultural research for development in Eastern Indonesia. Doctor of Philosophy University of Queensland, Brisbane, Qld.

ENET

Perverse Incentive: Hourly Pay Plus Piece-Rate Bonus

Gregorio Billikopf and Celina Lemus

*We call it the
perverse incentive
because
as employees
productivity
increases,
workers receive
diminishing pay
for their efforts.*



The California Endive Farms packing shed successfully moved away from the hourly pay plus piece-rate bonus compensation system they had ten years ago, one that caused high dissatisfaction among the packers, into a straight piece rate pay system that increased worker productivity, pay and satisfaction—and also augmented packing shed profitability.

Growers who are worried that paying by the piece will mean shoddy work, and that paying by the hour will mean slow work, have come up with an apparently astute compromise: hourly paid work plus a piece-rate bonus. We, however, call it the perverse incentive because as employees' productivity increases, workers receive diminishing pay for their efforts. Workers are paid the most for the first unit of output, and decreasingly for each subsequent unit. As a result, faster workers subsidize slower ones. Workers are not motivated by this corrupted piece-rate approach, and often share their dissatisfaction. Or, just as likely, they simply work as if they were being paid by the hour. To complicate matters, a misunderstanding of the 2013 California rulings that require that employers pay rest breaks for piece-rate workers is also pushing some growers towards an hourly pay plus piece-rate bonus, or the perverse incentive.

The wonderful news is that workers are motivated by a properly designed piece rate, and that there are other methods for successfully complying with the new rest

break regulations, such as simply adding the equivalent of the two ten-minute break periods to the daily pay check, or paying the equivalent for what employees would have earned if they had kept working during the break.

The plants are first grown in the field, harvested and stored for up to eleven months and the delicate root is then placed in a completely dark room with just the right temperature and humidity. Small variations in temperature and humidity can have serious adverse effects on the process.

Several teams of four women sort and pack endives at the California Endive Farms. In 2004, the employees made their dissatisfaction with the hourly pay plus piece rate bonus clear. They wrote to management: "Please remove the weight from off our shoulders and change the way you pay." The letter signed by all packers went on to suggest that the wages should be raised and the perverse incentive eliminated. At the time, the base pay was \$7.25 an hour for up to 75 pounds of produce handled per hour. The bonus began with production over the 75 pound base, and consisted of 5.5 cents per pound.

Figure 1 is an example of earning lines for those on a straight piece rate versus those on an hourly wage plus piece-rate bonus and shows how the faster workers (those who would have earned much more on a straight piece rate) subsidize the slower ones (those who would have earned much less on a straight piece rate).

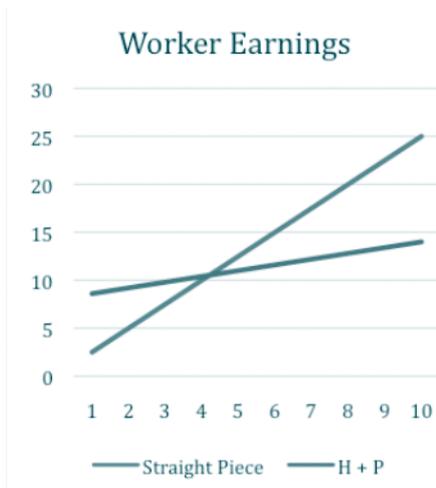


Figure 1. Sample straight piece rate compared to hourly pay plus a piece-rate bonus. The blue line (straight piece rate) intersects the red line (hourly plus piece rate) at some point. To the left of that intersection, workers in an hourly plus piece rate scheme earn more than what they would have on a straight piece rate, and to the right of that intersection, they earn less. One can say that the workers to the right are subsidizing the pay of those to the left. Workers on an hourly plus piece rate soon tire of having their efforts not valued and reduce their productivity.

Moving to a Straight Piece Rate

Four of the most vital piece-rate principles include: (1) protecting employees from piece-rate games played by management (including the perverse incentive); (2) protecting management from poor quality work and activities that benefit employees at the expense of the farm enterprise; (3) designing a pay for performance approach that rewards employees for their effort, or what is under their control; and (4) involving workers in the decision-making process.

The new program began February 2005, after some of the more vocal packers had a chance to review the suggested changes and make suggestions for implementation. Some of the endive roots that employees handle take considerably less effort to trim and pack than others. As a result, a multi-tier approach was designed. The best quality endives would be paid at 8 cents per pound. Those endives that would require more work were to be paid at either 9 or 10 cents per pound. The goal of the field and storehouse managers is to produce as much of the top quality endive as possible. For roots that did not meet any of these three quality grades, work would be done by the hour at the standard \$7.50 per hour wage. (Beside the white endives discussed in this paper, at that time red and organic endives were paid by the hour. Today all pick/pack work is by the piece.) In 2013, these wages range from 9.3 to 11.6 cents per pound.



But packers did not make a smooth transition into the straight piece rate as there were residual trust issues, especially during the first few months. Feelings of distrust loomed large during the transition period which was characterized by continual complaints, anxiety on the part of the employees, and sabotage of the new system (for a month some of the women decided to work at the same pace to prove the system wrong). By 2006 the packers were pleased with working conditions and from time to time informally approached management to let them know that things were much better. That they could make more money in less hours and that they could spend more time with their families. In fact, employees were so satisfied with their jobs that there was virtually no turnover.

On a sample day in 2013, the lowest performing group earned \$18.45 per-person-per-hour, and the highest, \$22.54, both well over double the minimum wage. The packing shed was able to increase profitability and end up with a very positive return on investment (ROI). The new pay system had a statistically significant, positive effect on worker productivity. We calculated an ROI of 254%, that is, a benefit/cost ratio of 2.5:1 (a gain of \$2.5 per \$1 invested). Before February 2005, endives processed seldom surpassed 90 pounds per person-hour. It was thought by management that a barrier of 120 pounds per hour could not be broken. Yet, within a few months this barrier was shattered.



Employees were so satisfied with their jobs that there was virtually no turnover.

Inside your editor's head: Reporting on the MC face to face meeting

Maryse Bourgault

Over 2 days in February the APEN MC came together for its annual Face to Face meeting in Melbourne. The APEN MC met mostly to discuss its strategic plan for the next three years, to make sure it is on track, and make it clear what needs to be done in the next three years. But the team also met with Neil Webster and Ian Halliday, both of Dairy Australia where the meeting was held, Mike Stephens from the Ag Institute Australia, and remotely with APEN subcommittee chairs, Peter Ampt, Jess Jennings, and Roy Murray-Prior. There was finally time to discuss things we don't normally have time to discuss during our regular Go-To-Meeting sessions, like whether we want to move from a representative management committee to a skill based board. There are many ways we could communicate what was achieved – but what follows is a description (and subjective personal account) of the APEN face-to-face meeting by one of the newest APEN Management Committee members, ExtensionNet editor Maryse Bourgault:

I had plans to write at night what my impressions were and finish this article at the end of February. It didn't quite work out. And since then, I have been meaning to write something fun to read, to express how invigorating this was, how much energy we all came out with (or at least I did), and how positive I felt for the future of APEN. Problem is, real life came kicking back in quick, and some relationships with collaborators at work have been... difficult. It's hard to write something light and fun when you are frustrated or disappointed. And when you want something to be perfect, like I wanted this text to be...

Introducing ourselves – Making the connection

We started our face to face meeting with a round table and people explaining what APEN meant to them. A few people mentioned the network and how important it was to them to stay connected and part of a community. Others mentioned how it made them reflect on their own practice of extension and allowed them to improve. Austin McLennan (our President) showed us a fruit fly trap containing a protein-based goo and explained how he uses these

in some of his work as an entomologist. Coming from a research background, he explained that, once he'd heard of APEN, he simply had to get involved to get skills in extension, perhaps the same way that the fruit flies he works with get lured in by certain attractants. From a scientific background myself, I could definitely relate to this, though thankfully, getting involved in APEN doesn't mean getting drowned! It was about getting the knowledge to get good at being an extension agronomist, but APEN is more than that to me. I didn't say much then, but this is what I should have said: APEN makes me feel the same way as when I used to write well. Then, I wasn't ashamed to put my soul in words (well, part of it anyways; usually the silly part too...). I wasn't scared that people would get to know me for who I really was. I had trust that it would all be all right. Back into research, I now again need to write scientific articles. It is a rather restrictive writing style. Silliness is definitely not allowed. APEN makes me feel like it's okay to be completely myself. Like all of my personality contradictions are perfectly fine. It's a great break from everything that pulls me down working in research.

I think there is a positive energy in APEN that is contagious. There is energy that people in the network put in through ExtensionNet articles, LinkedIn discussions, formal articles in the Extension and Farming Systems Journal, organising local events and more, and I'm pleased to be a part of it.

The Plan – Getting down to business

But that is enough rambling from me; surely you want to know what we talked about! In short, we talked about the future of APEN. We reviewed the strategic direction of APEN, evaluated our progress against our

objectives, and determined the key actions for moving the organisation forward, i.e. develop an operation plan for 2014-2017.

In the strategic plan 2012-2017 (from the last face to face meeting), a number of strategic objectives were defined:

- To be the peak body representing members, their professional interests and to advocate for the extension profession;
- To build and maintain a vibrant and effective extension network;
- To provide and promote professional development opportunities to members;
- To be a well-managed highly effective professional organisation.

Obviously, the international conference was a great achievement in this regard, but there are also a number of other activities that have been happening in the background that have made us progress. For example in 2013, Austin had represented APEN at a number of key events such as the Australian Farm Institute's conference on 'Australia's Agricultural Innovation Systems at the Crossroads' and a National forum on e-Extension. A National Extension Policy subcommittee has been formed (in Australia) to discuss our positions on the agricultural sector and the importance of extension in the RD&E system, which led among others to a submission to the National Food Plan of the Australian Federal government. If you are not aware of the LinkedIn group, I suggest you become a member and start reading some of the discussions that are happening in this space. It is a very dynamic group. Other opportunities for professional development include the mentoring program and webinars. The Extension and Farming





Systems (EFS) Journal was also formally transferred to APEN and represents an opportunity for APEN members to publish their work and experiences.

From a governance perspective, the Management Committee has introduced sub-committees organised by topics such as the National Extension Policy subcommittee, the EFS Journal and International Initiatives sub-committee, the Education, Training and Accreditation subcommittee as well as a Social Media reference group. This allows people to be involved without requiring the same amount of time to dedicate to the Management Committee for example, while lightening the load on Management Committee members.

Financially, we are doing well, in good part thanks to the profits generated by the international conference. However, to maintain a good financial position and be able to survive rough times, we need to increase the expected profits from APEN activities and increase our membership, especially as a good share of current members are approaching retirement. By the way, feel free to encourage your colleagues to join APEN!

By lunch on the first day, we came out with six priorities and action plans to be worked on:

- Developing the 2014 roadshow and promoting local activities
- Improving the APEN value proposition for members
- Holding the 2015 APEN Conference
- Moving ExtensionNet to an online platform
- Professional Development activities
- Reinvigorating the Senior Extension Leader Network (SELN) group

Part of our strategy to improve our value proposition to members is to help provide

events that are interesting and useful. Therefore, a good part of our priority for 2014-2017 is with the 2014 roadshow, the conference/forum in 2015, and continuing to see how we can deliver professional development opportunities to our members and others, wherever they are located. Part of the challenge is to know what our extension professionals actually need to progress in their career and what training they feel they need. If you have any suggestions, please do not be shy to talk to any of us about it.

As mentioned above, we also need to remain in a good financial situation, and as part of this objective, we have decided to move ExtensionNet to an online platform. As I am also mentioning in my Editor's note, we are considering giving you the choice to continue receiving the newsletter in paper format at cost. Feel free to contact me if you have concerns or suggestions.

What else is happening? – Introducing our subcommittees' work

On day two, we used webconferencing to 'meet' with the chairs and members of our subcommittees to discuss various issues arising. For example, we discussed the White paper on agriculture with Jess Jennings (National Extension Policy subcommittee – Australia), and the Extension and Farming Journal potential name change and registration into SCOPUS with Roy Murray-Prior (EFS Journal and International Initiatives subcommittee). We also heard of the good work being done by the Education, Training and Accreditation subcommittee from its Chair, Peter Ampt, and how they would soon be releasing a document that is the most comprehensive summary of extension education and training courses available in Australia.

We also discussed things we never have time to discuss in regular meetings, like whether or not we think it worthwhile to

move our structure as a management committee to a skill-based board for example. We discussed things informally too walking to and fro from the conference centre to our hotel, at dinner, and between breaks. We got to know and tease each other (or maybe that was just Warren teasing me!).

Going large (well sort of...)

We also met with Neil Webster and Ian Halliday from Dairy Australia during morning tea and with Mike Stephens, president of the Ag Institute Australia (AIA) to see how we were perceived by the "outside world", and if people thought of us when they need to get, or get their staff, training and resources on extension. It appears that overall, everyone sees the need for extension skills, but they do not necessarily think of APEN as a first stop.

The AIA and APEN have shared secretarial support previously and our membership base overlaps, so our relationship is not new. As such, it was decided with the president, Mike Stephens that we draft a memorandum of understanding to formally engage with each other, and communicate to make sure that our events do not clash and that our activities are complementary. Specifically, we agreed to engage with AIA on the submission to the Agricultural White Paper, and to offer member discounts to the members of the other organisation.

Reflections on getting back to work

Now, it was an intense two days, but I feel I can speak on behalf of everyone when I say we all came out with a new energy (I wish mine had lasted a bit longer...) and a renewed focus. We do have challenges ahead, but it is also an exciting time for extension. Now, this text wasn't quite written as well as I had wished, but I hope I've conveyed a little bit of what we are trying to do in the MC and how we work.

Young Extensionist Corner

FeedRight events develop into national roadshow

Erin Sinclair, DairyNZ and winner of the Amabel Fulton Award for Excellence in Extension by a Young Professional

Getting farmers to drive the agenda of an event about cow nutrition has been a highlight for the DairyNZ Canterbury/ North Otago extension team.

'Feedright' events, currently being run by DairyNZ nationwide, were originally piloted by consulting officer Juliette Lee as a winter 2012 event for a local Canterbury discussion group.

The event is based on the age-old concept of using experts to deliver science messages to farmers, but in a way where there is no pre-set agenda of what will be discussed on the day. It put farmers in the driver's seat and allowed them to individualise their questions and set the agenda. According to follow-up evaluation, farmers had made immediate changes to their farm systems.

New Zealand farmers often receive conflicting messages regarding nutrition for pastoral based systems. These events were designed to address that.

Three experts in cow nutrition were selected as panellists: Dr John Roche from DairyNZ, Dr Jim Gibbs from Lincoln University and Dr Terry Hughes, a farm consultant.

A member of the extension team acted as the facilitator, and at least one other member as support.

The two and a half hour events held to date have attracted between 30 and 200 people.

The format

Panellists gave a two minute insight into their background and specialist areas. Attendees were then given five minutes to chat to their neighbours and record questions on post- it notes, which were collected and sorted into subject sections on a flipchart.

The facilitator then structured the session and questions taken from the floor during the event. A two minute summary of key messages was then given by the panellists.

Key success factors

1. Optimising the expertise of the panellists
- Panellists agreed on key messages, but were confident enough to challenge



each other in areas where the science did not show an irrefutable answer.

- Panellists knew the science in their field inside out and could not only quote relevant research but also linked their answers with their farm systems' knowledge.

- Panellists made it clear on the day where the scientific facts ended and their own opinions started.

2. Clear context

- All answers were based on a standard New Zealand pasture system

3. Process and structure for farmers to drive the agenda

- Discussion time after the introduction and post-it note collection allowed attendees to validate their questions with neighbours and for less forthcoming attendees to ask their questions without speaking in front of the audience. This also provided important structure for the facilitator.

- The facilitator was adept at ordering questions in a logical manner, and could keep track of what had already been covered.

4. Strong facilitation

- The facilitator and panellists managed questions so they were answered and validated by the panellists.

- The facilitator managed questions from the floor in a way which kept the interactive feel, but did not detract from the subject.

- A cow bell was used by the support person when any of the panellists began to ramble – time was of the essence!

The format of this event delivered individualisation on a group scale, with a farms system approach not being lost through choosing appropriate speakers. This type of event could be run over many topics, and is worth considering for your next series of events.

What Erin had to say on receiving the Amabel Fulton Award for Excellence in Extension by a Young Professional: "It was an honour to be selected, and I'm grateful for the huge number of people contributing to the success of young DairyNZ consulting officers. DairyNZ extension has been developed well."



New APEN members

If you've recently joined APEN, welcome! You'll reap plenty of professional and personal rewards. If you've been in APEN for a few seasons now, be sure to say hello to the new members.



Kathryn Davis

Kathryn Davis is an Australian veterinarian who has specialised in science communication. She founded a specialist veterinary communication agency delivering a variety of services to industry and commercial enterprises in Australia and the United Kingdom. She now manages the Animal Health and Fertility Program at Dairy Australia, the service provider organisation for the Australian dairy industry. This role includes the design and delivery of industry programs to drive on-farm innovation in animal health and welfare such as the long running Countdown 2020 and InCalf initiatives. Kathryn has a particular interest in the application of public relations theory and harnessing the power of new media channels to improve reach to farmer audiences.



Monika Frank-Ruediger

Hi there! My name is Monika Frank-Ruediger and I am a food safety specialist in Airdrie, Alberta, Canada with Alberta Agriculture and Rural Development (provincial government). One of my roles is to coach food processors on developing and implementing hazard analysis critical control point (HACCP) and food safety systems, as well as meeting global food safety initiative (GFSI) food safety schemes. Additionally, we spend time working on different projects related to food safety that benefit the Alberta food processing industry.

Having recently completed an on-line extension programming course with my colleagues, we are planning on implementing extension in our day to day activities. I am interested in learning more about extension in other parts of the world, and other models, best practices or other learnings that we could incorporate into our work environment. Outside of work, I enjoy camping and hiking, reading, crafts and watching soccer. I am a parent to 3 young adults who keep us busy and one small dog who keeps us entertained.



Justine Severin

Justine Severin started at Birchip Cropping Group (BCG) in January 2012, filling the role of public relations officer. Prior to joining BCG she worked as a print journalist, specialising in agricultural news and earlier in her career she worked with the wheat and barley breeding teams at the Department of Environment and Primary Industries (DEPI) at Horsham (formerly VIDA) and at IAMA (now Landmark) at Naracoorte, SA.

As part of BCG's extension team, Justine's role includes extending BCG research findings to grain growers and mixed farmers in the Wimmera and Mallee regions of Victoria. This includes producing reports, writing news and technical articles and planning and running both large and small events.

With the other two members of BCG's extension team, Justine is involved in the mammoth task of hosting up to 600 farmers and 100 exhibitors who attend the annual BCG Grains Research Expo and organising the program, logistics and speakers for BCG's Main Field Day (about 500 farmers) and Trials Review Day (about 160 farmers). Throughout the year, with BCG's extension team, she also organises a number of smaller events including up to ten crop walks, five travelling trials review days and industry workshops and training days.

Justine has a Masters in Communication (Writing), a Diploma of Applied Science (Agriculture) and more than a decade of experience working within the media and agricultural industries. She is responsible for publishing BCG newsletters, editing and collating the annual 200-page BCG Season Research Results publication and producing regular news and technical articles for local, state and national print media and industry publications.

A writer at heart, Justine is passionate about agriculture and the ability of farmer groups, such as BCG, to motivate change that will benefit farmers, agricultural communities and, ultimately, help to feed the world.

Welcome to these new members who have joined since last edition. We're glad to have you all on board.

Mofakkarul Islam	<i>UK</i>
Ingrid Jenkins	<i>Qld</i>
Peter Ampt	<i>NSW</i>
Sally Thomson	<i>WA</i>
Michael Coleman	<i>NSW</i>
Felicity Harrop	<i>Vic</i>
Zea Gebregzabihier	<i>India</i>
Muhammad Yaseen	<i>Pakistan</i>
Jo Campbell	<i>Vic</i>
John Evans	<i>Vic</i>
Monika Frank-Ruediger	<i>Canada</i>
Don Pollock	<i>Qld</i>
Marija ten Napel	<i>NT</i>
Jane Crane	<i>Vic</i>
Alli Way	<i>WA</i>
Rob Dwyer	<i>Qld</i>
Amy Fay	<i>Vic</i>
Cathy Phelps	<i>Vic</i>
Kathryn Davis	<i>Vic</i>
Rob La Grange	<i>Vic</i>
Ian Halliday	<i>Vic</i>
Liz Mann	<i>Tas</i>
Jo Gorman	<i>NSW</i>
Elizabeth Rymill	<i>SA</i>
Ian Linley	<i>Vic</i>
Ross Bawden	<i>Vic</i>
Don Burrowes	<i>Vic</i>
Matthew Shaffer	<i>Vic</i>
Nerida Ewart	<i>SA</i>
Tony Platt	<i>Vic</i>
Sheena Carter	<i>NSW</i>
Mark Neal	<i>NSW</i>
Helen Quinn	<i>Vic</i>
Bernie Baxter	<i>Vic</i>
Erika Oakes	<i>Vic</i>
Troy Mauger	<i>Vic</i>
Bernadette Lawson	<i>SA</i>
Trish Cowley	<i>NT</i>



Muhammad Yaseen

I am Muhammad Yaseen, working as Lecturer (Agricultural Extension) in University College of Agriculture, University of Sargodha, Pakistan. Before that I worked as Instructor in Agricultural Training Institute, Rawalpindi, Agriculture Department Government of the Punjab Pakistan, where I organized trainings for agriculture extension field staff including Field Assistant, Agric. officers, Deputy District Officers, District Officers. I have also work experience with rural community and conducted farmers days, workshops and community mobilization and community development.

I completed my B.Sc.(Hons.)Agriculture in 2003 and M.Sc. (Hons.) Agricultural Extension in 2005 from University of Agriculture, Faisalabad Pakistan.

Recently I am doing my PhD from Agricultural Information Institute of Chinese Academy of Agricultural Sciences, Beijing China.

WHERE TO CONTACT APEN:

MANAGEMENT COMMITTEE

Austin McLennan (President)
Ph: 0488 764 592
austin.mclennan@nt.gov.au

Jeanette Long
(Vice-President & SA RC)
Ph 08 8837 3993
jeanette@agconsulting.com.au

Greg Mills (Treasurer & NSW RC)
Ph 0427 737 858
greg.mills@goahead.com.au

Denise Bewsell
(Secretary & NZ/OS RC)
Ph: 64 3 321 8651
denise.bewsell@agresearch.co.nz

Maryse Bourgault (Editor)
Ph 03 5321 4144
maryse.bourgault@unimelb.edu.au

Regional Coordinators

QUEENSLAND
Graham Harris
Ph: 07 4688 1559
graham.harris@daff.qld.gov.au

VICTORIA
Mike Weise
Ph 0423 716 453
mike@weise.net.au

TASMANIA
Sophie Folder
Ph: 0439 247 172
sophiefolder@internode.on.net

WESTERN AUSTRALIA
Rebecca Wallis
Ph: 08 6180 5759
rwallis@gga.org.au

NORTHERN TERRITORY
Warren Hunt
Ph: 08 8999 2143
warren.hunt@nt.gov.au

CLUSTER COORDINATORS

Far North Queensland
Vacant

SE Queensland & N NSW
Vacant

Western Queensland
Gerry Roberts
Ph 07 4658 2523
gerry.roberts@tpg.com.au

NSW, ACT, NT, SA, Melbourne
Vacant

Tasmania
Aysha Fleming
Ph 03 6232 5252
aysha.fleming@csiro.au

Rutherglen (Victoria)
Carole Hollier Ph 02 6030 4500
carole.hollier@dpi.vic.gov.au

Western Australia (Agriculture)
Pamela I'Anson Ph 08 9690 2201
pamela.ianson@agric.wa.gov.au

Western Australia (NRM)
Vacant

Perth
Bronwyn Walsh Ph 08 9368 3666
bronwyn.walsh@agric.wa.gov.au

Policy
Greg Leach (Qld)
Ph 07 3211 4404
gleach@seqcatchments.com.au

APEN SECRETARIAT

Rosemary Currie, PO Box 1239,
WODONGA VIC 3689, AUSTRALIA
Ph: 02 6024 5349, Fax: 02 6056 1967, info@apen.org.au
APEN Website www.apen.org.au

Guidelines and deadlines

Submissions should be made in MS Word 6.0 with minimal formatting. A portrait photograph of the author is required. All photographs, figures and/or tables ought to be provided as separate files (preferably TIF or JPEG; photos scanned at 300 dpi). Feature articles should be around 1000 words and minor articles 500 words. The editor reserves the right to edit submitted material to meet space restrictions. Letters to the editor or general items of news of interest to the network are welcome. Articles should be submitted at least four weeks prior to publication.

Preference is given to articles that are grounded in some form of project or event.

Editing: Maryse Bourgault

Layout: Ross Tasker, Snap Albury Wodonga, Victoria.

Production management: Rosemary Currie, APEN Secretariat, Wodonga, Victoria.

Opinions expressed in ExtensionNet are not necessarily those of the Australasia-Pacific Extension Network (Inc.) unless otherwise stated.

Stories and photos (next edition) due to Editor 7 July 2014